



**EDB Information Disclosure Requirements
Information Templates
for
Schedules 1–10**

Company Name	<input type="text" value="Vector"/>
Disclosure Date	<input type="text" value="31 August 2016"/>
Disclosure Year (year ended)	<input type="text" value="31 March 2016"/>

Templates for Schedules 1–10 excluding 5f–5g
Template Version 4.1. Prepared 24 March 2015

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Disclosure Template Instructions

These templates have been prepared for use by EDBs when making disclosures under clauses 2.3.1, 2.4.21, 2.4.22, 2.5.1, and 2.5.2 of the Electricity Distribution Information Disclosure Determination 2012.

Company Name and Dates

To prepare the templates for disclosure, the supplier's company name should be entered in cell C8, the date of the last day of the current (disclosure) year should be entered in cell C12, and the date on which the information is disclosed should be entered in cell C10 of the CoverSheet worksheet.

The cell C12 entry (current year) is used to calculate disclosure years in the column headings that show above some of the tables and in labels adjacent to some entry cells. It is also used to calculate the 'For year ended' date in the template title blocks (the title blocks are the light green shaded areas at the top of each template).

The cell C8 entry (company name) is used in the template title blocks.

Dates should be entered in day/month/year order (Example -"1 April 2013").

Data Entry Cells and Calculated Cells

Data entered into this workbook may be entered only into the data entry cells. Data entry cells are the bordered, unshaded areas (white cells) in each template. Under no circumstances should data be entered into the workbook outside a data entry cell.

In some cases, where the information for disclosure is able to be ascertained from disclosures elsewhere in the workbook, such information is disclosed in a calculated cell.

Validation Settings on Data Entry Cells

To maintain a consistency of format and to help guard against errors in data entry, some data entry cells test keyboard entries for validity and accept only a limited range of values. For example, entries may be limited to a list of category names, to values between 0% and 100%, or either a numeric entry or the text entry "N/A". Where this occurs, a validation message will appear when data is being entered. These checks are applied to keyboard entries only and not, for example, to entries made using Excel's copy and paste facility.

Conditional Formatting Settings on Data Entry Cells

Schedule 2 cells G79 and I79:L79 will change colour if the total cashflows do not equal the corresponding values in table 2(ii).

Schedule 4 cells P99:P105 and P107 will change colour if the RAB values do not equal the corresponding values in table 4(ii).

Schedule 9b columns AA to AE (2013 to 2017) contain conditional formatting. The data entry cells for future years are hidden (are changed from white to yellow).

Schedule 9b cells AG10 to AG60 will change colour if the total assets at year end for each asset class does not equal the corresponding values in column I in Schedule 9a.

Schedule 9c cell G30 will change colour if G30 (overhead circuit length by terrain) does not equal G18 (overhead circuit length by operating voltage).

Inserting Additional Rows and Columns

The templates for schedules 4, 5b, 5c, 5d, 5e, 6a, 8, 9d, and 9e may require additional rows to be inserted in tables marked 'include additional rows if needed' or similar. Column A schedule references should not be entered in additional rows, and should be deleted from additional rows that are created by copying and pasting rows that have schedule references.

Additional rows in schedules 5c, 6a, and 9e must not be inserted directly above the first row or below the last row of a table. This is to ensure that entries made in the new row are included in the totals.

Schedules 5d and 5e may require new cost or asset category rows to be inserted in allocation change tables 5d(iii) and 5e(ii). Accordingly, cell protection has been removed from rows 77 and 78 of the respective templates to allow blocks of rows to be copied. The four steps to add new cost category rows to table 5d(iii) are: Select Excel rows 69:77, copy, select Excel row 78, insert copied cells. Similarly, for table 5e(ii): Select Excel rows 70:78, copy, select Excel row 79, then insert copied cells.

The template for schedule 8 may require additional columns to be inserted between column P and U. To avoid interfering with the title block entries, these should be inserted to the left of column S. If inserting additional columns, the formulas for standard consumers total, non-standard consumers totals and total for all consumers will need to be copied into the cells of the added columns. The formulas can be found in the equivalent cells of the existing columns.

Disclosures by Sub-Network

If the supplier has sub-networks, schedules 8, 9a, 9b, 9c, 9e, and 10 must be completed for the network and for each sub-network. A copy of the schedule worksheet(s) must be made for each sub-network and named accordingly.

Schedule References

The references labelled 'sch ref' in the leftmost column of each template are consistent with the row references in the Electricity Distribution ID Determination 2012 (as issued on 24 March 2015). They provide a common reference between the rows in the determination and the template.

Description of Calculation References

Calculation cell formulas contain links to other cells within the same template or elsewhere in the workbook. Key cell references are described in a column to the right of each template. These descriptions are provided to assist data entry. Cell references refer to the row of the template and not the schedule reference.

Worksheet Completion Sequence

Calculation cells may show an incorrect value until precedent cell entries have been completed. Data entry may be assisted by completing the schedules in the following order:

1. Coversheet
2. Schedules 5a–5e
3. Schedules 6a–6b
4. Schedule 8
5. Schedule 3
6. Schedule 4
7. Schedule 2
8. Schedule 7
9. Schedules 9a–9e
10. Schedule 10

Company Name **Vector**
 For Year Ended **31 March 2016**

SCHEDULE 1: ANALYTICAL RATIOS

This schedule calculates expenditure, revenue and service ratios from the information disclosed. The disclosed ratios may vary for reasons that are company specific and, as a result, must be interpreted with care. The Commerce Commission will publish a summary and analysis of information disclosed in accordance with the ID determination. This will include information disclosed in accordance with this and other schedules, and information disclosed under the other requirements of the determination.

This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

1(i): Expenditure metrics

	Expenditure per GWh energy delivered to ICPs (\$/GWh)	Expenditure per average no. of ICPs (\$/ICP)	Expenditure per MW maximum coincident system demand (\$/MW)	Expenditure per km circuit length (\$/km)	Expenditure per MVA of capacity from EDB-owned distribution transformers (\$/MVA)
Operational expenditure	12,917	199	62,044	5,961	26,016
Network	4,182	65	20,090	1,930	8,424
Non-network	8,734	135	41,954	4,031	17,592
Expenditure on assets	18,734	289	89,988	8,645	37,733
Network	17,604	272	84,558	8,123	35,456
Non-network	1,131	17	5,430	522	2,277

1(ii): Revenue metrics

	Revenue per GWh energy delivered to ICPs (\$/GWh)	Revenue per average no. of ICPs (\$/ICP)
Total consumer line charge revenue	73,311	1,132
Standard consumer line charge revenue	77,082	1,089
Non-standard consumer line charge revenue	32,658	649,139

1(iii): Service intensity measures

Demand density	96	Maximum coincident system demand per km of circuit length (for supply) (kW/km)
Volume density	461	Total energy delivered to ICPs per km of circuit length (for supply) (MWh/km)
Connection point density	30	Average number of ICPs per km of circuit length (for supply) (ICPs/km)
Energy intensity	15,438	Total energy delivered to ICPs per average number of ICPs (kWh/ICP)

1(iv): Composition of regulatory income

	(\$000)	% of revenue
Operational expenditure	108,873	17.80%
Pass-through and recoverable costs excluding financial incentives and wash-ups	220,898	36.11%
Total depreciation	94,495	15.45%
Total revaluations	11,077	1.81%
Regulatory tax allowance	51,900	8.48%
Regulatory profit/(loss) including financial incentives and wash-ups	146,163	23.89%
Total regulatory income	611,723	

1(v): Reliability

Interruption rate	13.17	Interruptions per 100 circuit km
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Company Name	Vector
For Year Ended	31 March 2016

SCHEDULE 2: REPORT ON RETURN ON INVESTMENT

This schedule requires information on the Return on Investment (ROI) for the EDB relative to the Commerce Commission's estimates of post tax WACC and vanilla WACC. EDBs must calculate their ROI based on a monthly basis if required by clause 2.3.3 of the ID Determination or if they elect to. If an EDB makes this election, information supporting this calculation must be provided in 2(iii).

EDBs must provide explanatory comment on their ROI in Schedule 14 (Mandatory Explanatory Notes).

This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

		CY-2	CY-1	Current Year CY
		31 Mar 14	31 Mar 15	31 Mar 16
		%	%	%
7	2(i): Return on Investment			
8				
9	ROI – comparable to a post tax WACC			
10	Reflecting all revenue earned	6.68%	4.81%	5.00%
11	Excluding revenue earned from financial incentives	6.68%	4.81%	5.00%
12	Excluding revenue earned from financial incentives and wash-ups	6.68%	5.26%	5.00%
13				
14	Mid-point estimate of post tax WACC	5.43%	6.10%	5.37%
15	25th percentile estimate	4.71%	5.39%	4.66%
16	75th percentile estimate	6.14%	6.82%	6.09%
17				
18				
19	ROI – comparable to a vanilla WACC			
20	Reflecting all revenue earned	7.37%	5.59%	5.64%
21	Excluding revenue earned from financial incentives	7.37%	5.59%	5.64%
22	Excluding revenue earned from financial incentives and wash-ups	7.37%	6.04%	5.64%
23				
24	WACC rate used to set regulatory price path	8.77%	8.77%	7.19%
25				
26	Mid-point estimate of vanilla WACC	6.11%	6.89%	6.02%
27	25th percentile estimate	5.39%	6.17%	5.30%
28	75th percentile estimate	6.83%	7.60%	6.74%
29				
30	2(ii): Information Supporting the ROI			
31				
32	Total opening RAB value	2,660,795		
33	plus Opening deferred tax	(62,328)		
34	Opening RIV		2,598,467	
35				
36	Line charge revenue		617,925	
37				
38	Expenses cash outflow	329,771		
39	add Assets commissioned	116,194		
40	less Asset disposals	11,139		
41	add Tax payments	42,142		
42	less Other regulated income	(6,202)		
43	Mid-year net cash outflows		483,170	
44				
45	Term credit spread differential allowance		471	
46				
47	Total closing RAB value	2,682,398		
48	less Adjustment resulting from asset allocation	(34)		
49	less Lost and found assets adjustment	-		
50	plus Closing deferred tax	(72,086)		
51	Closing RIV		2,610,346	
52				
53	ROI – comparable to a vanilla WACC			5.64%
54				
55	Leverage (%)			44%
56	Cost of debt assumption (%)			5.26%
57	Corporate tax rate (%)			28%
58				
59	ROI – comparable to a post tax WACC			5.00%
60				

Company Name **Vector**
 For Year Ended **31 March 2016**

SCHEDULE 2: REPORT ON RETURN ON INVESTMENT

This schedule requires information on the Return on Investment (ROI) for the EDB relative to the Commerce Commission's estimates of post tax WACC and vanilla WACC. EDBs must calculate their ROI based on a monthly basis if required by clause 2.3.3 of the ID Determination or if they elect to. If an EDB makes this election, information supporting this calculation must be provided in 2(iii).

EDBs must provide explanatory comment on their ROI in Schedule 14 (Mandatory Explanatory Notes).

This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref	2(iii): Information Supporting the Monthly ROI						
	Line charge revenue	Expenses cash outflow	Assets commissioned	Asset disposals	Other regulated income	Monthly net cash outflows	
61	Opening RIV						N/A
62							
63							
64							
65							
66							
67	April					-	
68	May					-	
69	June					-	
70	July					-	
71	August					-	
72	September					-	
73	October					-	
74	November					-	
75	December					-	
76	January					-	
77	February					-	
78	March					-	
79	Total	-	-	-	-	-	
80							
81	Tax payments					N/A	
82							
83	Term credit spread differential allowance					N/A	
84							
85	Closing RIV					N/A	
86							
87							
88	Monthly ROI – comparable to a vanilla WACC					N/A	
89							
90	Monthly ROI – comparable to a post tax WACC					N/A	
91							
92	2(iv): Year-End ROI Rates for Comparison Purposes						
93							
94	Year-end ROI – comparable to a vanilla WACC					5.50%	
95							
96	Year-end ROI – comparable to a post tax WACC					4.85%	
97							
98	<i>* these year-end ROI values are comparable to the ROI reported in pre 2012 disclosures by EDBs and do not represent the Commission's current view on ROI.</i>						
99							
100	2(v): Financial Incentives and Wash-Ups						
101							
102	Net recoverable costs allowed under incremental rolling incentive scheme				-		
103	Purchased assets – avoided transmission charge				-		
104	Energy efficiency and demand incentive allowance				-		
105	Quality incentive adjustment				-		
106	Other financial incentives				-		
107	Financial incentives					-	
108							
109	Impact of financial incentives on ROI					-	
110							
111	Input methodology claw-back				-		
112	Recoverable customised price-quality path costs				-		
113	Catastrophic event allowance				-		
114	Capex wash-up adjustment				-		
115	Transmission asset wash-up adjustment				-		
116	2013–2015 NPV wash-up allowance				-		
117	Reconsideration event allowance				-		
118	Other wash-ups				-		
119	Wash-up costs					-	
120							
121	Impact of wash-up costs on ROI					-	

Company Name

Vector

For Year Ended

31 March 2016

SCHEDULE 3: REPORT ON REGULATORY PROFIT

This schedule requires information on the calculation of regulatory profit for the EDB for the disclosure year. All EDBs must complete all sections and provide explanatory comment on their regulatory profit in Schedule 14 (Mandatory Explanatory Notes).

