EDB Information Disclosure Requirements

Information Templates

for

Schedules 1–10

Company Name	Vector
Disclosure Date	30 August 2023
Disclosure Year (year ended)	31 March 2023

Templates for Schedules 1–10 excluding 5f–5g

Template Version 5.1. Prepared 24 November 2022

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

Changes Since Previous Version

Refer to the Targeted Information Disclosure Review - Electricity Distribution Businesses Final reasons paper - Tranche 1, for the details of changes made. A summary is provided in Chapter 2.

Company Name	**Vector**
For Year Ended	**31 March 2023**

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)	MVA of capacity from EDB-owned distribution transformers ($/MVA)
Operational expenditure	17,246	242	82,989	7,497	29,396
Network	6,844	96	32,935	2,975	11,666
Non-network	10,402	146	50,055	4,521	17,730
Expenditure on assets	43,850	615	211,006	19,060	74,742
Network	41,223	578	198,364	17,918	70,264
Non-network	2,627	37	12,642	1,142	4,478

1(ii): Revenue metrics

	Revenue per GWh energy delivered to ICPs ($/GWh)	Revenue per average no. of ICPs ($/ICP)
Total consumer line charge revenue	72,419	1,015
Standard consumer line charge revenue	75,860	986
Non-standard consumer line charge revenue	28,446	602,414

1(iii): Service intensity measures

Demand density	90	*Maximum coincident system demand per km of circuit length (for supply) (kW/km)*
Volume density	435	*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	14,017	*Total energy delivered to ICPs per average number of ICPs (kWh/ICP)*

1(iv): Composition of regulatory income

	($000)	% of revenue
Operational expenditure	145,942	24.35%
Pass-through and recoverable costs excluding financial incentives and wash-ups	205,188	34.24%
Total depreciation	145,856	24.34%
Total revaluations	241,014	40.21%
Regulatory tax allowance	26,890	4.49%
Regulatory profit/(loss) including financial incentives and wash-ups	313,288	52.27%
Total regulatory income	599,321	

1(v): Reliability

Interruption rate	19.59	*Interruptions per 100 circuit km*

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Company Name	**Vector**
For Year Ended	**31 March 2023**

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
	2(i): Return on Investment	31 Mar 21	31 Mar 22	31 Mar 23
	ROI – comparable to a post tax WACC	%	%	%
	Reflecting all revenue earned	3.34%	9.15%	8.37%
	Excluding revenue earned from financial incentives	3.40%	9.10%	8.34%
	Excluding revenue earned from financial incentives and wash-ups	3.40%	9.09%	8.33%
	Mid-point estimate of post tax WACC	3.72%	3.52%	4.88%
	25th percentile estimate	3.04%	2.84%	4.20%
	75th percentile estimate	4.40%	4.20%	5.56%
	ROI – comparable to a vanilla WACC			
	Reflecting all revenue earned	3.67%	9.45%	8.88%
	Excluding revenue earned from financial incentives	3.74%	9.40%	8.85%
	Excluding revenue earned from financial incentives and wash-ups	3.74%	9.39%	8.84%
	WACC rate used to set regulatory price path	4.57%	4.57%	4.57%
	Mid-point estimate of vanilla WACC	4.05%	3.82%	5.39%
	25th percentile estimate	3.37%	3.14%	4.71%
	75th percentile estimate	4.73%	4.50%	6.07%

	2(ii): Information Supporting the ROI		($000)	
	Total opening RAB value	3,641,987		
plus	Opening deferred tax	(131,379)		
Opening RIV			3,510,608	
Line charge revenue			612,823	
	Expenses cash outflow	351,130		
add	Assets commissioned	169,287		
less	Asset disposals	15,317		
add	Tax payments	12,520		
less	Other regulated income	(13,502)		
Mid-year net cash outflows			531,121	
Term credit spread differential allowance			3,171	
	Total closing RAB value	3,891,833		
less	Adjustment resulting from asset allocation	719		
less	Lost and found assets adjustment	–		
plus	Closing deferred tax	(145,749)		
Closing RIV			3,745,365	
	ROI – comparable to a vanilla WACC			8.88%
	Leverage (%)			42%
	Cost of debt assumption (%)			4.38%
	Corporate tax rate (%)			28%
	ROI – comparable to a post tax WACC			8.37%

Company Name	**Vector**
For Year Ended	**31 March 2023**

SCHEDULE 2: REPORT ON RETURN ON INVESTMENT

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EDBs must provide explanatory comment on their ROI in Schedule 14 (Mandatory Explanatory Notes).
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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 — 8.67%

Year-end ROI – comparable to a post tax WACC — 8.15%

** 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	(71)	
Other financial incentives	1,431	
Financial incentives		1,360

Impact of financial incentives on ROI — 0.03%

Input methodology claw-back	–
CPP application recoverable costs	–
Catastrophic event allowance	–
Capex wash-up adjustment	356
Transmission asset wash-up adjustment	–
2013–15 NPV wash-up allowance	–
Reconsideration event allowance	–
Other wash-ups	–

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Company Name	**Vector**
For Year Ended	**31 March 2023**

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).

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sch ref		
119	**Wash-up costs**	356
120		
121	**Impact of wash-up costs on ROI**	0.01%

Company Name	**Vector**
For Year Ended	**31 March 2023**

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				
7	**3(i): Regulatory Profit**			**($000)**
8		**Income**		
9		Line charge revenue		612,823
10	*plus*	Gains / (losses) on asset disposals		(13,502)
11	*plus*	Other regulated income (other than gains / (losses) on asset disposals)		–
12				
13		**Total regulatory income**		599,321
14		**Expenses**		
15	*less*	Operational expenditure		145,942
16				
17	*less*	Pass-through and recoverable costs excluding financial incentives and wash-ups		205,188
18				
19		**Operating surplus / (deficit)**		248,191
20				
21	*less*	Total depreciation		145,856
22				
23	*plus*	Total revaluations		241,014
24				
25		**Regulatory profit / (loss) before tax**		343,349
26				
27	*less*	Term credit spread differential allowance		3,171
28				
29	*less*	Regulatory tax allowance		26,890
30				
31		**Regulatory profit/(loss) including financial incentives and wash-ups**		313,288
32				
33	**3(ii): Pass-through and Recoverable Costs excluding Financial Incentives and Wash-Ups**		**($000)**	
34		**Pass through costs**		
35		Rates	18,135	
36		Commerce Act levies	1,490	
37		Industry levies	2,014	
38		CPP specified pass through costs		
39		**Recoverable costs excluding financial incentives and wash-ups**		
40		Electricity lines service charge payable to Transpower	174,035	
41		Transpower new investment contract charges	7,943	
42		System operator services	–	
43		Distributed generation allowance	1,033	
44		Extended reserves allowance	–	
45		Other recoverable costs excluding financial incentives and wash-ups	538	
46		**Pass-through and recoverable costs excluding financial incentives and wash-ups**		205,188
47				

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Company Name	**Vector**
For Year Ended	**31 March 2023**

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(iii): Incremental Rolling Incentive Scheme

($000)

	CY-1 31 Mar 22	CY 31 Mar 23
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 18		
CY-4	31 Mar 19		
CY-3	31 Mar 20		
CY-2	31 Mar 21		
CY-1	31 Mar 22		
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 2023**

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 19 ($000)	RAB 31 Mar 20 ($000)	RAB 31 Mar 21 ($000)	RAB 31 Mar 22 ($000)	RAB 31 Mar 23 ($000)
	Total opening RAB value		2,951,716	3,075,471	3,258,721	3,385,969	3,641,987
less	**Total depreciation**		108,729	116,767	125,888	133,873	145,856
plus	**Total revaluations**		44,091	77,539	49,372	233,313	241,014
plus	**Assets commissioned**		203,460	512,505	215,221	171,903	169,287
less	**Asset disposals**		7,412	289,233	12,198	16,301	15,317
plus	**Lost and found assets adjustment**		–	–	–	–	–
plus	**Adjustment resulting from asset allocation**		(7,655)	(794)	741	976	719
	Total closing RAB value		3,075,471	3,258,721	3,385,969	3,641,987	3,891,833

4(ii): Unallocated Regulatory Asset Base

		Unallocated RAB * ($000)	($000)	RAB ($000)	($000)
	Total opening RAB value		3,657,245		3,641,987
Add	**Adjustment to the opening RAB value**		1,431		
less					
	Total depreciation		150,186		145,856
plus					
	Total revaluations		242,044		241,014
plus					
	Assets commissioned (other than below)	169,667		167,028	
	Assets acquired from a regulated supplier	–		–	
	Assets acquired from a related party	2,259		2,259	
	Assets commissioned		171,926		169,287
less					
	Asset disposals (other than below)	15,483		15,317	
	Asset disposals to a regulated supplier				
	Asset disposals to a related party				
	Asset disposals		15,483		15,317
plus	**Lost and found assets adjustment**		–		–
plus	**Adjustment resulting from asset allocation**				719
	Total closing RAB value		3,906,977		3,891,833

** 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.*

Company Name	**Vector**
For Year Ended	**31 March 2023**

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(iii): Calculation of Revaluation Rate and Revaluation of Assets

54		CPI_4	1,218
55		CPI_4^{-4}	1,142
56		Revaluation rate (%)	6.66%

			Unallocated RAB *		RAB	
			($000)	($000)	($000)	($000)
60		Total opening RAB value	3,657,245		3,641,987	
	Add	Adjustment to the opening RAB value	1,431			
61	*less*	Opening value of fully depreciated, disposed and lost assets	23,480		22,261	
62						
63		Total opening RAB value subject to revaluation	3,635,196		3,619,726	
64		**Total revaluations**		242,044		241,014

4(iv): Roll Forward of Works Under Construction

			Unallocated works under construction		Allocated works under construction	
68		**Works under construction—preceding disclosure year**		44,462		42,958
69	*plus*	Capital expenditure	210,038		207,179	
70	*less*	Assets commissioned	171,926		169,287	
71	*plus*	Adjustment resulting from asset allocation			–	
72		**Works under construction - current disclosure year**		82,574		80,850
73						
74		Highest rate of capitalised finance applied				4.31%
75						

Company Name	**Vector**
For Year Ended	**31 March 2023**

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(v): Regulatory Depreciation

	Unallocated RAB *		RAB	
	($000)	($000)	($000)	($000)
Depreciation - standard	93,635		93,337	
Depreciation - no standard life assets	56,551		52,519	
Depreciation - modified life assets				
Depreciation - alternative depreciation in accordance with CPP				
Total depreciation		150,186		145,856

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

** include additional rows if needed*

4(vii): Disclosure by Asset Category

($000 unless otherwise specified)

		Subtransmission lines	Subtransmission cables	Zone substations	Distribution and LV lines	Distribution and LV cables	Distribution substations and transformers	Distribution switchgear	Other network assets	Non-network assets	Total	
	Total opening RAB value	76,670	374,082	353,047	457,029	847,718	313,571	315,884	844,965	59,021	3,641,987	
less	Total depreciation	2,077	11,575	13,700	14,568	27,484	10,848	12,546	30,747	22,312	145,856	
plus	Total revaluations	5,103	24,874	23,226	36,210	50,245	20,750	20,797	56,303	3,507	241,014	
plus	Assets commissioned	323	(512)	29,884	37,055	15,110	14,263	38,538	25,068	9,556	169,287	
less	Asset disposals	131	336	1,063	2,742	2,707	1,753	3,458	2,306	821	15,317	
plus	Lost and found assets adjustment	–	–	–	–	–	–	–	–	–	–	
plus	Adjustment resulting from asset allocation	(3)	–	–	(1,894)	1,740	–	–	–	876	719	
plus	Asset category transfers	38	(200)	(3,090)	89,841	(89,882)	(62)	98	3,256	–	(0)	
	Total closing RAB value	79,923	386,334	388,304	600,930	794,740	335,921	359,314	896,540	49,828	3,891,833	
	Asset Life											
	Weighted average remaining asset life	40	46	32	47	34	34	29	40	6	(years)	
	Weighted average expected total asset life	60	63	44	59	57	50	36	47	12	(years)	

