



EDB Information Disclosure Requirements

Information Templates

for

Schedules 1–10

(Reissued¹)

Company Name

Vector

Disclosure Date

3 October 2022

Disclosure Year (year ended)

31 March 2021

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

¹ In March 2020 Vector's electricity business undertook certain sale and lease back related party transactions (the Transactions) relating to substation land, substation buildings and the Penrose to CBD tunnel. The Transactions were undertaken to separate Vector's land and buildings into separate subsidiaries, accountabilities and reporting lines, to commercialise, develop and realise additional revenue from these assets outside the regulated business, and to create opportunities for future capital raising to support our ongoing investment in Auckland growth and electrification to enable net zero 2050. Other infrastructure owners have recently undertaken similar transactions; for example, Telstra, Vodafone and Spark have all separated out the ownership of their passive infrastructure.

The Transactions were disclosed in the 2020 Information Disclosure published on 29 October 2020. Given the size and the complexity of the Transactions, extensive external legal and accounting advice was sought to ensure the Transactions were correctly treated in the Information Disclosures. Vector also brought the Transactions to the Commission's attention ahead of filing the 2020 Information Disclosures, and those original disclosures as filed clearly set out the impact of the Transactions. After the 2020 Information Disclosures were published, the Commerce Commission notified Vector that it considered its treatment of the Transactions to be inconsistent with the applicable input methodologies. Following extensive engagement by Vector with the Commission, Vector has agreed to amend the regulatory effects of the Transactions.

These restated and reissued Information Disclosures reflect the reversal of the regulatory effects of the Transactions. Neither the original treatment of the Transactions or the amended effects of the Transactions now reflected in these disclosures have had any impact on prices. As these transactions were undertaken between wholly owned Vector companies, they had no impact on our Group financial statements.

Vector initiated extensive engagement with the Commission on this matter, including proactively sharing expert legal and accounting advice supporting Vector's regulatory treatment of the Transactions, in an attempt to reconcile the difference in interpretation. Such expert advice was in addition to audited regulatory disclosures incorporating the Transactions having been filed with the Commission.

Table of Contents

Schedule	Schedule name
1	ANALYTICAL RATIOS
2	REPORT ON RETURN ON INVESTMENT
3	REPORT ON REGULATORY PROFIT
4	REPORT ON VALUE OF THE REGULATORY ASSET BASE (ROLLED FORWARD)
5a	REPORT ON REGULATORY TAX ALLOWANCE
5b	REPORT ON RELATED PARTY TRANSACTIONS
5c	REPORT ON TERM CREDIT SPREAD DIFFERENTIAL ALLOWANCE
5d	REPORT ON COST ALLOCATIONS
5e	REPORT ON ASSET ALLOCATIONS
6a	REPORT ON CAPITAL EXPENDITURE FOR THE DISCLOSURE YEAR
6b	REPORT ON OPERATIONAL EXPENDITURE FOR THE DISCLOSURE YEAR
7	COMPARISON OF FORECASTS TO ACTUAL EXPENDITURE
8	REPORT ON BILLED QUANTITIES AND LINE CHARGE REVENUES
9a	ASSET REGISTER
9b	ASSET AGE PROFILE
9c	REPORT ON OVERHEAD LINES AND UNDERGROUND CABLES
9d	REPORT ON EMBEDDED NETWORKS
9e	REPORT ON NETWORK DEMAND
10	REPORT ON NETWORK RELIABILITY

Disclosure Template Instructions

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

Company Name and Dates

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

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

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

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

Data Entry Cells and Calculated Cells

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

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

Validation Settings on Data Entry Cells

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

Conditional Formatting Settings on Data Entry Cells

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

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

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

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

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

Inserting Additional Rows and Columns

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

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

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

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

Disclosures by Sub-Network

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

Schedule References

The references labelled 'sch ref' in the leftmost column of each template are consistent with the row references in the Electricity Distribution ID Determination 2012 (as issued on 21 December 2017). They provide a common reference between the rows in the determination and the template.

Description of Calculation References

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

Worksheet Completion Sequence

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

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

Company Name	Vector
For Year Ended	31 March 2021

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

7

1(i): Expenditure metrics

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

	Expenditure per GWh energy delivered to ICPs (\$/GWh)	Expenditure per average no. of ICPs (\$/ICP)	Expenditure per MW maximum coincident system demand (\$/MW)	Expenditure per km circuit length (\$/km)	Expenditure per MVA of capacity from EDB- owned distribution transformers (\$/MVA)
Operational expenditure	15,494	218	73,527	6,644	27,168
Network	5,975	84	28,357	2,563	10,478
Non-network	9,518	134	45,171	4,082	16,691
Expenditure on assets	36,114	508	171,383	15,487	63,326
Network	33,202	467	157,563	14,239	58,220
Non-network	2,912	41	13,820	1,249	5,106

	Revenue per GWh energy delivered to ICPs (\$/GWh)	Revenue per average no. of ICPs (\$/ICP)
Total consumer line charge revenue	68,275	961
Standard consumer line charge revenue	71,079	929
Non-standard consumer line charge revenue	31,844	602,742

1(iii): Service intensity measures

Demand density	90	Maximum coincident system demand per km of circuit length (for supply) (kW/km)
Volume density	429	Total energy delivered to ICPs per km of circuit length (for supply) (MWh/km)
Connection point density	30	Average number of ICPs per km of circuit length (for supply) (ICPs/km)
Energy intensity	14,071	Total energy delivered to ICPs per average number of ICPs (kWh/ICP)

1(iv): Composition of regulatory income

	(\$000)	% of revenue
Operational expenditure	127,202	23.19%
Pass-through and recoverable costs excluding financial incentives and wash-ups	191,320	34.88%
Total depreciation	125,888	22.95%
Total revaluations	49,372	9.00%
Regulatory tax allowance	31,928	5.82%
Regulatory profit/(loss) including financial incentives and wash-ups	117,787	21.47%
Total regulatory income	548,582	

1(v): Reliability

Interruption rate	15.72	Interruptions per 100 circuit km
-------------------	-------	----------------------------------



Company Name	Vector
For Year Ended	31 March 2021

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

7	2(i): Return on Investment	CY-2	CY-1	Current Year CY
8		31 Mar 19	31 Mar 20	31 Mar 21
9	ROI – comparable to a post tax WACC	%	%	%
10	Reflecting all revenue earned	5.23%	5.42%	3.34%
11	Excluding revenue earned from financial incentives	5.34%	5.53%	3.40%
12	Excluding revenue earned from financial incentives and wash-ups	5.41%	5.60%	3.40%
13				
14	Mid-point estimate of post tax WACC	4.75%	4.27%	3.72%
15	25th percentile estimate	4.07%	3.59%	3.04%
16	75th percentile estimate	5.43%	4.95%	4.40%
17				
18				
19	ROI – comparable to a vanilla WACC			
20	Reflecting all revenue earned	5.74%	5.85%	3.67%
21	Excluding revenue earned from financial incentives	5.85%	5.95%	3.74%
22	Excluding revenue earned from financial incentives and wash-ups	5.92%	6.02%	3.74%
23				
24	WACC rate used to set regulatory price path	7.19%	7.19%	4.57%
25				
26	Mid-point estimate of vanilla WACC	5.26%	4.69%	4.05%
27	25th percentile estimate	4.58%	4.01%	3.37%
28	75th percentile estimate	5.94%	5.37%	4.73%
29				
30	2(ii): Information Supporting the ROI	(\$000)		
31				
32	Total opening RAB value	3,258,721		
33	plus Opening deferred tax	(100,962)		
34	Opening RIV		3,157,759	
35				
36	Line charge revenue		560,533	
37				
38	Expenses cash outflow	318,522		
39	add Assets commissioned	215,221		
40	less Asset disposals	12,198		
41	add Tax payments	20,346		
42	less Other regulated income	(11,951)		
43	Mid-year net cash outflows		553,842	
44				
45	Term credit spread differential allowance		3,830	
46				
47	Total closing RAB value	3,385,969		
48	less Adjustment resulting from asset allocation	741		
49	less Lost and found assets adjustment	–		
50	plus Closing deferred tax	(112,544)		
51	Closing RIV		3,272,684	
52				
53	ROI – comparable to a vanilla WACC			3.67%
54				
55	Leverage (%)			42%
56	Cost of debt assumption (%)			2.82%
57	Corporate tax rate (%)			28%
58				
59	ROI – comparable to a post tax WACC			3.34%
60				



Company Name	Vector
For Year Ended	31 March 2021

SCHEDULE 2: REPORT ON RETURN ON INVESTMENT

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

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

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

sch ref

2(iii): Information Supporting the Monthly ROI

Opening RIV						N/A
-------------	--	--	--	--	--	-----

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

Tax payments	N/A
--------------	-----

Term credit spread differential allowance	N/A
---	-----

Closing RIV	N/A
-------------	-----

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

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

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

Year-end ROI – comparable to a vanilla WACC	3.69%
---	-------

Year-end ROI – comparable to a post tax WACC	3.36%
--	-------

* these year-end ROI values are comparable to the ROI reported in pre 2012 disclosures by EDBs and do not represent the Commission's current view on ROI.

