EDB Information Disclosure Requirements

Information Templates

for

Schedules 1–10

Company Name	Vector
Disclosure Date	31 August 2022
Disclosure Year (year ended)	31 March 2022

Templates for Schedules 1–10 excluding 5f–5g
Template Version 4.1. Prepared 21 December 2017

Table of Contents

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 21 December 2017). 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 2022**

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	16,329	230	75,669	7,093	28,480
Network	6,574	93	30,466	2,856	11,467
Non-network	9,755	138	45,204	4,237	17,014
Expenditure on assets	38,826	548	179,918	16,865	67,718
Network	36,163	510	167,579	15,708	63,073
Non-network	2,663	38	12,339	1,157	4,644

1(ii): Revenue metrics

	Revenue per GWh energy delivered to ICPs ($/GWh)	Revenue per average no. of ICPs ($/ICP)
Total consumer line charge revenue	71,601	1,010
Standard consumer line charge revenue	74,859	982
Non-standard consumer line charge revenue	28,948	593,241

1(iii): Service intensity measures

Demand density	94	*Maximum coincident system demand per km of circuit length (for supply) (kW/km)*
Volume density	434	*Total energy delivered to ICPs per km of circuit length (for supply) (MWh/km)*
Connection point density	31	*Average number of ICPs per km of circuit length (for supply) (ICPs/km)*
Energy intensity	14,112	*Total energy delivered to ICPs per average number of ICPs (kWh/ICP)*

1(iv): Composition of regulatory income

	($000)	% of revenue
Operational expenditure	136,753	23.22%
Pass-through and recoverable costs excluding financial incentives and wash-ups	201,296	34.18%
Total depreciation	133,873	22.73%
Total revaluations	233,313	39.62%
Regulatory tax allowance	36,039	6.12%
Regulatory profit/(loss) including financial incentives and wash-ups	311,064	52.83%
Total regulatory income	588,845	

1(v): Reliability

Interruption rate	18.26	*Interruptions per 100 circuit km*

Company Name	**Vector**
For Year Ended	**31 March 2022**

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
7	**2(i): Return on Investment**			
8		31 Mar 20	31 Mar 21	31 Mar 22
9	**ROI – comparable to a post tax WACC**	%	%	%
10	Reflecting all revenue earned	5.42%	3.34%	9.15%
11	Excluding revenue earned from financial incentives	5.53%	3.40%	9.10%
12	Excluding revenue earned from financial incentives and wash-ups	5.60%	3.40%	9.09%
13				
14	**Mid-point estimate of post tax WACC**	4.27%	3.72%	3.52%
15	25th percentile estimate	3.59%	3.04%	2.84%
16	75th percentile estimate	4.95%	4.40%	4.20%
17				
18				
19	**ROI – comparable to a vanilla WACC**			
20	Reflecting all revenue earned	5.85%	3.67%	9.45%
21	Excluding revenue earned from financial incentives	5.95%	3.74%	9.40%
22	Excluding revenue earned from financial incentives and wash-ups	6.02%	3.74%	9.39%
23				
24	**WACC rate used to set regulatory price path**	7.19%	4.57%	4.57%
25				
26	**Mid-point estimate of vanilla WACC**	4.69%	4.05%	3.82%
27	25th percentile estimate	4.01%	3.37%	3.14%
28	75th percentile estimate	5.37%	4.73%	4.50%
29				

30	**2(ii): Information Supporting the ROI**		**($000)**	
31				
32	Total opening RAB value	3,385,969		
33	*plus* Opening deferred tax	(113,891)		
34	**Opening RIV**		3,272,078	
35				
36	**Line charge revenue**		599,637	
37				
38	Expenses cash outflow	338,049		
39	*add* Assets commissioned	171,903		
40	*less* Asset disposals	16,301		
41	*add* Tax payments	19,189		
42	*less* Other regulated income	(10,792)		
43	**Mid-year net cash outflows**		523,632	
44				
45	**Term credit spread differential allowance**		3,133	
46				
47	Total closing RAB value	3,641,987		
48	*less* Adjustment resulting from asset allocation	976		
49	*less* Lost and found assets adjustment	–		
50	*plus* Closing deferred tax	(130,741)		
51	**Closing RIV**		3,510,270	
52				
53	**ROI – comparable to a vanilla WACC**			9.45%
54				
55	Leverage (%)			42%
56	Cost of debt assumption (%)			2.55%
57	Corporate tax rate (%)			28%
58				
59	**ROI – comparable to a post tax WACC**			9.15%
60				

Company Name	**Vector**
For Year Ended	**31 March 2022**

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

Opening RIV — N/A

	Line charge revenue	Expenses cash outflow	Assets commissioned	Asset disposals	Other regulated income	Monthly net cash outflows
April						–
May						–
June						–
July						–
August						–
September						–
October						–
November						–
December						–
January						–
February						–
March						–
Total	–	–	–	–	–	–

Tax payments — N/A

Term credit spread differential allowance — N/A

Closing RIV — N/A

Monthly ROI – comparable to a vanilla WACC — N/A

Monthly ROI – comparable to a post tax WACC — N/A

2(iv): Year-End ROI Rates for Comparison Purposes

Year-end ROI – comparable to a vanilla WACC — 9.18%

Year-end ROI – comparable to a post tax WACC — 8.88%

** 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.*

2(v): Financial Incentives and Wash-Ups

Net recoverable costs allowed under incremental rolling incentive scheme	–	
Purchased assets – avoided transmission charge		
Energy efficiency and demand incentive allowance	–	
Quality incentive adjustment	(4,449)	
Other financial incentives	6,759	
Financial incentives		2,310

Impact of financial incentives on ROI — 0.05%

Input methodology claw-back		
CPP application recoverable costs		
Catastrophic event allowance		
Capex wash-up adjustment	346	
Transmission asset wash-up adjustment		
2013–15 NPV wash-up allowance		
Reconsideration event allowance		
Other wash-ups		
Wash-up costs		346

Impact of wash-up costs on ROI — 0.01%

Company Name	**Vector**
For Year Ended	**31 March 2022**

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)
		Income	
		Line charge revenue	599,637
	plus	Gains / (losses) on asset disposals	(10,792)
	plus	Other regulated income (other than gains / (losses) on asset disposals)	–
		Total regulatory income	588,845
		Expenses	
	less	Operational expenditure	136,753
	less	Pass-through and recoverable costs excluding financial incentives and wash-ups	201,296
		Operating surplus / (deficit)	250,796
	less	Total depreciation	133,873
	plus	Total revaluations	233,313
		Regulatory profit / (loss) before tax	350,236
	less	Term credit spread differential allowance	3,133
	less	Regulatory tax allowance	36,039
		Regulatory profit/(loss) including financial incentives and wash-ups	311,064

3(ii): Pass-through and Recoverable Costs excluding Financial Incentives and Wash-Ups

		($000)	
	Pass through costs		
	Rates	16,233	
	Commerce Act levies	1,869	
	Industry levies	1,850	
	CPP specified pass through costs	–	
	Recoverable costs excluding financial incentives and wash-ups		
	Electricity lines service charge payable to Transpower	171,904	
	Transpower new investment contract charges	7,881	
	System operator services	–	
	Distributed generation allowance	1,034	
	Extended reserves allowance	–	
	Other recoverable costs excluding financial incentives and wash-ups	525	
	Pass-through and recoverable costs excluding financial incentives and wash-ups		201,296

3(iii): Incremental Rolling Incentive Scheme

			($000)	
			CY-1 31 Mar 21	**CY 31 Mar 22**
	Allowed controllable opex		–	–
	Actual controllable opex		–	–
	Incremental change in year			–
			Previous years' incremental change	**Previous years' incremental change adjusted for inflation**
	CY-5	31 Mar 17	–	–
	CY-4	31 Mar 18	–	–
	CY-3	31 Mar 19	–	–
	CY-2	31 Mar 20	–	–
	CY-1	31 Mar 21	–	–
	Net incremental rolling incentive scheme			–
	Net recoverable costs allowed under incremental rolling incentive scheme			–

3(iv): Merger and Acquisition Expenditure

		($000)
	Merger and acquisition expenditure	–

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)

3(v): Other Disclosures

		($000)
	Self-insurance allowance	–

Company Name	**Vector**
For Year Ended	**31 March 2022**

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 18 ($000)	RAB 31 Mar 19 ($000)	RAB 31 Mar 20 ($000)	RAB 31 Mar 21 ($000)	RAB 31 Mar 22 ($000)	
10		**Total opening RAB value**	2,879,136	2,951,716	3,075,471	3,258,721	**3,385,969**	-
12	*less*	**Total depreciation**	108,316	108,729	116,767	125,888	133,873	-
14	*plus*	**Total revaluations**	31,561	44,091	77,539	49,372	233,313	-
16	*plus*	**Assets commissioned**	156,888	203,460	512,505	215,221	171,903	-
18	*less*	**Asset disposals**	7,540	7,412	289,233	12,198	16,301	-
20	*plus*	**Lost and found assets adjustment**	–	–	–	–	–	
22	*plus*	**Adjustment resulting from asset allocation**	(13)	(7,655)	(794)	741	976	
24		**Total closing RAB value**	2,951,716	3,075,471	3,258,721	3,385,969	3,641,987	

4(ii): Unallocated Regulatory Asset Base

			Unallocated RAB * ($000)	($000)	RAB ($000)	($000)	
29		**Total opening RAB value**		3,403,311		3,385,969	
33	*less*	**Total depreciation**		137,473		133,873	
35	*plus*	**Total revaluations**		234,444		233,313	
37	*plus*	Assets commissioned (other than below)	173,512		169,837		
38		Assets acquired from a regulated supplier	-		-		
39		Assets acquired from a related party	2,066		2,066		
40		**Assets commissioned**		175,578		171,903	
42	*less*	Asset disposals (other than below)	18,615		16,301		
43		Asset disposals to a regulated supplier	–		–		
44		Asset disposals to a related party					
45		**Asset disposals**		18,615		16,301	
47	*plus*	**Lost and found assets adjustment**		–		–	
49	*plus*	**Adjustment resulting from asset allocation**				976	
51		**Total closing RAB value**		3,657,245		3,641,987	s5e

** 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

56	CPI_4	1,142
57	CPI_4^{-4}	1,068
58	Revaluation rate (%)	6.93%

			Unallocated RAB * ($000)	($000)	RAB ($000)	($000)
62		Total opening RAB value	3,403,311		3,385,969	
64	*less*	Opening value of fully depreciated, disposed and lost assets	20,120		19,090	
66		Total opening RAB value subject to revaluation	3,383,191		3,366,879	
67		**Total revaluations**		234,444		233,313

4(iv): Roll Forward of Works Under Construction

			Unallocated works under construction	Allocated works under construction
71		**Works under construction—preceding disclosure year**	31,026	30,835
73	*plus*	Capital expenditure	189,014	184,026
74	*less*	Assets commissioned	175,578	171,903
75	*less*	Adjustment resulting from asset allocation		-
76		**Works under construction - current disclosure year**	44,462	42,958
78		Highest rate of capitalised finance applied		3.69%

4(v): Regulatory Depreciation

			Unallocated RAB * ($000)	($000)	RAB ($000)	($000)
83		Depreciation - standard	86,258		85,789	
84		Depreciation - no standard life assets	51,215		48,084	
85		Depreciation - modified life assets				
86		Depreciation - alternative depreciation in accordance with CPP				
87		**Total depreciation**		137,473		133,873

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)	Depreciation charge for the period (RAB)	Closing RAB value under 'non-standard' depreciation	Closing RAB value under 'standard' depreciation
91					
92					
93					
94					
95					
96					
97					
98					

** include additional rows if needed*

4(vii): Disclosure by Asset Category

Company Name	**Vector**
For Year Ended	**31 March 2022**

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

($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	
103		**Total opening RAB value**	73,571	359,436	315,966	410,861	808,850	297,961	277,498	777,622	64,204	3,385,969	
104	*less*	Total depreciation	2,079	11,485	12,416	11,719	27,687	10,242	11,251	27,446	19,548	133,873	
105	*plus*	Total revaluations	5,093	24,899	21,811	28,295	55,907	20,501	18,986	53,904	3,917	233,313	
106	*plus*	Assets commissioned	61	1,270	28,716	32,515	10,584	7,360	34,134	41,377	15,886	171,903	
107	*less*	Asset disposals	68	38	1,030	2,333	1,418	2,009	3,483	492	5,430	16,301	
108	*plus*	Lost and found assets adjustment	-	-	-	-	-	-	-	-	-	–	
109	*plus*	Adjustment resulting from asset allocation	92	-	-	(590)	1,482	-	-	-	(8)	976	
110	*plus*	Asset category transfers	-	-	-	-	-	-	-	-	-	–	
111		**Total closing RAB value**	76,670	374,082	353,047	457,029	847,718	313,571	315,884	844,965	59,021	3,641,987	
112													
113		**Asset Life**											
114		Weighted average remaining asset life	40	44	31	44	36	33	28	39	6		(years)
115		Weighted average expected total asset life	59	66	42	58	60	45	36	47	11		(years)