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Company Name	**Vector**
For Year Ended	**31 March 2023**

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**			343,349
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	6,442	*	
12		Amortisation of initial differences in asset values	31,571		
13		Amortisation of revaluations	24,603		
14					62,616
15					
16	*less*	Total revaluations	241,014		
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	2,600	*	
20		Notional deductible interest	66,315		
21					309,929
22					
23		**Regulatory taxable income**			96,036
24					
25	*less*	Utilised tax losses	–		
26		Regulatory net taxable income			96,036
27					
28		Corporate tax rate (%)	28%		
29		**Regulatory tax allowance**			26,890
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	852,422		
37	*less*	Amortisation of initial differences in asset values	31,571		
38	*plus*	Adjustment for unamortised initial differences in assets acquired	–		
39	*less*	Adjustment for unamortised initial differences in assets disposed	9,930		
40		Closing unamortised initial differences in asset values			810,921
41					
42		Opening weighted average remaining useful life of relevant assets (years)			27
43					

Company Name	**Vector**
For Year Ended	**31 March 2023**

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				
44	**5a(iv): Amortisation of Revaluations**			**($000)**
45				
46		Opening sum of RAB values without revaluations	3,046,792	
47				
48		Adjusted depreciation	121,253	
49		Total depreciation	145,856	
50		Amortisation of revaluations		24,603
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**	(131,379)	
61				
62	*plus*	Tax effect of adjusted depreciation	33,951	
63				
64	*less*	Tax effect of tax depreciation	40,956	
65				
66	*plus*	Tax effect of other temporary differences*	1,183	
67				
68	*less*	Tax effect of amortisation of initial differences in asset values	8,840	
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	(288)	
73				
74	*plus*	Deferred tax cost allocation adjustment	4	
75				
76		**Closing deferred tax**		(145,749)
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**	1,407,264	
84	*less*	Tax depreciation	146,272	
85	*plus*	Regulatory tax asset value of assets commissioned	193,525	
86	*less*	Regulatory tax asset value of asset disposals	7,846	
87	*plus*	Lost and found assets adjustment	–	
88	*plus*	Adjustment resulting from asset allocation	733	
89	*plus*	Other adjustments to the RAB tax value	–	
90		**Closing sum of regulatory tax asset values**		1,447,404

Company Name	**Vector**
For Year Ended	**31 March 2023**

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)
	Total regulatory income		–
	Market value of asset disposals		–
	Service interruptions and emergencies	–	
	Vegetation management	–	
	Routine and corrective maintenance and inspection	–	
	Asset replacement and renewal (opex)	–	
	Network opex		–
	Business support	–	
	System operations and network support	11,321	
	Operational expenditure		11,321
	Consumer connection	18	
	System growth	1,884	
	Asset replacement and renewal (capex)	115	
	Asset relocations	–	
	Quality of supply	–	
	Legislative and regulatory	–	
	Other reliability, safety and environment	242	
	Expenditure on non-network assets		–
	Expenditure on assets		2,259
	Cost of financing		8
	Value of capital contributions		–
	Value of vested assets		–
	Capital Expenditure		2,267
	Total expenditure		13,588
	Other related party transactions		–

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

Name of related party	Nature of opex or capex service provided	Total value of transactions ($000)
PowerSmart NZ Limited	Other reliability, safety and environment	220
Vector Communications Limited	Asset replacement and renewal (capex)	115
Vector Communications Limited	Consumer connection	18
Vector Communications Limited	Other reliability, safety and environment	22
Vector Communications Limited	System operations and network support	5,853
Vector Auckland Property Limited	System growth	201
Vector Northern Property Limited	System growth	1,683
Vector Technology Solutions Limited	System operations and network support	5,112
Advanced Metering Services Limited	System operations and network support	356
transactions		13,580

** include additional rows if needed*

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	6,008
PowerSmart NZ Limited	a wholly owned subsidiary of Vector limited	Energy solutions services	220
Advanced Metering Services Limited	a wholly owned subsidiary of Vector limited	Metering services	356
Vector Technology Solutions Limited	a wholly owned subsidiary of Vector limited	Digital and technology services	5,112
Vector Auckland Property Limited	a wholly owned subsidiary of Vector limited	Asset management services	201
Vector Northern Property Limited	a wholly owned subsidiary of Vector limited	Asset management services	1,683

Company Name	**Vector**
For Year Ended	**31 March 2023**

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 (may be Commission only)

	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
11	[]VCI	16/9/2019	24/7/2019	3.0	BKBM + []VCI				
12	[]VCI	16/9/2019	24/7/2019	3.0	BKBM + []VCI				
13	[]VCI	16/9/2019	24/7/2019	3.0	BKBM + []VCI				
14	[]VCI	16/9/2019	24/7/2019	3.0	BKBM + []VCI				
15	[]VCI	16/4/2020	15/4/2020	3.0	BKBM + []VCI				
16	[]VCI	13/1/2020	20/12/2019	5.0	BKBM + []VCI				
17	[]VCI	2/2/2021	26/1/2021	3.0	BKBM + []VCI				
18	[]VCI	2/2/2021	26/1/2021	3.0	BKBM + []VCI				
19	[]VCI	2/2/2021	26/1/2021	3.0	BKBM + []VCI				
20	[]VCI	2/2/2021	26/1/2021	3.0	BKBM + []VCI				
21	[]VCI	2/2/2021	26/1/2021	3.0	BKBM + []VCI				
22	[]VCI	1/7/2021	28/6/2021	5.0	BKBM + []VCI				
23	[]VCI	1/7/2021	28/6/2021	5.0	BKBM + []VCI				
24	[]VCI	30/7/2021	29/7/2021	3.0	BKBM + []VCI				
25	[]VCI	30/7/2021	29/7/2021	3.0	BKBM + []VCI				
26	[]VCI	30/7/2021	29/7/2021	3.0	BKBM + []VCI				
27	**Subtotal of bank facilities- variable rate**					**636,000**	**634,457**	**[]VCI**	**[]VCI**
28									
29	**Capital bonds – fixed rate**	**15/6/2022**	**14/6/2022**	**5.0**	**6.23**	**307,205**	**305,419**	**[]VCI**	**[]VCI**
30									
31	Wholesale Bonds- fixed rate Mar17	14/3/2017	3/3/2017	7.0	4.996	100,000		[]VCI	[]VCI
32	Wholesale Bonds- fixed rate Jun18	25/6/2018	21/6/2018	5.7	4.996	140,000		[]VCI	[]VCI
33	Wholesale Bonds- fixed rate Oct20	6/10/2020	1/10/2020	6.0	1.575	170,000		[]VCI	[]VCI
34	**Subtotal of wholesale bonds- variable rate**					**410,000**	**411,248**	**[]VCI**	**[]VCI**
35									
36	Senior notes - 2020 USPP 12yr	12/3/2020	4/3/2020	12.0	[]VCI	573,888		[]VCI	[]VCI
37	Senior notes - 2020 USPP 15 yr	12/3/2020	4/3/2020	15.0	[]VCI	223,179		[]VCI	[]VCI
38	Senior notes - 2010 USPP 12yr	20/12/2010	22/9/2010	12.0	[]VCI	250,516		[]VCI	[]VCI
39	Senior notes - 2017 USPP 10yr	25/10/2017	28/9/2017	10.0	[]VCI	277,200		[]VCI	[]VCI
40	Senior notes - 2017 USPP 12yr	25/10/2017	28/9/2017	12.0	[]VCI	138,600		[]VCI	[]VCI
41	**Subtotal of senior notes - USD fixed rate**					**1,463,383**	**1,408,485**	**[]VCI**	**[]VCI**
42									
43	Unsubordinated bond May 19	27/5/2019	16/5/2019	6.0	3.5	250,000		[]VCI	[]VCI
44	Unsubordinated bond Nov 21	26/11/2021	18/11/2021	6.0	3.7	225,000		[]VCI	[]VCI
45	**Unsubordinated bond**					**475,000**	**469,853**	**[]VCI**	**[]VCI**
46									
47	** include additional rows if needed*						3,229,461	[]VCI	[]VCI

48

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

50			
51	**Gross term credit spread differential**		6,473
52			
53	Total book value of interest bearing debt	3,229,461	
54	Leverage	42%	
55	Average opening and closing RAB values	3,766,910	
56	**Attribution Rate (%)**		49%
57			
58	**Term credit spread differential allowance**		3,171
59			

Company Name	**Vector**
For Year Ended	**31 March 2023**

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		21,262			
Not directly attributable	–	–	–	–	–
Total attributable to regulated service		21,262			
Vegetation management					
Directly attributable		6,046			
Not directly attributable	–	–	–	–	–
Total attributable to regulated service		6,046			
Routine and corrective maintenance and inspection					
Directly attributable		20,603			
Not directly attributable	–	–	–	–	–
Total attributable to regulated service		20,603			
Asset replacement and renewal					
Directly attributable		10,007			
Not directly attributable	–	–	–	–	–
Total attributable to regulated service		10,007			
System operations and network support					
Directly attributable		34,740			
Not directly attributable	–	7,174	885	8,059	–
Total attributable to regulated service		41,914			
Business support					
Directly attributable		2,756			
Not directly attributable		43,354	21,091	64,445	–
Total attributable to regulated service		46,110			
Operating costs directly attributable		95,414			
Operating costs not directly attributable	–	50,528	21,976	72,504	–
Operational expenditure		145,942			

5d(ii): Other Cost Allocations

Pass through and recoverable costs	($000)
Pass through costs	
Directly attributable	21,639
Not directly attributable	–
Total attributable to regulated service	21,639
Recoverable costs	
Directly attributable	183,549
Not directly attributable	–
Total attributable to regulated service	183,549

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

KPMG

Company Name	**Vector**
For Year Ended	**31 March 2023**

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	77,983
Not directly attributable	1,939
Total attributable to regulated service	79,923
Subtransmission cables	
Directly attributable	386,334
Not directly attributable	–
Total attributable to regulated service	386,334
Zone substations	
Directly attributable	388,304
Not directly attributable	–
Total attributable to regulated service	388,304
Distribution and LV lines	
Directly attributable	515,008
Not directly attributable	85,922
Total attributable to regulated service	600,930
Distribution and LV cables	
Directly attributable	794,737
Not directly attributable	3
Total attributable to regulated service	794,740
Distribution substations and transformers	
Directly attributable	335,921
Not directly attributable	–
Total attributable to regulated service	335,921
Distribution switchgear	
Directly attributable	359,314
Not directly attributable	–
Total attributable to regulated service	359,314
Other network assets	
Directly attributable	893,121
Not directly attributable	3,419
Total attributable to regulated service	896,540
Non-network assets	
Directly attributable	24,152
Not directly attributable	25,676
Total attributable to regulated service	49,828
Regulated service asset value directly attributable	3,774,874
Regulated service asset value not directly attributable	116,959
Total closing RAB value	3,891,833

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				

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

KPMG

Company Name	**Vector**
For Year Ended	**31 March 2023**

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		129,468
9		System growth		45,442
10		Asset replacement and renewal		145,389
11		Asset relocations		25,548
12		Reliability, safety and environment:		
13		Quality of supply	26	
14		Legislative and regulatory	6	
15		Other reliability, safety and environment	2,956	
16		**Total reliability, safety and environment**		2,988
17		**Expenditure on network assets**		348,835
18		Expenditure on non-network assets		22,232
19				
20		**Expenditure on assets**		371,067
21	*plus*	Cost of financing		(117)
22	*less*	Value of capital contributions		163,771
23	*plus*	Value of vested assets		–
24				
25		**Capital expenditure**		207,179

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	11,133
29	Research and development	8,835
	Cybersecurity (Commission only)	–

6a(iii): Consumer Connection

		*Consumer types defined by EDB**	($000)	($000)
32		Service connection	26,011	
		Customer substations	35,805	
		Business subdivisions	1,312	
		Residential subdivisions	59,322	
33		Capacity change	6,573	
34		Street lighting	445	
35				
36				
37		** include additional rows if needed*		
38		**Consumer connection expenditure**		129,468
39				
40	*less*	Capital contributions funding consumer connection expenditure	128,135	
41		**Consumer connection less capital contributions**		1,333