This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

3(i): Regulatory Profit		(\$000)
7	Income	
8	Line charge revenue	617,925
9	plus Gains / (losses) on asset disposals	(7,456)
10	plus Other regulated income (other than gains / (losses) on asset disposals)	1,254
11		
12	Total regulatory income	611,723
13	Expenses	
14	less Operational expenditure	108,873
15	less Pass-through and recoverable costs excluding financial incentives and wash-ups	220,898
16		
17	Operating surplus / (deficit)	281,952
18		
19	less Total depreciation	94,495
20	plus Total revaluations	11,077
21		
22	Regulatory profit / (loss) before tax	198,534
23		
24	less Term credit spread differential allowance	471
25	less Regulatory tax allowance	51,900
26		
27	Regulatory profit/(loss) including financial incentives and wash-ups	146,163
28		
29		
30		
31		
32		
33	3(ii): Pass-through and Recoverable Costs excluding Financial Incentives and Wash-Ups	(\$000)
34	Pass through costs	
35	Rates	8,763
36	Commerce Act levies	852
37	Industry levies	1,772
38	CPP specified pass through costs	-
39	Recoverable costs excluding financial incentives and wash-ups	
40	Electricity lines service charge payable to Transpower	190,029
41	Transpower new investment contract charges	12,846
42	System operator services	-
43	Distributed generation allowance	6,636
44	Extended reserves allowance	-
45	Other recoverable costs excluding financial incentives and wash-ups	-
46	Pass-through and recoverable costs excluding financial incentives and wash-ups	220,898
47		

Company Name **Vector**
 For Year Ended **31 March 2016**

SCHEDULE 3: REPORT ON REGULATORY PROFIT

This schedule requires information on the calculation of regulatory profit for the EDB for the disclosure year. All EDBs must complete all sections and provide explanatory comment on their regulatory profit in Schedule 14 (Mandatory Explanatory Notes).

This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

		(\$000)	
		CY-1	CY
		31 Mar 15	31 Mar 16
48	3(iii): Incremental Rolling Incentive Scheme		
49			
50			
51	Allowed controllable opex	-	-
52	Actual controllable opex	-	-
53			
54	Incremental change in year		-
55			
		Previous years' incremental change	Previous years' incremental change adjusted for inflation
56			
57	CY-5 31 Mar 11	-	-
58	CY-4 31 Mar 12	-	-
59	CY-3 31 Mar 13	-	-
60	CY-2 31 Mar 14	-	-
61	CY-1 31 Mar 15	-	-
62	Net incremental rolling incentive scheme		-
63			
64	Net recoverable costs allowed under incremental rolling incentive scheme		-
65	3(iv): Merger and Acquisition Expenditure		
70			(\$000)
66	Merger and acquisition expenditure		-
67			
68	<i>Provide commentary on the benefits of merger and acquisition expenditure to the electricity distribution business, including required disclosures in accordance with section 2.7, in Schedule 14 (Mandatory Explanatory Notes)</i>		
69	3(v): Other Disclosures		
70			(\$000)
71	Self-insurance allowance		-

Company Name **Vector**
 For Year Ended **31 March 2016**

SCHEDULE 4: REPORT ON VALUE OF THE REGULATORY ASSET BASE (ROLLED FORWARD)

This schedule requires information on the calculation of the Regulatory Asset Base (RAB) value to the end of this disclosure year. This informs the ROI calculation in Schedule 2. EDBs must provide explanatory comment on the value of their RAB in Schedule 14 (Mandatory Explanatory Notes). This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

4(i): Regulatory Asset Base Value (Rolled Forward)		for year ended				
		RAB 31 Mar 12 (\$000)	RAB 31 Mar 13 (\$000)	RAB 31 Mar 14 (\$000)	RAB 31 Mar 15 (\$000)	RAB 31 Mar 16 (\$000)
Total opening RAB value		2,453,324	2,489,280	2,536,404	2,618,855	2,660,795
less Total depreciation		87,420	84,718	90,831	92,306	94,495
plus Total revaluations		38,147	21,339	38,684	6,565	11,077
plus Assets commissioned		102,442	113,902	143,062	137,234	116,194
less Asset disposals		17,091	3,348	8,447	9,358	11,139
plus Lost and found assets adjustment		-	-	-	-	-
plus Adjustment resulting from asset allocation		(122)	(51)	(17)	(195)	(34)
Total closing RAB value		2,489,280	2,536,404	2,618,855	2,660,795	2,682,398

4(ii): Unallocated Regulatory Asset Base		Unallocated RAB *		RAB	
		(\$000)	(\$000)	(\$000)	(\$000)
Total opening RAB value			2,671,149		2,660,795
less Total depreciation			97,621		94,495
plus Total revaluations			11,118		11,077
plus Assets commissioned (other than below)		119,748		116,194	
Assets acquired from a regulated supplier					
Assets acquired from a related party					
Assets commissioned			119,748		116,194
less Asset disposals (other than below)		7,710		7,699	
Asset disposals to a regulated supplier					
Asset disposals to a related party		3,440		3,440	
Asset disposals			11,150		11,139
plus Lost and found assets adjustment			(107)		-
plus Adjustment resulting from asset allocation					(34)
Total closing RAB value			2,693,138		2,682,398

* The 'unallocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services without any allowance being made for the allocation of costs to services provided by the supplier that are not electricity distribution services. The RAB value represents the value of these assets after applying this cost allocation. Neither value includes works under construction.

4(iii): Calculation of Revaluation Rate and Revaluation of Assets		
CPI _t		1,200
CPI _{t-4}		1,195
Revaluation rate (%)		0.42%

		Unallocated RAB *		RAB	
		(\$000)	(\$000)	(\$000)	(\$000)
Total opening RAB value		2,671,149		2,660,795	
less Opening value of fully depreciated, disposed and lost assets		13,872		13,502	
Total opening RAB value subject to revaluation		2,657,276		2,647,293	
Total revaluations			11,118		11,077

4(iv): Roll Forward of Works Under Construction		Unallocated works under construction		Allocated works under construction	
Works under construction—preceding disclosure year			51,896		49,937
plus Capital expenditure		124,331		122,509	
less Assets commissioned		119,748		116,194	
plus Adjustment resulting from asset allocation				(115)	
Works under construction - current disclosure year			56,479		56,137
Highest rate of capitalised finance applied					5.84%

4(v): Regulatory Depreciation		Unallocated RAB *		RAB	
		(\$000)	(\$000)	(\$000)	(\$000)
Depreciation - standard		78,098		78,098	
Depreciation - no standard life assets		19,522		16,397	
Depreciation - modified life assets					
Depreciation - alternative depreciation in accordance with CPP					
Total depreciation			97,621		94,495

4(vi): Disclosure of Changes to Depreciation Profiles		(\$000 unless otherwise specified)		
Asset or assets with changes to depreciation*	Reason for non-standard depreciation (text entry)	Closing RAB value		
		Depreciation charge for the period (RAB)	under 'non-standard' depreciation	Closing RAB value under 'standard' depreciation

Company Name **Vector**
 For Year Ended **31 March 2016**

SCHEDULE 4: REPORT ON VALUE OF THE REGULATORY ASSET BASE (ROLLED FORWARD)

This schedule requires information on the calculation of the Regulatory Asset Base (RAB) value to the end of this disclosure year. This informs the ROI calculation in Schedule 2. EDBs must provide explanatory comment on the value of their RAB in Schedule 14 (Mandatory Explanatory Notes). This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

* include additional rows if needed										
4(vii): Disclosure by Asset Category										
(\$000 unless otherwise specified)										
	Subtransmission lines	Subtransmission cables	Zone substations	Distribution and LV lines	Distribution and LV cables	Distribution substations and transformers	Distribution switchgear	Other network assets	Non-network assets	Total
99	Total opening RAB value									
	80,253	397,133	229,684	284,699	735,024	257,248	146,611	495,539	34,604	2,660,795
100	<i>less</i> Total depreciation									
	2,081	10,974	8,672	8,652	24,234	8,375	6,574	15,987	8,946	94,495
101	<i>plus</i> Total revaluations									
	334	1,647	959	1,183	3,073	1,068	606	2,071	136	11,077
102	<i>plus</i> Assets commissioned									
	40	170	19,288	19,058	22,480	8,169	12,987	26,473	7,529	116,194
103	<i>less</i> Asset disposals									
	380	3,580	406	1,921	442	1,926	1,836	620	28	11,139
104	<i>plus</i> Lost and found assets adjustment									
	-	-	-	-	-	-	-	-	-	-
105	<i>plus</i> Adjustment resulting from asset allocation									
	-	-	-	-	-	-	-	-	(34)	(34)
106	<i>plus</i> Asset category transfers									
	-	-	-	-	-	-	-	(1,105)	1,105	-
107	Total closing RAB value									
	78,166	384,396	240,853	294,367	735,901	256,184	151,794	506,371	34,366	2,682,398
108	Asset Life									
110	Weighted average remaining asset life									
	46	48	35	42	37	36	28	34	12	(years)
111	Weighted average expected total asset life									
	59	70	43	58	61	45	38	44	17	(years)

Company Name **Vector**
 For Year Ended **31 March 2016**

SCHEDULE 5a: REPORT ON REGULATORY TAX ALLOWANCE

This schedule requires information on the calculation of the regulatory tax allowance. This information is used to calculate regulatory profit/loss in Schedule 3 (regulatory profit). EDBs must provide explanatory commentary on the information disclosed in this schedule, in Schedule 14 (Mandatory Explanatory Notes). This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 70

sch ref

		(\$000)	
7	5a(i): Regulatory Tax Allowance		
8	Regulatory profit / (loss) before tax		198,534
9			
10	<i>plus</i> Income not included in regulatory profit / (loss) before tax but taxable	8,852	*
11	Expenditure or loss in regulatory profit / (loss) before tax but not deductible	6,600	*
12	Amortisation of initial differences in asset values	34,965	
13	Amortisation of revaluations	6,582	
14			56,998
15			
16	<i>less</i> Total revaluations	11,077	
17	Income included in regulatory profit / (loss) before tax but not taxable	22	*
18	Discretionary discounts and customer rebates		
19	Expenditure or loss deductible but not in regulatory profit / (loss) before tax		*
20	Notional deductible interest	59,076	
21			70,174
22			
23	Regulatory taxable income		185,357
24			
25	<i>less</i> Utilised tax losses		
26	Regulatory net taxable income		185,357
27			
28	Corporate tax rate (%)	28%	
29	Regulatory tax allowance		51,900

* Workings to be provided in Schedule 14

5a(ii): Disclosure of Permanent Differences

In Schedule 14, Box 5, provide descriptions and workings of items recorded in the asterisked categories in Schedule 5a(i).

5a(iii): Amortisation of Initial Difference in Asset Values

(\$000)

36	Opening unamortised initial differences in asset values	1,188,800	
37	<i>less</i> Amortisation of initial differences in asset values	34,965	
38	<i>plus</i> Adjustment for unamortised initial differences in assets acquired		
39	<i>less</i> Adjustment for unamortised initial differences in assets disposed	6,342	
40	Closing unamortised initial differences in asset values		1,147,493
41			
42	Opening weighted average remaining useful life of relevant assets (years)		34
43			

Company Name **Vector**
 For Year Ended **31 March 2016**

SCHEDULE 5a: REPORT ON REGULATORY TAX ALLOWANCE

This schedule requires information on the calculation of the regulatory tax allowance. This information is used to calculate regulatory profit/loss in Schedule 3 (regulatory profit). EDBs must provide explanatory commentary on the information disclosed in this schedule, in Schedule 14 (Mandatory Explanatory Notes). This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 70

sch ref

44	5a(iv): Amortisation of Revaluations		(\$000)
45			
46	Opening sum of RAB values without revaluations	2,476,074	
47			
48	Adjusted depreciation	87,913	
49	Total depreciation	94,495	
50	Amortisation of revaluations		6,582
51			
52	5a(v): Reconciliation of Tax Losses		(\$000)
53			
54	Opening tax losses	-	
55	plus Current period tax losses		
56	less Utilised tax losses		
57	Closing tax losses		-
58	5a(vi): Calculation of Deferred Tax Balance		(\$000)
59			
60	Opening deferred tax	(62,328)	
61			
62	plus Tax effect of adjusted depreciation	24,616	
63			
64	less Tax effect of tax depreciation	25,918	
65			
66	plus Tax effect of other temporary differences*	1,676	
67			
68	less Tax effect of amortisation of initial differences in asset values	9,790	
69			
70	plus Deferred tax balance relating to assets acquired in the disclosure year	-	
71			
72	less Deferred tax balance relating to assets disposed in the disclosure year	240	
73			
74	plus Deferred tax cost allocation adjustment	(102)	
75			
76	Closing deferred tax		(72,086)
77			
78	5a(vii): Disclosure of Temporary Differences		
79	<i>In Schedule 14, Box 6, provide descriptions and workings of items recorded in the asterisked category in Schedule 5a(vi) (Tax effect of other temporary differences).</i>		
80			
81	5a(viii): Regulatory Tax Asset Base Roll-Forward		
82			(\$000)
83	Opening sum of regulatory tax asset values	1,049,139	
84	less Tax depreciation	92,563	
85	plus Regulatory tax asset value of assets commissioned	113,149	
86	less Regulatory tax asset value of asset disposals	3,214	
87	plus Lost and found assets adjustment		
88	plus Adjustment resulting from asset allocation	(398)	
89	plus Other adjustments to the RAB tax value	(20)	
90	Closing sum of regulatory tax asset values		1,066,093

Company Name **Vector**
 For Year Ended **31 March 2016**

SCHEDULE 5b: REPORT ON RELATED PARTY TRANSACTIONS

This schedule provides information on the valuation of related party transactions, in accordance with section 2.3.6 and 2.3.7 of the ID determination.
 This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

7 5b(i): Summary—Related Party Transactions		(S000)
8	Total regulatory income	–
9	Operational expenditure	14,344
10	Capital expenditure	–
11	Market value of asset disposals	2,365
12	Other related party transactions	–