2(v): Financial Incentives and Wash-Ups

Net recoverable costs allowed under incremental rolling incentive scheme	–
Purchased assets – avoided transmission charge	–
Energy efficiency and demand incentive allowance	–
Quality incentive adjustment	(4,449)
Other financial incentives	1,725
Financial incentives	(2,724)

Impact of financial incentives on ROI	–0.06%
---------------------------------------	--------

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

Impact of wash-up costs on ROI	–
--------------------------------	---



Company Name	Vector
For Year Ended	31 March 2021

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		560,533
10	plus	Gains / (losses) on asset disposals		(11,951)
11	plus	Other regulated income (other than gains / (losses) on asset disposals)		–
12				
13	Total regulatory income		548,582	
14	Expenses			
15	less	Operational expenditure		127,202
16				
17	less	Pass-through and recoverable costs excluding financial incentives and wash-ups		191,320
18				
19	Operating surplus / (deficit)		230,060	
20				
21	less	Total depreciation		125,888
22				
23	plus	Total revaluations		49,372
24				
25	Regulatory profit / (loss) before tax		153,544	
26				
27	less	Term credit spread differential allowance		3,830
28				
29	less	Regulatory tax allowance		31,928
30				
31	Regulatory profit/(loss) including financial incentives and wash-ups		117,787	
32				
33	3(ii): Pass-through and Recoverable Costs excluding Financial Incentives and Wash-Ups		(\$000)	
34	Pass through costs			
35		Rates	8,093	
36		Commerce Act levies	1,203	
37		Industry levies	2,046	
38		CPP specified pass through costs	–	
39	Recoverable costs excluding financial incentives and wash-ups			
40		Electricity lines service charge payable to Transpower	170,812	
41		Transpower new investment contract charges	7,632	
42		System operator services	–	
43		Distributed generation allowance	977	
44		Extended reserves allowance	–	
45		Other recoverable costs excluding financial incentives and wash-ups	557	
46	Pass-through and recoverable costs excluding financial incentives and wash-ups		191,320	
47				
48	3(iii): Incremental Rolling Incentive Scheme		(\$000)	
49				
50			CY-1 31 Mar 20	CY 31 Mar 21
51		Allowed controllable opex	–	–
52		Actual controllable opex	–	–
53				
54		Incremental change in year	–	
55				
56			Previous years' incremental change	Previous years' incremental change adjusted for inflation
57	CY-5	31 Mar 16	–	–
58	CY-4	31 Mar 17	–	–
59	CY-3	31 Mar 18	–	–
60	CY-2	31 Mar 19	–	–
61	CY-1	31 Mar 20	–	–
62	Net incremental rolling incentive scheme		–	
63				
64	Net recoverable costs allowed under incremental rolling incentive scheme		–	
65	3(iv): Merger and Acquisition Expenditure			
66			(\$000)	
67		Merger and acquisition expenditure	–	
68	<i>Provide commentary on the benefits of merger and acquisition expenditure to the electricity distribution business, including required disclosures in accordance with section 2.7, in Schedule 14 (Mandatory Explanatory Notes)</i>			
69	3(v): Other Disclosures			
70			(\$000)	
71		Self-insurance allowance	–	

Company Name **Vector**
For Year Ended **31 March 2021**

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	RAB	RAB	RAB	RAB
	31 Mar 17 (\$000)	31 Mar 18 (\$000)	31 Mar 19 (\$000)	31 Mar 20 (\$000)	31 Mar 21 (\$000)
Total opening RAB value	2,682,398	2,879,136	2,951,716	3,075,471	3,258,721
less Total depreciation	96,289	108,316	108,729	116,767	125,888
plus Total revaluations	57,761	31,561	44,091	77,539	49,372
plus Assets commissioned	249,121	156,888	203,460	512,505	215,221
less Asset disposals	15,951	7,540	7,412	289,233	12,198
plus Lost and found assets adjustment	–	–	–	–	–
plus Adjustment resulting from asset allocation	2,095	(13)	(7,655)	(794)	741
Total closing RAB value	2,879,136	2,951,716	3,075,471	3,258,721	3,385,969

4(ii): Unallocated Regulatory Asset Base

	Unallocated RAB *	RAB
	(\$000)	(\$000)
Total opening RAB value	3,280,363	3,258,721
less Total depreciation	130,658	125,888
plus Total revaluations	49,689	49,372
plus Assets commissioned (other than below)	208,798	207,207
Assets acquired from a regulated supplier	–	–
Assets acquired from a related party	8,014	8,014
Assets commissioned	216,812	215,221
less Asset disposals (other than below)	12,895	12,198
Asset disposals to a regulated supplier	–	–
Asset disposals to a related party	–	–
Asset disposals	12,895	12,198
plus Lost and found assets adjustment	–	–
plus Adjustment resulting from asset allocation		741
Total closing RAB value	3,403,311	3,385,969

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

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

CPI _t	1,068
CPI _t ⁻⁴	1,052
Revaluation rate (%)	1.52%

	Unallocated RAB *	RAB
	(\$000)	(\$000)
Total opening RAB value	3,280,363	3,258,721
less Opening value of fully depreciated, disposed and lost assets	14,491	13,673
Total opening RAB value subject to revaluation	3,265,872	3,245,048
Total revaluations	49,689	49,372

4(iv): Roll Forward of Works Under Construction

	Unallocated works under construction	Allocated works under construction
Works under construction—preceding disclosure year	37,838	37,381
plus Capital expenditure	210,000	209,069
less Assets commissioned	216,812	215,221
less Adjustment resulting from asset allocation		394
Works under construction - current disclosure year	31,026	30,835
Highest rate of capitalised finance applied		4.30%

4(v): Regulatory Depreciation

	Unallocated RAB *	RAB
	(\$000)	(\$000)
Depreciation - standard	84,067	84,067
Depreciation - no standard life assets	46,591	41,821
Depreciation - modified life assets	–	–
Depreciation - alternative depreciation in accordance with CPP	–	–
Total depreciation	130,658	125,888

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	74,476	360,720	295,703	379,366	807,938	293,647	244,277	742,735	59,859	3,258,721
less Total depreciation	2,055	11,283	11,478	11,018	27,398	10,053	10,088	26,367	16,148	125,888

Company Name

Vector

For Year Ended

31 March 2021

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

105	plus	Total revaluations	1,133	5,484	4,469	5,773	12,275	4,455	3,660	11,207	916	49,372
106	plus	Assets commissioned	101	4,579	29,061	38,846	18,038	10,485	43,189	50,341	20,579	215,221
107	less	Asset disposals	84	64	1,790	2,107	2,004	573	3,540	293	1,744	12,198
108	plus	Lost and found assets adjustment	0	0	0	0	0	0	0	0	0	–
109	plus	Adjustment resulting from asset allocation	0	0	0	0	0	0	0	0	741	741
110	plus	Asset category transfers	0	0	0	0	0	0	0	0	0	–
111		Total closing RAB value	73,571	359,436	315,966	410,860	808,850	297,961	277,498	777,624	64,203	3,385,969
112												
113		Asset Life										
114		Weighted average remaining asset life	41	45	31	43	36	34	28	39	12	(years)
115		Weighted average expected total asset life	59	66	42	58	60	45	36	46	16	(years)



Company Name

Vector

For Year Ended

31 March 2021

SCHEDULE 5a: REPORT ON REGULATORY TAX ALLOWANCE

This schedule requires information on the calculation of the regulatory tax allowance. This information is used to calculate regulatory profit/loss in Schedule 3 (regulatory profit). EDBs must provide explanatory commentary on the information disclosed in this schedule, in Schedule 14 (Mandatory Explanatory Notes).

This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 70

sch ref

5a(i): Regulatory Tax Allowance

(\$000)

Regulatory profit / (loss) before tax

153,544

- plus* Income not included in regulatory profit / (loss) before tax but taxable
- Expenditure or loss in regulatory profit / (loss) before tax but not deductible
- Amortisation of initial differences in asset values
- Amortisation of revaluations

—

*

9,213

*

32,019

11,526

52,758

- less* Total revaluations
- Income included in regulatory profit / (loss) before tax but not taxable
- Discretionary discounts and customer rebates
- Expenditure or loss deductible but not in regulatory profit / (loss) before tax
- Notional deductible interest

49,372

*

—

*

—

2,241

*

40,661

92,274

Regulatory taxable income

114,028

- less* Utilised tax losses
- Regulatory net taxable income

—

114,028

Corporate tax rate (%)

28%

Regulatory tax allowance

31,928

* Workings to be provided in Schedule 14

5a(ii): Disclosure of Permanent Differences

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

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

(\$000)

- Opening unamortised initial differences in asset values
- less* Amortisation of initial differences in asset values
- plus* Adjustment for unamortised initial differences in assets acquired
- less* Adjustment for unamortised initial differences in assets disposed
- Closing unamortised initial differences in asset values
- Opening weighted average remaining useful life of relevant assets (years)

928,569

32,019

—

7,349

889,201

29



Company Name **Vector**
For Year Ended **31 March 2021**

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 78 of the Electricity Act 2008.

sch ref

44	5a(iv): Amortisation of Revaluations				(\$000)
45					
46	Opening sum of RAB values without revaluations		3,248,864		
47					
48	Adjusted depreciation		114,362		
49	Total depreciation		125,888		
50	Amortisation of revaluations			11,526	
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		(100,962)		
61					
62	plus Tax effect of adjusted depreciation		32,021		
63					
64	less Tax effect of tax depreciation		36,026		
65					
66	plus Tax effect of other temporary differences*		1,869		
67					
68	less Tax effect of amortisation of initial differences in asset values		8,965		
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		1,244		
73					
74	plus Deferred tax cost allocation adjustment		763		
75					
76	Closing deferred tax				(112,544)
77					
78	5a(vii): Disclosure of Temporary Differences				
79	<i>In Schedule 14, Box 6, provide descriptions and workings of items recorded in the asterisked category in Schedule 5a(vi) (Tax effect of other temporary differences).</i>				
80					
81	5a(viii): Regulatory Tax Asset Base Roll-Forward				
82					(\$000)
83	Opening sum of regulatory tax asset values		1,259,310		
84	less Tax depreciation		128,666		
85	plus Regulatory tax asset value of assets commissioned		219,279		
86	less Regulatory tax asset value of asset disposals		4,989		
87	plus Lost and found assets adjustment		—		
88	plus Adjustment resulting from asset allocation		3,466		
89	plus Other adjustments to the RAB tax value		—		
90	Closing sum of regulatory tax asset values				1,348,400

Company Name

Vector

For Year Ended

31 March 2021

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

7	5b(i): Summary—Related Party Transactions	(\$000)	(\$000)
8	Total regulatory income		—
9			
10	Market value of asset disposals		—
11			
12	Service interruptions and emergencies	—	
13	Vegetation management	7,193	
14	Routine and corrective maintenance and inspection	—	
15	Asset replacement and renewal (opex)	—	
16	Network opex		7,193
17	Business support	—	
18	System operations and network support	10,776	
19	Operational expenditure		17,969
20	Consumer connection	—	
21	System growth	5,068	
22	Asset replacement and renewal (capex)	714	
23	Asset relocations	—	
24	Quality of supply	—	
25	Legislative and regulatory	—	
26	Other reliability, safety and environment	252	
27	Expenditure on non-network assets		129
28	Expenditure on assets		6,163
29	Cost of financing		38
30	Value of capital contributions		—
31	Value of vested assets		—
32	Capital Expenditure		6,201
33	Total expenditure		24,170
34			
35	Other related party transactions		—
36	5b(iii): Total Opex and Capex Related Party Transactions		
37			Total value of transactions (\$000)
40	PowerSmart NZ Limited	Other reliability, safety and environment	157
41	PowerSmart NZ Limited	System growth	81
42	Vector Communications Limited	Asset replacement and renewal (capex)	338
43	Vector Communications Limited	System growth	27
44	Vector Communications Limited	Other reliability, safety and environment	79
45	Vector Communications Limited	System operations and network support	4,029
46	Tree Scape Limited	Vegetation management	7,193
47	Tree Scape Limited	Asset replacement and renewal (capex)	376
48	Tree Scape Limited	Other reliability, safety and environment	16
49	Cristal Air International Limited	Expenditure on non-network assets	129
50	Vector Auckland Property Limited	System growth	1,415
51	Vector Northern Property Limited	System growth	3,545
52	Vector Technology Services Limited	System operations and network support	6,747
53	Total value of related party transactions		24,132