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

			System Growth ($000)	Asset Replacement and Renewal ($000)
45		Subtransmission	11,271	3,751
46		Zone substations	15,896	28,568
47		Distribution and LV lines	2,652	56,503
48		Distribution and LV cables	6,845	15,045
49		Distribution substations and transformers	5,759	16,228
50		Distribution switchgear	579	15,378
51		Other network assets	2,440	9,916
52		**System growth and asset replacement and renewal expenditure**	45,442	145,389
53	*less*	Capital contributions funding system growth and asset replacement and renewal	20,672	207
54		**System growth and asset replacement and renewal less capital contributions**	24,770	145,182

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	25,548	
65		**Asset relocations expenditure**		25,548
66	*less*	Capital contributions funding asset relocations	14,757	
67		**Asset relocations less capital contributions**		10,791

Company Name	**Vector**
For Year Ended	**31 March 2023**

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

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

sch ref				
68				
69	**6a(vi): Quality of Supply**			
70		*Project or programme**	**($000)**	**($000)**
71				
72				
73				
74				
75				
76		** include additional rows if needed*		
77		All other projects programmes - quality of supply	26	
78		**Quality of supply expenditure**		26
79	*less*	Capital contributions funding quality of supply		
80		**Quality of supply less capital contributions**		26
81	**6a(vii): Legislative and Regulatory**			
82		*Project or programme**	**($000)**	**($000)**
83				
84				
85				
86				
87				
88		** include additional rows if needed*		
89		All other projects or programmes - legislative and regulatory	6	
90		**Legislative and regulatory expenditure**		6
91	*less*	Capital contributions funding legislative and regulatory		
92		**Legislative and regulatory less capital contributions**		6
93	**6a(viii): Other Reliability, Safety and Environment**			
94		*Project or programme**	**($000)**	**($000)**
95				
96				
97				
98				
99				
100		** include additional rows if needed*		
101		All other projects or programmes - other reliability, safety and environment	2,956	
102		**Other reliability, safety and environment expenditure**		2,956
103	*less*	Capital contributions funding other reliability, safety and environment		
104		**Other reliability, safety and environment less capital contributions**		2,956
105				
106	**6a(ix): Non-Network Assets**			
107		**Routine expenditure**		
108		*Project or programme**	**($000)**	**($000)**
109				
110				
111				
112				
113				
114		** include additional rows if needed*		
115		All other projects or programmes - routine expenditure	1,025	
116		**Routine expenditure**		1,025
117		**Atypical expenditure**		
118		*Project or programme**	**($000)**	**($000)**
119				
120				
121				
122				
123				
124		** include additional rows if needed*		
125		All other projects or programmes - atypical expenditure	21,207	
126		**Atypical expenditure**		21,207
127				
128		**Expenditure on non-network assets**		22,232

KPMG

Company Name	**Vector**
For Year Ended	**31 March 2023**

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	21,262	
9	Vegetation management	6,046	
10	Routine and corrective maintenance and inspection	20,603	
11	Asset replacement and renewal	10,007	
12	**Network opex**		57,918
13	System operations and network support	41,914	
14	Business support	46,110	
15	**Non-network opex**		88,024
16			
17	**Operational expenditure**		145,942
18	**6b(ii): Subcomponents of Operational Expenditure (where known)**		
19	*EDBs' must disclose both a public version of this Schedule (excluding cybersecurity cost data) and a confidential version of this Schedule (including cybersecurity costs)*		
20	Energy efficiency and demand side management, reduction of energy losses		
21	Direct billing*		
22	Research and development		
23	Insurance		4,124
24	Cybersecurity (Commission only)		
25	** Direct billing expenditure by suppliers that directly bill the majority of their consumers*		

KPMG

Company Name	**Vector**
For Year Ended	**31 March 2023**

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

		Target ($000) [1]	Actual ($000)	% variance
7	**7(i): Revenue**			
8	Line charge revenue	625,305	612,823	(2%)
		Forecast ($000) [2]	**Actual ($000)**	**% variance**
9	**7(ii): Expenditure on Assets**			
10	Consumer connection	89,557	129,468	45%
11	System growth	73,275	45,442	(38%)
12	Asset replacement and renewal	120,865	145,389	20%
13	Asset relocations	35,582	25,548	(28%)
14	Reliability, safety and environment:			
15	Quality of supply	–	26	–
16	Legislative and regulatory	–	6	–
17	Other reliability, safety and environment	26,839	2,956	(89%)
18	**Total reliability, safety and environment**	26,839	2,988	(89%)
19	**Expenditure on network assets**	346,118	348,835	1%
20	Expenditure on non-network assets	67,197	22,232	(67%)
21	Expenditure on assets	413,315	371,067	(10%)
22	**7(iii): Operational Expenditure**			
23	Service interruptions and emergencies	14,475	21,262	47%
24	Vegetation management	5,491	6,046	10%
25	Routine and corrective maintenance and inspection	21,138	20,603	(3%)
26	Asset replacement and renewal	14,555	10,007	(31%)
27	**Network opex**	55,659	57,918	4%
28	System operations and network support	46,322	41,914	(10%)
29	Business support	40,890	46,110	13%
30	**Non-network opex**	87,212	88,024	1%
31	**Operational expenditure**	142,871	145,942	2%
32	**7(iv): Subcomponents of Expenditure on Assets (where known)**			
33	Energy efficiency and demand side management, reduction of energy losses	–	–	–
34	Overhead to underground conversion	8,214	11,133	36%
35	Research and development	–	8,835	–
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	3,677	4,124	12%
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**
For Year Ended	**31 March 2023**
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	41,186	224,027		15,035,023	224,026,724	–	–	–	–	–	–	–
	ARCS	residential	Standard	30,167	270,718		11,022,740	270,718,197	–	–	–	–	–	–	–
	ARUL	residential	Standard	13,286	51,184		4,853,385	–	51,184,183	–	–	–	–	–	–
	ARUS	residential	Standard	14,035	75,014		5,102,791	–	75,013,640	–	–	–	–	–	–
	ARHLC	residential	Standard	119,450	607,318		43,619,532	–	–	423,755,329	183,562,359	–	–	–	–
	ARHSC	residential	Standard	60,890	642,227		22,239,467	–	–	450,931,765	191,295,594	–	–	–	–
	ARHL	residential	Standard	23,195	93,172		8,452,100	–	–	65,908,494	27,263,748	–	–	–	–
	ARHS	residential	Standard	10,394	86,363		3,796,395	–	–	61,288,580	25,074,651	–	–	–	–
	ABSN	general	Standard	25,290	412,583		9,213,382	–	412,582,907	–	–	–	–	–	–
	ABSU	general	Standard	1,727	15,675		26,748,627	–	15,675,495	–	–	–	–	–	–
	ABSH	general	Standard	11,996	272,983		4,368,005	–	–	194,451,717	78,531,505	–	–	–	–
	ALVN	low voltage	Standard	2,337	231,806		852,949	–	231,806,190	–	–	125,873,414	–	–	11,569
	ALVT	low voltage	Standard	1,484	539,182		–	–	539,182,326	–	–	145,376,907	45,280,068	–	3,637,410
	ATXN	transformer	Standard	159	21,871		57,928	–	21,870,952	–	–	13,077,167	–	–	1,456
	ATXT	transformer	Standard	1,008	1,127,475		–	–	1,127,475,303	–	–	268,494,710	89,118,597	–	3,604,270
	AHVN	high voltage	Standard	7	576		2,404	–	575,595	–	–	497,097	–	–	2,201
	AHVT	high voltage	Standard	150	432,268		–	–	432,267,989	–	–	70,573,679	32,190,867	21,431	1,219,667
	WRCL	residential	Standard	29,534	165,579		10,722,048	165,578,723	–	–	–	–	–	–	–
	WRCS	residential	Standard	24,869	238,628		9,031,741	238,627,597	–	–	–	–	–	–	–
	WRUL	residential	Standard	8,051	40,920		2,926,972	–	40,919,764	–	–	–	–	–	–
	WRUS	residential	Standard	12,191	81,426		4,413,687	–	81,425,710	–	–	–	–	–	–
	WRHLC	residential	Standard	73,299	388,939		26,822,128	–	–	270,993,719	117,945,099	–	–	–	–
	WRHSC	residential	Standard	45,494	477,681		16,666,291	–	–	334,799,569	142,881,461	–	–	–	–
	WRHL	residential	Standard	16,342	83,151		5,972,132	–	–	58,472,265	24,678,451	–	–	–	–
	WRHS	residential	Standard	11,205	109,651		4,106,948	–	–	77,445,959	32,205,102	–	–	–	–
	WBSN	general	Standard	13,343	182,961		4,812,451	–	182,960,941	–	–	–	–	–	–
16	WBSU	general	Standard	737	9,714		17,185,963	–	9,713,641	–	–	–	–	–	–
17	WBSH	general	Standard	10,151	192,857		3,755,141	–	–	136,952,142	55,904,768	–	–	–	–
18	WLVN	low voltage	Standard	839	95,654		306,087	–	95,654,421	–	–	44,396,419	–	–	411
19	WLVH	low voltage	Standard	374	151,694		137,728	–	151,694,184	–	–	33,260,934	12,260,975	–	848,951
20	WTXN	transformer	Standard	81	16,444		29,696	–	16,444,471	–	–	6,908,785	–	–	–
21	WTXH	transformer	Standard	381	387,493		134,278	–	387,493,466	–	–	93,250,810	31,405,355	–	1,349,730
22	WHVN	high voltage	Standard	–	–		–	–	–	–	–	–	–	–	–
23	WHVH	high voltage	Standard	26	120,861		9,675	–	120,861,344	–	–	17,436,324	8,750,659	49,751	254,536
24	NS	non-standard	Non-standard	29	614,140		10,585	–	–	–	–	–	–	–	22,299
25	*Add extra rows for additional consumer groups or price category codes as necessary*														
26			**Standard consumer totals**	603,678	7,848,095		262,397,694	898,951,241	3,994,802,522	2,074,999,539	879,342,738	819,146,246	219,006,521	71,182	10,930,201
27			**Non-standard consumer totals**	29	614,140		10,585	–	–	–	–	–	–	–	22,299
28			**Total for all consumers**	603,707	8,462,235		262,408,279	898,951,241	3,994,802,522	2,074,999,539	879,342,738	819,146,246	219,006,521	71,182	10,952,500

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

Company Name	**Vector**
For Year Ended	**31 March 2023**
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