13 **5b(ii): Entities Involved in Related Party Transactions**

14	Name of related party	Related party relationship
15	Vector Communications Limited	A wholly owned subsidiary of Vector Limited.
16	Tree Scape Limited	An associate in which Vector Limited holds a 50% interest.
17		
18		
19		

20 * include additional rows if needed

21 **5b(iii): Related Party Transactions**

22	Name of related party	Related party transaction type	Description of transaction	Value of transaction (\$000)	Basis for determining value
23	Vector Communications Limited	Opex	Purchase of telecommunications services	10,158	ID clause 2.3.6(1)(c)(i)
24	Tree Scape Limited	Opex	Purchase of vegetation management services	4,186	ID clause 2.3.6(1)(d)
25	Vector Communications Limited	Sales	Sale of assets	2,365	ID clause 2.3.7(2)(c)
26					[Select one]
27					[Select one]
28					[Select one]
29					[Select one]
30					[Select one]
31					[Select one]
32					[Select one]
33					[Select one]
34					[Select one]
35					[Select one]
36					[Select one]
37					[Select one]

38 * include additional rows if needed

Company Name **Vector**
 For Year Ended **31 March 2016**

SCHEDULE 5c: REPORT ON TERM CREDIT SPREAD DIFFERENTIAL ALLOWANCE

This schedule is only to be completed if, as at the date of the most recently published financial statements, the weighted average original tenor of the debt portfolio (both qualifying debt and non-qualifying debt) is greater than five years. This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

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5c(i): Qualifying Debt (may be Commission only)

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Issuing party	Issue date	Pricing date	Original tenor (in years)	Coupon rate (%)	Book value at issue date (NZD)	Book value at date of financial statements (NZD)	Term Credit Spread Difference	Cost of executing an interest rate swap	Debt issue cost readjustment
Capital bonds – fixed coupon	15-Jun-12	14-Jun-12	5	7	262,651	262,422	[]VCI	[]VCI	[]VCI
Floating rate notes									
FRN - series 2	26-Oct-05	26-Oct-05	10	BKBM + []VCI	250,000		[]VCI	[]VCI	[]VCI
FRN - series 2	26-Oct-05	26-Oct-05	12	BKBM + []VCI	400,000		[]VCI	[]VCI	[]VCI
FRN - series 3	26-Oct-05	26-Oct-05	15	BKBM + []VCI	350,000		[]VCI	[]VCI	[]VCI
FRN - series 4	4-Apr-07	4-Apr-07	10	BKBM + []VCI	200,000		[]VCI	[]VCI	[]VCI
Floating rate notes subtotal					1,200,000	1,156,080	[]VCI	[]VCI	[]VCI
Medium term notes – GBP fixed rate	11-Apr-08	8-Apr-08	10.8	7.625	285,614	265,122	[]VCI	[]VCI	[]VCI
Senior notes - USD fixed rate									
2004 series- 12 years	16-Sep-04	19-Jul-04	12	5.51	98,875		[]VCI	[]VCI	[]VCI
2004 series- 15 years	16-Sep-04	19-Jul-04	15	5.75	296,623		[]VCI	[]VCI	[]VCI
2010 series- 12 years	20-Dec-10	22-Sep-10	12	[]VCI	250,516		[]VCI	[]VCI	[]VCI
2014 series- 7 years	14-Oct-14	19-Jun-14	7	[]VCI	150,000		[]VCI	[]VCI	[]VCI
Senior notes - USD fixed rate subtotal					796,014	903,698	[]VCI	[]VCI	[]VCI
Senior credit facilities									
[]VCI	3-Feb-15	16-Dec-14	3	BKBM + []VCI					
[]VCI	3-Feb-15	16-Dec-14	3	BKBM + []VCI					
Bank loans subtotal						169,598			
Working capital facilities									
[]VCI	17-Dec-13	11-Nov-13	3	BKBM + []VCI		78,650			
* include additional rows if needed						2,835,570	[]VCI	[]VCI	[]VCI

5c(ii): Attribution of Term Credit Spread Differential

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Gross term credit spread differential		1,136
Total book value of interest bearing debt	2,835,570	
Leverage	44%	
Average opening and closing RAB values	2,671,597	
Attribution Rate (%)		41%
Term credit spread differential allowance		471

Company Name **Vector**
 For Year Ended **31 March 2016**

SCHEDULE 5d: REPORT ON COST ALLOCATIONS

This schedule provides information on the allocation of operational costs. EDBs must provide explanatory comment on their cost allocation in Schedule 14 (Mandatory Explanatory Notes), including on the impact of any reclassifications. This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

		Value allocated (\$000s)				
		Arm's length deduction	Electricity distribution services	Non-electricity distribution services	Total	OVABAA allocation increase (\$000s)
7	5d(i): Operating Cost Allocations					
8						
9						
10	Service interruptions and emergencies					
11	Directly attributable		6,940			
12	Not directly attributable	-	-	-	-	-
13	Total attributable to regulated service		6,940			
14	Vegetation management					
15	Directly attributable		3,968			
16	Not directly attributable	-	-	-	-	-
17	Total attributable to regulated service		3,968			
18	Routine and corrective maintenance and inspection					
19	Directly attributable		11,069			
20	Not directly attributable	-	-	-	-	-
21	Total attributable to regulated service		11,069			
22	Asset replacement and renewal					
23	Directly attributable		13,276			
24	Not directly attributable	-	-	-	-	-
25	Total attributable to regulated service		13,276			
26	System operations and network support					
27	Directly attributable		35,455			
28	Not directly attributable	-	9,434	3,477	12,911	-
29	Total attributable to regulated service		44,889			
30	Business support					
31	Directly attributable		1,338			
32	Not directly attributable	-	27,393	19,437	46,830	-
33	Total attributable to regulated service		28,731			
34						
35	Operating costs directly attributable		72,046			
36	Operating costs not directly attributable	-	36,827	22,914	59,741	-
37	Operational expenditure		108,873			
38						

Company Name	Vector
For Year Ended	31 March 2016

SCHEDULE 5d: REPORT ON COST ALLOCATIONS

This schedule provides information on the allocation of operational costs. EDBs must provide explanatory comment on their cost allocation in Schedule 14 (Mandatory Explanatory Notes), including on the impact of any reclassifications. This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

39 **5d(ii): Other Cost Allocations**

	(\$000)
40 Pass through and recoverable costs	
41 Pass through costs	
42 Directly attributable	11,387
43 Not directly attributable	-
44 Total attributable to regulated service	11,387
45 Recoverable costs	
46 Directly attributable	209,511
47 Not directly attributable	-
48 Total attributable to regulated service	209,511

50 **5d(iii): Changes in Cost Allocations* †**

		(\$000)	
		CY-1	Current Year (CY)
52 Change in cost allocation 1			
53 Cost category			
54 Original allocator or line items			
55 New allocator or line items			
		-	-
56			
57 Rationale for change			

		(\$000)	
		CY-1	Current Year (CY)
61 Change in cost allocation 2			
62 Cost category			
63 Original allocator or line items			
64 New allocator or line items			
		-	-
65			
66 Rationale for change			

		(\$000)	
		CY-1	Current Year (CY)
70 Change in cost allocation 3			
71 Cost category			
72 Original allocator or line items			
73 New allocator or line items			
		-	-
74			
75 Rationale for change			

78 * a change in cost allocation must be completed for each cost allocator change that has occurred in the disclosure year. A movement in an allocator metric is not a change in allocator or component.

79 † include additional rows if needed

Company Name	Vector
For Year Ended	31 March 2016

SCHEDULE 5e: REPORT ON ASSET ALLOCATIONS

This schedule requires information on the allocation of asset values. This information supports the calculation of the RAB value in Schedule 4. EDBs must provide explanatory comment on their cost allocation in Schedule 14 (Mandatory Explanatory Notes), including on the impact of any changes in asset allocations. This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

5e(i): Regulated Service Asset Values		Value allocated (\$000s)
		Electricity distribution services
7	Subtransmission lines	
11	Directly attributable	78,166
12	Not directly attributable	-
13	Total attributable to regulated service	78,166
14	Subtransmission cables	
15	Directly attributable	384,396
16	Not directly attributable	-
17	Total attributable to regulated service	384,396
18	Zone substations	
19	Directly attributable	240,853
20	Not directly attributable	-
21	Total attributable to regulated service	240,853
22	Distribution and LV lines	
23	Directly attributable	294,367
24	Not directly attributable	-
25	Total attributable to regulated service	294,367
26	Distribution and LV cables	
27	Directly attributable	735,901
28	Not directly attributable	-
29	Total attributable to regulated service	735,901
30	Distribution substations and transformers	
31	Directly attributable	256,184
32	Not directly attributable	-
33	Total attributable to regulated service	256,184
34	Distribution switchgear	
35	Directly attributable	151,794
36	Not directly attributable	-
37	Total attributable to regulated service	151,794
38	Other network assets	
39	Directly attributable	506,371
40	Not directly attributable	-
41	Total attributable to regulated service	506,371
42	Non-network assets	
43	Directly attributable	16,425
44	Not directly attributable	17,941
45	Total attributable to regulated service	34,366
46		
47	Regulated service asset value directly attributable	2,664,457
48	Regulated service asset value not directly attributable	17,941
49	Total closing RAB value	2,682,398

5e(ii): Changes in Asset Allocations* †		(\$000)	
		CY-1	Current Year (CY)
53	Change in asset value allocation 1		
54	Asset category		
55	Original allocator or line items		
56	New allocator or line items		
57			
58	Rationale for change		
59			
60			
61			
62	Change in asset value allocation 2		
63	Asset category		
64	Original allocator or line items		
65	New allocator or line items		
66			
67	Rationale for change		
68			
69			
70			
71	Change in asset value allocation 3		
72	Asset category		
73	Original allocator or line items		
74	New allocator or line items		
75			
76	Rationale for change		
77			
78			

* a change in asset allocation must be completed for each allocator or component change that has occurred in the disclosure year. A movement in an allocator metric is not a change in allocator or component.
 † include additional rows if needed

Company Name **Vector**
 For Year Ended **31 March 2016**

SCHEDULE 6a: REPORT ON CAPITAL EXPENDITURE FOR THE DISCLOSURE YEAR

This schedule requires a breakdown of capital expenditure on assets incurred in the disclosure year, including any assets in respect of which capital contributions are received, but excluding assets that are vested assets. Information on expenditure on assets must be provided on an accounting accruals basis and must exclude finance costs. EDBs must provide explanatory comment on their expenditure on assets in Schedule 14 (Explanatory Notes to Templates). This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

7	6a(i): Expenditure on Assets		(\$000)	(\$000)
8	Consumer connection			42,018
9	System growth			21,514
10	Asset replacement and renewal			64,028
11	Asset relocations			18,463
12	Reliability, safety and environment:			
13	Quality of supply	401		
14	Legislative and regulatory	596		
15	Other reliability, safety and environment	1,359		
16	Total reliability, safety and environment			2,356
17	Expenditure on network assets			148,379
18	Expenditure on non-network assets			9,529
19				
20	Expenditure on assets			157,908
21	plus Cost of financing			3,056
22	less Value of capital contributions			38,455
23	plus Value of vested assets			-
24				
25	Capital expenditure			122,509
26	6a(ii): Subcomponents of Expenditure on Assets (where known)			(\$000)
27	Energy efficiency and demand side management, reduction of energy losses			-
28	Overhead to underground conversion			8,290
29	Research and development			1,426
30	6a(iii): Consumer Connection			
31	<i>Consumer types defined by EDB*</i>		(\$000)	(\$000)
32	Service connection		11,071	
33	Customer substations		7,834	
34	Business subdivisions		2,302	
35	Residential subdivisions		16,836	
36	Capacity change		3,012	
37	Street lighting		956	
38	Easement costs		7	
39	<i>* include additional rows if needed</i>			
40	Consumer connection expenditure			42,018
41	less Capital contributions funding consumer connection expenditure	25,730		
42	Consumer connection less capital contributions			16,288
43				
44	6a(iv): System Growth and Asset Replacement and Renewal			
45			System Growth	Replacement and
46			(\$000)	Renewal
47	Subtransmission		3,425	1,629
48	Zone substations		6,719	15,844
49	Distribution and LV lines		299	22,429
50	Distribution and LV cables		7,194	5,718
51	Distribution substations and transformers		1,617	6,258
52	Distribution switchgear		930	5,878
53	Other network assets		1,330	6,272
54	System growth and asset replacement and renewal expenditure		21,514	64,028
55	less Capital contributions funding system growth and asset replacement and renewal	3,103		-
56	System growth and asset replacement and renewal less capital contributions		18,411	64,028
57				
58	6a(v): Asset Relocations		(\$000)	(\$000)
59	<i>Project or programme*</i>			
60				
61				
62				
63	<i>* include additional rows if needed</i>			
64	All other projects or programmes - asset relocations		18,463	
65	Asset relocations expenditure			18,463
66	less Capital contributions funding asset relocations	9,622		
67	Asset relocations less capital contributions			8,841

Company Name **Vector**
 For Year Ended **31 March 2016**

SCHEDULE 6a: REPORT ON CAPITAL EXPENDITURE FOR THE DISCLOSURE YEAR

This schedule requires a breakdown of capital expenditure on assets incurred in the disclosure year, including any assets in respect of which capital contributions are received, but excluding assets that are vested assets. Information on expenditure on assets must be provided on an accounting accruals basis and must exclude finance costs. EDBs must provide explanatory comment on their expenditure on assets in Schedule 14 (Explanatory Notes to Templates). This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

68			
69	6a(vi): Quality of Supply		
70	Project or programme*	(\$000)	(\$000)
71			
72			
73			
74			
75			
76	* include additional rows if needed		
77	All other projects programmes - quality of supply	401	
78	Quality of supply expenditure		401
79	less Capital contributions funding quality of supply		
80	Quality of supply less capital contributions		401
81	6a(vii): Legislative and Regulatory		
82	Project or programme*	(\$000)	(\$000)
83			
84			
85			
86			
87			
88	* include additional rows if needed		
89	All other projects or programmes - legislative and regulatory	596	
90	Legislative and regulatory expenditure		596
91	less Capital contributions funding legislative and regulatory		
92	Legislative and regulatory less capital contributions		596
93	6a(viii): Other Reliability, Safety and Environment		
94	Project or programme*	(\$000)	(\$000)
95			
96			
97			
98			
99			
100	* include additional rows if needed		
101	All other projects or programmes - other reliability, safety and environment	1,359	
102	Other reliability, safety and environment expenditure		1,359
103	less Capital contributions funding other reliability, safety and environment		
104	Other reliability, safety and environment less capital contributions		1,359
105			
106	6a(ix): Non-Network Assets		
107	Routine expenditure		
108	Project or programme*	(\$000)	(\$000)
109			
110			
111			
112			
113			
114	* include additional rows if needed		
115	All other projects or programmes - routine expenditure	4,285	
116	Routine expenditure		4,285
117	Atypical expenditure		
118	Project or programme*	(\$000)	(\$000)
119			
120			
121			
122			
123			
124	* include additional rows if needed		
125	All other projects or programmes - atypical expenditure	5,244	
126	Atypical expenditure		5,244
127			
128	Expenditure on non-network assets		9,529

Company Name	Vector
For Year Ended	31 March 2016

SCHEDULE 6b: REPORT ON OPERATIONAL EXPENDITURE FOR THE DISCLOSURE YEAR

This schedule requires a breakdown of operational expenditure incurred in the disclosure year.