Company Name	**Vector**
For Year Ended	**31 March 2022**

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 2.8.

sch ref					
7	**5a(i): Regulatory Tax Allowance**				**($000)**
8		**Regulatory profit / (loss) before tax**			350,236
9					
10	*plus*	Income not included in regulatory profit / (loss) before tax but taxable		*	
11		Expenditure or loss in regulatory profit / (loss) before tax but not deductible	6,335	*	
12		Amortisation of initial differences in asset values	31,757		
13		Amortisation of revaluations	15,369		
14					53,461
15					
16	*less*	Total revaluations	233,313		
17		Income included in regulatory profit / (loss) before tax but not taxable		*	
18		Discretionary discounts and customer rebates			
19		Expenditure or loss deductible but not in regulatory profit / (loss) before tax	3,974	*	
20		Notional deductible interest	37,699		
21					274,987
22					
23		**Regulatory taxable income**			128,711
24					
25	*less*	Utilised tax losses	–		
26		Regulatory net taxable income			128,711
27					
28		Corporate tax rate (%)	28%		
29		**Regulatory tax allowance**			36,039
30					
31	* Workings to be provided in Schedule 14				
32	**5a(ii): Disclosure of Permanent Differences**				
33	In Schedule 14, Box 5, provide descriptions and workings of items recorded in the asterisked categories in Schedule 5a(i).				
34	**5a(iii): Amortisation of Initial Difference in Asset Values**				**($000)**
35					
36		Opening unamortised initial differences in asset values	889,201		
37	*less*	Amortisation of initial differences in asset values	31,757		
38	*plus*	Adjustment for unamortised initial differences in assets acquired	–		
39	*less*	Adjustment for unamortised initial differences in assets disposed	5,022		
40		Closing unamortised initial differences in asset values			852,422
41					
42		Opening weighted average remaining useful life of relevant assets (years)			28
43					

Company Name	**Vector**
For Year Ended	**31 March 2022**

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).
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sch ref				
44	**5a(iv): Amortisation of Revaluations**			**($000)**
45				
46		Opening sum of RAB values without revaluations	3,001,320	
47				
48		Adjusted depreciation	118,504	
49		Total depreciation	133,873	
50		Amortisation of revaluations		15,369
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**	(113,891)	
61				
62	*plus*	Tax effect of adjusted depreciation	33,181	
63				
64	*less*	Tax effect of tax depreciation	39,205	
65				
66	*plus*	Tax effect of other temporary differences*	(1,985)	
67				
68	*less*	Tax effect of amortisation of initial differences in asset values	8,892	
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	13	
73				
74	*plus*	Deferred tax cost allocation adjustment	64	
75				
76		**Closing deferred tax**		(130,741)
77				
78	**5a(vii): Disclosure of Temporary Differences**			
79		*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).*		
80				
81	**5a(viii): Regulatory Tax Asset Base Roll-Forward**			
82				**($000)**
83		**Opening sum of regulatory tax asset values**	1,348,400	
84	*less*	Tax depreciation	140,018	
85	*plus*	Regulatory tax asset value of assets commissioned	202,498	
86	*less*	Regulatory tax asset value of asset disposals	4,819	
87	*plus*	Lost and found assets adjustment	–	
88	*plus*	Adjustment resulting from asset allocation	1,203	
89	*plus*	Other adjustments to the RAB tax value		
90		**Closing sum of regulatory tax asset values**		1,407,264

Company Name	**Vector**
For Year Ended	**31 March 2022**

SCHEDULE 5b: REPORT ON RELATED PARTY TRANSACTIONS

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

sch ref

5b(i): Summary—Related Party Transactions

		($000)	($000)
8	**Total regulatory income**		–
9			
10	**Market value of asset disposals**		–
11			
12	Service interruptions and emergencies	–	
13	Vegetation management	2,526	
14	Routine and corrective maintenance and inspection	–	
15	Asset replacement and renewal (opex)	–	
16	**Network opex**		2,526
17	Business support	–	
18	System operations and network support	11,419	
19	**Operational expenditure**		13,945
20	Consumer connection	69	
21	System growth	1,385	
22	Asset replacement and renewal (capex)	352	
23	Asset relocations	–	
24	Quality of supply	–	
25	Legislative and regulatory	–	
26	Other reliability, safety and environment	112	
27	**Expenditure on non-network assets**		–
28	**Expenditure on assets**		1,918
29	Cost of financing		9
30	Value of capital contributions		
31	Value of vested assets		
32	**Capital Expenditure**		1,927
33	**Total expenditure**		15,872
34			
35	**Other related party transactions**		–

5b(iii): Total Opex and Capex Related Party Transactions

37	Name of related party	Nature of opex or capex service provided	Total value of transactions ($000)
40	PowerSmart NZ Limited	Other reliability, safety and environment	112
41	Vector Communications Limited	Asset replacement and renewal (capex)	224
42	Vector Communications Limited	Consumer connection	69
43	Vector Communications Limited	System operations and network support	4,653
44	Tree Scape Limited	Vegetation management	2,526
45	Tree Scape Limited	Asset replacement and renewal (capex)	128
46	Vector Auckland Property Limited	System growth	44
47	Vector Northern Property Limited	System growth	1,341
48	Vector Technology Services Limited	System operations and network support	6,731
49	Advanced Metering Services Limited	System operations and network support	35
50			
51			
52	**Total value of related party transactions**		15,863
53			

In accordance with clause 2.3.8(1) and (2) of the ID determination, a description showing the connection between Vector and the related parties with which it has had related party transactions in the disclosure year and the principal activities of the related party is disclosed below:

Related party	Relationship	Principal activities	Amount ($000) excluded cost of financing
Vector Communications Limited	a wholly owned subsidiary of Vector limited	Network communications and SCADA services	4,946
Tree Scape Limited	an associate in which Vector limited holds a 50% interest	Vegetation management services	2,654
PowerSmart NZ Limited	a wholly owned subsidiary of Vector limited	Energy solutions services	112
Advanced Metering Services Limited	a wholly owned subsidiary of Vector limited	Metering services	35
Vector Technology Services Limited	a wholly owned subsidiary of Vector limited	Digital and technology services	6,731
Vector Auckland Property Limited	a wholly owned subsidiary of Vector limited	Asset management services	44
Vector Northern Property Limited	a wholly owned subsidiary of Vector limited	Asset management services	1,341

Company Name	**Vector**
For Year Ended	**31 March 2022**

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

5c(i): Qualifying Debt (for public)

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	Debt issue cost readjustment
[]VCI	31-Jul-18	17-Jul-18	3	BKBM + []VCI				
[]VCI	31-Jul-18	17-Jul-18	3	BKBM + []VCI				
[]VCI	31-Jul-18	17-Jul-18	3	BKBM + []VCI				
[]VCI	16-Sep-19	24-Jul-19	3	BKBM + []VCI				
[]VCI	16-Sep-19	24-Jul-19	3	BKBM + []VCI				
[]VCI	16-Sep-19	24-Jul-19	3	BKBM + []VCI				
[]VCI	16-Sep-19	24-Jul-19	3	BKBM + []VCI				
[]VCI	16-Apr-20	15-Apr-20	3	BKBM + []VCI				
[]VCI	13-Jan-20	20-Dec-19	5	BKBM + []VCI				
[]VCI	2-Feb-21	26-Jan-21	3	BKBM + []VCI				
[]VCI	2-Feb-21	26-Jan-21	3	BKBM + []VCI				
[]VCI	2-Feb-21	26-Jan-21	3	BKBM + []VCI				
[]VCI	2-Feb-21	26-Jan-21	3	BKBM + []VCI				
[]VCI	2-Feb-21	26-Jan-21	3	BKBM + []VCI				
Subtotal of bank facilities- variable rate					**510,000**	**508,513**		
Capital bonds – fixed rate	**15-Jun-17**	**14-Jun-17**	**5**	**5.7**	**307,205**	**306,854**	**[]VCI**	**[]VCI**
Wholesale Bonds- fixed rate Mar17	14-Mar-17	3-Mar-17	7	4.996	100,000		[]VCI	[]VCI
Wholesale Bonds- fixed rate Jun18	25-Jun-18	21-Jun-18	5.7	4.996	140,000		[]VCI	[]VCI
Wholesale Bonds- fixed rate Oct20	6-Oct-20	1-Oct-20	6	1.575	170,000		[]VCI	[]VCI
Subtotal of wholesale bonds- variable rate					**410,000**	**412,018**	**[]VCI**	**[]VCI**
Senior notes - 2020 USPP 12yr	12-Mar-20	4-Mar-20	12	[]VCI	573,888		[]VCI	[]VCI
Senior notes - 2020 USPP 15 yr	12-Mar-20	4-Mar-20	15	[]VCI	223,179		[]VCI	[]VCI
Senior notes - 2010 USPP 12yr	20-Dec-10	22-Sep-10	12	[]VCI	250,516		[]VCI	[]VCI
Senior notes - 2014 USPP 7yr	14-Oct-14	19-Jun-14	7	[]VCI	150,000		[]VCI	[]VCI
Senior notes - 2017 USPP 10yr	25-Oct-17	28-Sep-17	10	[]VCI	277,200		[]VCI	[]VCI
Senior notes - 2017 USPP 12yr	25-Oct-17	28-Sep-17	12	[]VCI	138,600		[]VCI	[]VCI
Subtotal of senior notes - USD fixed rate					**1,613,383**	**1,595,125**	**[]VCI**	**[]VCI**
Unsubordinated bond	**27-May-19**	**16-May-19**	**6**	**3.45**	**250,000**	**248,004**	**[]VCI**	**[]VCI**
** include additional rows if needed*						3,070,513	[]VCI	[]VCI

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

Gross term credit spread differential		6,518
Total book value of interest bearing debt	3,070,513	
Leverage	42%	
Average opening and closing RAB values	3,513,978	
Attribution Rate (%)		48%
Term credit spread differential allowance		3,133

Company Name	**Vector**
For Year Ended	**31 March 2022**

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

5d(i): Operating Cost Allocations

	Value allocated ($000s)				
	Arm's length deduction	Electricity distribution services	Non-electricity distribution services	Total	OVABAA allocation increase ($000s)
Service interruptions and emergencies					
Directly attributable		14,382			
Not directly attributable	–	–	–	–	
Total attributable to regulated service		14,382			
Vegetation management					
Directly attributable		5,677			
Not directly attributable	–	–	–	–	
Total attributable to regulated service		5,677			
Routine and corrective maintenance and inspection					
Directly attributable		19,488			
Not directly attributable	–	–	–	–	
Total attributable to regulated service		19,488			
Asset replacement and renewal					
Directly attributable		15,512			
Not directly attributable	–	–	–	–	
Total attributable to regulated service		15,512			
System operations and network support					
Directly attributable		35,740			
Not directly attributable	–	5,638	729	6,367	
Total attributable to regulated service		41,378			
Business support					
Directly attributable		1,446			
Not directly attributable	–	38,870	20,328	59,198	
Total attributable to regulated service		40,316			
Operating costs directly attributable		92,245			
Operating costs not directly attributable	–	44,508	21,057	65,565	–
Operational expenditure		136,753			

5d(ii): Other Cost Allocations

Pass through and recoverable costs	($000)
Pass through costs	
Directly attributable	19,952
Not directly attributable	–
Total attributable to regulated service	19,952
Recoverable costs	
Directly attributable	181,344
Not directly attributable	–
Total attributable to regulated service	181,344

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

Change in cost allocation 1

			($000)	
			CY-1	Current Year (CY)
Cost category		Original allocation		
Original allocator or line items		New allocation		
New allocator or line items		Difference	–	–
Rationale for change				

Change in cost allocation 2

			($000)	
			CY-1	Current Year (CY)
Cost category		Original allocation		
Original allocator or line items		New allocation		
New allocator or line items		Difference	–	–
Rationale for change				

Change in cost allocation 3

			($000)	
			CY-1	Current Year (CY)
Cost category		Original allocation		
Original allocator or line items		New allocation		
New allocator or line items		Difference	–	–
Rationale for change				

** 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.*

† include additional rows if needed

Company Name	**Vector**
For Year Ended	**31 March 2022**

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
Subtransmission lines	
Directly attributable	75,017
Not directly attributable	1,653
Total attributable to regulated service	76,670
Subtransmission cables	
Directly attributable	374,082
Not directly attributable	–
Total attributable to regulated service	374,082
Zone substations	
Directly attributable	353,047
Not directly attributable	–
Total attributable to regulated service	353,047
Distribution and LV lines	
Directly attributable	403,327
Not directly attributable	53,702
Total attributable to regulated service	457,029
Distribution and LV cables	
Directly attributable	828,336
Not directly attributable	19,382
Total attributable to regulated service	847,718
Distribution substations and transformers	
Directly attributable	313,571
Not directly attributable	–
Total attributable to regulated service	313,571
Distribution switchgear	
Directly attributable	315,884
Not directly attributable	–
Total attributable to regulated service	315,884
Other network assets	
Directly attributable	840,790
Not directly attributable	4,175
Total attributable to regulated service	844,965
Non-network assets	
Directly attributable	30,338
Not directly attributable	28,683
Total attributable to regulated service	59,021
Regulated service asset value directly attributable	3,534,392
Regulated service asset value not directly attributable	107,595
Total closing RAB value	3,641,987