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

Related party	Relationship	Principal activities	Amount (\$000) excluded cost of financing
Vector communications limited	a wholly owned subsidiary of Vector limited	Network communications and SCADA services	4,473
Tree Scape limited	an associate in which Vector limited holds a 50% interest	Vegetation management services	7,585
PowerSmart NZ limited	a wholly owned subsidiary of Vector limited	Energy solutions services	238
Cristal Air International limited	a wholly owned subsidiary of Vector limited	Energy solutions services	129
Vector technology services limited	a wholly owned subsidiary of Vector limited	Digital and technology services	6,747
Vector Auckland property limited	a wholly owned subsidiary of Vector limited	Asset management services	1,415
Vector Northern property limited	a wholly owned subsidiary of Vector limited	Asset management services	3,545



SCHEDULE 5c: REPORT ON TERM CREDIT SPREAD DIFFERENTIAL ALLOWANCE

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

sch ref

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

Issuing party	Issue date	Pricing date	Original tenor (in years)	Coupon rate (%)	Book value at issue date (NZD)	Book value at date of financial statements (NZD)	Term Credit Spread Difference	Debt issue cost readjustment
[]VCI	2-Feb-18	19-Dec-17	3	BKBM + []VCI				
[]VCI	2-Feb-18	19-Dec-17	3	BKBM + []VCI				
[]VCI	2-Feb-18	19-Dec-17	3	BKBM + []VCI				
[]VCI	2-Feb-18	19-Dec-17	3	BKBM + []VCI				
[]VCI	31-Jul-18	17-Jul-18	3	BKBM + []VCI				
[]VCI	31-Jul-18	17-Jul-18	3	BKBM + []VCI				
[]VCI	31-Jul-18	17-Jul-18	3	BKBM + []VCI				
[]VCI	16-Sep-19	24-Jul-19	3	BKBM + []VCI				
[]VCI	16-Sep-19	24-Jul-19	3	BKBM + []VCI				
[]VCI	16-Sep-19	24-Jul-19	3	BKBM + []VCI				
[]VCI	16-Sep-19	24-Jul-19	3	BKBM + []VCI				
[]VCI	16-Sep-19	24-Jul-19	3	BKBM + []VCI				
[]VCI	16-Apr-20	15-Apr-20	3	BKBM + []VCI				
[]VCI	13-Jan-20	20-Dec-19	5	BKBM + []VCI				
Subtotal of bank facilities- variable rate						148,683		
Capital bonds – fixed rate	15-Jun-17	14-Jun-17	5	5.7	307,205	306,511	[]VCI	[]VCI
Wholesale Bonds- fixed rate Mar17	14-Mar-17	3-Mar-17	7	4.996	100,000		[]VCI	[]VCI
Wholesale Bonds- fixed rate Jun18	25-Jun-18	21-Jun-18	5.7	4.996	140,000		[]VCI	[]VCI
Subtotal of wholesale bonds- variable rate					240,000	243,100	[]VCI	[]VCI
Senior notes - 2020 USPP 12yr	12-Mar-20	4-Mar-20	12	[]VCI	573,888		[]VCI	[]VCI
Senior notes - 2020 USPP 15 yr	12-Mar-20	4-Mar-20	15	[]VCI	223,179		[]VCI	[]VCI
Senior notes - 2010 USPP 12yr	20-Dec-10	22-Sep-10	12	[]VCI	250,516		[]VCI	[]VCI
Senior notes - 2014 USPP 7yr	14-Oct-14	19-Jun-14	7	[]VCI	150,000		[]VCI	[]VCI
Senior notes - 2017 USPP 10yr	25-Oct-17	28-Sep-17	10	[]VCI	277,200		[]VCI	[]VCI
Senior notes - 2017 USPP 12yr	25-Oct-17	28-Sep-17	12	[]VCI	138,600		[]VCI	[]VCI
Subtotal of senior notes - USD fixed rate					1,613,383	1,839,871	[]VCI	[]VCI
Floating rate notes- variable rate	26-Oct-05	26-Oct-05	15	BKBM + []VCI	350,000	349,899	[]VCI	[]VCI
Unsubordinated fixed rate bonds	27-May-19	16-May-19	6.0	3.45	250,000	247,536	[]VCI	[]VCI
* include additional rows if needed						3,135,600	11,032	(2,426)

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

Gross term credit spread differential	8,606
Total book value of interest bearing debt	3,135,600
Leverage	42%
Average opening and closing RAB values	3,322,345
Attribution Rate (%)	45%
Term credit spread differential allowance	3,830

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	13,329			
Not directly attributable	–	–	–	–
Total attributable to regulated service	13,329			
Vegetation management				
Directly attributable	8,667			
Not directly attributable	–	–	–	–
Total attributable to regulated service	8,667			
Routine and corrective maintenance and inspection				
Directly attributable	16,027			
Not directly attributable	(15)	(3)	(18)	–
Total attributable to regulated service	16,012			
Asset replacement and renewal				
Directly attributable	11,049			
Not directly attributable	–	–	–	–
Total attributable to regulated service	11,049			
System operations and network support				
Directly attributable	35,362			
Not directly attributable	7,632	987	8,619	–
Total attributable to regulated service	42,994			
Business support				
Directly attributable	1,066			
Not directly attributable	34,085	18,085	52,170	–
Total attributable to regulated service	35,151			
Operating costs directly attributable	85,500			
Operating costs not directly attributable	–	19,069	60,771	–
Operational expenditure	127,202			

5d(ii): Other Cost Allocations

Pass through and recoverable costs		(\$000)
Pass through costs		
Directly attributable		11,342
Not directly attributable		–
Total attributable to regulated service		11,342
Recoverable costs		
Directly attributable		179,978
Not directly attributable		–
Total attributable to regulated service		179,978

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

		(\$000)	
Change in cost allocation 1		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			

		(\$000)	
Change in cost allocation 2		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			

		(\$000)	
Change in cost allocation 3		CY-1	Current Year (CY)
Cost category		Original allocation	
Original allocator or line items		New allocation	
New allocator or line items		Difference	—
Rationale for change			

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



Company Name **Vector**
For Year Ended **31 March 2021**

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		72,144
Not directly attributable		1,427
Total attributable to regulated service		73,571
Subtransmission cables		
Directly attributable		359,436
Not directly attributable		–
Total attributable to regulated service		359,436
Zone substations		
Directly attributable		315,966
Not directly attributable		–
Total attributable to regulated service		315,966
Distribution and LV lines		
Directly attributable		362,625
Not directly attributable		48,235
Total attributable to regulated service		410,860
Distribution and LV cables		
Directly attributable		790,596
Not directly attributable		18,254
Total attributable to regulated service		808,850
Distribution substations and transformers		
Directly attributable		297,961
Not directly attributable		–
Total attributable to regulated service		297,961
Distribution switchgear		
Directly attributable		277,498
Not directly attributable		–
Total attributable to regulated service		277,498
Other network assets		
Directly attributable		772,953
Not directly attributable		4,671
Total attributable to regulated service		777,624
Non-network assets		
Directly attributable		35,356
Not directly attributable		28,847
Total attributable to regulated service		64,203
Regulated service asset value directly attributable		3,284,535
Regulated service asset value not directly attributable		101,434
Total closing RAB value		3,385,969

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

		(\$000)	
Change in asset value allocation 1		CY-1	Current Year (CY)
Asset category	Non Network Assets	Original allocation	437280
Original allocator or line items	Property, plant and equipment ratio for regulated businesses	New allocation	498319
New allocator or line items	Directly attributable	Difference	(61)(39)
Rationale for change	Assets have been repurposed.		

		(\$000)	
Change in asset value allocation 2		CY-1	Current Year (CY)
Asset category	Non Network Assets	Original allocation	—
Original allocator or line items	Not attributable	New allocation	595425
New allocator or line items	Directly attributable	Difference	(595)(425)
Rationale for change	Assets have been repurposed.		

		(\$000)	
Change in asset value allocation 3		CY-1	Current Year (CY)
Asset category	Non Network Assets	Original allocation	1,523463
Original allocator or line items	Relevant employee ratio	New allocation	3,069933
New allocator or line items	Property, plant and equipment ratio for regulated businesses	Difference	(1,546)(470)
Rationale for change	Assets have been repurposed.		

		(\$000)	
Change in asset value allocation 4		CY-1	Current Year (CY)
Asset category		Original allocation	
Original allocator or line items		New allocation	
New allocator or line items		Difference	—
Rationale for change			

		(\$000)	
Change in asset value allocation 5		CY-1	Current Year (CY)
Asset category		Original allocation	
Original allocator or line items		New allocation	
New allocator or line items		Difference	—
Rationale for change			

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

Company Name

Vector

For Year Ended

31 March 2021

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

This schedule requires a breakdown of capital expenditure on assets incurred in the disclosure year, including any assets in respect of which capital contributions are received, but excluding assets that are vested assets. Information on expenditure on assets must be provided on an accounting accruals basis and must exclude finance costs.

EDBs must provide explanatory comment on their expenditure on assets in Schedule 14 (Explanatory Notes to Templates).