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
ARCL	residential	Standard	$23,299		$17,365	$5,937		$4,496	$18,803	–	–	–	–	–	–	–
ARCS	residential	Standard	$24,935		$17,764	$7,174		$12,306	$12,629	–	–	–	–	–	–	–
ARUL	residential	Standard	$6,063		$4,391	$1,674		$1,451	–	$4,612	–	–	–	–	–	–
ARUS	residential	Standard	$9,660		$7,208	$2,453		$5,697	–	$3,963	–	–	–	–	–	–
ARHLC	residential	Standard	$63,729		$49,511	$14,226		$13,044	–	–	$25,471	$25,214	–	–	–	–
ARHSC	residential	Standard	$54,267		$39,448	$14,825		$24,829	–	–	$10,293	$19,145	–	–	–	–
ARHL	residential	Standard	$10,781		$8,121	$2,661		$2,528	–	–	$3,962	$4,291	–	–	–	–
ARHS	residential	Standard	$8,649		$6,203	$2,447		$4,238	–	–	$1,399	$3,012	–	–	–	–
ABSN	general	Standard	$32,083		$18,596	$13,491		$10,286	–	$21,797	–	–	–	–	–	–
ABSU	general	Standard	$2,570		$1,722	$848		$2,168	–	$402	–	–	–	–	–	–
ABSH	general	Standard	$18,749		$11,085	$7,665		$4,877	–	–	$4,439	$9,433	–	–	–	–
ALVN	low voltage	Standard	$20,222		$16,421	$3,802		$1,556	–	$12,778	–	–	$5,885	–	–	$3
ALVT	low voltage	Standard	$28,562		$21,057	$7,507		–	–	$6,611	–	–	$6,797	$14,096	–	$1,058
ATXN	transformer	Standard	$1,899		$1,540	$359		$106	–	$1,206	–	–	$587	–	–	–
ATXT	transformer	Standard	$53,549		$38,777	$14,776		–	–	$13,824	–	–	$12,044	$26,633	–	$1,048
AHVN	high voltage	Standard	$58		$49	$9		$4	–	$32	–	–	$21	–	–	$1
AHVT	high voltage	Standard	$17,953		$12,618	$5,337		–	–	$5,304	–	–	$3,039	$9,235	$20	$355
WRCL	residential	Standard	$17,079		$12,691	$4,388		$3,202	$13,877	–	–	–	–	–	–	–
WRCS	residential	Standard	$21,185		$14,860	$6,324		$10,069	$11,116	–	–	–	–	–	–	–
WRUL	residential	Standard	$4,556		$3,218	$1,338		$874	–	$3,682	–	–	–	–	–	–
WRUS	residential	Standard	$9,215		$6,552	$2,663		$4,920	–	$4,295	–	–	–	–	–	–
WRHLC	residential	Standard	$40,451		$31,310	$9,141		$8,009	–	–	$16,265	$16,177	–	–	–	–
WRHSC	residential	Standard	$40,489		$29,416	$11,073		$18,579	–	–	$7,631	$14,279	–	–	–	–
WRHL	residential	Standard	$9,171		$6,762	$2,409		$1,783	–	–	$3,509	$3,879	–	–	–	–
WRHS	residential	Standard	$10,206		$7,063	$3,143		$4,578	–	–	$1,765	$3,863	–	–	–	–
WBSN	general	Standard	$15,017		$9,034	$5,983		$5,365	–	$9,652	–	–	–	–	–	–
WBSU	general	Standard	$1,639		$1,094	$545		$1,391	–	$248	–	–	–	–	–	–
WBSH	general	Standard	$14,013		$8,557	$5,456		$4,186	–	–	$3,122	$6,705	–	–	–	–
WLVN	low voltage	Standard	$6,791		$5,222	$1,569		$1,804	–	$3,237	–	–	$1,750	–	–	–
WLVH	low voltage	Standard	$7,454		$5,421	$2,033		$1,529	–	$800	–	–	$1,311	$3,568	–	$246
WTXN	transformer	Standard	$993		$723	$270		$175	–	$557	–	–	$261	–	–	–
WTXH	transformer	Standard	$16,227		$11,020	$5,207		$1,490	–	$2,044	–	–	$3,527	$8,774	–	$392
WHVN	high voltage	Standard	–		–	–		–	–	–	–	–	–	–	–	–
WHVH	high voltage	Standard	$3,839		$2,388	$1,451		$107	–	$638	–	–	$633	$2,347	$40	$74
NS	non-standard	Non-standard	$17,470		$10,296	$7,136		$17,293	–	–	–	–	–	–	–	$177
Add extra rows for additional consumer groups or price category codes as necessary																
		Standard consumer totals	$595,353	–	$427,207	$168,184		$155,647	$56,425	$95,682	$77,856	$105,998	$35,855	$64,653	$60	$3,177
		Non-standard consumer totals	$17,470	–	$10,296	$7,136		$17,293	–	–	–	–	–	–	–	$177
		Total for all consumers	$612,823	–	$437,503	$175,320		$172,940	$56,425	$95,682	$77,856	$105,998	$35,855	$64,653	$60	$3,354

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 42

Check OK

Company Name	**Vector**
For Year Ended	**31 March 2023**
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	41,186	224,027	15,035,023	224,026,724	–	–	–	–	–	–	–
ARCS	residential	Standard	30,167	270,718	11,022,740	270,718,197	–	–	–	–	–	–	–
ARUL	residential	Standard	13,286	51,184	4,853,385	–	51,184,183	–	–	–	–	–	–
ARUS	residential	Standard	14,035	75,014	5,102,791	–	75,013,640	–	–	–	–	–	–
ARHLC	residential	Standard	119,450	607,318	43,619,532	–	–	423,755,329	183,562,359	–	–	–	–
ARHSC	residential	Standard	60,890	642,227	22,239,467	–	–	450,931,765	191,295,594	–	–	–	–
ARHL	residential	Standard	23,195	93,172	8,452,100	–	–	65,908,494	27,263,748	–	–	–	–
ARHS	residential	Standard	10,394	86,363	3,796,395	–	–	61,288,580	25,074,651	–	–	–	–
ABSN	general	Standard	25,290	412,583	9,213,382	–	412,582,907	–	–	–	–	–	–
ABSU	general	Standard	1,727	15,675	26,748,627	–	15,675,495	–	–	–	–	–	–
ABSH	general	Standard	11,996	272,983	4,368,005	–	–	194,451,717	78,531,505	–	–	–	–
ALVN	low voltage	Standard	2,337	231,806	852,949	–	231,806,190	–	–	125,873,414	–	–	11,569
ALVT	low voltage	Standard	1,484	539,182	–	–	539,182,326	–	–	145,376,907	45,280,068	–	3,637,410
ATXN	transformer	Standard	159	21,871	57,928	–	21,870,952	–	–	13,077,167	–	–	1,456
ATXT	transformer	Standard	1,008	1,127,475	–	–	1,127,475,303	–	–	268,494,710	89,118,597	–	3,604,270
AHVN	high voltage	Standard	7	576	2,404	–	575,595	–	–	497,097	–	–	2,201
AHVT	high voltage	Standard	150	432,268	–	–	432,267,989	–	–	70,573,679	32,190,867	21,431	1,219,667
NS	non-standard	Non-standard	25	513,092	9,125	–	–	–	–	–	–	–	11,479
Add extra rows for additional consumer groups or price category codes as necessary													
		Standard consumer totals	356,761	5,104,443	155,364,728	494,744,921	2,907,634,580	1,196,335,884	505,727,857	623,892,974	166,589,533	21,431	8,476,574
		Non-standard consumer totals	25	513,092	9,125	–	–	–	–	–	–	–	11,479
		Total for all consumers	356,786	5,617,536	155,373,853	494,744,921	2,907,634,580	1,196,335,884	505,727,857	623,892,974	166,589,533	21,431	8,488,052

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

Company Name	**Vector**
For Year Ended	**31 March 2023**
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)	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
ARCL	residential	Standard	$23,299		$17,362	$5,937		$4,496	$18,803	–	–	–	–	–	–	–
ARCS	residential	Standard	$24,935		$17,761	$7,174		$12,306	$12,629	–	–	–	–	–	–	–
ARUL	residential	Standard	$6,063		$4,389	$1,674		$1,451	–	$4,612	–	–	–	–	–	–
ARUS	residential	Standard	$9,660		$7,207	$2,453		$5,697	–	$3,963	–	–	–	–	–	–
ARHLC	residential	Standard	$63,729		$49,503	$14,226		$13,044	–	–	$25,471	$25,214	–	–	–	–
ARHSC	residential	Standard	$54,267		$39,442	$14,825		$24,829	–	–	$10,293	$19,145	–	–	–	–
ARHL	residential	Standard	$10,781		$8,120	$2,661		$2,528	–	–	$3,962	$4,291	–	–	–	–
ARHS	residential	Standard	$8,649		$6,202	$2,447		$4,238	–	–	$1,399	$3,012	–	–	–	–
ABSN	general	Standard	$32,083		$18,592	$13,491		$10,286	–	$21,797	–	–	–	–	–	–
ABSU	general	Standard	$2,570		$1,722	$848		$2,168	–	$402	–	–	–	–	–	–
ABSH	general	Standard	$18,749		$11,084	$7,665		$4,877	–	–	$4,439	$9,433	–	–	–	–
ALVN	low voltage	Standard	$20,222		$16,420	$3,802		$1,556	–	$12,778	–	–	$5,885	–	–	$3
ALVT	low voltage	Standard	$28,562		$21,055	$7,507		–	–	$6,611	–	–	$6,797	$14,096	–	$1,058
ATXN	transformer	Standard	$1,899		$1,540	$359		$106	–	$1,206	–	–	$587	–	–	–
ATXT	transformer	Standard	$53,549		$38,773	$14,776		–	–	$13,824	–	–	$12,044	$26,633	–	$1,048
AHVN	high voltage	Standard	$58		$49	$9		$4	–	$32	–	–	$21	–	–	$1
AHVT	high voltage	Standard	$17,953		$12,616	$5,337		–	–	$5,304	–	–	$3,039	$9,235	$20	$355
NS	non-standard	Non-standard	$14,844		$8,524	$6,320		$14,753	–	–	–	–	–	–	–	$91
Add extra rows for additional consumer groups or price category codes as necessary																
		Standard consumer totals	$377,028	–	$271,837	$105,191		$87,586	$31,432	$70,529	$45,564	$61,095	$28,373	$49,964	$20	$2,465
		Non-standard consumer totals	$14,844	–	$8,524	$6,320		$14,753	–	–	–	–	–	–	–	$91
		Total for all consumers	$391,872	–	$280,361	$111,511		$102,339	$31,432	$70,529	$45,564	$61,095	$28,373	$49,964	$20	$2,556

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	32	**Check** OK

Company Name	**Vector**
For Year Ended	**31 March 2023**
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	29,534	165,579		10,722,048	165,578,723	–	–	–	–	–	–	–
	WRCS	residential	Standard	24,869	238,628		9,031,741	238,627,597	–	–	–	–	–	–	–
	WRUL	residential	Standard	8,051	40,920		2,926,972	–	40,919,764	–	–	–	–	–	–
	WRUS	residential	Standard	12,191	81,426		4,413,687	–	81,425,710	–	–	–	–	–	–
	WRHLC	residential	Standard	73,299	388,939		26,822,128	–	–	270,993,719	117,945,099	–	–	–	–
	WRHSC	residential	Standard	45,494	477,681		16,666,291	–	–	334,799,569	142,881,461	–	–	–	–
	WRHL	residential	Standard	16,342	83,151		5,972,132	–	–	58,472,265	24,678,451	–	–	–	–
	WRHS	residential	Standard	11,205	109,651		4,106,948	–	–	77,445,959	32,205,102	–	–	–	–
	WBSN	general	Standard	13,343	182,961		4,812,451	–	182,960,941	–	–	–	–	–	–
	WBSU	general	Standard	737	9,714		17,185,963	–	9,713,641	–	–	–	–	–	–
	WBSH	general	Standard	10,151	192,857		3,755,141	–	–	136,952,142	55,904,768	–	–	–	–
	WLVN	low voltage	Standard	839	95,654		306,087	–	95,654,421	–	–	44,396,419	–	–	411.390
	WLVH	low voltage	Standard	374	151,694		137,728	–	151,694,184	–	–	33,260,934	12,260,975	–	848,950.780
	WTXN	transformer	Standard	81	16,444		29,696	–	16,444,471	–	–	6,908,785	–	–	–
	WTXH	transformer	Standard	381	387,493		134,278	–	387,493,466	–	–	93,250,810	31,405,355	–	1,349,730.000
	WHVN	high voltage	Standard	–	–		–	–	–	–	–	–	–	–	–
	WHVH	high voltage	Standard	26	120,861		9,675	–	120,861,344	–	–	17,436,324	8,750,659	49,751	254,536.240
	NS	non-standard	Non-standard	4	101,048		1,460	–	–	–	–	–	–	–	10,820.000
	Add extra rows for additional consumer groups or price category codes as necessary														
			Standard consumer totals	246,917	2,743,653		107,032,966	404,206,320	1,087,167,942	878,663,653	373,614,881	195,253,272	52,416,988	49,751	2,453,628
			Non-standard consumer totals	4	101,048		1,460	–	–	–	–	–	–	–	10,820
			Total for all consumers	246,921	2,844,700		107,034,426	404,206,320	1,087,167,942	878,663,653	373,614,881	195,253,272	52,416,988	49,751	2,464,448