EDBs must provide explanatory comment on their operational expenditure in Schedule 14 (Explanatory notes to templates). This includes explanatory comment on any atypical operational expenditure and assets replaced or renewed as part of asset replacement and renewal operational expenditure, and additional information on insurance.

This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

		(\$000)	(\$000)
7	6b(i): Operational Expenditure		
8	Service interruptions and emergencies	6,940	
9	Vegetation management	3,968	
10	Routine and corrective maintenance and inspection	11,069	
11	Asset replacement and renewal	13,276	
12	Network opex		35,253
13	System operations and network support	44,889	
14	Business support	28,731	
15	Non-network opex		73,620
16			
17	Operational expenditure		108,873
18	6b(ii): Subcomponents of Operational Expenditure (where known)		
19	Energy efficiency and demand side management, reduction of energy losses		-
20	Direct billing*		-
21	Research and development		52
22	Insurance		2,420
23	* Direct billing expenditure by suppliers that directly bill the majority of their consumers		

Company Name	Vector
For Year Ended	31 March 2016

SCHEDULE 7: COMPARISON OF FORECASTS TO ACTUAL EXPENDITURE

This schedule compares actual revenue and expenditure to the previous forecasts that were made for the disclosure year. Accordingly, this schedule requires the forecast revenue and expenditure information from previous disclosures to be inserted.

EDBs must provide explanatory comment on the variance between actual and target revenue and forecast expenditure in Schedule 14 (Mandatory Explanatory Notes). This information is part of the audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8. For the purpose of this audit, target revenue and forecast expenditures only need to be verified back to previous disclosures.

sch ref

7	7(i): Revenue	Target (\$000) ¹	Actual (\$000)	% variance
8	Line charge revenue	607,044	617,925	2%

9	7(ii): Expenditure on Assets	Forecast (\$000) ²	Actual (\$000)	% variance
10	Consumer connection	64,585	42,018	(35%)
11	System growth	39,754	21,514	(46%)
12	Asset replacement and renewal	68,928	64,028	(7%)
13	Asset relocations	20,803	18,463	(11%)
14	Reliability, safety and environment:			
15	Quality of supply	159	401	152%
16	Legislative and regulatory	686	596	(13%)
17	Other reliability, safety and environment	7,598	1,359	(82%)
18	Total reliability, safety and environment	8,443	2,356	(72%)
19	Expenditure on network assets	202,513	148,379	(27%)
20	Expenditure on non-network assets	12,099	9,529	(21%)
21	Expenditure on assets	214,612	157,908	(26%)

22	7(iii): Operational Expenditure			
23	Service interruptions and emergencies	8,454	6,940	(18%)
24	Vegetation management	3,611	3,968	10%
25	Routine and corrective maintenance and inspection	13,150	11,069	(16%)
26	Asset replacement and renewal	10,501	13,276	26%
27	Network opex	35,716	35,253	(1%)
28	System operations and network support	43,287	44,889	4%
29	Business support	27,664	28,731	4%
30	Non-network opex	70,951	73,620	4%
31	Operational expenditure	106,667	108,873	2%

32	7(iv): Subcomponents of Expenditure on Assets (where known)			
33	Energy efficiency and demand side management, reduction of energy losses	-	-	-
34	Overhead to underground conversion	2,483	8,290	234%
35	Research and development	-	1,426	-

37	7(v): Subcomponents of Operational Expenditure (where known)			
38	Energy efficiency and demand side management, reduction of energy losses	-	-	-
39	Direct billing	-	-	-
40	Research and development	-	52	-
41	Insurance	2,532	2,420	(4%)

1 From the nominal dollar target revenue for the disclosure year disclosed under clause 2.4.3(3) of this determination

2 From the CY+1 nominal dollar expenditure forecasts disclosed in accordance with clause 2.6.6 for the forecast period starting at the beginning of the disclosure year (the second to last disclosure of Schedules 11a and 11b)

Company Name	Vector
For Year Ended	31 March 2016
Network / Sub-Network Name	Vector Combined

SCHEDULE 8: REPORT ON BILLED QUANTITIES AND LINE CHARGE REVENUES

This schedule requires the billed quantities and associated line charge revenues for each price category code used by the EDB in its pricing schedules. Information is also required on the number of ICPs that are included in each consumer group or price category code, and the energy delivered to these ICPs.

sch ref

8(i): Billed Quantities by Price Component

Consumer group name or price category code	Consumer type or types (eg, residential, commercial etc.)	Standard or non-standard consumer group (specify)	Average no. of ICPs in disclosure year	Energy delivered to ICPs in disclosure year (MWh)	Unit charging basis (eg, days, kW of demand, kVA of capacity, etc.)	Billed quantities by price component						
						FIXD	kWh	CAPY	DAMD	DEXA	PWRP	
						Day	kWh	kVA/Day	kVA/Day	kVA/Day	kVA/Day	
ARCL	residential	Standard	122,472	647,519			45,193,617	647,519,325	-	-	-	-
ARCS	residential	Standard	98,466	923,732			35,675,224	923,731,753	-	-	-	-
ARUL	residential	Standard	39,507	167,547			14,547,357	167,546,628	-	-	-	-
ARUS	residential	Standard	24,284	203,032			8,790,645	203,031,969	-	-	-	-
ARHL	residential	Standard	2	11			741	11,423	-	-	-	-
ARHS	residential	Standard	1	18			238	17,872	-	-	-	-
ABSN	business	Standard	36,174	767,967			13,228,693	767,966,647	-	-	-	-
ABSU	business	Standard	1,896	38,665			24,174,846	38,664,927	-	-	-	-
ABSH	business	Standard	31	5,261			11,085	5,260,870	-	-	-	-
ALVN	low voltage	Standard	2,062	224,402			755,573	224,402,107	111,765,349	-	-	501,854
ALVT	low voltage	Standard	1,460	572,834			-	572,833,656	130,330,852	50,268,112	-	6,012,441
ATXN	transformer	Standard	171	26,962			62,149	26,962,270	16,055,582	-	-	150,233
ATXT	transformer	Standard	857	1,106,294			-	1,106,294,451	214,137,852	88,584,611	-	5,966,574
AHVN	high voltage	Standard	9	2,317			3,324	2,316,873	1,628,400	-	-	230,352
AHVT	high voltage	Standard	126	439,697			-	439,696,561	54,464,357	34,086,306	139,234	1,685,591
WRCL	residential	Standard	86,304	465,595			31,736,077	465,595,384	-	-	-	-
WRCS	residential	Standard	76,527	742,394			27,888,846	742,393,603	-	-	-	-
WRUL	residential	Standard	15,865	79,592			5,829,249	79,592,219	-	-	-	-
WRUS	residential	Standard	16,085	136,106			5,845,826	136,105,721	-	-	-	-
WRHL	residential	Standard	1	6			294	5,755	-	-	-	-
WRHS	residential	Standard	2	11			658	10,744	-	-	-	-
WBSN	business	Standard	21,788	392,404			7,970,169	392,403,803	-	-	-	-
WBSU	business	Standard	426	18,868			12,736,656	18,867,835	-	-	-	-
WBSH	business	Standard	11	1,814			4,062	1,813,590	-	-	-	-
WLVN	low voltage	Standard	798	131,319			291,556	131,319,309	43,097,020	-	-	487,606
WLVH	low voltage	Standard	201	108,739			73,471	108,738,766	17,429,667	8,238,713	-	663,875
WTXN	transformer	Standard	146	44,708			53,515	44,707,708	15,541,192	-	-	419,207
WTXH	transformer	Standard	241	350,823			88,295	350,823,063	67,473,806	27,570,351	-	1,299,477
WHVN	high voltage	Standard	1	-			300	261	9,104	-	-	-
WHVH	high voltage	Standard	18	114,622			6,711	114,621,889	12,682,350	7,924,971	12,338	193,282
NS	non-standard	Non-standard	36	715,565			12,988	-	-	-	-	370,000
<i>Add extra rows for additional consumer groups or price category codes as necessary</i>												
Standard consumer totals							234,969,177	7,713,256,982	684,615,531	216,673,064	151,572	17,610,492
Non-standard consumer totals							12,988	-	-	-	-	370,000
Total for all consumers							234,982,165	7,713,256,982	684,615,531	216,673,064	151,572	17,980,492

Add extra columns for additional billed quantities by price component as necessary

Company Name	Vector
For Year Ended	31 March 2016
Network / Sub-Network Name	Vector Combined

SCHEDULE 8: REPORT ON BILLED QUANTITIES AND LINE CHARGE REVENUES

This schedule requires the billed quantities and associated line charge revenues for each price category code used by the EDB in its pricing schedules. Information is also required on the number of ICPs that are included in each consumer group or price category code, and the energy delivered to these ICPs.

8(ii): Line Charge Revenues (\$000) by Price Component

Line charge revenues (\$000) by price component

Price component	FIXD	kWh	CAPY	DAMD	DEXA	PWRP
Day	kWh	kVA/Day	kVA/Day	kVA/Day	kVA/Day	kVA/Day

Add extra columns for additional line charge revenues by price component as necessary

Consumer group name or price category code	Consumer type or types (eg. residential, commercial etc.)	Standard or non-standard consumer group (specify)	Total line charge revenue in disclosure year	Notional revenue foregone from posted discounts (if applicable)
ARCL	residential	Standard	\$67,135	
ARCS	residential	Standard	\$86,127	
ARUL	residential	Standard	\$19,144	
ARUS	residential	Standard	\$21,497	
ARHL	residential	Standard	\$1	
ARHS	residential	Standard	\$1	
ABSN	business	Standard	\$61,626	
ABSU	business	Standard	\$6,305	
ABSH	business	Standard	\$301	
ALVN	low voltage	Standard	\$19,504	
ALVT	low voltage	Standard	\$31,355	
ATXN	transformer	Standard	\$2,367	
ATXT	transformer	Standard	\$53,910	
AHVN	high voltage	Standard	\$268	
AHVT	high voltage	Standard	\$19,306	
WRCL	residential	Standard	\$47,792	
WRCS	residential	Standard	\$67,929	
WRUL	residential	Standard	\$8,863	
WRUS	residential	Standard	\$14,251	
WRHL	residential	Standard	\$1	
WRHS	residential	Standard	\$2	
WBSN	business	Standard	\$32,428	
WBSU	business	Standard	\$3,184	
WBSH	business	Standard	\$104	
WLVN	low voltage	Standard	\$8,623	
WLVH	low voltage	Standard	\$4,338	
WTXN	transformer	Standard	\$2,546	
WTXH	transformer	Standard	\$12,477	
WHVN	high voltage	Standard	\$1	
WHVH	high voltage	Standard	\$3,170	
NS	non-standard	Non-standard	\$23,369	
<i>Add extra rows for additional consumer groups or price category codes as necessary</i>				
Standard consumer totals			\$594,556	--
Non-standard consumer totals			\$23,369	--
Total for all consumers			\$617,925	--

Total distribution line charge revenue	Total transmission line charge revenue (if available)	Rate (eg. \$ per day, \$ per kWh, etc.)
\$44,830	\$22,305	
\$57,511	\$28,616	
\$12,784	\$6,360	
\$14,355	\$7,142	
\$1	--	
\$1	--	
\$41,151	\$20,475	
\$4,210	\$2,095	
\$201	\$100	
\$13,024	\$6,480	
\$20,938	\$10,417	
\$1,581	\$786	
\$35,999	\$17,911	
\$179	\$89	
\$12,892	\$6,414	
\$31,913	\$15,879	
\$45,360	\$22,569	
\$5,918	\$2,945	
\$9,516	\$4,735	
\$1	--	
\$1	\$1	
\$21,654	\$10,774	
\$2,126	\$1,058	
\$70	\$34	
\$5,758	\$2,865	
\$2,897	\$1,441	
\$1,700	\$846	
\$8,332	\$4,145	
--	\$1	
\$2,116	\$1,054	
\$12,032	\$11,337	
<i>Add extra rows for additional consumer groups or price category codes as necessary</i>		
\$397,019	\$197,537	
\$12,032	\$11,337	
\$409,051	\$208,874	