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

sch ref

7	6a(i): Expenditure on Assets		(\$000)	(\$000)
8	Consumer connection			73,289
9	System growth			43,465
10	Asset replacement and renewal			100,567
11	Asset relocations			31,297
12	Reliability, safety and environment:			
13	Quality of supply	400		
14	Legislative and regulatory	158		
15	Other reliability, safety and environment	23,408		
16	Total reliability, safety and environment			23,966
17	Expenditure on network assets			272,584
18	Expenditure on non-network assets			23,908
19				
20	Expenditure on assets			296,492
21	plus Cost of financing			587
22	less Value of capital contributions			88,010
23	plus Value of vested assets			–
24				
25	Capital expenditure			209,069
26	6a(ii): Subcomponents of Expenditure on Assets (where known)			(\$000)
27	Energy efficiency and demand side management, reduction of energy losses			–
28	Overhead to underground conversion			12,628
29	Research and development			173
30	6a(iii): Consumer Connection			
31	Consumer types defined by EDB*		(\$000)	(\$000)
32	Service connection	16,921		
33	Customer substations	16,306		
34	Business subdivisions	3,501		
35	Residential subdivisions	31,842		
36	Capacity change	3,150		
	Street lighting	1,566		
	Easement costs	3		
37	* include additional rows if needed			
38	Consumer connection expenditure			73,289
39				
40	less Capital contributions funding consumer connection expenditure	71,332		
41	Consumer connection less capital contributions			1,957
42	6a(iv): System Growth and Asset Replacement and Renewal			
43				
44				
45	Subtransmission	10,233	1,207	
46	Zone substations	11,066	20,438	
47	Distribution and LV lines	4,430	48,720	
48	Distribution and LV cables	4,167	7,379	
49	Distribution substations and transformers	943	6,074	
50	Distribution switchgear	677	14,673	
51	Other network assets	11,949	2,076	
52	System growth and asset replacement and renewal expenditure	43,465	100,567	
53	less Capital contributions funding system growth and asset replacement and renewal	26	153	
54	System growth and asset replacement and renewal less capital contributions	43,439	100,414	
55				
56	6a(v): Asset Relocations			
57	Project or programme*		(\$000)	(\$000)
58				
59				
60				
61				
62				
63	* include additional rows if needed			
64	All other projects or programmes - asset relocations	31,297		
65	Asset relocations expenditure			31,297
66	less Capital contributions funding asset relocations	16,495		
67	Asset relocations less capital contributions			14,802

Company Name

Vector

For Year Ended

31 March 2021

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*

71

72

73

74

75

76

* include additional rows if needed

77

All other projects programmes - quality of supply

78

Quality of supply expenditure

79

less

Capital contributions funding quality of supply

80

Quality of supply less capital contributions

81

6a(vii): Legislative and Regulatory

82

Project or programme*

83

84

85

86

87

88

* include additional rows if needed

89

All other projects or programmes - legislative and regulatory

90

Legislative and regulatory expenditure

91

less

Capital contributions funding legislative and regulatory

92

Legislative and regulatory less capital contributions

93

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

94

Project or programme*

95

96

97

98

99

100

* include additional rows if needed

101

All other projects or programmes - other reliability, safety and environment

102

Other reliability, safety and environment expenditure

103

less

Capital contributions funding other reliability, safety and environment

104

Other reliability, safety and environment less capital contributions

105

106

6a(ix): Non-Network Assets

107

Routine expenditure

108

Project or programme*

109

110

111

112

113

114

* include additional rows if needed

115

All other projects or programmes - routine expenditure

116

Routine expenditure

117

Atypical expenditure

118

Project or programme*

119

120

121

122

123

124

* include additional rows if needed

125

All other projects or programmes - atypical expenditure

126

Atypical expenditure

127

128

Expenditure on non-network assets

(\$000)

(\$000)

400

400

—

400

(\$000)

(\$000)

158

158

4

154

(\$000)

(\$000)

23,408

23,408

—

23,408

(\$000)

(\$000)

3,617

3,617

(\$000)

(\$000)

20,291

20,291

23,908

Company Name	Vector
For Year Ended	31 March 2021

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

7	6b(i): Operational Expenditure		
8	Service interruptions and emergencies	13,329	
9	Vegetation management	8,667	
10	Routine and corrective maintenance and inspection	16,012	
11	Asset replacement and renewal	11,049	
12	Network opex		49,057
13	System operations and network support	42,994	
14	Business support	35,151	
15	Non-network opex		78,145
16			
17	Operational expenditure		127,202
18	6b(ii): Subcomponents of Operational Expenditure (where known)		
19	Energy efficiency and demand side management, reduction of energy losses		
20	Direct billing*		
21	Research and development		
22	Insurance		3,140
23	* Direct billing expenditure by suppliers that directly bill the majority of their consumers		



Company Name

Vector

For Year Ended

31 March 2021

SCHEDULE 7: COMPARISON OF FORECASTS TO ACTUAL EXPENDITURE

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

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

sch ref

7(i): Revenue

Target (\$000) ¹	Actual (\$000)	% variance
-----------------------------	----------------	------------

Line charge revenue

565,200

560,533

(1%)

7(ii): Expenditure on Assets

Forecast (\$000) ²	Actual (\$000)	% variance
-------------------------------	----------------	------------

Consumer connection

67,133

73,289

9%

System growth

46,551

43,465

(7%)

Asset replacement and renewal

111,988

100,567

(10%)

Asset relocations

32,778

31,297

(5%)

Reliability, safety and environment:

Quality of supply

–

400

–

Legislative and regulatory

–

158

–

Other reliability, safety and environment

27,141

23,408

(14%)

Total reliability, safety and environment

27,141

23,966

(12%)

Expenditure on network assets

285,591

272,584

(5%)

Expenditure on non-network assets

43,790

23,908

(45%)

Expenditure on assets

329,381

296,492

(10%)

7(iii): Operational Expenditure

Service interruptions and emergencies

14,173

13,329

(6%)

Vegetation management

10,217

8,667

(15%)

Routine and corrective maintenance and inspection

18,458

16,012

(13%)

Asset replacement and renewal

13,836

11,049

(20%)

Network opex

56,684

49,057

(13%)

System operations and network support

37,365

42,994

15%

Business support

37,441

35,151

(6%)

Non-network opex

74,806

78,145

4%

Operational expenditure

131,490

127,202

(3%)

7(iv): Subcomponents of Expenditure on Assets (where known)

Energy efficiency and demand side management, reduction of energy losses

–

–

–

Overhead to underground conversion

8,056

12,628

57%

Research and development

–

173

–

7(v): Subcomponents of Operational Expenditure (where known)

Energy efficiency and demand side management, reduction of energy losses

–

–

–

Direct billing

–

–

–

Research and development

–

–

–

Insurance

3,252

3,140

(3%)

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

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

Company Name	Vector Ltd
For Year Ended	31 March 2020
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)
ARCL	residential	Standard	47,575	263,153
ARCS	residential	Standard	32,637	313,690
ARUL	residential	Standard	11,806	42,698
ARUS	residential	Standard	9,922	53,184
ARHLC	residential	Standard	115,307	597,384
ARHSC	residential	Standard	59,628	629,698
ARHL	residential	Standard	18,129	72,930
ARHS	residential	Standard	8,153	68,337
ABSN	general	Standard	28,660	497,879
ABSU	general	Standard	1,706	26,021
ABSH	general	Standard	8,111	166,760
ALVN	low voltage	Standard	2,323	229,861
ALVT	low voltage	Standard	1,431	516,243
ATXN	transformer	Standard	162	20,515
ATXT	transformer	Standard	950	1,078,755
AHVN	high voltage	Standard	7	572
AHVT	high voltage	Standard	142	400,696
WRCL	residential	Standard	34,025	190,751
WRCS	residential	Standard	26,882	264,425
WRUL	residential	Standard	6,710	34,321
WRUS	residential	Standard	8,214	61,217
WRHLC	residential	Standard	71,145	379,077
WRHSC	residential	Standard	42,612	456,803
WRHL	residential	Standard	13,402	66,708
WRHS	residential	Standard	8,733	86,360
WBSN	general	Standard	14,855	231,231
WBSU	general	Standard	710	15,754
WBSH	general	Standard	7,916	129,843
WLVN	low voltage	Standard	906	115,074
WLVH	low voltage	Standard	258	124,787
WTXN	transformer	Standard	132	33,393
WTXH	transformer	Standard	279	342,409
WHVN	high voltage	Standard	-	-
WHVH	high voltage	Standard	24	112,644
NS	non-standard	Non-standard	31	586,758
Add extra rows for additional consumer groups or price category codes as necessary				
Standard consumer totals			583,452	7,623,173
Non-standard consumer totals			31	586,758
Total for all consumers			583,483	8,209,931

Billed quantities by price component

FIXD	AICO	24UC	OPFK	PEAK	CAPY	DAMD	DEXA	PWRF
Day	kWh	kWh	kWh	kWh	kVA/Day	kVA/Day	kVA/Day	kVAr/Day
17,461,127	263,152,728	-	-	-	-	-	-	-
11,982,321	313,689,887	-	-	-	-	-	-	-
4,338,725	-	42,698,065	-	-	-	-	-	-
3,637,078	-	53,184,340	-	-	-	-	-	-
42,013,538	-	-	414,155,210	183,228,337	-	-	-	-
21,736,170	-	-	440,055,160	189,643,307	-	-	-	-
6,606,676	-	-	50,517,432	22,412,496	-	-	-	-
2,965,710	-	-	47,623,767	20,713,673	-	-	-	-
10,443,431	-	497,878,559	-	-	-	-	-	-
26,078,972	-	26,021,031	-	-	-	-	-	-
2,939,847	-	-	118,309,804	48,450,281	-	-	-	-
849,304	-	229,860,564	-	-	126,680,919	-	-	320,135
-	-	516,242,640	-	-	138,539,806	43,717,347	-	3,688,361
59,182	-	20,515,005	-	-	13,418,908	-	-	14,860
-	-	1,078,755,242	-	-	252,907,685	86,254,638	-	3,834,076
2,555	-	571,653	-	-	517,935	-	-	6,377
-	-	400,695,729	-	-	60,672,920	29,932,667	36,468	1,243,625
12,468,196	190,750,601	-	-	-	-	-	-	-
9,852,089	264,424,887	-	-	-	-	-	-	-
2,461,624	-	34,320,985	-	-	-	-	-	-
3,021,854	-	61,217,384	-	-	-	-	-	-
25,934,747	-	-	261,954,710	117,122,765	-	-	-	-
15,535,327	-	-	318,310,445	138,492,180	-	-	-	-
4,886,726	-	-	45,929,665	20,778,055	-	-	-	-
3,182,497	-	-	59,901,528	26,458,795	-	-	-	-
5,405,779	-	231,230,715	-	-	-	-	-	-
16,432,967	-	15,754,340	-	-	-	-	-	-
2,861,159	-	-	91,833,398	38,009,454	-	-	-	-
331,752	-	115,073,730	-	-	48,916,985	-	-	283,628
94,132	-	124,786,701	-	-	24,970,945	9,808,260	-	694,689
48,299	-	33,393,176	-	-	11,780,426	-	-	159,999
102,001	-	342,408,724	-	-	76,488,925	27,099,056	-	1,177,690
-	-	-	-	-	-	-	-	-
8,964	-	112,643,824	-	-	14,953,890	7,775,778	13,706	168,953
1,460	-	-	-	-	-	-	-	12,277
253,742,749	1,032,018,103	3,937,252,407	1,848,591,119	805,309,343	769,849,344	204,587,746	50,174	11,592,393
1,460	-	-	-	-	-	-	-	12,277
253,744,209	1,032,018,103	3,937,252,407	1,848,591,119	805,309,343	769,849,344	204,587,746	50,174	11,604,670

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

Company Name	Vector Ltd
For Year Ended	31 March 2020
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.