5e(ii): Changes in Asset Allocations* †

Change in asset value allocation 1

			($000) CY-1	Current Year (CY)
Asset category		Original allocation		
Original allocator or line items		New allocation		
New allocator or line items		Difference		–
Rationale for change				

Change in asset value allocation 2

			($000) CY-1	Current Year (CY)
Asset category		Original allocation		
Original allocator or line items		New allocation		
New allocator or line items		Difference		–
Rationale for change				

Change in asset value allocation 3

			($000) CY-1	Current Year (CY)
Asset category		Original allocation		
Original allocator or line items		New allocation		
New allocator or line items		Difference		–
Rationale for change				

Change in asset value allocation 4

			CY-1	Current Year (CY)
Asset category		Original allocation		
Original allocator or line items		New allocation		
New allocator or line items		Difference	–	–
Rationale for change				

Change in asset value allocation 5

			CY-1	Current Year (CY)
Asset category		Original allocation		
Original allocator or line items		New allocation		
New allocator or line items		Difference	–	–
Rationale for change				

** 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 compo*
† include additional rows if needed

Company Name	**Vector**
For Year Ended	**31 March 2022**

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

6a(i): Expenditure on Assets

			($000)	($000)
8		Consumer connection		125,989
9		System growth		29,449
10		Asset replacement and renewal		116,611
11		Asset relocations		20,035
12		Reliability, safety and environment:		
13		Quality of supply	106	
14		Legislative and regulatory	97	
15		Other reliability, safety and environment	10,569	
16		**Total reliability, safety and environment**		10,772
17		**Expenditure on network assets**		302,856
18		Expenditure on non-network assets		22,299
19				
20		**Expenditure on assets**		325,155
21	*plus*	Cost of financing		12
22	*less*	Value of capital contributions		141,141
23	*plus*	Value of vested assets		–
24				
25		**Capital expenditure**		184,026

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	9,251
29		Research and development	1,549

6a(iii): Consumer Connection

		*Consumer types defined by EDB**	($000)	($000)
32		Service connection	24,902	
33		Customer substations	38,975	
34		Business subdivisions	3,017	
35		Residential subdivisions	52,475	
36		Capacity change	4,379	
		Street lighting	2,235	
		Easement costs	6	
37		** include additional rows if needed*		
38		**Consumer connection expenditure**		125,989
39				
40	*less*	Capital contributions funding consumer connection expenditure	127,811	
41		**Consumer connection less capital contributions**		(1,822)

6a(iv): System Growth and Asset Replacement and Renewal

			System Growth ($000)	Asset Replacement and Renewal ($000)
45		Subtransmission	13,412	16,685
46		Zone substations	5,377	20,518
47		Distribution and LV lines	778	42,778
48		Distribution and LV cables	5,393	9,057
49		Distribution substations and transformers	1,711	7,674
50		Distribution switchgear	240	12,984
51		Other network assets	2,538	6,915
52		**System growth and asset replacement and renewal expenditure**	29,449	116,611
53	*less*	Capital contributions funding system growth and asset replacement and renewal	781	204
54		**System growth and asset replacement and renewal less capital contributions**	28,668	116,407
55				

6a(v): Asset Relocations

		*Project or programme**	($000)	($000)
58				
59				
60				
61				
62				
63		** include additional rows if needed*		
64		All other projects or programmes - asset relocations	20,035	
65		**Asset relocations expenditure**		20,035
66	*less*	Capital contributions funding asset relocations	12,345	
67		**Asset relocations less capital contributions**		7,690

Company Name	**Vector**
For Year Ended	**31 March 2022**

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

6a(vi): Quality of Supply

			($000)	($000)
		*Project or programme**		
		** include additional rows if needed*		
		All other projects programmes - quality of supply	106	
		Quality of supply expenditure		106
	less	Capital contributions funding quality of supply		
		Quality of supply less capital contributions		106

6a(vii): Legislative and Regulatory

			($000)	($000)
		*Project or programme**		
		** include additional rows if needed*		
		All other projects or programmes - legislative and regulatory	97	
		Legislative and regulatory expenditure		97
	less	Capital contributions funding legislative and regulatory		
		Legislative and regulatory less capital contributions		97

6a(viii): Other Reliability, Safety and Environment

			($000)	($000)
		*Project or programme**		
		** include additional rows if needed*		
		All other projects or programmes - other reliability, safety and environment	10,569	
		Other reliability, safety and environment expenditure		10,569
	less	Capital contributions funding other reliability, safety and environment		
		Other reliability, safety and environment less capital contributions		10,569

6a(ix): Non-Network Assets

Routine expenditure

			($000)	($000)
		*Project or programme**		
		** include additional rows if needed*		
		All other projects or programmes - routine expenditure	3,304	
		Routine expenditure		3,304

Atypical expenditure

			($000)	($000)
		*Project or programme**		
		** include additional rows if needed*		
		All other projects or programmes - atypical expenditure	18,995	
		Atypical expenditure		18,995
		Expenditure on non-network assets		22,299

Company Name	**Vector**
For Year Ended	**31 March 2022**

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	14,382	
9	Vegetation management	5,677	
10	Routine and corrective maintenance and inspection	19,488	
11	Asset replacement and renewal	15,512	
12	**Network opex**		55,059
13	System operations and network support	41,378	
14	Business support	40,316	
15	**Non-network opex**		81,694
16			
17	**Operational expenditure**		136,753
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		
22	Insurance		3,600
23	** Direct billing expenditure by suppliers that directly bill the majority of their consumers*		

Company Name	**Vector**
For Year Ended	**31 March 2022**

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	602,980	599,637	(1%)
9	**7(ii): Expenditure on Assets**	**Forecast ($000) [2]**	**Actual ($000)**	**% variance**
10	Consumer connection	88,828	125,989	42%
11	System growth	53,330	29,449	(45%)
12	Asset replacement and renewal	106,865	116,611	9%
13	Asset relocations	39,672	20,035	(49%)
14	Reliability, safety and environment:			
15	Quality of supply	–	106	–
16	Legislative and regulatory	40	97	143%
17	Other reliability, safety and environment	28,644	10,569	(63%)
18	**Total reliability, safety and environment**	28,684	10,772	(62%)
19	**Expenditure on network assets**	317,379	302,856	(5%)
20	Expenditure on non-network assets	46,614	22,299	(52%)
21	Expenditure on assets	363,993	325,155	(11%)
22	**7(iii): Operational Expenditure**			
23	Service interruptions and emergencies	15,043	14,382	(4%)
24	Vegetation management	6,590	5,677	(14%)
25	Routine and corrective maintenance and inspection	19,166	19,488	2%
26	Asset replacement and renewal	13,806	15,512	12%
27	**Network opex**	54,605	55,059	1%
28	System operations and network support	41,669	41,378	(1%)
29	Business support	40,289	40,316	0%
30	**Non-network opex**	81,958	81,694	(0%)
31	**Operational expenditure**	136,563	136,753	0%
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	8,053	9,251	15%
35	Research and development	–	1,549	–
36				
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		–	–
41	Insurance	3,554	3,600	1%
42				
43	*1 From the nominal dollar target revenue for the disclosure year disclosed under clause 2.4.3(3) of this determination*			
44	*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 Ltd**
For Year Ended	**31 March 2022**
Network / Sub-Network Name	**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)	Billed quantities by price component									
						Price component	FIXD	AICO	24UC	OFPK	PEAK	CAPY	DAMD	DEXA	PWRF
						Unit charging basis (eg, days, kW of demand, kVA of capacity, etc.)	Day	kWh	kWh	kWh	kWh	kVA/Day	kVA/Day	kVA/Day	kVAr/Day
15	ARCL	residential	Standard	44,344	247,125		16,199,073	247,124,936	–	–	–	–	–	–	–
16	ARCS	residential	Standard	32,400	301,881		11,836,645	301,881,481	–	–	–	–	–	–	–
17	ARUL	residential	Standard	12,757	48,298		4,674,527	–	48,298,406	–	–	–	–	–	–
18	ARUS	residential	Standard	12,610	67,092		4,581,487	–	67,092,327	–	–	–	–	–	–
19	ARHLC	residential	Standard	117,401	609,662		42,873,717	–	–	425,161,993	184,499,930	–	–	–	–
20	ARHSC	residential	Standard	59,452	652,976		21,708,181	–	–	458,778,832	194,196,851	–	–	–	–
21	ARHL	residential	Standard	21,058	85,849		7,675,112	–	–	60,139,081	25,710,372	–	–	–	–
22	ARHS	residential	Standard	7,861	73,195		2,858,252	–	–	51,624,736	21,570,633	–	–	–	–
23	ABSN	general	Standard	28,739	491,058		10,507,741	–	491,057,905	–	–	–	–	–	–
24	ABSU	general	Standard	1,703	17,187		26,379,567	–	17,187,104	–	–	–	–	–	–
25	ABSH	general	Standard	8,349	172,676		3,034,983	–	–	123,578,216	49,097,603	–	–	–	–
26	ALVN	low voltage	Standard	2,402	239,499		877,507	–	239,499,196	–	–	131,621,414	–	–	315,395
27	ALVT	low voltage	Standard	1,389	508,346		–	–	508,345,752	–	–	136,434,067	42,653,134	–	3,489,382
28	ATXN	transformer	Standard	170	22,069		62,297	–	22,068,727	–	–	14,224,125	–	–	13,927
29	ATXT	transformer	Standard	977	1,109,601		–	–	1,109,600,878	–	–	261,974,141	87,865,978	–	3,605,969
30	AHVN	high voltage	Standard	7	561		2,555	–	561,257	–	–	517,935	–	–	3,722
31	AHVT	high voltage	Standard	148	420,180		–	–	420,180,162	–	–	68,769,615	31,553,221	47,860	1,371,716
32	WRCL	residential	Standard	32,459	185,530		11,864,737	185,530,269	–	–	–	–	–	–	–
33	WRCS	residential	Standard	26,805	265,365		9,799,427	265,364,697	–	–	–	–	–	–	–
34	WRUL	residential	Standard	7,552	39,594		2,770,879	–	39,593,715	–	–	–	–	–	–
35	WRUS	residential	Standard	10,525	76,199		3,830,678	–	76,199,160	–	–	–	–	–	–
36	WRHLC	residential	Standard	71,854	389,097		26,227,849	–	–	270,226,145	118,870,368	–	–	–	–
37	WRHSC	residential	Standard	43,026	472,438		15,700,976	–	–	330,601,768	141,836,508	–	–	–	–
38	WRHL	residential	Standard	15,027	77,063		5,470,451	–	–	53,612,421	23,450,740	–	–	–	–
39	WRHS	residential	Standard	8,812	94,170		3,207,021	–	–	65,875,704	28,294,673	–	–	–	–
40	WBSN	general	Standard	15,165	230,066		5,538,429	–	230,066,075	–	–	–	–	–	–
41	WBSU	general	Standard	724	10,454		16,988,928	–	10,454,366	–	–	–	–	–	–
42	WBSH	general	Standard	8,048	135,146		2,927,725	–	–	96,351,076	38,794,782	–	–	–	–
43	WLVN	low voltage	Standard	940	118,829		343,315	–	118,829,191	–	–	50,821,558	–	–	262,005
44	WLVH	low voltage	Standard	254	123,231		92,622	–	123,230,579	–	–	25,031,073	9,585,436	–	649,420
45	WTXN	transformer	Standard	136	33,742		49,352	–	33,742,131	–	–	12,190,942	–	–	166,330
46	WTXH	transformer	Standard	292	349,796		107,039	–	349,795,893	–	–	80,213,228	27,611,037	–	1,174,756
47	WHVN	high voltage	Standard	–	–		–	–	–	–	–	–	–	–	–
48	WHVH	high voltage	Standard	25	112,397		9,125	–	112,396,670	–	–	15,646,050	7,733,019	4,594	155,343
49	NS	non-standard	Non-standard	29	594,306		10,585	–	–	–	–	–	–	–	27,801
50															
51				593,411	7,780,372		258,200,197	999,901,383	4,018,199,494	1,935,949,972	826,322,460	797,444,148	207,001,825	52,454	11,207,965
52				29	594,306		10,585	–	–	–	–	–	–	–	27,801
53				593,440	8,374,678		258,210,782	999,901,383	4,018,199,494	1,935,949,972	826,322,460	797,444,148	207,001,825	52,454	11,235,766
54															
55															

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

Company Name	**Vector Ltd**
For Year Ended	**31 March 2022**
Network / Sub-Network Name	**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