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

Company Name	**Vector**
For Year Ended	**31 March 2023**
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	$17,079		$12,691	$4,388		$3,202	$13,877	–	–	–	–	–	–	–
WRCS	residential	Standard	$21,185		$14,861	$6,324		$10,069	$11,116	–	–	–	–	–	–	–
WRUL	residential	Standard	$4,556		$3,218	$1,338		$874	–	$3,682	–	–	–	–	–	–
WRUS	residential	Standard	$9,215		$6,552	$2,663		$4,920	–	$4,295	–	–	–	–	–	–
WRHLC	residential	Standard	$40,451		$31,310	$9,141		$8,009	–	–	$16,265	$16,177	–	–	–	–
WRHSC	residential	Standard	$40,489		$29,416	$11,073		$18,579	–	–	$7,631	$14,279	–	–	–	–
WRHL	residential	Standard	$9,171		$6,762	$2,409		$1,783	–	–	$3,509	$3,879	–	–	–	–
WRHS	residential	Standard	$10,206		$7,063	$3,143		$4,578	–	–	$1,765	$3,863	–	–	–	–
WBSN	general	Standard	$15,017		$9,034	$5,983		$5,365	–	$9,652	–	–	–	–	–	–
WBSU	general	Standard	$1,639		$1,094	$545		$1,391	–	$248	–	–	–	–	–	–
WBSH	general	Standard	$14,013		$8,557	$5,456		$4,186	–	–	$3,122	$6,705	–	–	–	–
WLVN	low voltage	Standard	$6,791		$5,222	$1,569		$1,804	–	$3,237	–	–	$1,750	–	–	–
WLVH	low voltage	Standard	$7,454		$5,421	$2,033		$1,529	–	$800	–	–	$1,311	$3,568	–	$246
WTXN	transformer	Standard	$993		$723	$270		$175	–	$557	–	–	$261	–	–	–
WTXH	transformer	Standard	$16,227		$11,020	$5,207		$1,490	–	$2,044	–	–	$3,527	$8,774	–	$392
WHVN	high voltage	Standard	–		–	–		–	–	–	–	–	–	–	–	–
WHVH	high voltage	Standard	$3,839		$2,388	$1,451		$107	–	$638	–	–	$633	$2,347	$40	$74
NS	non-standard	Non-standard	$2,626		$1,810	$816		$2,540	–	–	–	–	–	–	–	$86
Add extra rows for additional consumer groups or price category codes as necessary																
		Standard consumer totals	$218,325	–	$155,332	$62,993		$68,061	$24,993	$25,153	$32,292	$44,903	$7,482	$14,689	$40	$712
		Non-standard consumer totals	$2,626	–	$1,810	$816		$2,540	–	–	–	–	–	–	–	$86
		Total for all consumers	$220,951	–	$157,142	$63,809		$70,601	$24,993	$25,153	$32,292	$44,903	$7,482	$14,689	$40	$798

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 2023**
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.	118,699	119,152	453	3
10	All	Overhead Line	Wood poles	No.	5,382	5,213	(169)	2
11	All	Overhead Line	Other pole types	No.	1,181	1,343	162	3
12	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	363	362	(1)	4
13	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	27	27	–	4
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	376	380	4	4
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	146	145	(1)	4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	0	0	–	N/A
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	23	22	(1)	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	–	N/A
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	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	–	4
24	HV	Zone substation Buildings	Zone substations 110kV+	No.	7	7	–	4
25	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	22	22	–	4
26	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	2	2	–	4
27	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	0	0	–	N/A
28	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	174	157	(17)	4
29	HV	Zone substation switchgear	33kV RMU	No.	6	6	–	4
30	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	286	298	12	4
31	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	119	107	(12)	4
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	1,500	1,409	(91)	4
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	0	0	–	N/A
34	HV	Zone Substation Transformer	Zone Substation Transformers	No.	222	224	2	4
35	HV	Distribution Line	Distribution OH Open Wire Conductor	km	3,719	3,717	(2)	4
36	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	0	0	–	N/A
37	HV	Distribution Line	SWER conductor	km	0	0	–	N/A
38	HV	Distribution Cable	Distribution UG XLPE or PVC	km	1,686	1,744	58	4
39	HV	Distribution Cable	Distribution UG PILC	km	2,180	2,168	(12)	4
40	HV	Distribution Cable	Distribution Submarine Cable	km	8	8	–	4
41	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	336	341	5	4
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	352	386	34	3
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	11,619	11,880	261	3
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	3,087	3,000	(87)	3
45	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	6,260	6,461	201	4
46	HV	Distribution Transformer	Pole Mounted Transformer	No.	7,580	7,596	16	4
47	HV	Distribution Transformer	Ground Mounted Transformer	No.	14,917	15,128	211	4
48	HV	Distribution Transformer	Voltage regulators	No.	15	15	–	4
49	HV	Distribution Substations	Ground Mounted Substation Housing	No.	13,833	14,269	436	3
50	LV	LV Line	LV OH Conductor	km	4,128	4,121	(7)	3
51	LV	LV Cable	LV UG Cable	km	6,565	6,714	149	4
52	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	474	503	29	3
53	LV	Connections	OH/UG consumer service connections	No.	597,617	609,550	11,933	4
54	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	4,296	4,600	304	3
55	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	389	406	17	3
56	All	Capacitor Banks	Capacitors including controls	No	68	66	(2)	4
57	All	Load Control	Centralised plant	Lot	32	32	–	3
58	All	Load Control	Relays	No	0	0	–	N/A
59	All	Civils	Cable Tunnels	km	10	10	–	3

Company Name	**Vector**
For Year Ended	**31 March 2023**
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	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.	51,031	51,198	167	2
10	All	Overhead Line	Wood poles	No.	3,383	3,252	(131)	2
11	All	Overhead Line	Other pole types	No.	499	503	4	3
12	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	48	48	–	4
13	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	0	0	–	N/A
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	230	232	2	4
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	143	143	–	4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	0	0	–	N/A
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	22	22	–	4
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	31	31	–	4
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	17	17	–	4
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	0	0	–	N/A
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	0	0	–	N/A
22	HV	Subtransmission Cable	Subtransmission submarine cable	km	11	11	–	4
23	HV	Zone substation Buildings	Zone substations up to 66kV	No.	51	51	–	4
24	HV	Zone substation Buildings	Zone substations 110kV+	No.	5	5	–	4
25	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	22	22	–	4
26	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	0	0	–	N/A
27	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	0	0	–	N/A
28	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	0	0	–	N/A
29	HV	Zone substation switchgear	33kV RMU	No.	0	0	–	N/A
30	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	154	154	–	4
31	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	0	0	–	N/A
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	971	869	(102)	4
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	0	0	–	N/A
34	HV	Zone Substation Transformer	Zone Substation Transformers	No.	130	130	–	4
35	HV	Distribution Line	Distribution OH Open Wire Conductor	km	877	875	(2)	3
36	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	0	0	–	N/A
37	HV	Distribution Line	SWER conductor	km	0	0	–	N/A
38	HV	Distribution Cable	Distribution UG XLPE or PVC	km	765	790	25	4
39	HV	Distribution Cable	Distribution UG PILC	km	1,574	1,569	(5)	4
40	HV	Distribution Cable	Distribution Submarine Cable	km	2	2	–	4
41	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	85	86	1	4
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	267	275	8	3
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	2,702	2,772	70	3
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	2,253	2,181	(72)	3
45	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	4,659	4,768	109	4
46	HV	Distribution Transformer	Pole Mounted Transformer	No.	1,956	1,950	(6)	4
47	HV	Distribution Transformer	Ground Mounted Transformer	No.	7,223	7,326	103	4
48	HV	Distribution Transformer	Voltage regulators	No.	8	8	–	4
49	HV	Distribution Substations	Ground Mounted Substation Housing	No.	6,288	6,400	112	3
50	LV	LV Line	LV OH Conductor	km	1,914	1,899	(15)	3
51	LV	LV Cable	LV UG Cable	km	3,928	3,989	61	4
52	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	265	271	6	3
53	LV	Connections	OH/UG consumer service connections	No.	353,478	360,085	6,607	4
54	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	2,265	2,397	132	3
55	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	205	209	4	3
56	All	Capacitor Banks	Capacitors including controls	No	9	9	–	4
57	All	Load Control	Centralised plant	Lot	21	21	–	3
58	All	Load Control	Relays	No	0	0	–	N/A
59	All	Civils	Cable Tunnels	km	10	10	–	3

Company Name	**Vector**
For Year Ended	**31 March 2023**
Network / Sub-network Name	**Northern**

SCHEDULE 9a: ASSET REGISTER

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

sch ref	Voltage	Asset category	Asset class	Units	Items at start of year (quantity)	Items at end of year (quantity)	Net change	Data accuracy (1–4)
9	All	Overhead Line	Concrete poles / steel structure	No.	67,668	67,954	286	4
10	All	Overhead Line	Wood poles	No.	1,999	1,961	(38)	3
11	All	Overhead Line	Other pole types	No.	682	840	158	3
12	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	315	314	(1)	4
13	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	27	27	–	4
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	146	148	2	4
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	2	2	–	4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	0	0	–	N/A
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	1	0	(1)	4
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	0	0	–	N/A
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	0	0	–	N/A
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	0	0	–	N/A
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	0	0	–	N/A
22	HV	Subtransmission Cable	Subtransmission submarine cable	km	1	1	–	4
23	HV	Zone substation Buildings	Zone substations up to 66kV	No.	53	53	–	4
24	HV	Zone substation Buildings	Zone substations 110kV+	No.	2	2	–	4
25	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	0	0	–	N/A
26	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	2	2	–	4
27	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	0	0	–	N/A
28	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	174	157	(17)	4
29	HV	Zone substation switchgear	33kV RMU	No.	6	6	–	4
30	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	132	144	12	4
31	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	119	107	(12)	4
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	529	540	11	4
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	0	0	–	N/A
34	HV	Zone Substation Transformer	Zone Substation Transformers	No.	92	94	2	4
35	HV	Distribution Line	Distribution OH Open Wire Conductor	km	2,842	2,842	(0)	4
36	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	0	0	–	N/A
37	HV	Distribution Line	SWER conductor	km	0	0	–	N/A
38	HV	Distribution Cable	Distribution UG XLPE or PVC	km	921	954	33	4
39	HV	Distribution Cable	Distribution UG PILC	km	606	599	(7)	4
40	HV	Distribution Cable	Distribution Submarine Cable	km	6	6	–	4
41	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	251	255	4	4
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	85	111	26	4
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	8,917	9,108	191	3
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	834	819	(15)	3
45	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	1,601	1,693	92	4
46	HV	Distribution Transformer	Pole Mounted Transformer	No.	5,624	5,646	22	4
47	HV	Distribution Transformer	Ground Mounted Transformer	No.	7,694	7,802	108	4
48	HV	Distribution Transformer	Voltage regulators	No.	7	7	–	4
49	HV	Distribution Substations	Ground Mounted Substation Housing	No.	7,545	7,869	324	3
50	LV	LV Line	LV OH Conductor	km	2,214	2,222	8	3
51	LV	LV Cable	LV UG Cable	km	2,637	2,725	88	4
52	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	209	232	23	3
53	LV	Connections	OH/UG consumer service connections	No.	244,139	249,465	5,326	4
54	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	2,031	2,203	172	3
55	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	184	197	13	3
56	All	Capacitor Banks	Capacitors including controls	No	59	57	(2)	4
57	All	Load Control	Centralised plant	Lot	11	11	–	4
58	All	Load Control	Relays	No	0	0	–	N/A
59	All	Civils	Cable Tunnels	km	0	0	–	N/A

Company Name	**Vector**
For Year Ended	**31 March 2023**
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 2023