56	8(ii): Line Charge Revenues (\$000) by Price Component									
57										
58										
59										
60										
61										
62										
63										
64										
65										
66										
67										
68										
69										
70										
71										
72										
73										
74										
75										
76										
77										
78										
79										
80										
81										
82										
83										
84										
85										
86										
87										
88										
89										
90										
91										
92										
93										
94										
95										
96										
97	Add extra rows for additional consumer groups or price category codes as necessary									
98										
99										
100										
101										
102	8(iii): Number of ICPs directly billed									
103	Number of directly billed ICPs at year end									
						Check		OK		

Line charge revenues (\$000) by price component	FIXD	AICO	24UC	OPFK	PEAK	CAPY	DAMD	DEXA	PWRF
Day	kWh	kWh	kWh	kWh	kWh	kVA/Day	kVA/Day	kVA/Day	kVA/Day
\$2,610	\$22,632	–	–	–	–	–	–	–	–
\$12,060	\$14,724	–	–	–	–	–	–	–	–
\$649	–	\$3,936	–	–	–	–	–	–	–
\$3,661	–	\$2,825	–	–	–	–	–	–	–
\$6,280	–	–	\$25,630	\$24,724	–	–	–	–	–
\$21,878	–	–	\$10,043	\$18,181	–	–	–	–	–
\$988	–	–	\$3,126	\$3,444	–	–	–	–	–
\$2,985	–	–	\$1,087	\$2,374	–	–	–	–	–
\$10,512	–	\$26,445	–	–	–	–	–	–	–
\$2,079	–	\$667	–	–	–	–	–	–	–
\$2,959	–	–	\$2,700	\$5,553	–	–	–	–	–
\$1,507	–	\$12,393	–	–	\$5,315	–	–	–	\$93
–	–	\$6,174	–	–	\$5,812	\$12,708	–	–	\$1,072
\$103	–	\$1,084	–	–	\$551	–	–	–	\$4
–	–	\$12,578	–	–	\$10,384	\$24,567	–	–	\$1,115
\$4	–	\$29	–	–	\$21	–	–	–	\$2
–	–	\$4,512	–	–	\$2,413	\$8,269	\$32	–	\$362
\$1,865	\$16,418	–	–	–	–	–	–	–	–
\$9,924	\$12,422	–	–	–	–	–	–	–	–
\$368	–	\$3,166	–	–	–	–	–	–	–
\$3,044	–	\$3,254	–	–	–	–	–	–	–
\$3,880	–	–	\$16,224	\$15,817	–	–	–	–	–
\$15,649	–	–	\$7,270	\$13,288	–	–	–	–	–
\$731	–	–	\$2,845	\$3,196	–	–	–	–	–
\$3,206	–	–	\$1,368	\$3,035	–	–	–	–	–
\$5,445	–	\$12,292	–	–	–	–	–	–	–
\$1,311	–	\$404	–	–	–	–	–	–	–
\$2,882	–	–	\$2,097	\$4,360	–	–	–	–	–
\$1,899	–	\$3,845	–	–	\$1,654	–	–	–	\$83
\$1,016	–	\$622	–	–	–	\$844	\$2,571	–	\$202
\$271	–	\$1,092	–	–	\$390	–	–	–	\$47
\$1,079	–	\$1,673	–	–	\$2,533	\$6,960	–	–	\$343
–	–	–	–	–	–	–	–	–	–
\$92	–	\$539	–	–	\$480	\$1,937	\$10	–	\$49
\$18,482	–	–	–	–	–	–	–	–	\$203
\$120,937	\$66,196	\$97,530	\$72,390	\$93,972	\$30,397	\$57,012	\$42	–	\$3,372
\$18,482	–	–	–	–	–	–	–	–	\$203
\$139,419	\$66,196	\$97,530	\$72,390	\$93,972	\$30,397	\$57,012	\$42	–	\$3,575

Company Name	Vector Ltd
For Year Ended	31 March 2020
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)
ARCL	residential	Standard	47,575	263,153
ARCS	residential	Standard	32,637	313,690
ARUL	residential	Standard	11,806	42,698
ARUS	residential	Standard	9,922	53,184
ARHLC	residential	Standard	115,307	597,384
ARHSC	residential	Standard	59,628	629,698
ARHL	residential	Standard	18,129	72,930
ARHS	residential	Standard	8,153	68,337
ABSN	general	Standard	28,660	497,879
ABSU	general	Standard	1,706	26,021
ABSH	general	Standard	8,111	166,760
ALVN	low voltage	Standard	2,323	229,861
ALVT	low voltage	Standard	1,431	516,243
ATXN	transformer	Standard	162	20,515
ATXT	transformer	Standard	950	1,078,755
AHVN	high voltage	Standard	7	572
AHVT	high voltage	Standard	142	400,696
NS	non-standard	Non-standard	27	481,513
Add extra rows for additional consumer groups or price category codes as necessary				
Standard consumer totals			346,649	4,978,376
Non-standard consumer totals			27	481,513
Total for all consumers			346,676	5,459,889

Price component

Billed quantities by price component								
FIXD	AICO	24UC	OFFK	PEAK	CAPY	DAMD	DEXA	PWRF
Day	kWh	kWh	kWh	kWh	kVA/Day	kVA/Day	kVA/Day	kVA/Day
17,461,127	263,152,728	–	–	–	–	–	–	–
11,982,321	313,689,887	–	–	–	–	–	–	–
4,338,725	–	42,698,065	–	–	–	–	–	–
3,637,078	–	53,184,340	–	–	–	–	–	–
42,013,538	–	–	414,155,210	183,228,337	–	–	–	–
21,736,170	–	–	440,055,160	189,643,307	–	–	–	–
6,606,676	–	–	50,517,432	22,412,496	–	–	–	–
2,965,710	–	–	47,623,767	20,713,673	–	–	–	–
10,443,431	–	497,878,559	–	–	–	–	–	–
26,078,972	–	26,021,031	–	–	–	–	–	–
2,939,847	–	–	118,309,804	48,450,281	–	–	–	–
849,304	–	229,860,564	–	–	126,680,919	–	–	320,135
–	–	516,242,640	–	–	138,539,806	43,717,347	–	3,688,361
59,182	–	20,515,005	–	–	13,418,908	–	–	14,860
–	–	1,078,755,242	–	–	252,907,685	86,254,638	–	3,834,076
2,555	–	571,653	–	–	517,935	–	–	6,377
–	–	400,695,729	–	–	60,672,920	29,932,667	36,468	1,243,625
9,855	–	–	–	–	–	–	–	13,599
151,114,636	576,842,615	2,866,422,828	1,070,661,373	464,448,094	592,738,173	159,904,652	36,468	9,107,434
9,855	–	–	–	–	–	–	–	13,599
151,124,491	576,842,615	2,866,422,828	1,070,661,373	464,448,094	592,738,173	159,904,652	36,468	9,121,033

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

Company Name	Vector Ltd
For Year Ended	31 March 2020
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)
ARCL	residential	Standard	\$25,242	
ARCS	residential	Standard	\$26,784	
ARUL	residential	Standard	\$4,585	
ARUS	residential	Standard	\$6,486	
ARHLC	residential	Standard	\$56,634	
ARHSC	residential	Standard	\$50,102	
ARHL	residential	Standard	\$7,558	
ARHS	residential	Standard	\$6,446	
ABSN	general	Standard	\$36,957	
ABSU	general	Standard	\$2,746	
ABSH	general	Standard	\$11,212	
ALVN	low voltage	Standard	\$19,308	
ALVT	low voltage	Standard	\$25,766	
ATXN	transformer	Standard	\$1,742	
ATXT	transformer	Standard	\$48,644	
AHVN	high voltage	Standard	\$56	
AHVT	high voltage	Standard	\$15,588	
NS	non-standard	Non-standard	\$15,707	
Add extra rows for additional consumer groups or price category codes as necessary				
Standard consumer totals			\$345,856	–
Non-standard consumer totals			\$15,707	–
Total for all consumers			\$361,563	–

Total distribution line charge revenue	Total transmission line charge revenue (if available)
\$17,163	\$8,079
\$17,154	\$9,630
\$3,009	\$1,576
\$4,523	\$1,963
\$43,203	\$13,431
\$36,201	\$13,901
\$5,494	\$2,064
\$4,538	\$1,908
\$18,585	\$18,372
\$2,069	\$677
\$6,750	\$4,462
\$15,010	\$4,298
\$17,460	\$8,306
\$1,358	\$384
\$32,256	\$16,388
\$45	\$11
\$9,901	\$5,687
\$9,273	\$6,434
\$234,719	\$111,137
\$9,273	\$6,434
\$243,992	\$117,571

Price component

Line charge revenues (\$000) by price component

FIXD	AICO	24UC	OFFK	PEAK	CAPY	DAMD	DEXA	PWRF
Day	kWh	kWh	kWh	kWh	kVA/Day	kVA/Day	kVA/Day	kVA/Day
\$2,610	\$22,632	–	–	–	–	–	–	–
\$12,060	\$14,724	–	–	–	–	–	–	–
\$649	–	\$3,936	–	–	–	–	–	–
\$3,661	–	\$2,825	–	–	–	–	–	–
\$6,280	–	–	\$25,630	\$24,724	–	–	–	–
\$21,878	–	–	\$10,043	\$18,181	–	–	–	–
\$988	–	–	\$3,126	\$3,444	–	–	–	–
\$2,985	–	–	\$1,087	\$2,374	–	–	–	–
\$10,512	–	\$26,445	–	–	–	–	–	–
\$2,079	–	\$667	–	–	–	–	–	–
\$2,959	–	–	\$2,700	\$5,553	–	–	–	–
\$1,507	–	\$12,393	–	–	\$5,315	–	–	\$93
–	–	\$6,174	–	–	\$5,812	\$12,708	–	\$1,072
\$103	–	\$1,084	–	–	\$551	–	–	\$4
–	–	\$12,578	–	–	\$10,384	\$24,567	–	\$1,115
\$4	–	\$29	–	–	\$21	–	–	\$2
–	–	\$4,512	–	–	\$2,413	\$8,269	\$32	\$362
\$15,602	–	–	–	–	–	–	–	\$105
\$68,275	\$37,356	\$70,643	\$42,586	\$54,276	\$24,496	\$45,544	\$32	\$2,648
\$15,602	–	–	–	–	–	–	–	\$105
\$83,877	\$37,356	\$70,643	\$42,586	\$54,276	\$24,496	\$45,544	\$32	\$2,753