							Price component	FIXD	AICO	24UC	OFPK	PEAK	CAPY	DAMD	DEXA	PWRF	*Add extra columns for additional line charge revenues by price component as necessary*
							Rate (eg, $ per day, $ per kWh, etc.)	Day	kWh	kWh	kWh	kWh	kVA/Day	kVA/Day	kVA/Day	kVAr/Day	
			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)**											
ARCL	residential	Standard	$24,803		$17,711	$7,092		$2,440	$22,363	–	–	–	–	–	–	–	
ARCS	residential	Standard	$27,299		$18,635	$8,664		$12,958	$14,341	–	–	–	–	–	–	–	
ARUL	residential	Standard	$5,375		$3,689	$1,686		$704	–	$4,671	–	–	–	–	–	–	
ARUS	residential	Standard	$8,621		$6,279	$2,342		$5,016	–	$3,605	–	–	–	–	–	–	
ARHLC	residential	Standard	$61,352		$46,758	$14,594		$6,459	–	–	$28,098	$26,795	–	–	–	–	
ARHSC	residential	Standard	$54,218		$38,857	$15,361		$23,765	–	–	$10,598	$19,855	–	–	–	–	
ARHL	residential	Standard	$9,383		$6,833	$2,550		$1,156	–	–	$3,974	$4,253	–	–	–	–	
ARHS	residential	Standard	$6,963		$4,823	$2,140		$3,129	–	–	$1,193	$2,641	–	–	–	–	
ABSN	general	Standard	$37,889		$20,751	$17,138		$11,503	–	$26,386	–	–	–	–	–	–	
ABSU	general	Standard	$2,564		$2,227	$337		$2,120	–	$444	–	–	–	–	–	–	
ABSH	general	Standard	$12,189		$7,319	$4,870		$3,323	–	–	$2,855	$6,011	–	–	–	–	
ALVN	low voltage	Standard	$21,233		$16,898	$4,335		$1,648	–	$13,663	–	–	$5,830	–	–	$92	
ALVT	low voltage	Standard	$26,620		$18,823	$7,797		–	–	$6,433	–	–	$6,043	$13,122	–	$1,022	
ATXN	transformer	Standard	$1,971		$1,572	$399		$115	–	$1,235	–	–	$617	–	–	$4	
ATXT	transformer	Standard	$52,614		$36,552	$16,062		–	–	$13,708	–	–	$11,367	$26,483	–	$1,056	
AHVN	high voltage	Standard	$58		$48	$10		$5	–	$30	–	–	$22	–	–	$1	
AHVT	high voltage	Standard	$17,588		$11,820	$5,768		–	–	$5,026	–	–	$2,894	$9,222	$44	$402	
WRCL	residential	Standard	$18,514		$13,189	$5,325		$1,781	$16,733	–	–	–	–	–	–	–	
WRCS	residential	Standard	$23,256		$15,640	$7,616		$10,692	$12,564	–	–	–	–	–	–	–	
WRUL	residential	Standard	$4,233		$2,851	$1,382		$416	–	$3,817	–	–	–	–	–	–	
WRUS	residential	Standard	$8,261		$5,602	$2,659		$4,180	–	$4,081	–	–	–	–	–	–	
WRHLC	residential	Standard	$38,941		$29,538	$9,403		$3,938	–	–	$17,798	$17,205	–	–	–	–	
WRHSC	residential	Standard	$39,195		$27,976	$11,219		$17,131	–	–	$7,611	$14,453	–	–	–	–	
WRHL	residential	Standard	$8,218		$5,892	$2,326		$821	–	–	$3,531	$3,866	–	–	–	–	
WRHS	residential	Standard	$8,468		$5,661	$2,807		$3,499	–	–	$1,517	$3,452	–	–	–	–	
WBSN	general	Standard	$18,364		$10,335	$8,029		$6,043	–	$12,321	–	–	–	–	–	–	
WBSU	general	Standard	$1,629		$1,424	$205		$1,360	–	$269	–	–	–	–	–	–	
WBSH	general	Standard	$10,146		$6,298	$3,848		$3,194	–	–	$2,218	$4,734	–	–	–	–	
WLVN	low voltage	Standard	$8,139		$5,988	$2,151		$2,076	–	$4,175	–	–	$1,811	–	–	$77	
WLVH	low voltage	Standard	$5,449		$3,697	$1,752		$1,054	–	$666	–	–	$892	$2,647	–	$190	
WTXN	transformer	Standard	$1,929		$1,318	$611		$292	–	$1,162	–	–	$426	–	–	$49	
WTXH	transformer	Standard	$13,669		$8,622	$5,047		$1,195	–	$1,856	–	–	$2,802	$7,473	–	$343	
WHVN	high voltage	Standard	–		–	–		–	–	–	–	–	–	–	–	–	
WHVH	high voltage	Standard	$3,282		$1,868	$1,414		$99	–	$574	–	–	$531	$2,030	$3	$45	
NS	non-standard	Non-standard	$17,204		$10,125	$7,079		$16,982	–	–	–	–	–	–	–	$222	
Add extra rows for additional consumer groups or price category codes as necessary																	
		Standard consumer totals	$582,433	–	$405,494	$176,939		$132,112	$66,001	$104,122	$79,393	$103,265	$33,235	$60,977	$47	$3,281	
		Non-standard consumer totals	$17,204	–	$10,125	$7,079		$16,982	–	–	–	–	–	–	–	$222	
		Total for all consumers	$599,637	–	$415,619	$184,018		$149,094	$66,001	$104,122	$79,393	$103,265	$33,235	$60,977	$47	$3,503	

8(iii): Number of ICPs directly billed

Number of directly billed ICPs at year end	43	**Check**	**OK**

Company Name	**Vector Ltd**
For Year Ended	**31 March 2022**
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(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)	Billed quantities by price component								
					Price component	FIXD	AICO	24UC	OFPK	PEAK	CAPY	DAMD	DEXA	PWRF
					Unit charging basis (eg, days, kW of demand, kVA of capacity, etc.)	Day	kWh	kWh	kWh	kWh	kVA/Day	kVA/Day	kVA/Day	kVAr/Day
ARCL	residential	Standard	44,344	247,125		16,199,073	247,124,936	–	–	–	–	–	–	–
ARCS	residential	Standard	32,400	301,881		11,836,645	301,881,481	–	–	–	–	–	–	–
ARUL	residential	Standard	12,757	48,298		4,674,527	–	48,298,406	–	–	–	–	–	–
ARUS	residential	Standard	12,610	67,092		4,581,487	–	67,092,327	–	–	–	–	–	–
ARHLC	residential	Standard	117,401	609,662		42,873,717	–	–	425,161,993	184,499,930	–	–	–	–
ARHSC	residential	Standard	59,452	652,976		21,708,181	–	–	458,778,832	194,196,851	–	–	–	–
ARHL	residential	Standard	21,058	85,849		7,675,112	–	–	60,139,081	25,710,372	–	–	–	–
ARHS	residential	Standard	7,861	73,195		2,858,252	–	–	51,624,736	21,570,633	–	–	–	–
ABSN	general	Standard	28,739	491,058		10,507,741	–	491,057,905	–	–	–	–	–	–
ABSU	general	Standard	1,703	17,187		26,379,567	–	17,187,104	–	–	–	–	–	–
ABSH	general	Standard	8,349	172,676		3,034,983	–	–	123,578,216	49,097,603	–	–	–	–
ALVN	low voltage	Standard	2,402	239,499		877,507	–	239,499,196	–	–	131,621,414	–	–	315,395
ALVT	low voltage	Standard	1,389	508,346		–	–	508,345,752	–	–	136,434,067	42,653,134	–	3,489,382
ATXN	transformer	Standard	170	22,069		62,297	–	22,068,727	–	–	14,224,125	–	–	13,927
ATXT	transformer	Standard	977	1,109,601		–	–	1,109,600,878	–	–	261,974,141	87,865,978	–	3,605,969
AHVN	high voltage	Standard	7	561		2,555	–	561,257	–	–	517,935	–	–	3,722
AHVT	high voltage	Standard	148	420,180		–	–	420,180,162	–	–	68,769,615	31,553,221	47,860	1,371,716
NS	non-standard	Non-standard	25	490,732		9,125	–	–	–	–	–	–	–	14,253
Add extra rows for additional consumer groups or price category codes as necessary														
		Standard consumer totals	351,767	5,067,255		153,271,644	549,006,417	2,923,891,714	1,119,282,858	475,075,389	613,541,297	162,072,333	47,860	8,800,111
		Non-standard consumer totals	25	490,732		9,125	–	–	–	–	–	–	–	14,253
		Total for all consumers	351,792	5,557,987		153,280,769	549,006,417	2,923,891,714	1,119,282,858	475,075,389	613,541,297	162,072,333	47,860	8,814,364

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

Company Name	**Vector Ltd**
For Year Ended	**31 March 2022**
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

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.)	Line charge revenues ($000) by price component								
							Price component	FIXD	AICO	24UC	OFPK	PEAK	CAPY	DAMD	DEXA	PWRF
								Day	kWh	kWh	kWh	kWh	kVA/Day	kVA/Day	kVA/Day	kVAr/Day
ARCL	residential	Standard	$24,803		$17,711	$7,092	–	$2,440	$22,363	–	–	–	–	–	–	–
ARCS	residential	Standard	$27,299		$18,635	$8,664	–	$12,958	$14,341	–	–	–	–	–	–	–
ARUL	residential	Standard	$5,375		$3,689	$1,686	–	$704	–	$4,671	–	–	–	–	–	–
ARUS	residential	Standard	$8,621		$6,279	$2,342	–	$5,016	–	$3,605	–	–	–	–	–	–
ARHLC	residential	Standard	$61,352		$46,758	$14,594	–	$6,459	–	–	$28,098	$26,795	–	–	–	–
ARHSC	residential	Standard	$54,218		$38,857	$15,361	–	$23,765	–	–	$10,598	$19,855	–	–	–	–
ARHL	residential	Standard	$9,383		$6,833	$2,550	–	$1,156	–	–	$3,974	$4,253	–	–	–	–
ARHS	residential	Standard	$6,963		$4,823	$2,140	–	$3,129	–	–	$1,193	$2,641	–	–	–	–
ABSN	general	Standard	$37,889		$20,751	$17,138	–	$11,503	–	$26,386	–	–	–	–	–	–
ABSU	general	Standard	$2,564		$2,227	$337	–	$2,120	–	$444	–	–	–	–	–	–
ABSH	general	Standard	$12,189		$7,319	$4,870	–	$3,323	–	–	$2,855	$6,011	–	–	–	–
ALVN	low voltage	Standard	$21,233		$16,898	$4,335	–	$1,648	–	$13,663	–	–	$5,830	–	–	$92
ALVT	low voltage	Standard	$26,620		$18,823	$7,797	–	–	–	$6,433	–	–	$6,043	$13,122	–	$1,022
ATXN	transformer	Standard	$1,971		$1,572	$399	–	$115	–	$1,235	–	–	$617	–	–	$4
ATXT	transformer	Standard	$52,614		$36,552	$16,062	–	–	–	$13,708	–	–	$11,367	$26,483	–	$1,056
AHVN	high voltage	Standard	$58		$48	$10	–	$5	–	$30	–	–	$22	–	–	$1
AHVT	high voltage	Standard	$17,588		$11,820	$5,768	–	–	–	$5,026	–	–	$2,894	$9,222	$44	$402
NS	non-standard	Non-standard	$14,518		$8,312	$6,206	–	$14,404	–	–	–	–	–	–	–	$114
Add extra rows for additional consumer groups or price category codes as necessary																
		Standard consumer totals	$370,740	–	$259,595	$111,145		$74,341	$36,704	$75,201	$46,718	$59,555	$26,773	$48,827	$44	$2,577
		Non-standard consumer totals	$14,518	–	$8,312	$6,206		$14,404	–	–	–	–	–	–	–	$114
		Total for all consumers	$385,258	–	$267,907	$117,351		$88,745	$36,704	$75,201	$46,718	$59,555	$26,773	$48,827	$44	$2,691