\$6,793	\$60,342	--	--	--	--
\$35,033	\$51,094	--	--	--	--
\$2,187	\$16,957	--	--	--	--
\$8,632	\$12,865	--	--	--	--
--	\$1	--	--	--	--
--	\$1	--	--	--	--
\$12,991	\$48,635	--	--	--	--
\$3,391	\$2,914	--	--	--	--
\$11	\$290	--	--	--	--
\$1,181	\$14,121	\$4,056	--	--	\$146
--	\$9,414	\$4,761	\$15,424	--	\$1,756
\$94	\$1,662	\$569	--	--	\$42
--	\$17,846	\$7,673	\$26,647	--	\$1,744
\$5	\$140	\$56	--	--	\$67
--	\$6,873	\$1,892	\$9,946	\$102	\$493
\$4,734	\$43,058	--	--	--	--
\$27,178	\$40,751	--	--	--	--
\$869	\$7,994	--	--	--	--
\$5,697	\$8,554	--	--	--	--
--	\$1	--	--	--	--
\$1	\$1	--	--	--	--
\$7,767	\$24,661	--	--	--	--
\$1,773	\$1,411	--	--	--	--
\$4	\$100	--	--	--	--
\$1,595	\$5,759	\$1,138	--	--	\$141
\$758	\$616	\$461	\$2,310	--	\$193
\$263	\$1,765	\$396	--	--	\$122
\$820	\$1,954	\$1,751	\$7,575	--	\$377
\$1	--	--	--	--	--
\$60	\$615	\$319	\$2,112	\$8	\$56
\$23,272	--	--	--	--	\$97
<i>Add extra rows for additional consumer groups or price category codes as necessary</i>					
\$121,838	\$380,395	\$23,062	\$64,014	\$110	\$5,137
\$23,272	--	--	--	--	\$97
\$145,110	\$380,395	\$23,062	\$64,014	\$110	\$5,234

8(iii): Number of ICPs directly billed

Number of directly billed ICPs at year end

Check OK

Company Name	Vector
For Year Ended	31 March 2016
Network / Sub-Network Name	Southern

SCHEDULE 8: REPORT ON BILLED QUANTITIES AND LINE CHARGE REVENUES

This schedule requires the billed quantities and associated line charge revenues for each price category code used by the EDB in its pricing schedules. Information is also required on the number of ICPs that are included in each consumer group or price category code, and the energy delivered to these ICPs.

sch ref

8(j): Billed Quantities by Price Component

Consumer group name or price category code	Consumer type or types (eg, residential, commercial etc.)	Standard or non-standard consumer group (specify)	Average no. of ICPs in disclosure year	Energy delivered to ICPs in disclosure year (MWh)	Unit charging basis (eg, days, kW of demand, kVA of capacity, etc.)	Billed quantities by price component						
						FIXD	kWh	CAPY	DAMD	DEXA	PWRP	
						Day	kWh	kVA/Day	kVA/Day	kVA/Day	kVA/Day	
ARCL	residential	Standard	122,472	647,519			45,193,617	647,519,325	-	-	-	-
ARCS	residential	Standard	98,466	923,732			35,675,224	923,731,753	-	-	-	-
ARUL	residential	Standard	39,507	167,547			14,547,357	167,546,628	-	-	-	-
ARUS	residential	Standard	24,284	203,032			8,790,645	203,031,969	-	-	-	-
ARHL	residential	Standard	2	11			741	11,423	-	-	-	-
ARHS	residential	Standard	1	18			238	17,872	-	-	-	-
ABSN	business	Standard	36,174	767,967			13,228,693	767,966,647	-	-	-	-
ABSU	business	Standard	1,896	38,665			24,174,846	38,664,927	-	-	-	-
ABSH	business	Standard	31	5,261			11,085	5,260,870	-	-	-	-
ALVN	low voltage	Standard	2,062	224,402			755,573	224,402,107	111,765,349	-	-	501,854
ALVT	low voltage	Standard	1,460	572,834			-	572,833,656	130,330,852	50,268,112	-	6,012,441
ATXN	transformer	Standard	171	26,962			62,149	26,962,270	16,055,582	-	-	150,233
ATXT	transformer	Standard	857	1,106,294			-	1,106,294,451	214,137,852	88,584,611	-	5,966,574
AHVN	high voltage	Standard	9	2,317			3,324	2,316,873	1,628,400	-	-	230,352
AHVT	high voltage	Standard	126	439,697			-	439,696,561	54,464,357	34,086,306	139,234	1,685,591
NS	non-standard	Non-standard	30	626,943			10,920	-	-	-	-	325,206
<i>Add extra rows for additional consumer groups or price category codes as necessary</i>												
Standard consumer totals			327,518	5,126,258			142,443,492	5,126,257,332	528,382,392	172,939,029	139,234	14,547,045
Non-standard consumer totals			30	626,943			10,920	-	-	-	-	325,206
Total for all consumers			327,548	5,753,201			142,454,412	5,126,257,332	528,382,392	172,939,029	139,234	14,872,251

Add extra columns for additional billed quantities by price component as necessary

Company Name	Vector
For Year Ended	31 March 2016
Network / Sub-Network Name	Southern

SCHEDULE 8: REPORT ON BILLED QUANTITIES AND LINE CHARGE REVENUES

This schedule requires the billed quantities and associated line charge revenues for each price category code used by the EDB in its pricing schedules. Information is also required on the number of ICPs that are included in each consumer group or price category code, and the energy delivered to these ICPs.

8(ii): Line Charge Revenues (\$000) by Price Component

Line charge revenues (\$000) by price component

Consumer group name or price category code	Consumer type or types (eg, residential, commercial etc.)	Standard or non-standard consumer group (specify)	Total line charge revenue in disclosure year	Notional revenue foregone from posted discounts (if applicable)	Total distribution line charge revenue	Total transmission line charge revenue (if available)	Rate (eg, \$ per day, \$ per kWh, etc.)	Price component						
								FIXD	kWh	CAPY	DAMD	DEXA	PWRF	
								Day	kWh	kVA/Day	kVA/Day	kVA/Day	kVA/Day	kVA/Day
ARCL	residential	Standard	\$67,135		\$44,830	\$22,305		\$6,793	\$60,342	-	-	-	-	-
ARCS	residential	Standard	\$86,127		\$57,511	\$28,616		\$35,033	\$51,094	-	-	-	-	-
ARUL	residential	Standard	\$19,144		\$12,784	\$6,360		\$2,187	\$16,957	-	-	-	-	-
ARUS	residential	Standard	\$21,497		\$14,355	\$7,142		\$8,632	\$12,865	-	-	-	-	-
ARHL	residential	Standard	\$1		\$1	-		-	\$1	-	-	-	-	-
ARHS	residential	Standard	\$1		\$1	-		-	\$1	-	-	-	-	-
ABSN	business	Standard	\$61,626		\$41,151	\$20,475		\$12,991	\$48,635	-	-	-	-	-
ABSU	business	Standard	\$6,305		\$4,210	\$2,095		\$3,391	\$2,914	-	-	-	-	-
ABSH	business	Standard	\$301		\$201	\$100		\$11	\$290	-	-	-	-	-
ALVN	low voltage	Standard	\$19,504		\$13,024	\$6,480		\$1,181	\$14,121	\$4,056	-	-	-	\$146
ALVT	low voltage	Standard	\$31,355		\$20,938	\$10,417		-	\$9,414	\$4,761	\$15,424	-	-	\$1,756
ATXN	transformer	Standard	\$2,367		\$1,581	\$786		\$94	\$1,662	\$569	-	-	-	\$42
ATXT	transformer	Standard	\$53,910		\$35,999	\$17,911		-	\$17,846	\$7,673	\$26,647	-	-	\$1,744
AHVN	high voltage	Standard	\$268		\$179	\$89		\$5	\$140	\$56	-	-	-	\$67
AHVT	high voltage	Standard	\$19,306		\$12,892	\$6,414		-	\$6,873	\$1,892	\$9,946	\$102	-	\$493
NS	non-standard	Non-standard	\$20,672		\$10,288	\$10,384		\$20,587	-	-	-	-	-	\$85
<i>Add extra rows for additional consumer groups or price category codes as necessary</i>														
Standard consumer totals			\$388,847	-	\$259,657	\$129,190		\$70,318	\$243,155	\$19,007	\$52,017	\$102	-	\$4,248
Non-standard consumer totals			\$20,672	-	\$10,288	\$10,384		\$20,587	-	-	-	-	-	\$85
Total for all consumers			\$409,519	-	\$269,945	\$139,574		\$90,905	\$243,155	\$19,007	\$52,017	\$102	-	\$4,333

Add extra columns for additional line charge revenues by price component as necessary

8(iii): Number of ICPs directly billed

Number of directly billed ICPs at year end

Check OK

Company Name	Vector
For Year Ended	31 March 2016
Network / Sub-Network Name	Northern

SCHEDULE 8: REPORT ON BILLED QUANTITIES AND LINE CHARGE REVENUES

This schedule requires the billed quantities and associated line charge revenues for each price category code used by the EDB in its pricing schedules. Information is also required on the number of ICPs that are included in each consumer group or price category code, and the energy delivered to these ICPs.

sch ref

8(j): Billed Quantities by Price Component

Consumer group name or price category code	Consumer type or types (eg, residential, commercial etc.)	Standard or non-standard consumer group (specify)	Average no. of ICPs in disclosure year	Energy delivered to ICPs in disclosure year (MWh)	Unit charging basis (eg, days, kW of demand, kVA of capacity, etc.)	Billed quantities by price component					
						FIXD	kWh	CAPY	DAMD	DEXA	PWRP
						Day	kWh	kVA/Day	kVA/Day	kVA/Day	kVA/Day
WRCL	residential	Standard	86,304	465,595		31,736,077	465,595,384	-	-	-	-
WRCS	residential	Standard	76,527	742,394		27,888,846	742,393,603	-	-	-	-
WRUL	residential	Standard	15,865	79,592		5,829,249	79,592,219	-	-	-	-
WRUS	residential	Standard	16,085	136,106		5,845,826	136,105,721	-	-	-	-
WRHL	residential	Standard	1	6		294	5,755	-	-	-	-
WRHS	residential	Standard	2	11		658	10,744	-	-	-	-
WBSN	business	Standard	21,788	392,404		7,970,169	392,403,803	-	-	-	-
WBSU	business	Standard	426	18,868		12,736,656	18,867,835	-	-	-	-
WBSH	business	Standard	11	1,814		4,062	1,813,590	-	-	-	-
WLVN	low voltage	Standard	798	131,319		291,556	131,319,309	43,097,020	-	-	487,606
WLVH	low voltage	Standard	201	108,739		73,471	108,738,766	17,429,667	8,238,713	-	663,875
WTXN	transformer	Standard	146	44,708		53,515	44,707,708	15,541,192	-	-	419,207
WTXH	transformer	Standard	241	350,823		88,295	350,823,063	67,473,806	27,570,351	-	1,299,477
WHVN	high voltage	Standard	1	-		300	261	9,104	-	-	-
WHVH	high voltage	Standard	18	114,622		6,711	114,621,889	12,682,350	7,924,971	12,338	193,282
NS	non-standard	Non-standard	6	88,622		2,068	-	-	-	-	44,794
<i>Add extra rows for additional consumer groups or price category codes as necessary</i>											
Standard consumer totals				218,414	2,587,001	92,525,685	2,586,999,650	156,233,139	43,734,035	12,338	3,063,447
Non-standard consumer totals				6	88,622	2,068	-	-	-	-	44,794
Total for all consumers				218,420	2,675,623	92,527,753	2,586,999,650	156,233,139	43,734,035	12,338	3,108,241

Add extra columns for additional billed quantities by price component as necessary

Company Name	Vector
For Year Ended	31 March 2016
Network / Sub-Network Name	Northern

SCHEDULE 8: REPORT ON BILLED QUANTITIES AND LINE CHARGE REVENUES

This schedule requires the billed quantities and associated line charge revenues for each price category code used by the EDB in its pricing schedules. Information is also required on the number of ICPs that are included in each consumer group or price category code, and the energy delivered to these ICPs.