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

34

Check OK

Company Name	Vector Ltd
For Year Ended	31 March 2020
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)
--	---	---	--	---

WRCL	residential	Standard	34,025	190,751
WRCS	residential	Standard	26,882	264,425
WRUL	residential	Standard	6,710	34,321
WRUS	residential	Standard	8,214	61,217
WRHLC	residential	Standard	71,145	379,077
WRHSC	residential	Standard	42,612	456,803
WRHL	residential	Standard	13,402	66,708
WRHS	residential	Standard	8,733	86,360
WBSN	general	Standard	14,855	231,231
WBSU	general	Standard	710	15,754
WBSH	general	Standard	7,916	129,843
WLVN	low voltage	Standard	906	115,074
WLVH	low voltage	Standard	258	124,787
WTXN	transformer	Standard	132	33,393
WTXH	transformer	Standard	279	342,409
WHVN	high voltage	Standard	–	–
WHVH	high voltage	Standard	24	112,644
NS	non-standard	Non-standard	4	105,245

Add extra rows for additional consumer groups or price category codes as necessary

Standard consumer totals	236,803	2,644,797
Non-standard consumer totals	4	105,245
Total for all consumers	236,807	2,750,042

Price component

Billed quantities by price component

FIXD	AICO	24UC	OFFK	PEAK	CAPY	DAMD	DEXA	PWRF
Day	kWh	kWh	kWh	kWh	kVA/Day	kVA/Day	kVA/Day	kVA/Day

12,468,196	190,750,601	–	–	–	–	–	–	–
9,852,089	264,424,887	–	–	–	–	–	–	–
2,461,624	–	34,320,985	–	–	–	–	–	–
3,021,854	–	61,217,384	–	–	–	–	–	–
25,934,747	–	–	261,954,710	117,122,765	–	–	–	–
15,535,327	–	–	318,310,445	138,492,180	–	–	–	–
4,886,726	–	–	45,929,665	20,778,055	–	–	–	–
3,182,497	–	–	59,901,528	26,458,795	–	–	–	–
5,405,779	–	231,230,715	–	–	–	–	–	–
16,432,967	–	15,754,340	–	–	–	–	–	–
2,861,159	–	–	91,833,398	38,009,454	–	–	–	–
331,752	–	115,073,730	–	–	48,916,985	–	–	283,628
94,132	–	124,786,701	–	–	24,970,945	9,808,260	–	694,689
48,299	–	33,393,176	–	–	11,780,426	–	–	159,999
102,001	–	342,408,724	–	–	76,488,925	27,099,056	–	1,177,690
–	–	–	–	–	–	–	–	–
8,964	–	112,643,824	–	–	14,953,890	7,775,778	13,706	168,953
1,460	–	–	–	–	–	–	–	12,277

102,628,113	455,175,488	1,070,829,579	777,929,746	340,861,249	177,111,171	44,683,094	13,706	2,484,959
1,460	–	–	–	–	–	–	–	12,277
102,629,573	455,175,488	1,070,829,579	777,929,746	340,861,249	177,111,171	44,683,094	13,706	2,497,236

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

Company Name	Vector Ltd
For Year Ended	31 March 2020
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

								Rate (eg, \$ per day, \$ per kWh, etc.)	Line charge revenues (\$000) by price component									Add extra columns for additional line charge revenues by price component as necessary
						Total distribution line charge revenue	Total transmission line charge revenue (if available)		FIXD	AICO	24UC	OPFK	PEAK	CAPY	DAMD	DEXA	PWRF	
	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)			Day	kWh	kWh	kWh	kWh	kWh	kVA/Day	kVA/Day	kVA/Day	kVAr/Day	
	WRCL	residential	Standard	\$18,283														
	WRCS	residential	Standard	\$22,346														
	WRUL	residential	Standard	\$3,534														
	WRUS	residential	Standard	\$6,298														
	WRHLC	residential	Standard	\$35,921														
	WRHSC	residential	Standard	\$36,207														
	WRHL	residential	Standard	\$6,772														
	WRHS	residential	Standard	\$7,609														
	WBSN	general	Standard	\$17,737														
	WBSU	general	Standard	\$1,715														
	WBSH	general	Standard	\$9,339														
	WLVN	low voltage	Standard	\$7,481														
	WLVH	low voltage	Standard	\$5,255														
	WTXN	transformer	Standard	\$1,800														
	WTXH	transformer	Standard	\$12,588														
	WHVN	high voltage	Standard	–														
	WHVH	high voltage	Standard	\$3,107														
	NS	non-standard	Non-standard	\$2,978														
	Add extra rows for additional consumer groups or price category codes as necessary																	
	Standard consumer totals			\$195,992	–													
	Non-standard consumer totals			\$2,978	–													
	Total for all consumers			\$198,970	–													
	8(iii): Number of ICPs directly billed					Check		OK										
	Number of directly billed ICPs at year end			10														

Company Name

For Year Ended

Network / Sub-network Name

Vector

31 March 2021

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

					Items at start of year (quantity)	Items at end of year (quantity)	Net change	Data accuracy (1–4)
8	Voltage	Asset category	Asset class	Units				
9	All	Overhead Line	Concrete poles / steel structure	No.	117,263	118,014	751	3
10	All	Overhead Line	Wood poles	No.	5,826	5,714	-112	2
11	All	Overhead Line	Other pole types	No.	935	1,022	87	4
12	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	368	365	-3	4
13	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	27	27	0	4
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	354	376	22	4
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	145	147	2	4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	2	0	-2	N/A
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	50	29	-20	4
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	30	31	1	4
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	17	17	0	4
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	0	0	0	N/A
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	0	0	0	4
22	HV	Subtransmission Cable	Subtransmission submarine cable	km	12	12	0	4
23	HV	Zone substation Buildings	Zone substations up to 66kV	No.	102	104	2	4
24	HV	Zone substation Buildings	Zone substations 110kV+	No.	7	7	0	4
25	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	20	20	0	4
26	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	2	2	0	4
27	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	0	0	0	N/A
28	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	183	184	1	4
29	HV	Zone substation switchgear	33kV RMU	No.	13	7	-6	4
30	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	260	257	-3	4
31	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	105	121	16	N/A
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	1,369	1,478	109	4
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	0	0	0	N/A
34	HV	Zone Substation Transformer	Zone Substation Transformers	No.	219	219	0	4
35	HV	Distribution Line	Distribution OH Open Wire Conductor	km	3,746	3,738	-8	3
36	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	0	0	0	N/A
37	HV	Distribution Line	SWER conductor	km	0	0	0	N/A
38	HV	Distribution Cable	Distribution UG XLPE or PVC	km	1,561	1,623	62	3
39	HV	Distribution Cable	Distribution UG PILC	km	2,184	2,178	-6	4
40	HV	Distribution Cable	Distribution Submarine Cable	km	8	8	0	4
41	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	274	301	27	4
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	293	314	21	3
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	10,536	10,848	312	3
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	3,246	3,186	-60	3
45	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	6,216	6,072	-144	4
46	HV	Distribution Transformer	Pole Mounted Transformer	No.	7,600	7,604	4	4
47	HV	Distribution Transformer	Ground Mounted Transformer	No.	14,559	14,721	162	4
48	HV	Distribution Transformer	Voltage regulators	No.	12	12	0	4
49	HV	Distribution Substations	Ground Mounted Substation Housing	No.	13,075	13,218	143	3
50	LV	LV Line	LV OH Conductor	km	4,154	4,154	-1	3
51	LV	LV Cable	LV UG Cable	km	6,290	6,439	149	4
52	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	479	479	0	3
53	LV	Connections	OH/UG consumer service connections	No.	578,106	588,018	9,912	4
54	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	3,934	4,163	229	3
55	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	356	375	19	3
56	All	Capacitor Banks	Capacitors including controls	No	76	74	-2	4
57	All	Load Control	Centralised plant	Lot	33	32	-1	3
58	All	Load Control	Relays	No	0	0	0	N/A
59	All	Civils	Cable Tunnels	km	10	10	0	3

Company Name

For Year Ended

Network / Sub-network Name

Vector

31 March 2021

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

</

Company Name

For Year Ended

Network / Sub-network Name

Vector

31 March 2021

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

</

Company Name	Vector
For Year Ended	31 March 2021
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.