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	33	**Check**	**OK**

Company Name	**Vector Ltd**
For Year Ended	**31 March 2022**
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(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)	Billed quantities by price component								
					Price component	FIXD	AICO	24UC	OFPK	PEAK	CAPY	DAMD	DEXA	PWRF
					Unit charging basis (eg, days, kW of demand, kVA of capacity, etc.)	Day	kWh	kWh	kWh	kWh	kVA/Day	kVA/Day	kVA/Day	kVAr/Day
WRCL	residential	Standard	32,459	185,530		11,864,737	185,530,269	–	–	–	–	–	–	–
WRCS	residential	Standard	26,805	265,365		9,799,427	265,364,697	–	–	–	–	–	–	–
WRUL	residential	Standard	7,552	39,594		2,770,879	–	39,593,715	–	–	–	–	–	–
WRUS	residential	Standard	10,525	76,199		3,830,678	–	76,199,160	–	–	–	–	–	–
WRHLC	residential	Standard	71,854	389,097		26,227,849	–	–	270,226,145	118,870,368	–	–	–	–
WRHSC	residential	Standard	43,026	472,438		15,700,976	–	–	330,601,768	141,836,508	–	–	–	–
WRHL	residential	Standard	15,027	77,063		5,470,451	–	–	53,612,421	23,450,740	–	–	–	–
WRHS	residential	Standard	8,812	94,170		3,207,021	–	–	65,875,704	28,294,673	–	–	–	–
WBSN	general	Standard	15,165	230,066		5,538,429	–	230,066,075	–	–	–	–	–	–
WBSU	general	Standard	724	10,454		16,988,928	–	10,454,366	–	–	–	–	–	–
WBSH	general	Standard	8,048	135,146		2,927,725	–	–	96,351,076	38,794,782	–	–	–	–
WLVN	low voltage	Standard	940	118,829		343,315	–	118,829,191	–	–	50,821,558	–	–	262,005
WLVH	low voltage	Standard	254	123,231		92,622	–	123,230,579	–	–	25,031,073	9,585,436	–	649,420
WTXN	transformer	Standard	136	33,742		49,352	–	33,742,131	–	–	12,190,942	–	–	166,330
WTXH	transformer	Standard	292	349,796		107,039	–	349,795,893	–	–	80,213,228	27,611,037	–	1,174,756
WHVN	high voltage	Standard	–	–		–	–	–	–	–	–	–	–	–
WHVH	high voltage	Standard	25	112,397		9,125	–	112,396,670	–	–	15,646,050	7,733,019	4,594	155,343
NS	non-standard	Non-standard	4	103,574		1,460	–	–	–	–	–	–	–	13,548
Add extra rows for additional consumer groups or price category codes as necessary														
		Standard consumer totals	241,644	2,713,117		104,928,553	450,894,966	1,094,307,780	816,667,114	351,247,071	183,902,851	44,929,492	4,594	2,407,854
		Non-standard consumer totals	4	103,574		1,460	–	–	–	–	–	–	–	13,548
		Total for all consumers	241,648	2,816,691		104,930,013	450,894,966	1,094,307,780	816,667,114	351,247,071	183,902,851	44,929,492	4,594	2,421,402

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

Company Name	**Vector Ltd**
For Year Ended	**31 March 2022**
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

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)	Line charge revenues ($000) by price component								
							Price component	FIXD	AICO	24UC	OFPK	PEAK	CAPY	DAMD	DEXA	PWRF
							Rate (eg, $ per day, $ per kWh, etc.)	Day	kWh	kWh	kWh	kWh	kVA/Day	kVA/Day	kVA/Day	kVAr/Day
WRCL	residential	Standard	$18,514		$13,189	$5,325		$1,781	$16,733	–	–	–	–	–	–	–
WRCS	residential	Standard	$23,256		$15,640	$7,616		$10,692	$12,564	–	–	–	–	–	–	–
WRUL	residential	Standard	$4,233		$2,851	$1,382		$416	–	$3,817	–	–	–	–	–	–
WRUS	residential	Standard	$8,261		$5,602	$2,659		$4,180	–	$4,081	–	–	–	–	–	–
WRHLC	residential	Standard	$38,941		$29,538	$9,403		$3,938	–	–	$17,798	$17,205	–	–	–	–
WRHSC	residential	Standard	$39,195		$27,976	$11,219		$17,131	–	–	$7,611	$14,453	–	–	–	–
WRHL	residential	Standard	$8,218		$5,892	$2,326		$821	–	–	$3,531	$3,866	–	–	–	–
WRHS	residential	Standard	$8,468		$5,661	$2,807		$3,499	–	–	$1,517	$3,452	–	–	–	–
WBSN	general	Standard	$18,364		$10,335	$8,029		$6,043	–	$12,321	–	–	–	–	–	–
WBSU	general	Standard	$1,629		$1,424	$205		$1,360	–	$269	–	–	–	–	–	–
WBSH	general	Standard	$10,146		$6,298	$3,848		$3,194	–	–	$2,218	$4,734	–	–	–	–
WLVN	low voltage	Standard	$8,139		$5,988	$2,151		$2,076	–	$4,175	–	–	$1,811	–	–	$77
WLVH	low voltage	Standard	$5,449		$3,697	$1,752		$1,054	–	$666	–	–	$892	$2,647	–	$190
WTXN	transformer	Standard	$1,929		$1,318	$611		$292	–	$1,162	–	–	$426	–	–	$49
WTXH	transformer	Standard	$13,669		$8,622	$5,047		$1,195	–	$1,856	–	–	$2,802	$7,473	–	$343
WHVN	high voltage	Standard	–		–	–		–	–	–	–	–	–	–	–	–
WHVH	high voltage	Standard	$3,282		$1,868	$1,414		$99	–	$574	–	–	$531	$2,030	$3	$45
NS	non-standard	Non-standard	$2,686		$1,813	$873		$2,578	–	–	–	–	–	–	–	$108
Add extra rows for additional consumer groups or price category codes as necessary																
		Standard consumer totals	$211,693	–	$145,899	$65,794		$57,771	$29,297	$28,921	$32,675	$43,710	$6,462	$12,150	$3	$704
		Non-standard consumer totals	$2,686	–	$1,813	$873		$2,578	–	–	–	–	–	–	–	$108
		Total for all consumers	$214,379	–	$147,712	$66,667		$60,349	$29,297	$28,921	$32,675	$43,710	$6,462	$12,150	$3	$812

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	10	**Check** OK

Company Name	**Vector**
For Year Ended	**31 March 2022**
Network / Sub-network Name	**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

8	Voltage	Asset category	Asset class	Units	Items at start of year (quantity)	Items at end of year (quantity)	Net change	Data accuracy (1–4)
9	All	Overhead Line	Concrete poles / steel structure	No.	118,014	118,699	685	3
10	All	Overhead Line	Wood poles	No.	5,714	5,382	-332	2
11	All	Overhead Line	Other pole types	No.	1,022	1,181	159	3
12	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	365	363	-2	4
13	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	27	27	0	4
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	376	376	0	4
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	147	146	-1	4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	0	0	0	N/A
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	29	23	-6	4
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	31	31	0	4
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	17	17	0	4
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	0	0	0	N/A
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	0	0	0	N/A
22	HV	Subtransmission Cable	Subtransmission submarine cable	km	12	12	0	4
23	HV	Zone substation Buildings	Zone substations up to 66kV	No.	104	104	0	4
24	HV	Zone substation Buildings	Zone substations 110kV+	No.	7	7	0	4
25	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	20	22	2	4
26	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	2	2	0	4
27	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	0	0	0	N/A
28	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	184	174	-10	4
29	HV	Zone substation switchgear	33kV RMU	No.	7	6	-1	4
30	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	257	286	29	4
31	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	121	119	-2	4
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	1,478	1,500	22	4
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	0	0	0	N/A
34	HV	Zone Substation Transformer	Zone Substation Transformers	No.	219	222	3	4
35	HV	Distribution Line	Distribution OH Open Wire Conductor	km	3,738	3,719	-19	4
36	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	0	0	0	N/A
37	HV	Distribution Line	SWER conductor	km	0	0	0	N/A
38	HV	Distribution Cable	Distribution UG XLPE or PVC	km	1,623	1,686	63	4
39	HV	Distribution Cable	Distribution UG PILC	km	2,178	2,180	2	4
40	HV	Distribution Cable	Distribution Submarine Cable	km	8	8	0	4
41	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	301	336	35	4
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	314	352	38	3
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	10,848	11,619	771	3
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	3,186	3,087	-99	3
45	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	6,072	6,260	188	4
46	HV	Distribution Transformer	Pole Mounted Transformer	No.	7,604	7,580	-24	4
47	HV	Distribution Transformer	Ground Mounted Transformer	No.	14,721	14,917	196	4
48	HV	Distribution Transformer	Voltage regulators	No.	12	15	3	4
49	HV	Distribution Substations	Ground Mounted Substation Housing	No.	13,218	13,833	615	3
50	LV	LV Line	LV OH Conductor	km	4,154	4,128	-26	3
51	LV	LV Cable	LV UG Cable	km	6,439	6,565	126	4
52	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	479	474	-5	3
53	LV	Connections	OH/UG consumer service connections	No.	588,018	597,617	9,599	4
54	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	4,163	4,296	133	3
55	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	375	389	14	3
56	All	Capacitor Banks	Capacitors including controls	No	74	68	-6	4
57	All	Load Control	Centralised plant	Lot	32	32	0	3
58	All	Load Control	Relays	No	0	0	0	N/A
59	All	Civils	Cable Tunnels	km	10	10	0	3

Company Name	**Vector**
For Year Ended	**31 March 2022**
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

8	Voltage	Asset category	Asset class	Units	Items at start of year (quantity)	Items at end of year (quantity)	Net change	Data accuracy (1–4)
9	All	Overhead Line	Concrete poles / steel structure	No.	50,668	51,031	363	2
10	All	Overhead Line	Wood poles	No.	3,649	3,383	-266	2
11	All	Overhead Line	Other pole types	No.	442	499	57	3
12	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	48	48	0	4
13	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	0	0	0	N/A
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	230	229	-1	3
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	145	143	-1	4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	0	0	0	N/A
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	28	22	-6	3
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	31	31	0	4
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	17	17	0	4
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	0	0	0	N/A
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	0	0	0	N/A
22	HV	Subtransmission Cable	Subtransmission submarine cable	km	11	11	0	4
23	HV	Zone substation Buildings	Zone substations up to 66kV	No.	51	51	0	4
24	HV	Zone substation Buildings	Zone substations 110kV+	No.	5	5	0	4
25	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	20	22	2	4
26	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	0	0	0	4
27	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	0	0	0	N/A
28	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	0	0	0	N/A
29	HV	Zone substation switchgear	33kV RMU	No.	0	0	0	N/A
30	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	131	154	23	4
31	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	2	0	-2	N/A
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	958	971	13	4
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	0	0	0	N/A
34	HV	Zone Substation Transformer	Zone Substation Transformers	No.	128	130	2	4
35	HV	Distribution Line	Distribution OH Open Wire Conductor	km	881	877	-4	2
36	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	0	0	0	N/A
37	HV	Distribution Line	SWER conductor	km	0	0	0	N/A
38	HV	Distribution Cable	Distribution UG XLPE or PVC	km	728	765	38	3
39	HV	Distribution Cable	Distribution UG PILC	km	1,562	1,574	12	3
40	HV	Distribution Cable	Distribution Submarine Cable	km	2	2	0	4
41	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	71	85	14	4
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	255	267	12	3
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	2,532	2,702	170	3
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	2,406	2,253	-153	4
45	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	4,590	4,659	69	4
46	HV	Distribution Transformer	Pole Mounted Transformer	No.	1,969	1,956	-13	4
47	HV	Distribution Transformer	Ground Mounted Transformer	No.	7,134	7,223	89	4
48	HV	Distribution Transformer	Voltage regulators	No.	5	8	3	4
49	HV	Distribution Substations	Ground Mounted Substation Housing	No.	6,225	6,288	63	3
50	LV	LV Line	LV OH Conductor	km	1,926	1,914	-12	2
51	LV	LV Cable	LV UG Cable	km	3,880	3,928	48	3
52	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	264	265	1	2
53	LV	Connections	OH/UG consumer service connections	No.	349,020	353,478	4,458	4
54	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	2,175	2,265	90	3
55	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	204	205	1	3
56	All	Capacitor Banks	Capacitors including controls	No	13	9	-4	4
57	All	Load Control	Centralised plant	Lot	21	21	0	3
58	All	Load Control	Relays	No	0	0	0	N/A
59	All	Civils	Cable Tunnels	km	10	10	0	3

Company Name	**Vector**
For Year Ended	**31 March 2022**
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