8(ii): Line Charge Revenues (\$000) by Price Component

Line charge revenues (\$000) by price component

Consumer group name or price category code	Consumer type or types (eg, residential, commercial etc.)	Standard or non-standard consumer group (specify)	Total line charge revenue in disclosure year	Notional revenue foregone from posted discounts (if applicable)	Total distribution line charge revenue	Total transmission line charge revenue (if available)	Rate (eg, \$ per day, \$ per kWh, etc.)	Price component						
								FIXD	kWh	CAPY	DAMD	DEXA	PWRP	
								Day	kWh	kVA/Day	kVA/Day	kVA/Day	kVA/Day	kVA/Day
WRCL	residential	Standard	\$47,792		\$31,913	\$15,879		\$4,734	\$43,058	-	-	-	-	-
WRCS	residential	Standard	\$67,929		\$45,360	\$22,569		\$27,178	\$40,751	-	-	-	-	-
WRUL	residential	Standard	\$8,863		\$5,918	\$2,945		\$869	\$7,994	-	-	-	-	-
WRUS	residential	Standard	\$14,251		\$9,516	\$4,735		\$5,697	\$8,554	-	-	-	-	-
WRHL	residential	Standard	\$1		\$1	-		-	\$1	-	-	-	-	-
WRHS	residential	Standard	\$2		\$1	\$1		\$1	\$1	-	-	-	-	-
WBSN	business	Standard	\$32,428		\$21,654	\$10,774		\$7,767	\$24,661	-	-	-	-	-
WBSU	business	Standard	\$3,184		\$2,126	\$1,058		\$1,773	\$1,411	-	-	-	-	-
WBSH	business	Standard	\$104		\$70	\$34		\$4	\$100	-	-	-	-	-
WLVN	low voltage	Standard	\$8,623		\$5,758	\$2,865		\$1,595	\$5,759	\$1,128	-	-	-	\$141
WLVH	low voltage	Standard	\$4,338		\$2,897	\$1,441		\$758	\$616	\$461	\$2,310	-	-	\$193
WTXN	transformer	Standard	\$2,546		\$1,700	\$846		\$263	\$1,765	\$396	-	-	-	\$122
WTXH	transformer	Standard	\$12,477		\$8,332	\$4,145		\$820	\$1,954	\$1,751	\$7,575	-	-	\$377
WHVN	high voltage	Standard	\$1		-	\$1		\$1	-	-	-	-	-	-
WHVH	high voltage	Standard	\$3,170		\$2,116	\$1,054		\$60	\$615	\$319	\$2,112	\$8	-	\$56
NS	non-standard	Non-standard	\$2,697		\$1,744	\$953		\$2,685	-	-	-	-	-	\$12
<i>Add extra rows for additional consumer groups or price category codes as necessary</i>														
Standard consumer totals			\$205,709	-	\$137,362	\$68,347		\$51,520	\$137,240	\$4,055	\$11,997	\$8	-	\$889
Non-standard consumer totals			\$2,697	-	\$1,744	\$953		\$2,685	-	-	-	-	-	\$12
Total for all consumers			\$208,406	-	\$139,106	\$69,300		\$54,205	\$137,240	\$4,055	\$11,997	\$8	-	\$901

Add extra columns for additional line charge revenues by price component as necessary

8(iii): Number of ICPs directly billed

Number of directly billed ICPs at year end

Check

Company Name	Vector
For Year Ended	31 March 2016
Network / Sub-network Name	Vector Combined

SCHEDULE 9a: ASSET REGISTER

This schedule requires a summary of the quantity of assets that make up the network, by asset category and asset class. All units relating to cable and line assets, that are expressed in km, refer to circuit lengths.

sch ref	Voltage	Asset category	Asset class	Units	Items at start of	Items at end of	Net change	Data accuracy
					year (quantity)	year (quantity)		(1-4)
8	All	Overhead Line	Concrete poles / steel structure	No.	109,246	110,221	975	3
9	All	Overhead Line	Wood poles	No.	7,627	7,164	-463	2
10	All	Overhead Line	Other pole types	No.	105	143	38	4
11	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	375	369	-6	4
12	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	27	27	0	4
13	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	329	335	6	4
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	145	145	0	4
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	5	5	0	4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	49	51	2	4
17	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	30	30	0	4
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	17	17	0	4
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	0	0	0	N/A
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	0	0	0	N/A
21	HV	Subtransmission Cable	Subtransmission submarine cable	km	12	12	0	4
22	HV	Zone substation Buildings	Zone substations up to 66kV	No.	100	101	1	4
23	HV	Zone substation Buildings	Zone substations 110kV+	No.	7	7	0	4
24	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	13	20	7	4
25	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	2	2	0	4
26	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	0	0	0	N/A
27	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	198	204	6	4
28	HV	Zone substation switchgear	33kV RMU	No.	14	14	0	4
29	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	249	251	2	4
30	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	167	166	-1	4
31	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	1,339	1,365	26	4
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	0	0	0	N/A
33	HV	Zone Substation Transformer	Zone Substation Transformers	No.	210	214	4	4
34	HV	Distribution Line	Distribution OH Open Wire Conductor	km	3,814	3,803	-11	3
35	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	0	0	0	N/A
36	HV	Distribution Line	SWER conductor	km	0	0	0	N/A
37	HV	Distribution Cable	Distribution UG XLPE or PVC	km	1,233	1,295	62	4
38	HV	Distribution Cable	Distribution UG PILC	km	2,259	2,251	-8	4
39	HV	Distribution Cable	Distribution Submarine Cable	km	8	8	0	4
40	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	274	253	-21	4
41	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	154	224	70	3
42	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	9,042	9,405	363	3
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	3,650	3,594	-56	3
44	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	5,766	5,865	99	4
45	HV	Distribution Transformer	Pole Mounted Transformer	No.	7,660	7,643	-17	4
46	HV	Distribution Transformer	Ground Mounted Transformer	No.	13,668	13,800	132	4
47	HV	Distribution Transformer	Voltage regulators	No.	12	12	0	4
48	HV	Distribution Substations	Ground Mounted Substation Housing	No.	12,370	12,453	83	3
49	LV	LV Line	LV OH Conductor	km	4,159	4,146	-14	3
50	LV	LV Cable	LV UG Cable	km	5,654	5,771	118	4
51	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	400	421	21	3
52	LV	Connections	OH/UG consumer service connections	No.	542,826	548,280	5,454	3
53	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	3,046	3,613	567	2
54	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	231	269	38	2
55	All	Capacitor Banks	Capacitors including controls	No.	104	100	-4	4
56	All	Load Control	Centralised plant	Lot	32	33	1	3
57	All	Load Control	Relays	No.	0	0	0	N/A
58	All	Civils	Cable Tunnels	km	10	10	0	3

Company Name	Vector
For Year Ended	31 March 2016
Network / Sub-network Name	Northern

SCHEDULE 9a: ASSET REGISTER

This schedule requires a summary of the quantity of assets that make up the network, by asset category and asset class. All units relating to cable and line assets, that are expressed in km, refer to circuit lengths.

sch ref	Voltage	Asset category	Asset class	Units	Items at start of	Items at end of	Net change	Data accuracy
					year (quantity)	year (quantity)		(1-4)
8	All	Overhead Line	Concrete poles / steel structure	No.	62,874	63,409	535	3
9	All	Overhead Line	Wood poles	No.	2,578	2,528	-50	2
10	All	Overhead Line	Other pole types	No.	94	109	15	4
11	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	324	318	-6	4
12	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	27	27	0	4
13	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	134	137	3	4
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	2	2	0	4
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	0	0	0	N/A
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	1	1	0	4
17	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	0	0	0	N/A
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	0	0	0	N/A
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	0	0	0	N/A
20	HV	Subtransmission Cable	Subtransmission submarine cable	km	1	1	0	4
21	HV	Zone substation Buildings	Zone substations up to 66kV	No.	50	50	0	4
22	HV	Zone substation Buildings	Zone substations 110kV+	No.	2	2	0	4
23	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	0	0	0	N/A
24	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	2	2	0	4
25	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	0	0	0	N/A
26	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	198	204	6	4
27	HV	Zone substation switchgear	33kV RMU	No.	14	14	0	4
28	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	119	98	-21	4
29	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	167	166	-1	4
30	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	479	467	-12	4
31	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	0	0	0	N/A
32	HV	Zone Substation Transformer	Zone Substation Transformers	No.	83	84	1	4
33	HV	Distribution Line	Distribution OH Open Wire Conductor	km	2,911	2,907	-4	3
34	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	0	0	0	N/A
35	HV	Distribution Line	SWER conductor	km	0	0	0	N/A
36	HV	Distribution Cable	Distribution UG XLPE or PVC	km	700	731	31	4
37	HV	Distribution Cable	Distribution UG PILC	km	642	639	-3	4
38	HV	Distribution Cable	Distribution Submarine Cable	km	7	7	0	4
39	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	217	197	-20	4
40	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	37	70	33	3
41	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	7,039	7,321	282	3
42	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	827	814	-13	3
43	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	1,359	1,406	47	4
44	HV	Distribution Transformer	Pole Mounted Transformer	No.	5,610	5,617	7	4
45	HV	Distribution Transformer	Ground Mounted Transformer	No.	7,097	7,167	70	4
46	HV	Distribution Transformer	Voltage regulators	No.	7	7	0	4
47	HV	Distribution Substations	Ground Mounted Substation Housing	No.	6,341	6,410	69	3
48	LV	LV Line	LV OH Conductor	km	2,169	2,170	1	3
49	LV	LV Cable	LV UG Cable	km	2,135	2,196	61	4
50	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	164	177	13	3
51	LV	Connections	OH/UG consumer service connections	No.	216,467	219,845	3,378	3
52	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	1,130	1,551	421	2
53	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	89	113	24	2
54	All	Capacitor Banks	Capacitors including controls	No.	78	74	-4	4
55	All	Load Control	Centralised plant	Lot	11	11	0	3
56	All	Load Control	Relays	No.	0	0	0	N/A
57	All	Civils	Cable Tunnels	km	0	0	0	N/A

Company Name	Vector
For Year Ended	31 March 2016
Network / Sub-network Name	Southern

SCHEDULE 9a: ASSET REGISTER

This schedule requires a summary of the quantity of assets that make up the network, by asset category and asset class. All units relating to cable and line assets, that are expressed in km, refer to circuit lengths.

sch ref

sch ref	Voltage	Asset category	Asset class	Units	Items at start of	Items at end of	Net change	Data accuracy
					year (quantity)	year (quantity)		(1-4)
8	All	Overhead Line	Concrete poles / steel structure	No.	46,372	46,812	440	3
9	All	Overhead Line	Wood poles	No.	5,049	4,636	-413	2
10	All	Overhead Line	Other pole types	No.	11	34	23	4
11	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	51	51	0	4
12	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	0	0	0	N/A
13	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	195	198	3	4
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	143	143	0	4
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	5	5	0	4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	48	50	2	4
17	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	30	30	0	4
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	17	17	0	4
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	0	0	0	N/A
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	0	0	0	N/A
21	HV	Subtransmission Cable	Subtransmission submarine cable	km	11	11	0	4
22	HV	Zone substation Buildings	Zone substations up to 66kV	No.	50	51	1	4
23	HV	Zone substation Buildings	Zone substations 110kV+	No.	5	5	0	4
24	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	13	20	7	4
25	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	0	0	0	N/A
26	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	0	0	0	N/A
27	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	0	0	0	N/A
28	HV	Zone substation switchgear	33kV RMU	No.	0	0	0	N/A
29	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	130	153	23	4
30	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	0	0	0	N/A
31	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	860	898	38	4
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	0	0	0	N/A
33	HV	Zone Substation Transformer	Zone Substation Transformers	No.	127	130	3	4
34	HV	Distribution Line	Distribution OH Open Wire Conductor	km	903	896	-7	3
35	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	0	0	0	N/A
36	HV	Distribution Line	SWER conductor	km	0	0	0	N/A
37	HV	Distribution Cable	Distribution UG XLPE or PVC	km	533	565	31	4
38	HV	Distribution Cable	Distribution UG PILC	km	1,617	1,611	-5	4
39	HV	Distribution Cable	Distribution Submarine Cable	km	2	2	0	4
40	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	57	56	-1	4
41	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	117	154	37	3
42	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	2,003	2,084	81	3
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	2,823	2,780	-43	3
44	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	4,407	4,459	52	4
45	HV	Distribution Transformer	Pole Mounted Transformer	No.	2,050	2,026	-24	4
46	HV	Distribution Transformer	Ground Mounted Transformer	No.	6,571	6,633	62	4
47	HV	Distribution Transformer	Voltage regulators	No.	5	5	0	4
48	HV	Distribution Substations	Ground Mounted Substation Housing	No.	6,029	6,043	14	3
49	LV	LV Line	LV OH Conductor	km	1,990	1,975	-15	3
50	LV	LV Cable	LV UG Cable	km	3,519	3,576	57	4
51	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	236	243	8	3
52	LV	Connections	OH/UG consumer service connections	No.	326,359	328,435	2,076	3
53	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	1,916	2,062	146	2
54	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	142	156	14	2
55	All	Capacitor Banks	Capacitors including controls	No.	26	26	0	4
56	All	Load Control	Centralised plant	Lot	21	22	1	3
57	All	Load Control	Relays	No.	0	0	0	N/A
58	All	Civils	Cable Tunnels	km	10	10	0	3

Company Name	Vector
For Year Ended	31 March 2016
Network / Sub-network Name	Northern

SCHEDULE 9b: ASSET AGE PROFILE

This schedule requires a summary of the age profile (based on year of installation) of the assets that make up the network, by asset category and asset class. All units relating to cable and line assets, that are expressed in km, refer to circuit lengths.