8	Disclosure Year (year ended)		31 March 2021	Number of assets at disclosure year end by installation date																																					
																																	No. with age unknown	Items at end of year (quantity)	No. with default dates	Data accuracy (1-4)					
9	Voltage	Asset category	Asset class	Units	pre-1940	1940 –1949	1950 –1959	1960 –1969	1970 –1979	1980 –1989	1990 –1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025				
10	All	Overhead Line	Concrete poles / steel structure	No.	13	287	4,895	15,054	15,689	9,794	584	748	930	798	389	1,800	2,031	2,099	1,779	1,935	1,647	1,178	1,391	1,926	1,774	1,882	2,609	3,477	4,841	4,440	4,906	1,253				13,022	118,014				
11	All	Overhead Line	Wood poles	No.	4	8	121	394	472	573	807	187	50	71	75	34	89	129	101	61	55	111	14	26	31	24	15	10	4	21	29	46	21				2,131	5,714			
12	All	Overhead Line	Other pole types	No.	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	5	10	27	74	180	269	160	207	85				3	1,022			
13	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	2	2	24	73	160	72	2	0	0	0	1	0	1	4	1	0	13	1	7	0	0	0	2	1	0	0	0	0	0	0				0	365		
14	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	0	0	0	7	12	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	27		
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	0	0	0	0	19	11	55	56	1	21	6	2	4	8	32	8	25	19	4	10	7	3	16	16	13	6	3	5	25				1	376			
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	0	0	0	0	40	73	24	7	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	147	
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	—		
18	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	7	3	0	13	2	7	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	29	
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	0	0	0	0	0	0	0	8	0	0	0	18	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1				0	31
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	0	0	0	11	0	5	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	17	
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	—	
22	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	
23	HV	Subtransmission Cable	Subtransmission submarine cable	km	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	12	
24	HV	Zone substation Buildings	Zone substations up to 66kV	No.	0	1	2	22	24	18	9	3	1	1	1	1	0	1	1	0	3	3	4	2	0	0	3	2	1	0	1	0	1	0				0	104		
25	HV	Zone substation Buildings	Zone substations 110kV+	No.	0	0	0	0	2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	7		
26	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0				0	20		
27	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	2		
28	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	—		
29	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	0	0	0	37	77	40	8	0	0	0	0	0	0	0	1	0	8	2	0	2	0	1	0	1	0	6	0	1	0	0				0	184		
30	HV	Zone substation switchgear	33kV RMU	No.	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	7		
31	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	0	0	0	0	13	20	9	0	10	0	4	6	0	10	6	3	6	7	18	6	0	35	26	52	11	0	9	5	1				0	257			
32	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	0	0	0	7	19	20	25	4	0	2	0	0	0	2	1	1	8	20	2	4	0	1	0	0	2	1	0	0	0	0				2	121		
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	0	0	0	9	130	166	273	89	11	16	1	8	0	6	25	23	30	71	41	82	33	49	35	32	77	99	37	58	44	33				0	1,478		
34	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	—		
35	HV	Zone Substation Transformer	Zone Substation Transformers	No.	0	0	0	3	39	50	35	26	4	1	2	1	1	0	1	2	3	6	5	8	5	1	2	7	4	4	0	2	4	3				0	219		
36	HV	Distribution Line	Distribution OH Open Wire Conductor	km	1	4	143	537	989	1,362	291	94	11	7	11	6	22	36	62	21	21	10	8	5	5	7	8	4	7	5	7	16	8				30	3,738			
37	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	—		
38	HV	Distribution Line	SWER conductor	km	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	—		
39	HV	Distribution Cable	Distribution UG XLPE or PVC	km	0	0	0	0	3	18	34	168	36	40	31	22	18	97	136	102	61	106	53	71	40	49	70	63	68	65	77	64	57	68				8	1,623		
40	HV	Distribution Cable	Distribution UG PILC	km	13	3	25	193	621	695	516	34	13	4	1	2	12	7	19	5	6	2	1	0	0	0	0	1	0	0	0	0	0	0				3	2,178		
41	HV	Distribution Cable	Distribution Submarine Cable	km	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	8		
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionaliser	No.	0	0	0	0	0	0	17	0	0	0	2	0	0	3	8	30	67	45	4	0	7	10	0	2	3	2	0	17	37	43				0	301		
43	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	0	0	0	2	0	4	5	4	0	11	0	4	2	4	2	13	1	10	8	10	3	26	8	9	18	29	13	41	36	19				32	314		
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	0	0	0	7	195	913	1,607	1,320	235	153	130	140	59	213	284	242	237	249	153	102	156	253	318	401	484	573	452	500	667	614				191	10,848		
45	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	7	0	1	316	843	637	424	79	69	63	53	65	78	66	47	23	43	38	41	51	33	42	21	25	22	14	28	36	8				11	3,186			
46	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	4	0	2	217	755	1,094	594	78	65	76	140	125	142	99	83	65	47	85	106	112	167	126	177	199	248	304	367	471	119				5	6,072			
47	HV	Distribution Transformer	Pole Mounted Transformer	km	11	36	113	247	588	1,212	1,321	1	107	161	125	11	229	225	314	224	262	229	139	205	164	195	199	174	203	251	263	244	146				5	7,604			
48	HV	Distribution Transformer	Ground Mounted Transformer	No.	6	45	148	782	1,870	2,344	2,135	5	269	239	194	24	602	461	551	318	319	282	327	261	331	387	347	301	372	473	454	502	336				36	14,721			
49	HV	Distribution Transformer	Voltage regulators	No.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	4	2	1	0	0	0	2	0	0				0	12			
50	HV	Distribution Substations	Ground Mounted Substation Housing	No.	11	61	177	1,282	3,003	3,373	2,048	183	234	122	141	198	125	118	78	70	60	48	52	54	102	154	203	145	168	192	235	291	178				112	13,218			
51	LV	LV Line	LV OH Conductor	km	0	4	112	534	1,031	1,767	155	114	6	6	11	4	17	26	47	12	13	9	12	10	10	9	10	9	16	27	29	42	33				77	4,154			
52	LV	LV Cable	LV UG Cable	km	5	19	44	431	1,069	1,059	1,264	119	98	55	49	47	212	261	161	81	115	72	74	46	69	100	125	131	135	162	152	137	125				22	6,439			
53	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	3	1	9	24	45	52	86	9	7	4	4	3	15	15	15	11	16	9	17	8	17	12	21	17	13	14	12	5				7	479				
54	LV	Connections	OH/UG consumer service connections	No.	0	0	0	161	37,920	171,994	135,5																														

Company Name	Vector
For Year Ended	31 March 2021
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.

8	Disclosure Year (year ended)		31 March 2021	Number of assets at disclosure year end by installation date																																	No. with age unknown	Items at end of year	No. with default dates	Data accuracy (1–4)		
9	Voltage	Asset category	Asset class	Units	pre-1940	1940 –1949	1950 –1959	1960 –1969	1970 –1979	1980 –1989	1990 –1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025					
10	All	Overhead Line	Concrete poles / steel structure	No.	4	0	153	4,582	784	2,646	3,869	238	479	677	543	193	921	1,520	1,709	1,398	1,238	1,174	870	995	1,201	1,015	904	1,420	1,794	2,405	2,345	2,212	483			12,896	50,668					
11	All	Overhead Line	Wood poles	No.	0	0	0	203	107	93	439	170	37	24	58	27	48	75	51	42	18	26	13	7	14	3	1	2	1	17	19	34	15				2,105	3,649	2			
12	All	Overhead Line	Other pole types	No.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	7	29	146	173	48	32	2			3	442	4			
13	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	0	0	0	0	34,361	0	0	0	0	0	0.000	0.825	0	0	0	0	5,071	0	5,743	0	0	0.087	1,873	0	0	0	0	0	0	0	0.000			0.017	48	4		
14	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000			0.000	—	N/A		
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	0	0	0	0	0.136	1,685	31,720	47,821	1,093	20,624	5,406	0.011	1,210	1,362	14,657	0.840	2,875	17,254	0.419	9,002	4,566	2,332	14,330	12,537	9,126	1,501	0.940	4,319	23,427			0.599	230	4				
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	0	0	0	38,706	72,158	24,299	6,711	0	0.010	0.007	0	0.010	1,293	0.786	0.646	0	0.031	0.006	0	0	0.034	0	0	0	0.004	0	0	0	0	0	0			0	145	4		
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	0	0	0	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	—	N/A	
18	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	7,413	2,818	0.145	12,547	1,902	2,232	0.274	0.000	0	0	0	0	0	0.250	0.007	0	0.663	0	0	0	0	0	0.000	0	0	0	0	0	0	0	0	0.000			0.030	28	4	
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	0	0	0	0	0	0	8,475	0	0	18,478	0	0	0.860	0	0	0.036	0	0	2,133	0	0.004	0	0	0	0	0	0	0	0	0	0	0			0	31	4	
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	0	0	0	11,301	0	4,789	0.009	0.020	0	0	0	0	1,352	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	17	4	
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000			0.000	—	N/A		
22	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	0	0	0	0	0.001	0.003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0	4
23	HV	Subtransmission Cable	Subtransmission submarine cable	km	0	0	0	0	0	10,742	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	11	4
24	HV	Zone substation Buildings	Zone substations up to 66kV	No.	0	1	2	11	15	7	5	3	0	0	1	0	1	1	0	0	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0			0	51	4	
25	HV	Zone substation Buildings	Zone substations 110kV+	No.	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	5	4	
26	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0			0	20	4
27	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	—	N/A
28	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	—	N/A
29	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	—	N/A
30	HV	Zone substation switchgear	33kV RMU	No.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	—	N/A
31	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	0	0	0	0	13	20	9	0	10	0	0	0	0	0	0	0	0	7	1	6	0	6	17	39	2	0	0	0	0	0	0	0			0	131	4	
32	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			2	2	1	
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	0	0	0	2	104	94	194	61	11	10	0	0	0	8	23	17	26	26	48	22	25	18	21	50	61	23	43	44	27			0	958	4				
34	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	—	N/A
35	HV	Zone Substation Transformer	Zone Substation Transformers	No.	0	0	1	23	32	17	18	4	0	1	1	0	1	0	1	0	3	0	5	5	4	0	1	3	3	1	0	2	1	2			0	128	4			
36	HV	Distribution Line	Distribution OH Open Wire Conductor	km	0.482	0	0	0.125	64,298	604,823	34,483	86,002	2,114	4,225	9,323	0,919	5,452	5,538	9,698	9,336	3,528	3,612	2,693	2,597	1,068	1,127	0.358	0.209	2,276	2,018	2,830			18,997	881	3						
37	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000			0.000	—	N/A		
38	HV	Distribution Line	SWER conductor	km	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000			0.000	—	N/A		
39	HV	Distribution Cable	Distribution UG XLPE or PVC	km	0.215	0	0	0	2,252	12,341	12,541	17,704	7,095	16,978	14,195	13,578	4,997	64,789	54,573	59,510	30,103	33,623	25,364	40,708	22,184	24,198	44,284	27,247	33,698	29,869	30,663	38,852	26,576	34,533			5,120	728	3			
40	HV	Distribution Cable	Distribution UG PILC	km	13,055	2,613	24,359	176,585	502,947	432,050	321,920	26,523	11,274	2,544	0.802	0.001	11,026	5,292	16,601	3,998	3,719	1,884	0,921	0	0.014	0.007	0	0.133	0	0.062	0	0	0	0	0.004			3,390	1,562	4		
41	HV	Distribution Cable	Distribution Submarine Cable	km	0	0	0	0	0.870	0	0.693	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	2	4	
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionaliser	No.	0	0	0	0	0	0	1	0	0	0	0	0	0	7	11	12	3	2	0	2	2	1	0	0	0	0	0	5	11	15			0	71	4			
43	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	0	0	2	0	3	3	4	0	11	0	4	2	3	1	13	1	4	8	3	25	8	8	11	16	7	27	33	18			32	255	3					
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	0	0	0	3	33	428	110	83	39	32	41	0	80	47	80	75	40	36	31	57	116	140	101	114	123	99	117	171	181			155	2,532	3				
45	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	7	0	1	306	808	517	239	38	43	25	28	37	45	44	30	15	25	15	28	30	14	19	12	11	10	9	17	22	5			6	2,406	3				
46	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	4	0	2	216	754	987	425	47	43	50	94	80	105	71	55	41	34	39	74	64	129	86	105	117	131	164	249	333	86			5	4,590	4				
47	HV	Distribution Transformer	Pole Mounted Transformer	No.	0	0	1	32	121	201	333	1	29	73	57	2	48	42	86	85	99	87	53	71	59	72	71	42	61	66	75	65	40			3	1,969	4				
48	HV	Distribution Transformer	Ground Mounted Transformer	No.	0	0	2	111	1,048	1,520	1,224	3	149	107	101	4	158	178	283	152	121	90	116	125	183	193	157	125	148	159	199	269	176			33	7,134	4				
49	HV	Distribution Transformer	Voltage regulators	No.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0			0	5	4	
50	HV	Distribution Substations	Ground Mounted Substation Housing	No.	0	1	2	165	1,414	2,101	1,103	80	102	54	60	69	60	51	51	39	41	15	28	30	55	71	72	49	32	67	106	126	70			111	6,225	3				
51	LV	LV Line	LV OH Conductor	km	0.089	0	0	2,401	232,271	1,349,276	86,559	104,763	4,603	5,365																												