8	Voltage	Asset category	Asset class	Units	Items at start of year (quantity)	Items at end of year (quantity)	Net change	Data accuracy (1–4)
9	All	Overhead Line	Concrete poles / steel structure	No.	67,346	67,668	322	4
10	All	Overhead Line	Wood poles	No.	2,065	1,999	-66	3
11	All	Overhead Line	Other pole types	No.	580	682	102	3
12	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	317	315	-2	4
13	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	27	27	0	4
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	146	146	0	3
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	2	2	0	4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	0	0	0	N/A
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	1	1	0	4
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	0	0	0	N/A
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	0	0	0	N/A
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	0	0	0	N/A
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	0	0	0	N/A
22	HV	Subtransmission Cable	Subtransmission submarine cable	km	1	1	0	4
23	HV	Zone substation Buildings	Zone substations up to 66kV	No.	53	53	0	3
24	HV	Zone substation Buildings	Zone substations 110kV+	No.	2	2	0	4
25	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	0	0	0	N/A
26	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	2	2	0	4
27	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	0	0	0	N/A
28	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	184	174	-10	4
29	HV	Zone substation switchgear	33kV RMU	No.	7	6	-1	4
30	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	126	132	6	4
31	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	119	119	0	4
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	520	529	9	4
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	0	0	0	N/A
34	HV	Zone Substation Transformer	Zone Substation Transformers	No.	91	92	1	4
35	HV	Distribution Line	Distribution OH Open Wire Conductor	km	2,857	2,842	-15	4
36	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	0	0	0	N/A
37	HV	Distribution Line	SWER conductor	km	0	0	0	N/A
38	HV	Distribution Cable	Distribution UG XLPE or PVC	km	895	921	26	3
39	HV	Distribution Cable	Distribution UG PILC	km	616	606	-10	4
40	HV	Distribution Cable	Distribution Submarine Cable	km	7	6	0	4
41	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	230	251	21	4
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	59	85	26	3
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	8,316	8,917	601	3
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	780	834	54	3
45	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	1,482	1,601	119	4
46	HV	Distribution Transformer	Pole Mounted Transformer	No.	5,635	5,624	-11	4
47	HV	Distribution Transformer	Ground Mounted Transformer	No.	7,587	7,694	107	4
48	HV	Distribution Transformer	Voltage regulators	No.	7	7	0	4
49	HV	Distribution Substations	Ground Mounted Substation Housing	No.	6,993	7,545	552	3
50	LV	LV Line	LV OH Conductor	km	2,228	2,214	-13	3
51	LV	LV Cable	LV UG Cable	km	2,559	2,637	78	3
52	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	215	209	-6	3
53	LV	Connections	OH/UG consumer service connections	No.	238,998	244,139	5,141	4
54	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	1,988	2,031	43	3
55	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	171	184	13	2
56	All	Capacitor Banks	Capacitors including controls	No	61	59	-2	4
57	All	Load Control	Centralised plant	Lot	11	11	0	4
58	All	Load Control	Relays	No	0	0	0	N/A
59	All	Civils	Cable Tunnels	km	0	0	0	N/A

Company Name	**Vector**
For Year Ended	**31 March 2022**
Network / Sub-network Name	**Combined**

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

8 **Disclosure Year (year ended)**: 31 March 2022

Number of assets at disclosure year end by installation date

9	Voltage	Asset category	Asset class	Units	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	2017	2018	2019	2020	2021	2022	2023	2024	2025	No. with age unknown	Items at end of year (quantity)	No. with default dates	Data accuracy (1–4)
10	All	Overhead Line	Concrete poles / steel structure	No.	8	275	4,640	14,311	14,915	14,980	9,536	590	736	906	738	304	1,038	1,878	2,105	2,130	2,108	1,628	1,139	1,382	1,923	1,741	1,873	2,985	3,456	4,783	4,020	4,173	3,340	3,080				12,320	118,699		3
11	All	Overhead Line	Wood poles	No.	5	8	108	346	441	552	741	169	48	67	72	30	64	116	112	83	61	111	14	26	31	24	15	11	4	19	25	47	88	37				1,907	5,382		2
12	All	Overhead Line	Other pole types	No.			1	0	3	5	10	3	2		1		1						1		5	10	18	47	179	264	136	205	156	85				49	1,181		3
13	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	2	2	24	72	154	70	1				1		1	6	2	1	16	1	7		0	0	2	1	0									0	363		4
14	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km				7	12										7					0				0											27		4
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km			0		19	7	54	56	1	21	6	1	1	7	34	7	25	20	4	10	7	3	16	16	13	6	3	5	25	5				1	376		4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km				39	71	24	7		0	0		0	1	1	1		0	0			0				0										146		4
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km																																			–		
18	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	3	3	0	13	3	1	1						0			1																			23		4
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km						0				18			1			0			2		0									1					31		4
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km					11		5	0	0				1	0																					17		4
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km																																			–		
22	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km																																			–		
23	HV	Subtransmission Cable	Subtransmission submarine cable	km				0		11	0																												12		4
24	HV	Zone substation Buildings	Zone substations up to 66kV	No.		1	2	22	24	17	9	3	1		2			1	1	1	2	2	5	2		2	2	2		1	1	1						104		4
25	HV	Zone substation Buildings	Zone substations 110kV+	No.					2	4	1																												7		4
26	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.							9																11							2					22		4
27	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.							2																												2		4
28	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.																																			–		
29	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.			31	73	38	8								1	2	8	2		2		1		1		4		1			2				174		4
30	HV	Zone substation switchgear	33kV RMU	No.											3		2													1									6		4
31	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.					13	22	9		10		4		9		6	32	11			6		35	24	52	11		9	13	13	7					286		4
32	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.			5	20	17	26	2		1		1		1	1	1	7	19	3	6		1			2	1										119		4
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.			7	129	160	253	101	11	16		6		7	10	33	91	68	39	34	31	49	35	32	77	99	37	44	44	60	27					1,500		4
34	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.																																			–		
35	HV	Zone Substation Transformer	Zone Substation Transformers	No.			4	37	49	34	27	4	1	2	1	1		1	3	3	6	5	8	5	1	2	7	4	4		2	4	5	2					222		4
36	HV	Distribution Line	Distribution OH Open Wire Conductor	km	0	4	137	525	969	1,346	285	94	10	6	11	3	21	51	82	30	31	11	7	6	5	7	8	5	7	5	7	15	8	6				17	3,719		4
37	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km																																			–		
38	HV	Distribution Line	SWER conductor	km																																			–		
39	HV	Distribution Cable	Distribution UG XLPE or PVC	km	1	0	0	3	18	35	165	35	38	30	21	7	100	133	110	65	105	61	68	41	49	70	63	67	65	77	64	59	65	66				4	1,686		4
40	HV	Distribution Cable	Distribution UG PILC	km	12	4	28	189	616	686	510	34	12	4	1	0	17	13	27	13	8	2	1	0	0	0	1	0		0	0	0	0	0				1	2,180		4
41	HV	Distribution Cable	Distribution Submarine Cable	km			6	0	1		1																											0	8		4
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.							14	3	4		2		3	7	33	68	38	4		6	10	1	2	3	2		22	37	67	12					336		4
43	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.			2		4	3	1		11		4	2	8	2	13	1	11	5	10	1	26	8	9	18	29	10	34	37	22	39				31	352		3
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	2		8	183	863	1,534	1,269	227	151	122	134	88	206	246	258	253	279	146	101	155	251	312	395	479	568	442	498	629	593	711				564	11,619		3
45	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	7		1	284	753	618	414	72	65	62	53	60	79	75	53	26	44	41	38	52	34	43	22	25	20	13	19	31	21	21				40	3,087		3
46	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	4		2	192	690	1,065	577	76	63	75	138	118	140	92	82	68	47	84	104	111	160	118	174	185	242	299	322	373	296	347				6	6,260		4
47	HV	Distribution Transformer	Pole Mounted Transformer	No.	8	27	113	213	529	1,146	1,146	240	104	156	131	10	213	207	309	244	273	208	116	201	160	194	195	172	207	251	260	239	159	146				3	7,580		4
48	HV	Distribution Transformer	Ground Mounted Transformer	No.	6	33	120	693	1,770	2,127	2,149	266	262	235	198	20	573	450	540	336	313	279	315	256	324	376	347	298	372	469	458	474	379	479					14,917		4
49	HV	Distribution Transformer	Voltage regulators	No.						3									2				1	3	2	1						2	1					15		4
50	HV	Distribution Substations	Ground Mounted Substation Housing	No.	13	61	177	1,311	3,072	3,471	2,083	181	201	92	73	28	381	91	141	79	80	56	48	69	110	169	200	198	199	198	239	307	212	115				174	13,833		3
51	LV	LV Line	LV OH Conductor	km	1	3	111	523	1,007	1,750	153	118	6	6	11	3	16	26	52	15	16	9	11	11	10	9	10	9	16	27	29	42	31	23				69	4,128		3
52	LV	LV Cable	LV UG Cable	km	4	19	43	434	1,072	1,058	1,258	117	94	53	44	7	204	284	183	88	123	75	68	49	70	100	124	130	134	163	153	137	116	143				20	6,565		4
53	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	2	1	9	21	39	47	85	8	7	4	2	1	14	16	17	12	17	7	18	9	8	17	12	21	17	13	14	12	13	9				3	474		3
54	LV	Connections	OH/UG consumer service connections	No.	2	1	50	6	26,857	161,426	103,406	16,052	23,239	8,299	7,781	10,978	13,318	18,071	22,165	18,858	12,974	9,207	8,991	9,084	8,541	10,237	11,657	11,933	13,471	11,338	11,026	10,025	13,233	25,387				4	597,617		4
55	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.			3	116	411	275	197	32	16	15	8	11	47	88	87	187	275	187	136	46	253	63	175	167	221	94	209	204	326	216				231	4,296		3
56	All	SCADA and communications	SCADA and communications equipment operating as a single sys	Lot							1					4	3	5	21	11	10	14	7	14	21	3	3	31	17	21	26	21	23	20				65	389		3
57	All	Capacitor Banks	Capacitors including controls	No							6	39			1			2			1				11			4					3	1					68		4
58	All	Load Control	Centralised plant	Lot				8	1	4	11						1		1	3														2				1	32		3
59	All	Load Control	Relays	No																																			–		
60	All	Civils	Cable Tunnels	km								0		9			0																					1	10		3

Company Name	**Vector**
For Year Ended	**31 March 2022**
Network / Sub-network Name	**Southern**

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																																					
8		**Disclosure Year (year ended)**	31 March 2022																																		
9	**Voltage**	**Asset category**	**Asset class**	**Units**	**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**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**No. with age unknown**	**Items at end of year**	**No. with default dates**	**Data accuracy (1–4)**
10	All	Overhead Line	Concrete poles / steel structure	No.	4		143	4,344	748	2,558	3,707	235	469	660	521	187	823	1,410	1,651	1,588	1,289	1,158	859	988	1,201	1,007	899	1,414	1,783	2,377	2,168	1,842	1,450	1,357				12,192	51,031		2
11	All	Overhead Line	Wood poles	No.				165	92	88	400	156	37	22	53	24	46	72	51	42	21	25	13	7	13	4	1	2	1	14	17	33	71	24				1,889	3,383		2
12	All	Overhead Line	Other pole types	No.																						2	7	26	145	172	48	33	11	13				42	499		3
13	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km					34						1					0	1		0				0	2										0	48		4
14	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km																																			0		
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km					0	2	32	48	1	20	5	0	1	1	15	1	1	17	0	9	1	2	14	13	9	2	1	4	23				1	229		4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km				38	70	24	7		0	0		0	1	1	1		0	0			0				0										143		4
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km																																		0		
18	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	3	3	0	13	2	1	0						0			1																		22		4
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km							8			18			1			0			2		0								1					31		4
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km				11		1	0	0					1	0																				17		4
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km																																		0		
22	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km																																		0		
23	HV	Subtransmission Cable	Subtransmission submarine cable	km						11																												11		4
24	HV	Zone substation Buildings	Zone substations up to 66kV	No.		1	2	11	15	7	4	3			1			1	1			1	2				1				1						51		4
25	HV	Zone substation Buildings	Zone substations 110kV+	No.					1	4																												5		4
26	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.							9																11					1		1				22		4
27	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.																																		0		4
28	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.																																		0		
29	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.																																		0		
30	HV	Zone substation switchgear	33kV RMU	No.																																		0		
31	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.					13	22	9		10						0	8	9			6			6	17	39	2				13				154		4
32	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.																																		0		
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.				103	93	197	61	11	10					8	23	37	40	13	27	22	25	18	21	50	61	23	43	44	39	2				971		4
34	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.																																		0		
35	HV	Zone Substation Transformer	Zone Substation Transformers	No.			1	23	32	17	19	4		1	1			1		3		5	5	4		3	3	3	1		2	1	2	1				130		4
36	HV	Distribution Line	Distribution OH Open Wire Conductor	km	0			0	64	603	34	86	2	4	9	1	6	4	12	11	5	4	3	3	1	1	0	0	2	0	2	3	3	2				9	877		3
37	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km																																		0		
38	HV	Distribution Line	SWER conductor	km																																		0		
39	HV	Distribution Cable	Distribution UG XLPE or PVC	km	0			2	13	13	18	7	17	14	14	3	68	54	64	31	31	32	38	24	25	45	28	34	30	31	39	28	34	29				1	765		4
40	HV	Distribution Cable	Distribution UG PILC	km	12	4	24	173	502	430	322	27	11	3	1	0	13	10	23	11	5	2	1		0	0		0		0		0	0	0				1	1,574		4
41	HV	Distribution Cable	Distribution Submarine Cable	km					1		1																											2		4
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionaliser	No.							1				1			6	12	12	3	2		2	1	1					5	12	25	2				85		4
43	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.			2		3	3	4		11		4	2	5	1	13	1	4	8	8	3	25	8	8	11	16	4	25	33	20	14				31	267		3
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	1			3	33	411	102	79	39	30	40		76	58	75	82	40	32	31	57	115	139	100	113	122	99	117	164	175	163				214	2,702		3
45	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	7			266	713	503	234	37	42	21	28	34	44	42	31	14	24	16	25	30	14	20	13	10	8	8	13	18	15	10				10	2,253		4
46	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	4		2	191	689	965	414	48	41	49	93	75	103	64	54	42	34	38	73	63	123	79	104	117	127	160	218	258	213	216				6	4,659		4
47	HV	Distribution Transformer	Pole Mounted Transformer	No.				57	80	114	200	227	95	28	68	59		51	43	85	90	88	72	36	67	57	74	68	39	63	71	70	64	44	48				2	1,956		4
48	HV	Distribution Transformer	Ground Mounted Transformer	No.			2	73	984	1,384	1,280	125	146	107	100	1	160	183	269	157	117	92	110	122	178	185	159	126	151	158	201	256	194	203					7,223		4
49	HV	Distribution Transformer	Voltage regulators	No.							3													2									2	1					8		4
50	HV	Distribution Substations	Ground Mounted Substation Housing	No.	2	1	2	167	1,409	2,124	1,092	82	95	49	41	20	145	48	83	38	41	22	18	36	48	66	72	55	29	55	97	116	65	34				136	6,288		3
51	LV	LV Line	LV OH Conductor	km	0			2	227	1,340	86	105	5	5	11	2	7	4	7	5	5	3	5	4	5	4	3	3	5	3	2	4	6	8				47	1,913		3
52	LV	LV Cable	LV UG Cable	km	4	16	34	229	662	773	761	54	65	34	35	3	158	116	115	51	63	53	36	27	38	13	53	64	52	69	71	70	68	84				14	3,928		4
53	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	2	0	8	15	28	31	50	3	5	3	2	0	12	11	13	9	9	4	6	4	4	4	4	9	7	8	6	4	4	5				1	265		4
54	LV	Connections	OH/UG consumer service connections	No.	2	1	1	3	5,494	129,214	29,408	12,936	18,937	5,098	4,201	7,001	8,818	13,357	15,817	12,499	7,651	5,091	4,637	4,999	4,589	5,201	5,841	6,021	6,805	5,721	6,103	5,728	8,227	14,069				4	353,478		4
55	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.				80	227	148	102	32	16	12	2	4	1	73	26	92	132	97	67	28	94	38	99	118	119	23	154	124	156	96				105	2,265		3
56	All	SCADA and communications	SCADA and communications equipment operating as a single sys	Lot							1					4		1	9	6	9	7	4	8	12	3	3	21	34	11	12	13	8	8				27	205		3
57	All	Capacitor Banks	Capacitors including controls	No							6	1																1					1					9		4
58	All	Load Control	Centralised plant	Lot						2	11						1		1	3													2				1	21		3
59	All	Load Control	Relays	No																																		0		
60	All	Civils	Cable Tunnels	km								0		0			0								0													1	10		3