sch ref	Disclosure Year (year ended)	Number of assets at disclosure year end by installation date																				No. with age unknown	Items at end of year (quantity)	No. with default dates	Data accuracy (1-4)						
		pre-1940	1940-1949	1950-1959	1960-1969	1970-1979	1980-1989	1990-1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012					2013	2014	2015	2016		
9	Voltage																														
10	All	Overhead Line	Concrete poles / steel structure	No.	8	345	5,573	12,216	16,808	13,519	6,138	279	276	263	251	186	393	517	381	397	727	494	307	407	753	754	1,084	1,234	91	63,408	3
11	All	Overhead Line	Wood poles	No.	3	15	189	258	468	586	441	18	15	30	28	15	53	67	64	24	40	103	2	21	18	23	19	7	35	2,528	2
12	All	Overhead Line	Other pole types	No.																									199	4	
13	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	2	2	24	74	127	72	1					1	3	2	0	8	1	2						0	318	4	
14	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km				7	12																			0	27	4	
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km			0	20	10	24	8	0	1	1	1	3	7	7	17	7	23	2	4	1	2	1	3	0	137	4	
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km				3	1										0									2	4		
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km																										N/A	
18	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km					1	0	0																	1	4		
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km																										N/A	
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km																										N/A	
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km																										N/A	
22	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km																										N/A	
23	HV	Subtransmission Cable	Subtransmission submarine cable	km			0		0	0																		1	4		
24	HV	Zone substation Buildings	Zone substations up to 66kV	No.			2	12	11	11	5		1		3						3	1	1	1			1	50	4		
25	HV	Zone substation Buildings	Zone substations 110kV+	No.				1	1																			2	4		
26	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.										2																N/A	
27	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.																								2	4		
28	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.																										N/A	
29	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.			42	91	53	8											2			5	3			204	4		
30	HV	Zone substation switchgear	33kV RMU	No.												5	1											14	4		
31	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.												4		12			5	24	2					98	4		
32	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.			5	41	36	27	6		5		1		2	1	1	8	21	5	4			1	166	4			
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.			17	32	85	71	40				6	2	7		18	6			48	27	26	7	9	24	17	11	14
34	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.																										N/A	
35	HV	Zone Substation Transformer	Zone Substation Transformers	km			2	17	16	18	8						1											84	4		
36	HV	Distribution Line	Distribution OH Open Wire Conductor	No.	0	4	147	550	961	783	262	8	8	3	2	5	17	31	53	12	18	7	5	3	4	4	4	8	5		
37	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km																										N/A	
38	HV	Distribution Line	SWER conductor	km																										N/A	
39	HV	Distribution Cable	Distribution UG XLPE or PVC	km	0	0	0	7	25	153	29	23	17	7	13	33	82	42	30	73	28	31	18	25	26	36	31	1	731	4	
40	HV	Distribution Cable	Distribution UG PILC	km	0	1	17	121	270	200	8	3	1	2	2	1	3	3	1	3	0	0	0	0	0	0	1	0	2	639	4
41	HV	Distribution Cable	Distribution Submarine Cable	km			6	0	0	0																		0	7	4	
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.					20	6	5	1	1			4	2	21	63	41	3	3	8	11	1	3	4	0	197	4	
43	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.			1	7	15	5						1	3	1	2	9	1	2						6	70	3	
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.		11	258	1,129	1,427	1,372	166	126	121	107	66	144	259	177	177	240	124	79	117	152	197	335	503	34	7,321	3	
45	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.		1	9	17	104	208	37	25	41	28	26	42	38	25	17	24	25	15	18	13	6	2	2	91	814	3	
46	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.			1	18	38	196	288	60	30	49	64	52	35	35	18	18	51	37	54	46	62	86	100	1	1,496	4	
47	HV	Distribution Transformer	Pole Mounted Transformer	No.	14	38	150	273	558	1,166	1,086	159	95	100	82	39	188	232	241	127	168	153	91	146	111	128	151	142	5,617	4	
48	HV	Distribution Transformer	Ground Mounted Transformer	No.	6	45	161	763	1,041	964	1,007	164	131	144	115	68	435	284	238	162	191	206	205	137	151	200	195	184	7,167	4	
49	HV	Distribution Transformer	Voltage regulators	No.																									7	4	
50	HV	Distribution Substations	Ground Mounted Substation Housing	No.	11	61	180	1,129	1,607	1,303	956	105	133	70	81	129	66	68	28	31	17	31	24	26	47	83	133	88	1	6,410	3
51	LV	Line	LV OH Conductor	km	4	120	557	835	433	67	2	2	1	0	3	10	23	37	8	8	6	7	6	5	5	7	7	16	2,170	3	
52	LV	Line	LV UG Cable	km	1	4	10	203	405	280	493	60	31	21	15	30	63	143	55	32	52	28	28	20	31	47	69	70	7	2,196	4
53	LV	Street lighting	LV OH/UG Streetlight circuit	km	1	1	9	19	20	36	5	2	1	1	2	3	4	3	2	2	8	5	11	4	4	13	8	2	177	3	
54	LV	Connections	OH/UG consumer service connections	No.			64	3	28,065	45,107	88,799	5,548	4,085	3,589	4,310	4,651	4,247	3,407	3,165	3,232	2,231	2,449	2,212	2,100	2,335	2,854	3,510	3,882	219,845	3	
55	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.			5	49	234	201	106				8	5	8	39	35	12	22	62	129	87	67	14	177	26	65	57	
56	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot							2						3			15	6	1	7	3	6	13		41	113	2	
57	All	Capacitor Banks	Capacitors including controls	Lot								53					1			2	2							74	4		
58	All	Load Control	Centralised plant	Lot					8	1	2																	11	2		
59	All	Load Control	Relays	Lot																										N/A	
60	All	Civils	Cable Tunnels	km																										N/A	

Company Name	Vector
For Year Ended	31 March 2016
Network / Sub-network Name	Vector Combined

SCHEDULE 9c: REPORT ON OVERHEAD LINES AND UNDERGROUND CABLES

This schedule requires a summary of the key characteristics of the overhead line and underground cable network. All units relating to cable and line assets, that are expressed in km, refer to circuit lengths.

sch ref

9				
10	Circuit length by operating voltage (at year end)	Overhead (km)	Underground (km)	Total circuit length (km)
11	> 66kV	27	47	74
12	50kV & 66kV			
13	33kV	371	413	784
14	SWER (all SWER voltages)			
15	22kV (other than SWER)	3	171	174
16	6.6kV to 11kV (inclusive—other than SWER)	3,798	3,518	7,317
17	Low voltage (< 1kV)	4,146	5,771	9,917
18	Total circuit length (for supply)	8,344	9,921	18,266
19				
20	Dedicated street lighting circuit length (km)	17	404	421
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)			4,024
22				
23	Overhead circuit length by terrain (at year end)	(% of total circuit length)		
24	Urban	4,230		51%
25	Rural	4,114		49%
26	Remote only			
27	Rugged only			
28	Remote and rugged			
29	Unallocated overhead lines			
30	Total overhead length	8,344		100%
31				
32		(% of total circuit length)		
33	Length of circuit within 10km of coastline or geothermal areas (where known)	18,212		100%
34		(% of total overhead length)		
35	Overhead circuit requiring vegetation management	8,344		100%

Company Name	Vector
For Year Ended	31 March 2016
Network / Sub-network Name	Northern

SCHEDULE 9c: REPORT ON OVERHEAD LINES AND UNDERGROUND CABLES

This schedule requires a summary of the key characteristics of the overhead line and underground cable network. All units relating to cable and line assets, that are expressed in km, refer to circuit lengths.

sch ref

9				
10	Circuit length by operating voltage (at year end)	Overhead (km)	Underground (km)	Total circuit length (km)
11	> 66kV	27		27
12	50kV & 66kV			-
13	33kV	323	141	464
14	SWER (all SWER voltages)			-
15	22kV (other than SWER)			-
16	6.6kV to 11kV (inclusive—other than SWER)	2,902	1,377	4,279
17	Low voltage (< 1kV)	2,170	2,196	4,366
18	Total circuit length (for supply)	5,422	3,713	9,136
19				
20	Dedicated street lighting circuit length (km)	12	165	177
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)			1,728
22				
23	Overhead circuit length by terrain (at year end)	(% of total overhead length)		
24	Urban	1,922		35%
25	Rural	3,500		65%
26	Remote only			
27	Rugged only			
28	Remote and rugged			
29	Unallocated overhead lines			
30	Total overhead length	5,422		100%
31				
32		(% of total circuit length)		
33	Length of circuit within 10km of coastline or geothermal areas (where known)	9,082		99%
34		(% of total overhead length)		
35	Overhead circuit requiring vegetation management	5,422		100%

Company Name	Vector
For Year Ended	31 March 2016
Network / Sub-network Name	Southern

SCHEDULE 9c: REPORT ON OVERHEAD LINES AND UNDERGROUND CABLES

This schedule requires a summary of the key characteristics of the overhead line and underground cable network. All units relating to cable and line assets, that are expressed in km, refer to circuit lengths.

sch ref

9				
10	Circuit length by operating voltage (at year end)	Overhead (km)	Underground (km)	Total circuit length (km)
11	> 66kV		47	47
12	50kV & 66kV			-
13	33kV	48	272	320
14	SWER (all SWER voltages)			-
15	22kV (other than SWER)	3	171	174
16	6.6kV to 11kV (inclusive—other than SWER)	896	2,142	3,038
17	Low voltage (< 1kV)	1,975	3,576	5,551
18	Total circuit length (for supply)	2,922	6,208	9,130
19				
20	Dedicated street lighting circuit length (km)	5	239	243
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)			2,296
22				
23	Overhead circuit length by terrain (at year end)	(% of total overhead length)		
24	Urban	2,308		79%
25	Rural	614		21%
26	Remote only			
27	Rugged only			
28	Remote and rugged			
29	Unallocated overhead lines			
30	Total overhead length	2,922		100%
31				
32		(% of total circuit length)		
33	Length of circuit within 10km of coastline or geothermal areas (where known)	9,130		100%
34		(% of total overhead length)		
35	Overhead circuit requiring vegetation management	2,922		100%

Company Name **Vector**
 For Year Ended **31 March 2016**

SCHEDULE 9d: REPORT ON EMBEDDED NETWORKS

This schedule requires information concerning embedded networks owned by an EDB that are embedded in another EDB's network or in another embedded network.

sch ref

	Location *	Number of ICPs served	Line charge revenue (\$000)
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			

* Extend embedded distribution networks table as necessary to disclose each embedded network owned by the EDB which is embedded in another EDB's network or in another embedded network

Company Name	Vector
For Year Ended	31 March 2016
Network / Sub-network Name	Vector Combined

SCHEDULE 9e: REPORT ON NETWORK DEMAND

This schedule requires a summary of the key measures of network utilisation for the disclosure year (number of new connections including distributed generation, peak demand and electricity volumes conveyed).

sch ref

8	9e(i): Consumer Connections		
9	Number of ICPs connected in year by consumer type		
10	Consumer types defined by EDB*	Number of connections (ICPs)	
11	Residential	3,612	
12	Commercial	4,430	
13	[EDB consumer type]		
14	[EDB consumer type]		
15	[EDB consumer type]		
16	* include additional rows if needed		
17	Connections total	8,042	
18			
19	Distributed generation		
20	Number of connections made in year	850	connections
21	Capacity of distributed generation installed in year	3.00	MVA
22	9e(ii): System Demand		
23			
24		Demand at time of maximum coincident demand (MW)	
25	Maximum coincident system demand		
26	GXP demand	1,747	
27	plus Distributed generation output at HV and above	8	
28	Maximum coincident system demand	1,755	
29	less Net transfers to (from) other EDBs at HV and above	-	
30	Demand on system for supply to consumers' connection points	1,755	
31	Electricity volumes carried	Energy (GWh)	
32	Electricity supplied from GXPs	8,651	
33	less Electricity exports to GXPs	-	
34	plus Electricity supplied from distributed generation	109	
35	less Net electricity supplied to (from) other EDBs	-	
36	Electricity entering system for supply to consumers' connection points	8,760	
37	less Total energy delivered to ICPs	8,429	
38	Electricity losses (loss ratio)	331	3.8%
39			
40	Load factor	0.57	
41	9e(iii): Transformer Capacity		
42		(MVA)	
43	Distribution transformer capacity (EDB owned)	4,185	
44	Distribution transformer capacity (Non-EDB owned, estimated)	502	
45	Total distribution transformer capacity	4,687	
46			
47	Zone substation transformer capacity	4,453	

Company Name	Vector
For Year Ended	31 March 2016
Network / Sub-network Name	Northern

SCHEDULE 9e: REPORT ON NETWORK DEMAND

This schedule requires a summary of the key measures of network utilisation for the disclosure year (number of new connections including distributed generation, peak demand and electricity volumes conveyed).

sch ref

8	9e(i): Consumer Connections		
9	Number of ICPs connected in year by consumer type		
10	Consumer types defined by EDB*	Number of connections (ICPs)	
11	Residential	1,443	
12	Commercial	2,628	
13	[EDB consumer type]		
14	[EDB consumer type]		
15	[EDB consumer type]		
16	* include additional rows if needed		
17	Connections total	4,071	
18			
19	Distributed generation		
20	Number of connections made in year	494	connections
21	Capacity of distributed generation installed in year	1.67	MVA
22	9e(ii): System Demand		
23			
24		Demand at time of maximum coincident demand (MW)	
25	Maximum coincident system demand		
26	GXP demand	647	
27	plus Distributed generation output at HV and above	9	
28	Maximum coincident system demand	656	
29	less Net transfers to (from) other EDBs at HV and above		
30	Demand on system for supply to consumers' connection points	656	
31	Electricity volumes carried	Energy (GWh)	
32	Electricity supplied from GXPs	2,734	
33	less Electricity exports to GXPs	-	
34	plus Electricity supplied from distributed generation	76	
35	less Net electricity supplied to (from) other EDBs	-	
36	Electricity entering system for supply to consumers' connection points	2,810	
37	less Total energy delivered to ICPs	2,676	
38	Electricity losses (loss ratio)	134	4.8%
39			
40	Load factor	0.49	
41	9e(iii): Transformer Capacity		
42		(MVA)	
43	Distribution transformer capacity (EDB owned)	1,521	
44	Distribution transformer capacity (Non-EDB owned, estimated)	209	
45	Total distribution transformer capacity	1,730	
46			
47	Zone substation transformer capacity	1,449	

Company Name	Vector
For Year Ended	31 March 2016
Network / Sub-network Name	Southern

SCHEDULE 9e: REPORT ON NETWORK DEMAND

This schedule requires a summary of the key measures of network utilisation for the disclosure year (number of new connections including distributed generation, peak demand and electricity volumes conveyed).