Number of assets at disclosure year end by installation date

sch ref	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)
9																																									
10	All	Overhead Line	Concrete poles / steel structure	No.	8	256	4,519	13,931	14,533	14,747	9,402	593	735	899	737	302	1,030	1,865	2,094	2,105	2,098	1,616	1,149	1,376	1,916	1,754	1,855	2,589	3,440	4,762	3,993	4,138	3,240	2,880	2,474			12,116	119,152		3
11	All	Overhead Line	Wood poles	No.	5	8	104	313	423	544	723	152	47	66	71	24	61	115	112	82	60	108	14	26	31	24	15	9	4	19	22	44	86	35	25			1,841	5,213		2
12	All	Overhead Line	Other pole types	No.			1	–	3	5	12	98	2			1		1					1		5	10	18	46	178	267	137	206	148	86	67			51	1,343		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)	362		4
14	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km				7	12										7					0				0							–			0	27		4
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km			0		16	7	55	56	1	21	6	1	5	7	33	7	25	20	4	10	7	3	16	16	13	6	3	5	25	8	6			0	380		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						–			0	145		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	2	1	0						0			1															–			(0)	22		4
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km							8			18			1			0			2		0								1		0			(0)	31		4
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km				11		5	0	0					1	0																	–			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																								–			(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							1	1				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	65	31	8								1	2	8	2		2		1		1		3					2	–				157		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	5	1	7	32				298		4
32	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.			5	17	12	26	2		1		1		1	1	2	7	19	3	6		1			2	1						–				107		4
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.			7	129	134	218	99	11	6		6		7	10	33	90	59	39	34	25	49	29	17	53	97	37	44	44	46	33	53				1,409		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.			3	37	48	34	27	4	1	2	1	1		1	3	3	6	5	8	5	1	2	7	4	4		2	4	5	3	3				224		4
36	HV	Distribution Line	Distribution OH Open Wire Conductor	km	0	4	137	523	965	1,342	285	94	10	6	11	3	20	51	81	30	31	11	7	5	7	7	8	5	7	4	6	16	8	6	9			17	3,717		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	2	18	34	164	33	37	29	20	7	100	133	110	64	104	61	68	41	49	64	62	67	65	78	65	58	65	70	71			4	1,744		4
40	HV	Distribution Cable	Distribution UG PILC	km	12	4	24	189	612	684	509	34	12	4	1	0	17	13	27	13	8	2	1	0	0	0	1	0		0	0	0	0	0	0			2	2,168		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	3		1		3	7	30	67	38	4		6	10		1	4	2		20	36	66	12	14				341		4
43	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.			2		4	6	4		11		4	1	6	2	13	1	11	9	10	3	26	8	9	18	30	10	36	36	21	48	28			29	386		3
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	2		8	178	821	1,485	1,217	225	146	118	127	38	198	243	254	248	275	145	97	153	250	309	386	468	560	444	494	620	593	601	548			629	11,880		3
45	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	5		1	262	717	603	403	67	63	61	55	56	75	74	49	26	44	39	38	49	32	40	21	24	20	13	18	31	19	17	30			48	3,000		3
46	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	4		3	173	662	1,035	552	73	60	74	133	110	136	89	81	69	44	82	104	108	160	116	174	191	239	296	319	369	288	347	358			12	6,461		4
47	HV	Distribution Transformer	Pole Mounted Transformer	No.	8	24	107	204	505	1,093	1,112	234	100	151	125	10	208	203	303	237	265	205	111	200	159	190	194	170	202	249	260	237	144	142	241			3	7,596		4
48	HV	Distribution Transformer	Ground Mounted Transformer	No.	6	28	115	665	1,703	2,075	2,099	260	259	233	197	20	567	439	529	331	312	268	310	253	318	374	344	299	367	461	451	473	367	454	550			1	15,128		4
49	HV	Distribution Transformer	Voltage regulators	No.							3								2				1	3	2	1									3				15		4
50	HV	Distribution Substations	Ground Mounted Substation Housing	No.	13	60	177	1,308	3,051	3,458	2,079	181	205	92	72	22	379	89	137	77	79	54	47	67	108	166	186	194	194	182	225	289	198	269	281			330	14,269		3
51	LV	LV Line	LV OH Conductor	km	1	3	110	520	1,002	1,732	153	125	6	6	11	3	16	26	55	15	16	8	11	11	10	9	10	9	16	27	28	42	31	23	17			69	4,121		3
52	LV	LV Cable	LV UG Cable	km	4	19	42	432	1,070	1,054	1,255	117	94	53	44	7	203	284	183	88	123	75	68	49	69	100	124	130	134	162	153	136	117	152	155			20	6,714		4
53	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	2	1	9	23	45	52	85	9	7	4	2	1	14	16	17	12	17	7	18	9	8	16	12	21	17	13	13	11	13	15	9			3	503		3
54	LV	Connections	OH/UG consumer service connections	No.	2	1	49	6	26,676	160,543	103,073	16,000	23,146	8,297	7,750	10,932	13,282	18,053	22,256	18,923	12,968	9,164	8,956	9,042	8,480	10,210	11,635	11,938	13,473	11,346	10,854	10,039	13,086	13,492	25,874			4	609,550		4
55	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.			3	113	351	264	199	33	17	14	10	11	47	89	95	202	280	187	140	51	256	71	179	179	232	93	233	221	321	199	262			248	4,600		3
56	All	SCADA and communications	SCADA and communications equipment operating as a single syst	Lot							3					4	3	5	21	11	10	14	7	14	25	3	3	33	57	21	24	21	22	18	24			63	406		3
57	All	Capacitor Banks	Capacitors including controls	No							6	37			1			2				1			11			4					3	1	–				66		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								0										–			1	10		3

Company Name	Vector
For Year Ended	31 March 2023
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 2023

Number of assets at disclosure year end by installation date

sch ref	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
10	All	Overhead Line	Concrete poles / steel structure	No.	4		142	4,229	733	2,529	3,662	234	468	653	521	186
11	All	Overhead Line	Wood poles	No.				142	85	86	384	139	36	22	53	19
12	All	Overhead Line	Other pole types	No.												
13	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km					34						1	
14	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km												
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km					0	2	32	48	1	20	5	0
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km				38	70	24	7		0	0		0
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	2	1	0					
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km							8			18		
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km				11		5	0	0				
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						11						
24	HV	Zone substation Buildings	Zone substations up to 66kV	No.		1	2	11	15	7	4	3			1	
25	HV	Zone substation Buildings	Zone substations 110kV+	No.					1	4						
26	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.							9					
27	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.												
28	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.												
29	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.												
30	HV	Zone substation switchgear	33kV RMU	No.												
31	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.					13	22	9		10			
32	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.												
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.				103	77	162	59	11				
34	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.												
35	HV	Zone Substation Transformer	Zone Substation Transformers	No.			1	23	31	17	19	4		1	1	
36	HV	Distribution Line	Distribution OH Open Wire Conductor	km	0			0	64	601	34	86	2	4	9	1
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	0			2	12	12	18	6	17	14	13	3
40	HV	Distribution Cable	Distribution UG PILC	km	12	4	23	173	500	429	321	27	11	3	1	0
41	HV	Distribution Cable	Distribution Submarine Cable	km					1		1					
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.							1					
43	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.			2		3	3	4		11		4	1
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	1			3	33	395	97	78	38	30	37	
45	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	5			244	678	493	228	36	41	22	29	29
46	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	4		3	172	661	944	398	45	38	48	88	68
47	HV	Distribution Transformer	Pole Mounted Transformer	No.				29	109	185	217	92	27	67	57	
48	HV	Distribution Transformer	Ground Mounted Transformer	No.			2	69	963	1,356	1,250	125	143	107	99	1
49	HV	Distribution Transformer	Voltage regulators	No.							3					
50	HV	Distribution Substations	Ground Mounted Substation Housing	No.	2	1	2	165	1,395	2,113	1,088	82	95	49	40	16
51	LV	LV Line	LV OH Conductor	km	0			2	226	1,324	86	105	5	5	11	2
52	LV	LV Cable	LV UG Cable	km	3	16	33	229	660	773	759	54	65	34	34	3
53	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	2	0	8	14	27	33	50	3	5	3	2	0
54	LV	Connections	OH/UG consumer service connections	No.	2	1	1	3	5,447	128,428	29,240	12,896	18,852	5,095	4,196	6,954
55	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.				77	191	137	94	32	13	10	2	4
56	All	SCADA and communications	SCADA and communications equipment operating as a single syst	Lot							1					4
57	All	Capacitor Banks	Capacitors including controls	No							6	1				
58	All	Load Control	Centralised plant	Lot						2	11					
59	All	Load Control	Relays	No												
60	All	Civils	Cable Tunnels	km								0		9		

sch ref	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	816	1,401	1,645	1,570	1,284	1,146	851	984	1,196	1,005	888	1,409	1,778	2,371	2,161	1,825	1,395	1,304	820			11,988	51,198		2
11	45	73	51	42	21	24	13	7	13	4	1	1	1	14	15	31	69	23	16			1,822	3,252		2
12										2	7	26	144	169	48	33	3	10	18			43	503		3
13				0	5		6			0	2								–			0	48		4
14																			–				–		
15	1	1	15	1	3	17	0	9	5	2	14	13	9	2	1	4	23	0	4			0	232		4
16	1	1	1		0	0			0				0						–				143		4
17																			–				–		
18	0			1															–				22		4
19	1			0			2		0								1		0				31		4
20	1	0																	–				17		4
21																			–				–		
22																			–				–		
23																			–				11		4
24		1	1			1	2					1				1			–				51		4
25																			–				5		4
26											11							1	1				22		4
27																			–				–		
28																			–				–		
29																			–				–		
30																			–				–		
31			–	8	9			6		6	17	39	2				1		12				154		4
32																			–				–		
33		8	23	37	31	13	27	16	25	12	6	26	59	23	43	44	26	8	30				869		4
34																			–				–		
35		1		3		5	5	4		1	3	3	1		2	1	2	1	1				130		4
36	6	6	12	11	5	4	3	3	1	1	0	0	2	0	2	3	3	1	1			9	875		3
37																			–				–		
38																			–				–		
39	68	54	64	31	31	32	38	23	25	39	28	34	30	31	39	28	33	29	35			2	790		4
40	13	10	23	11	5	2	1		0	0		0		0		0	0		0			1	1,569		4
41																			–				2		4
42		6	12	12	3	2		2	1			1			5	12	25	2	2				86		4
43	5	1	13	1	4	8	8	3	25	8	8	11	16	4	25	32	20	13	13			29	275		3
44	72	50	73	79	40	32	30	56	115	139	99	111	121	99	117	164	175	135	112			241	2,772		3
45	42	41	27	14	24	14	25	27	13	20	13	11	9	8	13	18	13	7	17			20	2,181		3
46	99	62	53	43	32	38	73	61	123	77	104	115	128	160	216	257	202	216	228			12	4,768		4
47	48	43	85	89	87	69	34	66	57	71	69	39	62	71	70	63	39	46	57			2	1,950		4
48	159	177	265	155	117	89	109	122	176	185	159	126	151	157	200	256	187	203	217			1	7,326		4
49								2											3				8		4
50	142	46	81	37	40	22	18	35	48	64	65	54	27	46	87	111	58	72	92			207	6,400		3
51	7	4	7	5	5	3	5	4	5	4	3	3	3	3	2	4	6	7	5			47	1,899		3
52	158	116	115	50	63	53	36	27	38	53	55	64	52	69	71	69	68	86	71			14	3,988		4
53	12	11	13	9	9	4	6	4	4	4	4	9	7	6	6	4	4	5	4			1	271		3
54	8,782	13,347	15,913	12,571	7,655	5,056	4,634	4,985	4,549	5,185	5,831	6,036	6,797	5,713	6,124	5,750	8,090	7,614	14,334			4	360,085		4
55	1	73	27	92	134	98	66	29	94	39	98	123	126	26	182	136	155	93	123			122	2,397		3
56		5	9	6	9	7	4	8	12	3	3	21	34	11	12	13	8	8	6			25	209		3
57												1					1		–				9		4
58	1		1	3														2	–			1	21		3
59																			–				–		
60	0								0										–			1	10		3

Company Name	Vector
For Year Ended	31 March 2023
Network / Sub-network Name	Northen