Company Name	**Vector**
For Year Ended	**31 March 2022**
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																																								
8		**Disclosure Year (year ended)**	31 March 2022																																						
									Number of assets at disclosure year end by installation date																																			
9	**Voltage**	**Asset category**	**Asset class**	**Units**	**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**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**No. with age unknown**	**Items at end of year**	**No. with default dates**	**Data accuracy (1–4)**
10	All	Overhead Line	Concrete poles / steel structure	No.	4	275	4,505	9,967	14,167	12,422	5,829	355	267	246	217	117	217	468	454	542	819	470	300	394	722	754	974	1,181	1,673	2,406	1,851	2,331	1,890	1,723				128	67,668		4
11	All	Overhead Line	Wood poles	No.	5	8	108	181	349	464	341	13	13	45	19	6	18	44	61	41	40	86	1	19	18	20	14	9	3	5	8	14	17	13				18	1,999		3
12	All	Overhead Line	Other pole types	No.			1	0	3	5	10	3	2			1		1					1		5	8	11	21	34	92	88	172	145	72				7	682		3
13	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	2	2	24	72	120	70	1			0		1	6	2	1	11	1	2		0				1	0								0	315		4
14	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km				7	12									7						0				0										27		4
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km			0		18	6	23	8	0	1	1	1	4	6	19	7	22	2	3	1	3	1	2	3	4	4	2	1	1	6				0	146		4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km				1	1									0																				2		4
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km																																			0		
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																																			0		
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km																																			0		
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km																																			0		
22	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km																																			0		
23	HV	Subtransmission Cable	Subtransmission submarine cable	km				0		0	0																												1		4
24	HV	Zone substation Buildings	Zone substations up to 66kV	No.				11	9	10	5		3		1					1	2	1	3	2		2	2	1			1		1					53		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.																																			0		
27	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.							2																												2		4
28	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.																																			0		
29	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.			31	73	38	8							1	2	8	2		2		1		1		4		1			2					174		4
30	HV	Zone substation switchgear	33kV RMU	No.											3		2												1									6		4
31	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.											4		9		6	24	2				29	7	13	9		9	13		7					132		4
32	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.			5	20	17	26	2		5		1		1	1	2	7	19	3	6		1			2	1									119		4
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.			7	26	67	56	40		6		6		7	2	10	54	28	26	7	9	24	17	11	27	38	14	1		21	25					529		4
34	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.																																			0		
35	HV	Zone Substation Transformer	Zone Substation Transformers	No.				3	14	17	17	8		1	1		1		3		6		3	1	1	1	4	1	3			3	3	1					92		4
36	HV	Distribution Line	Distribution OH Open Wire Conductor	km		4	137	525	905	743	250	8	8	2	2	2	33	45	70	19	26	7	5	3	4	6	8	5	5	4	5	12	5	4				8	2,842		4
37	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km																																			0		
38	HV	Distribution Line	SWER conductor	km																																			0		
39	HV	Distribution Cable	Distribution UG XLPE or PVC	km	1	0	0	0	5	22	146	29	21	15	7	4	33	80	47	33	74	29	31	18	24	26	35	33	35	46	25	31	32	37				3	921		4
40	HV	Distribution Cable	Distribution UG PILC	km			4	16	114	253	188	7	3	2	0		3	3	4	3	3	0	0	0	0	0	1	0		0	0		0				0	606		4
41	HV	Distribution Cable	Distribution Submarine Cable	km			6	0			0																										0	6		4
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionaliser	No.							13	3	4		1		3	1	19	56	39	2		4	9		2	3	2		17	25	42	10					251		4
43	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.					1	2							1	1			7	1	2		1		1	7	13	9	11	4	2	25					85		4
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	1		8	180	830	1,123	1,167	148	112	92	94	38	130	196	184	171	239	114	70	98	136	173	295	366	446	343	382	465	418	548				350	8,917		3
45	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.			1	18	40	115	180	35	24	39	25	26	35	33	22	12	20	25	13	22	20	23	9	15	11	5	6	13	6	11				30	834		3
46	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.				1	1	100	163	30	22	26	45	43	37	28	28	26	13	46	31	48	37	39	70	78	115	139	106	115	83	131					1,601		4
47	HV	Distribution Transformer	Pole Mounted Transformer	No.	8	27	113	183	415	946	919	145	76	87	72	10	160	164	224	154	184	136	80	134	103	120	126	133	144	180	190	175	115	98				1	5,624		4
48	HV	Distribution Transformer	Ground Mounted Transformer	No.	6	33	118	620	786	743	869	141	116	128	98	19	413	267	271	179	196	187	205	134	146	191	188	172	221	311	257	218	185	276					7,694		4
49	HV	Distribution Transformer	Voltage regulators	No.															2					1	2	1													7		4
50	HV	Distribution Substations	Ground Mounted Substation Housing	No.	11	60	175	1,144	1,663	1,347	991	99	110	43	32	8	236	43	58	41	39	34	30	33	62	103	128	143	170	143	142	191	147	81				38	7,545		4
51	LV	LV Line	LV OH Conductor	km	0	3	111	521	780	409	67	13	2	1	0	2	10	22	48	10	12	6	7	6	5	5	7	6	13	24	26	38	25	16				21	2,214		3
52	LV	LV Cable	LV UG Cable	km	1	3	10	205	410	282	496	63	29	19	9	4	46	168	68	38	61	22	31	22	31	47	68	66	82	94	82	67	48	59				6	2,638		4
53	LV	LV Street lighting	LV OH/UG Streetlight circuit	km		1	1	6	13	16	35	5	2	1	1	1	2	5	4	3	8	3	12	5	4	12	7	13	10	8	8	8	9	4				2	209		3
54	LV	Connections	OH/UG consumer service connections	No.			49	3	21,363	32,212	73,998	3,116	4,302	3,201	3,580	3,977	4,501	4,714	6,348	6,359	5,323	4,116	4,354	4,085	3,952	5,036	5,808	5,912	6,666	5,617	4,926	4,297	5,006	11,318					244,139		4
55	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.			3	36	184	127	95			3	6	7	46	11	61	95	143	90	69	18	159	25	76	49	102	71	55	80	170	120				126	2,031		3
56	All	SCADA and communications	SCADA and communications equipment operating as a single sys	Lot							2				1		3		12	5	1	7	3	6	13			12	23	10	14	8	15	12				38	184		2
57	All	Capacitor Banks	Capacitors including controls	No								38			1			2				1			11			3				2	1					59		4
58	All	Load Control	Centralised plant	Lot				8	1	2																												11		4
59	All	Load Control	Relays	No																																		0		
60	All	Civils	Cable Tunnels	km																																		0		

Company Name	**Vector**
For Year Ended	**31 March 2022**
Network / Sub-network Name	**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	49	75
12	50kV & 66kV	-	-	-
13	33kV	363	439	802
14	SWER (all SWER voltages)	-	-	-
15	22kV (other than SWER)	2	168	171
16	6.6kV to 11kV (inclusive—other than SWER)	3,716	3,822	7,538
17	Low voltage (< 1kV)	4,128	6,565	10,693
18	**Total circuit length (for supply)**	8,236	11,044	19,280
19				
20	Dedicated street lighting circuit length (km)	17	457	474
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)			4,664
22				
23	**Overhead circuit length by terrain (at year end)**	**Circuit length (km)**	**(% of total overhead length)**	
24	Urban	4,691	57%	
25	Rural	3,545	43%	
26	Remote only		-	
27	Rugged only		-	
28	Remote and rugged		-	
29	Unallocated overhead lines		-	
30	**Total overhead length**	8,236	100%	
31				
32		**Circuit length (km)**	**(% of total circuit length)**	
33	Length of circuit within 10km of coastline or geothermal areas (where known)	19,229	99.7%	
34		**Circuit length (km)**	**(% of total overhead length)**	
35	Overhead circuit requiring vegetation management	8,236	100%	

Company Name	**Vector**
For Year Ended	**31 March 2022**
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	-	49	49
12	50kV & 66kV	-	-	-
13	33kV	48	289	337
14	SWER (all SWER voltages)	-	-	-
15	22kV (other than SWER)	2	168	170
16	6.6kV to 11kV (inclusive—other than SWER)	874	2,289	3,163
17	Low voltage (< 1kV)	1,914	3,928	5,842
18	**Total circuit length (for supply)**	2,838	6,723	9,560
19				
20	Dedicated street lighting circuit length (km)	5	260	265
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)			2,489
22				
23	**Overhead circuit length by terrain (at year end)**	**Circuit length (km)**	**(% of total overhead length)**	
24	Urban	2,377	84%	
25	Rural	461	16%	
26	Remote only		-	
27	Rugged only		-	
28	Remote and rugged		-	
29	Unallocated overhead lines		-	
30	**Total overhead length**	2,838	100%	
31				
32		**Circuit length (km)**	**(% of total circuit length)**	
33	Length of circuit within 10km of coastline or geothermal areas (where known)	9,553	99.9%	
34		**Circuit length (km)**	**(% of total overhead length)**	
35	Overhead circuit requiring vegetation management	2,838	100%	

Company Name	**Vector**
For Year Ended	**31 March 2022**
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	315	151	466
14	SWER (all SWER voltages)	–	–	-
15	22kV (other than SWER)	–	–	-
16	6.6kV to 11kV (inclusive—other than SWER)	2,842	1,533	4,375
17	Low voltage (< 1kV)	2,214	2,637	4,851
18	**Total circuit length (for supply)**	5,398	4,321	9,719
19				
20	Dedicated street lighting circuit length (km)	12	197	209
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)			2,175
22				
23	**Overhead circuit length by terrain (at year end)**	**Circuit length (km)**	**(% of total overhead length)**	
24	Urban	2,309	43%	
25	Rural	3,089	57%	
26	Remote only	–	–	
27	Rugged only	–	–	
28	Remote and rugged	–	–	
29	Unallocated overhead lines	–	–	
30	**Total overhead length**	5,398	100%	
31				
32		**Circuit length (km)**	**(% of total circuit length)**	
33	Length of circuit within 10km of coastline or geothermal areas (where known)	9,676	99.55%	
34		**Circuit length (km)**	**(% of total overhead length)**	
35	Overhead circuit requiring vegetation management	5,398	100%	