sch ref

8	9e(i): Consumer Connections		
9	Number of ICPs connected in year by consumer type		
10	Consumer types defined by EDB*	Number of connections (ICPs)	
11	Residential	2,169	
12	Commercial	1,802	
13	[EDB consumer type]		
14	[EDB consumer type]		
15	[EDB consumer type]		
16	* include additional rows if needed		
17	Connections total	3,971	
18			
19	Distributed generation		
20	Number of connections made in year	356	connections
21	Capacity of distributed generation installed in year	1.33	MVA
22	9e(ii): System Demand		
23			
24		Demand at time of maximum coincident demand (MW)	
25	Maximum coincident system demand		
26	GXP demand	1,182	
27	plus Distributed generation output at HV and above	0	
28	Maximum coincident system demand	1,182	
29	less Net transfers to (from) other EDBs at HV and above	-	
30	Demand on system for supply to consumers' connection points	1,182	
31	Electricity volumes carried	Energy (GWh)	
32	Electricity supplied from GXPs	5,917	
33	less Electricity exports to GXPs	-	
34	plus Electricity supplied from distributed generation	33	
35	less Net electricity supplied to (from) other EDBs	-	
36	Electricity entering system for supply to consumers' connection points	5,950	
37	less Total energy delivered to ICPs	5,753	
38	Electricity losses (loss ratio)	197	3.3%
39			
40	Load factor	0.57	
41	9e(iii): Transformer Capacity		
42		(MVA)	
43	Distribution transformer capacity (EDB owned)	2,663	
44	Distribution transformer capacity (Non-EDB owned, estimated)	294	
45	Total distribution transformer capacity	2,957	
46			
47	Zone substation transformer capacity	3,004	

Company Name	Vector
For Year Ended	31 March 2016
Network / Sub-network Name	Vector Combined

SCHEDULE 10: REPORT ON NETWORK RELIABILITY

This schedule requires a summary of the key measures of network reliability (interruptions, SAIDI, SAIFI and fault rate) for the disclosure year. EDBs must provide explanatory comment on their network reliability for the disclosure year in Schedule 14 (Explanatory notes to templates). The SAIFI and SAIDI information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

8	10(i): Interruptions		
9	Interruptions by class	Number of interruptions	
10	Class A (planned interruptions by Transpower)		
11	Class B (planned interruptions on the network)	1,035	
12	Class C (unplanned interruptions on the network)	1,369	
13	Class D (unplanned interruptions by Transpower)	2	
14	Class E (unplanned interruptions of EDB owned generation)		
15	Class F (unplanned interruptions of generation owned by others)		
16	Class G (unplanned interruptions caused by another disclosing entity)		
17	Class H (planned interruptions caused by another disclosing entity)		
18	Class I (interruptions caused by parties not included above)		
19	Total	2,406	
20			
21	Interruption restoration	≤3Hrs	>3hrs
22	Class C interruptions restored within	744	625
23			
24	SAIFI and SAIDI by class	SAIFI	SAIDI
25	Class A (planned interruptions by Transpower)		
26	Class B (planned interruptions on the network)	0.11	19.8
27	Class C (unplanned interruptions on the network)	1.08	114.9
28	Class D (unplanned interruptions by Transpower)	0.04	0.5
29	Class E (unplanned interruptions of EDB owned generation)		
30	Class F (unplanned interruptions of generation owned by others)		
31	Class G (unplanned interruptions caused by another disclosing entity)		
32	Class H (planned interruptions caused by another disclosing entity)		
33	Class I (interruptions caused by parties not included above)		
34	Total	1.22	135.2
35			
36	Normalised SAIFI and SAIDI	Normalised SAIFI	Normalised SAIDI
37	Classes B & C (interruptions on the network) (under the ID Determination 2012)	1.18	132.8
38	Classes B & C (interruptions on the network) (under the 2015 DPP)	1.11	117.0
39	Quality path normalised reliability limit	SAIFI reliability limit	SAIDI reliability limit
40	SAIFI and SAIDI limits applicable to disclosure year* (under the 2012 DPP)	1.86	127.3
41	SAIFI and SAIDI limits applicable to disclosure year* (under the 2015 DPP)	1.40	104.2

* not applicable to exempt EDBs

Company Name	Vector
For Year Ended	31 March 2016
Network / Sub-network Name	Vector Combined

SCHEDULE 10: REPORT ON NETWORK RELIABILITY

This schedule requires a summary of the key measures of network reliability (interruptions, SAIDI, SAIFI and fault rate) for the disclosure year. EDBs must provide explanatory comment on their network reliability for the disclosure year in Schedule 14 (Explanatory notes to templates). The SAIFI and SAIDI information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

10(ii): Class C Interruptions and Duration by Cause

Cause	SAIFI	SAIDI
Lightning	0.00	0.4
Vegetation	0.20	24.5
Adverse weather	0.04	6.0
Adverse environment		
Third party interference	0.18	18.0
Wildlife	0.06	5.7
Human error	0.03	0.9
Defective equipment	0.43	48.3
Cause unknown	0.14	11.2

10(iii): Class B Interruptions and Duration by Main Equipment Involved

Main equipment involved	SAIFI	SAIDI
Subtransmission lines		
Subtransmission cables		
Subtransmission other		
Distribution lines (excluding LV)	0.06	12.2
Distribution cables (excluding LV)	0.01	1.1
Distribution other (excluding LV)	0.04	6.6

10(iv): Class C Interruptions and Duration by Main Equipment Involved

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	0.11	4.5
Subtransmission cables	0.01	0.0
Subtransmission other	0.03	2.7
Distribution lines (excluding LV)	0.68	82.6
Distribution cables (excluding LV)	0.17	18.4
Distribution other (excluding LV)	0.08	6.7

10(v): Fault Rate

Main equipment involved	Number of Faults	Circuit length (km)	Fault rate (faults per 100km)
Subtransmission lines	27	395	6.83
Subtransmission cables	2	596	0.34
Subtransmission other	4		
Distribution lines (excluding LV)	939	3,803	24.69
Distribution cables (excluding LV)	199	3,554	5.60
Distribution other (excluding LV)	198		
Total	1,369		

Company Name	Vector
For Year Ended	31 March 2016
Network / Sub-network Name	Northern

SCHEDULE 10: REPORT ON NETWORK RELIABILITY

This schedule requires a summary of the key measures of network reliability (interruptions, SAIDI, SAIFI and fault rate) for the disclosure year. EDBs must provide explanatory comment on their network reliability for the disclosure year in Schedule 14 (Explanatory notes to templates). The SAIFI and SAIDI information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

8	10(i): Interruptions		
9	Interruptions by class	Number of interruptions	
10	Class A (planned interruptions by Transpower)		
11	Class B (planned interruptions on the network)	626	
12	Class C (unplanned interruptions on the network)	865	
13	Class D (unplanned interruptions by Transpower)		
14	Class E (unplanned interruptions of EDB owned generation)		
15	Class F (unplanned interruptions of generation owned by others)		
16	Class G (unplanned interruptions caused by another disclosing entity)		
17	Class H (planned interruptions caused by another disclosing entity)		
18	Class I (interruptions caused by parties not included above)		
19	Total	1,491	
20			
21	Interruption restoration	≤3Hrs	>3hrs
22	Class C interruptions restored within	454	411
23			
24	SAIFI and SAIDI by class	SAIFI	SAIDI
25	Class A (planned interruptions by Transpower)		
26	Class B (planned interruptions on the network)	0.20	42.0
27	Class C (unplanned interruptions on the network)	1.48	169.5
28	Class D (unplanned interruptions by Transpower)		
29	Class E (unplanned interruptions of EDB owned generation)		
30	Class F (unplanned interruptions of generation owned by others)		
31	Class G (unplanned interruptions caused by another disclosing entity)		
32	Class H (planned interruptions caused by another disclosing entity)		
33	Class I (interruptions caused by parties not included above)		
34	Total	1.68	211.5
35			
36	Normalised SAIFI and SAIDI	Normalised SAIFI	Normalised SAIDI
37	Classes B & C (interruptions on the network)	1.68	209.3
38			
39	Quality path normalised reliability limit	SAIFI reliability limit	SAIDI reliability limit
40	SAIFI and SAIDI limits applicable to disclosure year*	N/A	N/A
41	* not applicable to exempt EDBs		

Company Name	Vector
For Year Ended	31 March 2016
Network / Sub-network Name	Northern

SCHEDULE 10: REPORT ON NETWORK RELIABILITY

This schedule requires a summary of the key measures of network reliability (interruptions, SAIDI, SAIFI and fault rate) for the disclosure year. EDBs must provide explanatory comment on their network reliability for the disclosure year in Schedule 14 (Explanatory notes to templates). The SAIFI and SAIDI information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

10(ii): Class C Interruptions and Duration by Cause

Cause	SAIFI	SAIDI
Lightning	0.01	1.0
Vegetation	0.25	37.4
Adverse weather	0.05	9.1
Adverse environment		
Third party interference	0.18	20.0
Wildlife	0.13	11.6
Human error	0.05	2.2
Defective equipment	0.56	68.5
Cause unknown	0.23	19.6

10(iii): Class B Interruptions and Duration by Main Equipment Involved

Main equipment involved	SAIFI	SAIDI
Subtransmission lines		
Subtransmission cables		
Subtransmission other		
Distribution lines (excluding LV)	0.11	26.8
Distribution cables (excluding LV)	0.01	1.8
Distribution other (excluding LV)	0.08	13.5

10(iv): Class C Interruptions and Duration by Main Equipment Involved

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	0.26	10.9
Subtransmission cables	0.02	0.1
Subtransmission other	0.05	4.5
Distribution lines (excluding LV)	0.98	133.2
Distribution cables (excluding LV)	0.09	12.1
Distribution other (excluding LV)	0.09	8.8

10(v): Fault Rate

Main equipment involved	Number of Faults	Circuit length (km)	Fault rate (faults per 100km)
Subtransmission lines	20	345	5.81
Subtransmission cables	2	141	1.42
Subtransmission other	2		
Distribution lines (excluding LV)	651	2,907	22.39
Distribution cables (excluding LV)	66	1,377	4.79
Distribution other (excluding LV)	124		
Total	865		

Company Name	Vector
For Year Ended	31 March 2016
Network / Sub-network Name	Southern

SCHEDULE 10: REPORT ON NETWORK RELIABILITY

This schedule requires a summary of the key measures of network reliability (interruptions, SAIDI, SAIFI and fault rate) for the disclosure year. EDBs must provide explanatory comment on their network reliability for the disclosure year in Schedule 14 (Explanatory notes to templates). The SAIFI and SAIDI information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

8	10(i): Interruptions		
9	Interruptions by class	Number of interruptions	
10	Class A (planned interruptions by Transpower)		
11	Class B (planned interruptions on the network)	409	
12	Class C (unplanned interruptions on the network)	504	
13	Class D (unplanned interruptions by Transpower)	2	
14	Class E (unplanned interruptions of EDB owned generation)		
15	Class F (unplanned interruptions of generation owned by others)		
16	Class G (unplanned interruptions caused by another disclosing entity)		
17	Class H (planned interruptions caused by another disclosing entity)		
18	Class I (interruptions caused by parties not included above)		
19	Total	915	
20			
21	Interruption restoration	≤3Hrs	>3hrs
22	Class C interruptions restored within	290	214
23			
24	SAIFI and SAIDI by class	SAIFI	SAIDI
25	Class A (planned interruptions by Transpower)		
26	Class B (planned interruptions on the network)	0.04	5.0
27	Class C (unplanned interruptions on the network)	0.81	78.5
28	Class D (unplanned interruptions by Transpower)	0.06	0.8
29	Class E (unplanned interruptions of EDB owned generation)		
30	Class F (unplanned interruptions of generation owned by others)		
31	Class G (unplanned interruptions caused by another disclosing entity)		
32	Class H (planned interruptions caused by another disclosing entity)		
33	Class I (interruptions caused by parties not included above)		
34	Total	0.92	84.4
35			
36	Normalised SAIFI and SAIDI	Normalised SAIFI	Normalised SAIDI
37	Classes B & C (interruptions on the network)	0.85	83.6
38			
39	Quality path normalised reliability limit	SAIFI reliability limit	SAIDI reliability limit
40	SAIFI and SAIDI limits applicable to disclosure year*	N/A	N/A
41	* not applicable to exempt EDBs		

Company Name	Vector
For Year Ended	31 March 2016
Network / Sub-network Name	Southern

SCHEDULE 10: REPORT ON NETWORK RELIABILITY

This schedule requires a summary of the key measures of network reliability (interruptions, SAIDI, SAIFI and fault rate) for the disclosure year. EDBs must provide explanatory comment on their network reliability for the disclosure year in Schedule 14 (Explanatory notes to templates). The SAIFI and SAIDI information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

10(ii): Class C Interruptions and Duration by Cause

Cause	SAIFI	SAIDI
Lightning		
Vegetation	0.16	15.9
Adverse weather	0.03	3.9
Adverse environment		
Third party interference	0.17	16.6
Wildlife	0.02	1.7
Human error	0.01	0.1
Defective equipment	0.35	34.8
Cause unknown	0.07	5.6

10(iii): Class B Interruptions and Duration by Main Equipment Involved

Main equipment involved	SAIFI	SAIDI
Subtransmission lines		
Subtransmission cables		
Subtransmission other		
Distribution lines (excluding LV)	0.02	2.4
Distribution cables (excluding LV)	0.01	0.6
Distribution other (excluding LV)	0.02	2.0

10(iv): Class C Interruptions and Duration by Main Equipment Involved

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	0.01	0.3
Subtransmission cables	-	-
Subtransmission other	0.02	1.5
Distribution lines (excluding LV)	0.48	48.8
Distribution cables (excluding LV)	0.22	22.7
Distribution other (excluding LV)	0.07	5.2

10(v): Fault Rate

Main equipment involved	Number of Faults	Circuit length (km)	Fault rate (faults per 100km)
Subtransmission lines	7	51	13.76
Subtransmission cables	-	455	-
Subtransmission other	2		
Distribution lines (excluding LV)	288	896	32.14
Distribution cables (excluding LV)	133	2,177	6.11
Distribution other (excluding LV)	74		
Total	504		