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 2023

Number of assets at disclosure year end by installation date

sch ref	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)
9																																									
10	All	Overhead Line	Concrete poles / steel structure	No.	4	256	4,377	9,702	13,800	12,218	5,740	359	267	246	216	116	214	464	449	535	814	470	298	392	720	749	967	1,180	1,662	2,391	1,832	2,313	1,845	1,576	1,654			128	67,954		4
11	All	Overhead Line	Wood poles	No.	5	8	104	171	338	458	339	13	11	44	18	5	16	42	61	40	39	84	1	19	18	20	14	8	3	5	7	13	17	12	9			19	1,961		3
12	All	Overhead Line	Other pole types	No.			1	–	3	5	12	98	2			1		1					1		5	8	11	20	34	98	89	173	145	76	49			8	840		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	314		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		16	5	23	8	0	1	1	1	4	6	18	7	22	2	3	1	3	1	2	3	4	4	2	1	1	8	3			0	148		4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km				0	1																										–				2		4
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km																															–				–		
18	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km					0	0																									–				0		4
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km																															–				–		
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km																															–				–		
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		0	0																								–				1		4
24	HV	Zone substation Buildings	Zone substations up to 66kV	No.				11	9	10	5		1		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.																															–				–		
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	65	31	8								1	2	8	2		2		1		1		3					2	–				157		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	5		7	20				144		4
32	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.			5	17	12	26	2		1		1		1	1	2	7	19	3	6		1			2	1						–				107		4
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.			7	26	57	56	40		6		6		7	2	10	53	28	26	7	9	24	17	11	27	38	14	1		20	25	23				540		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.			2	14	17	17	8		1	1		1			3		6		3	1	1	1	4	1	3			3	3	2	2				94		4
36	HV	Distribution Line	Distribution OH Open Wire Conductor	km		4	137	523	901	741	250	8	8	2	2	2	15	45	69	18	27	7	5	3	6	6	8	5	5	4	4	13	5	5	8			8	2,842		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	0	5	21	145	27	20	15	7	3	32	80	46	32	73	29	31	18	24	26	35	33	35	47	26	30	31	41	36			3	954		4
40	HV	Distribution Cable	Distribution UG PILC	km			1	16	113	254	187	7	1	1			3	3	4	3	3	0	0	0	0	0	1	0		0	0		0	0	0			0	599		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 sectionalisers	No.							13	3	3		1		3	1	18	55	35	2		4	9		1	3	2		15	24	41	10	12				255		4
43	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.					1	3							1	1			7	1	2		1		1	7	14	6	11	4	1	35	15				111		4
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	1		8	175	788	1,090	1,120	147	108	88	90	38	126	193	181	169	235	113	67	97	135	170	287	357	439	345	377	456	418	466	436			388	9,108		3
45	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.			1	18	39	110	175	31	22	39	26	27	33	33	22	12	20	25	13	22	19	20	8	13	11	5	5	13	6	10	13			28	819		3
46	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.				1	1	91	154	28	22	26	45	42	37	27	28	26	12	44	31	47	37	39	70	76	111	136	103	112	86	131	130				1,693		4
47	HV	Distribution Transformer	Pole Mounted Transformer	No.	8	24	107	175	396	908	895	142	73	84	68	10	160	160	218	148	178	136	77	134	102	119	125	131	140	178	190	174	105	96	184			1	5,646		4
48	HV	Distribution Transformer	Ground Mounted Transformer	No.	6	28	113	596	740	719	849	135	116	126	98	19	408	262	264	176	195	179	201	131	142	189	185	173	216	304	251	217	180	251	333				7,802		4
49	HV	Distribution Transformer	Voltage regulators	No.															2				1	1	2	1									–				7		4
50	HV	Distribution Substations	Ground Mounted Substation Housing	No.	11	59	175	1,143	1,656	1,345	991	99	110	43	32	6	237	43	56	40	39	32	29	32	60	102	121	140	167	136	138	178	140	197	189			123	7,869		3
51	LV	LV Line	LV OH Conductor	km	0	3	110	517	776	408	67	20	2	1	0	2	9	22	48	10	12	6	7	6	5	5	7	6	13	24	26	37	25	15	12			22	2,222		3
52	LV	LV Cable	LV UG Cable	km	1	3	10	204	409	282	496	63	29	19	9	4	46	168	68	38	61	22	31	22	31	47	69	66	82	94	82	67	48	66	84			6	2,725		4
53	LV	LV Street lighting	LV OH/UG Streetlight circuit	km		1	1	9	18	19	35	6	2	1	1	1	2	5	4	3	8	3	12	5	4	12	7	13	9	8	7	8	10	10	5			2	232		3
54	LV	Connections	OH/UG consumer service connections	No.			48	3	21,229	32,115	73,833	3,104	4,294	3,202	3,554	3,978	4,500	4,706	6,343	6,352	5,313	4,108	4,322	4,057	3,931	5,025	5,804	5,902	6,676	5,633	4,730	4,289	4,996	5,878	11,540				249,465		4
55	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.			3	36	160	127	105	1	4	4	8	7	46	16	68	110	146	89	74	22	162	32	81	56	106	67	51	85	166	106	139			126	2,203		3
56	All	SCADA and communications	SCADA and communications equipment operating as a single syst	Lot							2						3		12	5	1	7	3	6	13			12	23	10	12	8	14	10	18			38	197		3
57	All	Capacitor Banks	Capacitors including controls	No								36			1			2				1			11			3					2	1	–				57		4
58	All	Load Control	Centralised plant	Lot				8	1	2																									–				11		4
59	All	Load Control	Relays	No																															–				–		
60	All	Civils	Cable Tunnels	km																															–				–		

Company Name	**Vector**
For Year Ended	**31 March 2023**
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	76
12	50kV & 66kV	-	-	–
13	33kV	362	439	801
14	SWER (all SWER voltages)	-	-	–
15	22kV (other than SWER)	2	172	174
16	6.6kV to 11kV (inclusive—other than SWER)	3,715	3,867	7,582
17	Low voltage (< 1kV)	4,121	6,714	10,835
18	**Total circuit length (for supply)**	8,227	11,241	19,468
19				
20	Dedicated street lighting circuit length (km)	17	486	503
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)			5,192
22				
23	**Overhead circuit length by terrain (at year end)**	**Circuit length (km)**	**(% of total overhead length)**	
24	Urban	4,632	56%	
25	Rural	3,595	44%	
26	Remote only		–	
27	Rugged only		–	
28	Remote and rugged		–	
29	Unallocated overhead lines		–	
30	**Total overhead length**	8,227	100%	
31				
32		**Circuit length (km)**	**(% of total circuit length)**	
33	Length of circuit within 10km of coastline or geothermal areas (where known)	19,448	99.90%	
34		**Circuit length (km)**	**(% of total overhead length)**	
35	Overhead circuit requiring vegetation management	8,227	100.00%	

Company Name	**Vector**
For Year Ended	**31 March 2023**
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	172	174
16	6.6kV to 11kV (inclusive—other than SWER)	873	2,308	3,181
17	Low voltage (< 1kV)	1,899	3,988	5,887
18	**Total circuit length (for supply)**	2,822	6,806	9,628
19				
20	Dedicated street lighting circuit length (km)	5	267	272
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)			2,733
22				
23	**Overhead circuit length by terrain (at year end)**	**Circuit length (km)**	**(% of total overhead length)**	
24	Urban	2,301	82%	
25	Rural	521	18%	
26	Remote only		–	
27	Rugged only		–	
28	Remote and rugged		–	
29	Unallocated overhead lines		–	
30	**Total overhead length**	2,822	100%	
31				
32		**Circuit length (km)**	**(% of total circuit length)**	
33	Length of circuit within 10km of coastline or geothermal areas (where known)	9,627	99.99%	
34		**Circuit length (km)**	**(% of total overhead length)**	
35	Overhead circuit requiring vegetation management	2,822	100.00%	

Company Name	**Vector**
For Year Ended	**31 March 2023**
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	314	150	464
14	SWER (all SWER voltages)	–	–	–
15	22kV (other than SWER)	–	–	–
16	6.6kV to 11kV (inclusive—other than SWER)	2,842	1,559	4,401
17	Low voltage (< 1kV)	2,222	2,725	4,947
18	**Total circuit length (for supply)**	5,405	4,434	9,839
19				
20	Dedicated street lighting circuit length (km)	12	219	231
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)			2,459
22				
23	**Overhead circuit length by terrain (at year end)**	**Circuit length (km)**	**(% of total overhead length)**	
24	Urban	2,328	43%	
25	Rural	3,077	57%	
26	Remote only		–	
27	Rugged only		–	
28	Remote and rugged		–	
29	Unallocated overhead lines		–	
30	**Total overhead length**	5,405	100%	
31				
32		**Circuit length (km)**	**(% of total circuit length)**	
33	Length of circuit within 10km of coastline or geothermal areas (where known)	9,821	99.82%	
34		**Circuit length (km)**	**(% of total overhead length)**	
35	Overhead circuit requiring vegetation management	5,405	100.00%	

Company Name	**Vector**
For Year Ended	**31 March 2023**

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)
9	N/A		
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 2023**
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 and Decommissionings

Number of ICPs connected in year by consumer type

	*Consumer types defined by EDB**	**Number of connections (ICPs)**
	Residential	10,697
	Commercial	4,812
	* include additional rows if needed	
	Connections total	15,509

Number of ICPs decommissioned in year by consumer type

	*Consumer types defined by EDB**	**Number of decommissionings**
	Residential	1,739
	Commercial	530
	* include additional rows if needed	
	Decommissionings total	2,269

Distributed generation

	Number of connections made in year	1,799	**connections**
	Capacity of distributed generation installed in year	15	**MVA**

9e(ii): System Demand

		Demand at time of maximum coincident demand (MW)	
	Maximum coincident system demand		
	GXP demand	1,747	
plus	Distributed generation output at HV and above	12	
	Maximum coincident system demand	1,759	
less	Net transfers to (from) other EDBs at HV and above		
	Demand on system for supply to consumers' connection points	1,759	

		Energy (GWh)	
	Electricity volumes carried		
	Electricity supplied from GXPs	8,660	
less	Electricity exports to GXPs	0	
plus	Electricity supplied from distributed generation	153	
less	Net electricity supplied to (from) other EDBs	0	
	Electricity entering system for supply to consumers' connection points	8,813	
less	Total energy delivered to ICPs	8,462	
	Electricity losses (loss ratio)	351	4.0%
	Load factor	0.57	

9e(iii): Transformer Capacity

	(MVA)
Distribution transformer capacity (EDB owned)	4,965
Distribution transformer capacity (Non-EDB owned, estimated)	770
Total distribution transformer capacity	5,734
Zone substation transformer capacity	4,677

Company Name	**Vector**
For Year Ended	**31 March 2023**
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 and Decommissionings

Number of ICPs connected in year by consumer type

*Consumer types defined by EDB**	**Number of connections (ICPs)**
Residential	6,274
Commercial	2,387
Connections total	8,661

** include additional rows if needed*

Number of ICPs decommissioned in year by consumer type

*Consumer types defined by EDB**	**Number of decommissionings**
Residential	1,198
Commercial	315
Decommissionings total	1,513

** include additional rows if needed*

Distributed generation

Number of connections made in year	908	**connections**
Capacity of distributed generation installed in year	8.97	**MVA**

9e(ii): System Demand

		Demand at time of maximum coincident demand (MW)	
Maximum coincident system demand			
	GXP demand	1,090	
plus	Distributed generation output at HV and above	5	
	Maximum coincident system demand	1,095	
less	Net transfers to (from) other EDBs at HV and above		
	Demand on system for supply to consumers' connection points	1,095	
Electricity volumes carried		**Energy (GWh)**	
	Electricity supplied from GXPs	5,753	
less	Electricity exports to GXPs	0	
plus	Electricity supplied from distributed generation	67	
less	Net electricity supplied to (from) other EDBs	0	
	Electricity entering system for supply to consumers' connection points	5,820	
less	Total energy delivered to ICPs	5,618	
	Electricity losses (loss ratio)	202	3.5%
	Load factor	0.61	