Company Name	**Vector**
For Year Ended	**31 March 2022**

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	None	–	–
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			

26 ** 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 2022**
Network / Sub-network Name	**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

9e(i): Consumer Connections

Number of ICPs connected in year by consumer type

*Consumer types defined by EDB**	**Number of connections (ICPs)**
Residential	8,292
Commercial	5,145
Connections total	13,437

Distributed generation

Number of connections made in year	1,117	**connections**
Capacity of distributed generation installed in year	7.4	**MVA**

* *include additional rows if needed*

9e(ii): System Demand

		Demand at time of maximum coincident demand (MW)	
	Maximum coincident system demand		
	GXP demand	1,792	
plus	Distributed generation output at HV and above	16	
	Maximum coincident system demand	1,807	
less	Net transfers to (from) other EDBs at HV and above	-	
	Demand on system for supply to consumers' connection points	1,807	
	Electricity volumes carried	**Energy (GWh)**	
	Electricity supplied from GXPs	8,604	
less	Electricity exports to GXPs	–	
plus	Electricity supplied from distributed generation	134	
less	Net electricity supplied to (from) other EDBs	14	
	Electricity entering system for supply to consumers' connection points	8,724	
less	Total energy delivered to ICPs	8,375	
	Electricity losses (loss ratio)	349	4.0%
	Load factor	0.55	

9e(iii): Transformer Capacity

	(MVA)
Distribution transformer capacity (EDB owned)	4,802
Distribution transformer capacity (Non-EDB owned, estimated)	712
Total distribution transformer capacity	5,513
Zone substation transformer capacity	4,650

Company Name	**Vector**
For Year Ended	**31 March 2022**
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

9e(i): Consumer Connections

Number of ICPs connected in year by consumer type

*Consumer types defined by EDB**	Number of connections (ICPs)
Residential	5,122
Commercial	2,362

** include additional rows if needed*

Connections total	7,484

Distributed generation

Number of connections made in year	582	connections
Capacity of distributed generation installed in year	4.1	MVA

9e(ii): System Demand

		Demand at time of maximum coincident demand (MW)	
Maximum coincident system demand			
	GXP demand	1,138	
plus	Distributed generation output at HV and above	0.2	
	Maximum coincident system demand	1,138	
less	Net transfers to (from) other EDBs at HV and above	-	
	Demand on system for supply to consumers' connection points	1,138	

		Energy (GWh)	
Electricity volumes carried			
	Electricity supplied from GXPs	5,722	
less	Electricity exports to GXPs	-	
plus	Electricity supplied from distributed generation	53	
less	Net electricity supplied to (from) other EDBs	14	
	Electricity entering system for supply to consumers' connection points	5,761	
less	Total energy delivered to ICPs	5,558	
	Electricity losses (loss ratio)	203	3.5%
	Load factor	0.58	

9e(iii): Transformer Capacity

	(MVA)
Distribution transformer capacity (EDB owned)	3,017
Distribution transformer capacity (Non-EDB owned, estimated)	287
Total distribution transformer capacity	3,304
Zone substation transformer capacity	3,022

Company Name	**Vector**
For Year Ended	**31 March 2022**
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

9e(i): Consumer Connections

Number of ICPs connected in year by consumer type

*Consumer types defined by EDB**	Number of connections (ICPs)
Residential	3,170
Commercial	2,783

** include additional rows if needed*

Connections total	5,953

Distributed generation

Number of connections made in year	535	connections
Capacity of distributed generation installed in year	3.3	MVA

9e(ii): System Demand

		Demand at time of maximum coincident demand (MW)	
Maximum coincident system demand			
	GXP demand	716	
plus	Distributed generation output at HV and above	11	
	Maximum coincident system demand	727	
less	Net transfers to (from) other EDBs at HV and above	-	
	Demand on system for supply to consumers' connection points	727	

		Energy (GWh)	
Electricity volumes carried			
	Electricity supplied from GXPs	2,882	
less	Electricity exports to GXPs	-	
plus	Electricity supplied from distributed generation	81	
less	Net electricity supplied to (from) other EDBs	-	
	Electricity entering system for supply to consumers' connection points	2,963	
less	Total energy delivered to ICPs	2,817	
	Electricity losses (loss ratio)	147	4.9%
	Load factor	0.47	

9e(iii): Transformer Capacity

	(MVA)
Distribution transformer capacity (EDB owned)	1,785
Distribution transformer capacity (Non-EDB owned, estimated)	424
Total distribution transformer capacity	2,209
Zone substation transformer capacity	1,628

Company Name	**Vector**
For Year Ended	**31 March 2022**
Network / Sub-network Name	**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

10(i): Interruptions

Interruptions by class	**Number of interruptions**
Class A (planned interruptions by Transpower)	12
Class B (planned interruptions on the network)	1,497
Class C (unplanned interruptions on the network)	2,010
Class D (unplanned interruptions by Transpower)	1
Class E (unplanned interruptions of EDB owned generation)	
Class F (unplanned interruptions of generation owned by others)	
Class G (unplanned interruptions caused by another disclosing entity)	
Class H (planned interruptions caused by another disclosing entity)	
Class I (interruptions caused by parties not included above)	
Total	3,520

Interruption restoration	**≤3Hrs**	**>3hrs**
Class C interruptions restored within	927	1,083

SAIFI and SAIDI by class	**SAIFI**	**SAIDI**
Class A (planned interruptions by Transpower)	0	0.1
Class B (planned interruptions on the network)	0.27	70.4
Class C (unplanned interruptions on the network)	1.29	151.4
Class D (unplanned interruptions by Transpower)	0	0.2
Class E (unplanned interruptions of EDB owned generation)		
Class F (unplanned interruptions of generation owned by others)		
Class G (unplanned interruptions caused by another disclosing entity)		
Class H (planned interruptions caused by another disclosing entity)		
Class I (interruptions caused by parties not included above)		
Total	1.56	222.1

Normalised SAIFI and SAIDI	**Normalised SAIFI**	**Normalised SAIDI**
Classes B & C (interruptions on the network)	1.56	178.4

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

Cause	**SAIFI**	**SAIDI**
Lightning	0.01	1.9
Vegetation	0.32	60.3
Adverse weather	0	0
Adverse environment	0	2.5
Third party interference	0.18	16.4
Wildlife	0.06	2.9
Human error	0.02	0.2
Defective equipment	0.45	42.9
Cause unknown	0.25	24.3

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)	0.09	32.5
Distribution cables (excluding LV)	0.01	1.9
Distribution other (excluding LV)	0.16	34.9

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

Main equipment involved	**SAIFI**	**SAIDI**
Subtransmission lines	0.19	4.9
Subtransmission cables	0.02	0.7
Subtransmission other	0.06	1.2
Distribution lines (excluding LV)	0.71	111.6
Distribution cables (excluding LV)	0.16	13.3
Distribution other (excluding LV)	0.15	19.8

10(v): Fault Rate

Main equipment involved	**Number of Faults**	**Circuit length (km)**	**Fault rate (faults per 100km)**
Subtransmission lines	37	390	9.50
Subtransmission cables	2	604	0.33
Subtransmission other	10		
Distribution lines (excluding LV)	1,420	3719	38.18
Distribution cables (excluding LV)	229	3874	5.91
Distribution other (excluding LV)	312		
Total	2,010		

Company Name	**Vector**
For Year Ended	**31 March 2022**
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

10(i): Interruptions

	Number of interruptions
Interruptions by class	
Class A (planned interruptions by Transpower)	
Class B (planned interruptions on the network)	828
Class C (unplanned interruptions on the network)	574
Class D (unplanned interruptions by Transpower)	
Class E (unplanned interruptions of EDB owned generation)	
Class F (unplanned interruptions of generation owned by others)	
Class G (unplanned interruptions caused by another disclosing entity)	
Class H (planned interruptions caused by another disclosing entity)	
Class I (interruptions caused by parties not included above)	
Total	1,402

	≤3Hrs	>3hrs
Interruption restoration		
Class C interruptions restored within	269	305

	SAIFI	SAIDI
SAIFI and SAIDI by class		
Class A (planned interruptions by Transpower)		
Class B (planned interruptions on the network)	0.26	52.4
Class C (unplanned interruptions on the network)	0.8	70.8
Class D (unplanned interruptions by Transpower)		
Class E (unplanned interruptions of EDB owned generation)		
Class F (unplanned interruptions of generation owned by others)		
Class G (unplanned interruptions caused by another disclosing entity)		
Class H (planned interruptions caused by another disclosing entity)		
Class I (interruptions caused by parties not included above)		
Total	1.06	123.2

	Normalised SAIFI	Normalised SAIDI
Normalised SAIFI and SAIDI		
Classes B & C (interruptions on the network)	1.06	123.1

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

	SAIFI	SAIDI
Cause		
Lightning	0.01	1.2
Vegetation	0.15	18.2
Adverse weather	0	0
Adverse environment	0.01	3.8
Third party interference	0.15	13.2
Wildlife	0.05	2.4
Human error	0	0
Defective equipment	0.31	26.4
Cause unknown	0.11	5.5

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

	SAIFI	SAIDI
Main equipment involved		
Subtransmission lines		
Subtransmission cables		
Subtransmission other		
Distribution lines (excluding LV)	0.09	25.4
Distribution cables (excluding LV)	0.02	2
Distribution other (excluding LV)	0.15	24.5

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

	SAIFI	SAIDI
Main equipment involved		
Subtransmission lines	0.04	0.7
Subtransmission cables	0.03	1.2
Subtransmission other	0.02	0.5
Distribution lines (excluding LV)	0.38	36.5
Distribution cables (excluding LV)	0.2	15
Distribution other (excluding LV)	0.13	16.9

10(v): Fault Rate

	Number of Faults	Circuit length (km)	Fault rate (faults per 100km)
Main equipment involved			
Subtransmission lines	7	48	14.59
Subtransmission cables	2	454	0.44
Subtransmission other	3		
Distribution lines (excluding LV)	320	877	36.50
Distribution cables (excluding LV)	131	2,341	5.60
Distribution other (excluding LV)	111		
Total	574		

Company Name	Vector
For Year Ended	31 March 2022
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

10(i): Interruptions

Interruptions by class	**Number of interruptions**
Class A (planned interruptions by Transpower)	12
Class B (planned interruptions on the network)	669
Class C (unplanned interruptions on the network)	1,436
Class D (unplanned interruptions by Transpower)	1
Class E (unplanned interruptions of EDB owned generation)	
Class F (unplanned interruptions of generation owned by others)	
Class G (unplanned interruptions caused by another disclosing entity)	
Class H (planned interruptions caused by another disclosing entity)	
Class I (interruptions caused by parties not included above)	
Total	2,118

Interruption restoration	**≤3Hrs**	**>3hrs**
Class C interruptions restored within	658	778

SAIFI and SAIDI by class	**SAIFI**	**SAIDI**
Class A (planned interruptions by Transpower)	0	0.3
Class B (planned interruptions on the network)	0.29	96.7
Class C (unplanned interruptions on the network)	2.01	268.8
Class D (unplanned interruptions by Transpower)	0	0.5
Class E (unplanned interruptions of EDB owned generation)		
Class F (unplanned interruptions of generation owned by others)		
Class G (unplanned interruptions caused by another disclosing entity)		
Class H (planned interruptions caused by another disclosing entity)		
Class I (interruptions caused by parties not included above)		
Total	2.30	366.3

Normalised SAIFI and SAIDI	**Normalised SAIFI**	**Normalised SAIDI**
Classes B & C (interruptions on the network)	2.3	267.2

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

Cause	**SAIFI**	**SAIDI**
Lightning	0.02	3
Vegetation	0.56	121.5
Adverse weather	0	0
Adverse environment	0	0.6
Third party interference	0.23	21.1
Wildlife	0.07	3.6
Human error	0.05	0.5
Defective equipment	0.64	66.8
Cause unknown	0.44	51.6

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)	0.1	42.8
Distribution cables (excluding LV)	0.01	1.7
Distribution other (excluding LV)	0.17	50.1

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

Main equipment involved	**SAIFI**	**SAIDI**
Subtransmission lines	0.4	11
Subtransmission cables	0	0
Subtransmission other	0.13	2.2
Distribution lines (excluding LV)	1.2	220.9
Distribution cables (excluding LV)	0.11	10.8
Distribution other (excluding LV)	0.17	23.9

10(v): Fault Rate

Main equipment involved	**Number of Faults**	**Circuit length (km)**	**Fault rate (faults per 100km)**
Subtransmission lines	30	342	8.78
Subtransmission cables	0	151	–
Subtransmission other	7		
Distribution lines (excluding LV)	1,100	2,842	38.70
Distribution cables (excluding LV)	98	1,533	6.39
Distribution other (excluding LV)	201		
Total	1,436		