9e(iii): Transformer Capacity

	(MVA)
Distribution transformer capacity (EDB owned)	3,080
Distribution transformer capacity (Non-EDB owned, estimated)	298
Total distribution transformer capacity	3,378
Zone substation transformer capacity	3,019

Company Name	**Vector**
For Year Ended	**31 March 2023**
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 and Decommissionings

Number of ICPs connected in year by consumer type

*Consumer types defined by EDB**	**Number of connections (ICPs)**
Residential	4,423
Commercial	2,425
Connections total	6,848

** include additional rows if needed*

Number of ICPs decommissioned in year by consumer type

*Consumer types defined by EDB**	**Number of decommissionings**
Residential	541
Commercial	215
Decommissionings total	756

** include additional rows if needed*

Distributed generation

Number of connections made in year	891	**connections**
Capacity of distributed generation installed in year	6	**MVA**

9e(ii): System Demand

		Demand at time of maximum coincident demand (MW)	
	Maximum coincident system demand		
	GXP demand	667	
plus	Distributed generation output at HV and above	7	
	Maximum coincident system demand	674	
less	Net transfers to (from) other EDBs at HV and above		
	Demand on system for supply to consumers' connection points	674	
	Electricity volumes carried	**Energy (GWh)**	
	Electricity supplied from GXPs	2,906	
less	Electricity exports to GXPs	0	
plus	Electricity supplied from distributed generation	86	
less	Net electricity supplied to (from) other EDBs	0	
	Electricity entering system for supply to consumers' connection points	2,992	
less	Total energy delivered to ICPs	2,845	
	Electricity losses (loss ratio)	147	4.9%
	Load factor	0.51	

9e(iii): Transformer Capacity

	(MVA)
Distribution transformer capacity (EDB owned)	1,884
Distribution transformer capacity (Non-EDB owned, estimated)	472
Total distribution transformer capacity	2,356
Zone substation transformer capacity	1,658

Company Name	**Vector**
For Year Ended	**31 March 2023**
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

8 **10(i): Interruptions**

		Number of interruptions
9	**Interruptions by class**	
10	Class A (planned interruptions by Transpower)	9
11	Class B (planned interruptions on the network)	1,471
12	Class C (unplanned interruptions on the network)	2,333
13	Class D (unplanned interruptions by Transpower)	1
14	Class E (unplanned interruptions of EDB owned generation)	
15	Class F (unplanned interruptions of generation owned by others)	
16	Class G (unplanned interruptions caused by another disclosing entity)	
17	Class H (planned interruptions caused by another disclosing entity)	
18	Class I (interruptions caused by parties not included above)	
19	**Total**	3,814

20

		≤3Hrs	>3hrs
21	**Interruption restoration**		
22	Class C interruptions restored within	1,018	1,315

23

		SAIFI	SAIDI
24	**SAIFI and SAIDI by class**		
25	Class A (planned interruptions by Transpower)	0	0.2
26	Class B (planned interruptions on the network)	0.26	74.1
27	Class C (unplanned interruptions on the network)	1.61	410.6
28	Class D (unplanned interruptions by Transpower)	0.03	1.3
29	Class E (unplanned interruptions of EDB owned generation)		
30	Class F (unplanned interruptions of generation owned by others)		
31	Class G (unplanned interruptions caused by another disclosing entity)		
32	Class H (planned interruptions caused by another disclosing entity)		
33	Class I (interruptions caused by parties not included above)		
34	**Total**	1.90	486.2

35

		Normalised SAIFI	Normalised SAIDI
36	**Normalised SAIFI and SAIDI**		
37	Classes B & C (interruptions on the network)	1.87	232.5

38

		SAIFI	SAIDI
39	**Transitional SAIDI and SAIDI (previous method)**		
40	*Where EDBs do not currently record their SAIFI and SAIDI values using the 'multi-count' approach, they shall continue to record their SAIFI and SAIDI values on the same basis that they employed as at 31 March 2023 as 'Transitional SAIFI' and 'Transitional SAIDI' values, in addition to their SAIFI and SAIDI values (Classes B & C) using the 'multi-count approach'.* ***This is a transitional reporting requirement that shall be in place for the 2024, 2025, and 2026 disclosure years.***		
41	Class B (planned interruptions on the network)		
42	Class C (unplanned interruptions on the network)		

43

Company Name	**Vector**
For Year Ended	**31 March 2023**
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.

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

Cause	SAIFI	SAIDI
Lightning	0.00	0.4
Vegetation	0.45	188.4
Adverse weather	0.07	21.7
Adverse environment	0.04	41.7
Third party interference	0.18	19.6
Wildlife	0.04	2.8
Human error	0.05	0.6
Defective equipment	0.41	88.8
Cause unknown	0.36	46.6

Breakdown of third party interference	SAIFI	SAIDI
Dig-in		
Overhead contact		
Vandalism		
Vehicle damage		
Other		

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	34.3
Distribution cables (excluding LV)	0.01	2.1
Distribution other (excluding LV)	0.16	37.7

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

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	0.29	43.6
Subtransmission cables	0.02	0.4
Subtransmission other	0.05	8.2
Distribution lines (excluding LV)	0.90	289.8
Distribution cables (excluding LV)	0.15	15.6
Distribution other (excluding LV)	0.20	52.9

10(v): Fault Rate

Main equipment involved	Number of Faults	Circuit length (km)	Fault rate (faults per 100km)
Subtransmission lines	59	389	15.17
Subtransmission cables	3	607	0.49
Subtransmission other	7		
Distribution lines (excluding LV)	1,612	3,717	43.36
Distribution cables (excluding LV)	258	3,920	6.58
Distribution other (excluding LV)	394		
Total	2,333		

Company Name	**Vector**
For Year Ended	**31 March 2023**
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

	Interruptions by class	Number of interruptions
	Class A (planned interruptions by Transpower)	
	Class B (planned interruptions on the network)	709
	Class C (unplanned interruptions on the network)	629
	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	1,338

	Interruption restoration	≤3Hrs	>3hrs
	Class C interruptions restored within	324	305

	SAIFI and SAIDI by class	SAIFI	SAIDI
	Class A (planned interruptions by Transpower)		
	Class B (planned interruptions on the network)	0.22	50
	Class C (unplanned interruptions on the network)	0.92	83.8
	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	1.14	133.8

	Normalised SAIFI and SAIDI	Normalised SAIFI	Normalised SAIDI
	Classes B & C (interruptions on the network)	1.14	133.3

	Transitional SAIDI and SAIDI (previous method)	SAIFI	SAIDI
	Where EDBs do not currently record their SAIFI and SAIDI values using the 'multi-count' approach, they shall continue to record their SAIFI and SAIDI values on the same basis that they employed as at 31 March 2023 as 'Transitional SAIFI' and 'Transitional SAIDI' values, in addition to their SAIFI and SAIDI values (Classes B & C) using the 'multi-count approach'. ***This is a transitional reporting requirement that shall be in place for the 2024, 2025, and 2026 disclosure years.***		
	Class B (planned interruptions on the network)		
	Class C (unplanned interruptions on the network)		

Company Name	**Vector**
For Year Ended	**31 March 2023**
Network / Sub-network Name	**Southern**

SCHEDULE 10: REPORT ON NETWORK RELIABILITY

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

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

Cause	SAIFI	SAIDI
Lightning	0.00	0.1
Vegetation	0.21	26.3
Adverse weather	0.02	2.4
Adverse environment	0.01	3.1
Third party interference	0.17	14.4
Wildlife	0.03	1.7
Human error	0.03	0.4
Defective equipment	0.23	24.9
Cause unknown	0.22	10.6

Breakdown of third party interference	SAIFI	SAIDI
Dig-in		
Overhead contact		
Vandalism		
Vehicle damage		
Other		

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)	0.08	24.3
Distribution cables (excluding LV)	0.01	2.8
Distribution other (excluding LV)	0.14	22.9

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

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	0.11	1.7
Subtransmission cables		
Subtransmission other		
Distribution lines (excluding LV)	0.47	50.2
Distribution cables (excluding LV)	0.18	15.5
Distribution other (excluding LV)	0.16	16.4

10(v): Fault Rate

Main equipment involved	Number of Faults	Circuit length (km)	Fault rate (faults per 100km)
Subtransmission lines	12	47.9	25.05
Subtransmission cables	–	456.9	–
Subtransmission other			
Distribution lines (excluding LV)	344	875.2	39.30
Distribution cables (excluding LV)	137	2,360.3	5.80
Distribution other (excluding LV)	136		
Total	629		

Company Name	**Vector**
For Year Ended	**31 March 2023**
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
10	Class A (planned interruptions by Transpower)	9
11	Class B (planned interruptions on the network)	762
12	Class C (unplanned interruptions on the network)	1,704
13	Class D (unplanned interruptions by Transpower)	1
14	Class E (unplanned interruptions of EDB owned generation)	
15	Class F (unplanned interruptions of generation owned by others)	
16	Class G (unplanned interruptions caused by another disclosing entity)	
17	Class H (planned interruptions caused by another disclosing entity)	
18	Class I (interruptions caused by parties not included above)	
19	**Total**	2,476

	Interruption restoration	≤3Hrs	>3hrs
22	Class C interruptions restored within	694	1,010

	SAIFI and SAIDI by class	SAIFI	SAIDI
25	Class A (planned interruptions by Transpower)	0	0.5
26	Class B (planned interruptions on the network)	0.31	108.9
27	Class C (unplanned interruptions on the network)	2.6	883.1
28	Class D (unplanned interruptions by Transpower)	0.07	3.2
29	Class E (unplanned interruptions of EDB owned generation)		
30	Class F (unplanned interruptions of generation owned by others)		
31	Class G (unplanned interruptions caused by another disclosing entity)		
32	Class H (planned interruptions caused by another disclosing entity)		
33	Class I (interruptions caused by parties not included above)		
34	**Total**	2.98	995.7

	Normalised SAIFI and SAIDI	Normalised SAIFI	Normalised SAIDI
37	Classes B & C (interruptions on the network)	2.91	391.9

	Transitional SAIDI and SAIDI (previous method)	SAIFI	SAIDI
	Where EDBs do not currently record their SAIFI and SAIDI values using the 'multi-count' approach, they shall continue to record their SAIFI and SAIDI values on the same basis that they employed as at 31 March 2023 as 'Transitional SAIFI' and 'Transitional SAIDI' values, in addition to their SAIFI and SAIDI values (Classes B & C) using the 'multi-count approach'. ***This is a transitional reporting requirement that shall be in place for the 2024, 2025, and 2026 disclosure years.***		
41	Class B (planned interruptions on the network)		
42	Class C (unplanned interruptions on the network)		

Company Name	**Vector**
For Year Ended	**31 March 2023**
Network / Sub-network Name	**Northern**

SCHEDULE 10: REPORT ON NETWORK RELIABILITY

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

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

Cause	SAIFI	SAIDI
Lightning	0.01	0.9
Vegetation	0.81	422.9
Adverse weather	0.13	49.7
Adverse environment	0.09	97.5
Third party interference	0.20	27.0
Wildlife	0.05	4.3
Human error	0.09	0.9
Defective equipment	0.65	181.2
Cause unknown	0.55	98.6

Breakdown of third party interference	SAIFI	SAIDI
Dig-in		
Overhead contact		
Vandalism		
Vehicle damage		
Other		

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)	0.12	48.8
Distribution cables (excluding LV)	0.01	1.1
Distribution other (excluding LV)	0.18	59.1

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

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	0.55	104.2
Subtransmission cables	0.05	1.1
Subtransmission other	0.12	20.0
Distribution lines (excluding LV)	1.51	636.2
Distribution cables (excluding LV)	0.11	15.9
Distribution other (excluding LV)	0.25	105.7

10(v): Fault Rate

Main equipment involved	Number of Faults	Circuit length (km)	Fault rate (faults per 100km)
Subtransmission lines	47	341.0	13.78
Subtransmission cables	3	150.5	1.99
Subtransmission other	7		
Distribution lines (excluding LV)	1,268	2,842.2	44.61
Distribution cables (excluding LV)	121	1,559.3	7.76
Distribution other (excluding LV)	258		
Total	1,704		