Company Name	Vector
For Year Ended	31 March 2021
Network / Sub-network Name	Northern

SCHEDULE 9b: ASSET AGE PROFILE

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

8	Disclosure Year (year ended)		31 March 2021		Number of assets at disclosure year end by installation date																																				No. with age unknown	Items at end of year	No. with default dates	Data accuracy (1-4)
9	Voltage	Asset category	Asset class	Units	pre-1940	1940-1949	1950-1959	1960-1969	1970-1979	1980-1989	1990-1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025							
10	All	Overhead Line	Concrete poles / steel structure	No.	9	287	4,742	10,472	14,905	12,697	14,905	346	269	253	255	196	379	511	390	381	697	473	308	396	725	759	978	1,189	1,683	2,436	2,095	2,694	770			126	67,346	3						
11	All	Overhead Line	Wood poles	No.	4	8	121	191	365	480	368	17	13	47	17	7	41	54	50	19	37	85	1	19	17	21	14	8	3	4	10	12	6			26	2,065	2						
12	All	Overhead Line	Other pole types	No.	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	5	8	20	45	34	96	112	175	83			0	580	4					
13	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	1,607	1,615	24,106	73,039	125,686	71,603	1,520	0	0	0	0.001	0	0.793	3,934	1,359	0.003	8,080	0.802	1,618	0	0.015	0	0	0.623	0.107	0	0.477	0	0.000			0	317	4						
14	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	0	0	0	7,067	12,182	0	0	0	0	0	0	0	0	0	0	6,839	0	0	0	0	0.432	0	0	0	0.086	0	0	0	0	0	0		0	27	4					
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	0	0	0.190	0	19,153	9,361	22,845	7,729	0.308	0.787	0.903	1,871	2,791	6,692	17,528	7,059	21,906	2,079	3,452	0.622	2,885	0.514	1,916	3,490	3,575	4,232	1,996	1	1,233			0	146	4						
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	0	0	0	1,056	1,113	0	0	0	0	0	0	0	0	0	0	0.116	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	2	4						
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0.000	—	N/A					
18	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	0	0	0	0	0.589	0.091	0.342	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	1	4						
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	—	N/A						
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	—	N/A						
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	—	N/A						
22	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	—	N/A						
23	HV	Subtransmission Cable	Subtransmission submarine cable	km	0	0	0.429	0	0.158	0.308	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	1	4						
24	HV	Zone substation Buildings	Zone substations up to 66kV	No.	0	0	0	11	9	11	4	0	1	1	0	0	0	0	0	3	1	3	2	0	0	0	3	1	1	0	1	0	1	0		0	53	4						
25	HV	Zone substation Buildings	Zone substations 110kV+	No.	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	2	4						
26	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	—	N/A						
27	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	2	4						
28	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	—	N/A						
29	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	0	0	0	37	77	40	8	0	0	0	0	0	0	0	1	0	8	2	0	2	0	1	0	1	0	6	0	1	0	0		0	184	4						
30	HV	Zone substation switchgear	33kV RMU	No.	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	7	4						
31	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	0	0	0	0	0	0	0	0	0	0	0	0	4	6	0	10	6	3	6	0	17	0	0	29	9	13	9	0	9	5	0		0	126	4					
32	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	0	0	7	19	20	25	4	0	2	0	0	0	0	2	1	1	8	70	2	4	0	1	0	0	2	1	0	0	0	0		0	119	4						
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	0	0	7	26	72	79	28	0	0	0	0	0	0	0	0	0	13	45	15	34	11	24	17	11	27	38	14	15	0	6		0	520	4						
34	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	—	N/A						
35	HV	Zone Substation Transformer	Zone Substation Transformers	No.	0	0	2	16	18	18	8	0	1	1	0	1	0	1	0	2	0	6	0	3	1	1	1	4	1	3	0	0	3	1		0	91	4						
36	HV	Distribution Line	Distribution OH Open Wire Conductor	km	0.068	3,808	142,707	536,738	924,924	757,061	256,673	7,988	8,569	2,711	2,100	4,916	16,258	30,487	52,006	11,708	17,878	6,875	5,037	2,863	3,929	6,292	7,647	4,242	4,841	4,564	4,890	13	4,802		11	2,857	3							
37	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	—	N/A						
38	HV	Distribution Line	SWER conductor	km	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	—	N/A						
39	HV	Distribution Cable	Distribution UG XLPE or PVC	km	0	0.005	0.021	0.302	5.556	21.158	150.161	28.982	23.203	16.464	8.416	12.517	32.290	81.330	42.370	30.454	72.648	27.412	30.584	17.715	24.688	25.588	35.384	33.896	35.178	46.691	25.010	31	33.008		3	895	3							
40	HV	Distribution Cable	Distribution UG PILC	km	0	0	0.626	16.621	117.676	262.642	194.217	7.833	1.694	1.845	0.014	2.182	1.098	2.154	2.459	0.899	2.195	0.338	0.244	0.001	0.002	0.006	0.591	0.332	0	0.129	0.001	0	0.001		0	616	4							
41	HV	Distribution Cable	Distribution Submarine Cable	km	0	0	0.6004	0.142	0	0	0.426	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	7	4							
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionaliser	km	0	0	0	0	0	0	0.16	0	0	0	0	0	1	0	0	3	1	19	55	42	2	0	5	9	0	2	3	2	0	12	26	28		0	230	4				
43	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	1	1	0	6	0	2	0	1	0	1	7	13	6	14	3	1		0	59	3					
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	0	0	0	7	192	880	1,179	1,210	152	114	98	99	99	133	237	162	162	209	117	71	99	137	178	300	370	450	353	383	496	433		36	8,316	3						
45	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	0	0	0	10	35	120	185	41	26	40	25	28	33	22	17	8	18	23	13	21	19	23	9	14	12	5	11	14	3		5	780	3							
46	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	0	0	0	1	1	107	169	31	27	26	46	45	37	28	28	24	13	46	32	48	38	40	77	82	117	140	118	138	32		0	1,482	3							
47	HV	Distribution Transformer	Pole Mounted Transformer	No.	11	36	112	215	467	1,011	988	0	78	88	68	9	181	183	228	139	169	142	86	134	105	123	128	132	142	185	188	179	106		2	5,635	4							
48	HV	Distribution Transformer	Ground Mounted Transformer	No.	6	45	146	671	822	824	911	2	120	132	93	20	444	283	268	166	198	192	211	136	148	194	190	176	224	314	255	233	160		3	7,587	4							
49	HV	Distribution Transformer	Voltage regulators	No.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	2	1	0	0	0	0	0	0	0		0	7	4						
50	HV	Distribution Substations	Ground Mounted Substation Housing	No.	11	60	175	1,117	1,589	1,272	945	103	132	68	81	129	65	67	27	31	19	33	24	24	47	83	131	96	136	125	129	165	108		1	6,993	3							
51	LV	LV Line	LV OH Conductor	km	0	3,958	112,280	531,192	798,486	417,451	68,008	9,337	1,746	1,098	0.460	2.012	10.035	22.034	40.001	7,665	8,044	5,646	7,210	6,069	5,036	5,476	6,936	6,318	12,796	24,398	26,598	38	25,962		23	2,228	4							
52	LV	LV Cable	LV UG Cable	km	0.494	2,943	9,292	199,499	402,468	276,865	492,527	63,578	30,546	21,088	14,551	29,559	61,578	142,697	55,201	31,450	52,350	26,951	28,324	19,760																				

Company Name

For Year Ended

Network / Sub-network Name

Vector

31 March 2021

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)

11

> 66kV

12

50kV & 66kV

13

33kV

14

SWER (all SWER voltages)

15

22kV (other than SWER)

16

6.6kV to 11kV (inclusive—other than SWER)

17

Low voltage (< 1kV)

18

Total circuit length (for supply)

19

20

Dedicated street lighting circuit length (km)

21

Circuit in sensitive areas (conservation areas, iwi territory etc) (km)

22

23

Overhead circuit length by terrain (at year end)

24

Urban

25

Rural

26

Remote only

27

Rugged only

28

Remote and rugged

29

Unallocated overhead lines

30

Total overhead length

31

32

33

Length of circuit within 10km of coastline or geothermal areas (where known)

34

35

Overhead circuit requiring vegetation management

Overhead (km)

Underground (km)

Total circuit length (km)

27

49

75

-

-

-

365

441

806

-

-

-

2

172

174

3,736

3,759

7,495

4,154

6,439

10,593

8,284

10,860

19,144

18

461

479

4,559

Circuit length (km)

(% of total overhead length)

4,754

57%

3,530

43%

-

-

-

-

8,284

100%

Circuit length (km)

(% of total circuit length)

19,094

99.7%

Circuit length (km)

(% of total overhead length)

8,284

100%

Company Name

For Year Ended

Network / Sub-network Name

Vector

31 March 2021

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)

11

> 66kV

Overhead (km)

Underground (km)

Total circuit length (km)

12

50kV & 66kV

-

-

-

13

33kV

48

290

338

14

SWER (all SWER voltages)

-

-

-

15

22kV (other than SWER)

2

172

174

16

6.6kV to 11kV (inclusive—other than SWER)

879

2,242

3,121

17

Low voltage (< 1kV)

1,926

3,880

5,806

18

Total circuit length (for supply)

2,855

6,633

9,489

19

20

Dedicated street lighting circuit length (km)

5

259

264

21

Circuit in sensitive areas (conservation areas, iwi territory etc) (km)

2,406

22

23

Overhead circuit length by terrain (at year end)

24

Urban

Circuit length (km)

(% of total overhead length)

25

Rural

2,389

84%

26

Remote only

466

16%

27

Rugged only

-

28

Remote and rugged

-

29

Unallocated overhead lines

-

30

Total overhead length

2,855

100%

31

32

33

Length of circuit within 10km of coastline or geothermal areas (where known)

Circuit length (km)

(% of total circuit length)

34

9,479

99.9%

35

Overhead circuit requiring vegetation management

Circuit length (km)

(% of total overhead length)

2,855

100%

		Company Name	Vector
		For Year Ended	31 March 2021
		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	317	150 468
14	SWER (all SWER voltages)	–	– -
15	22kV (other than SWER)	–	– -
16	6.6kV to 11kV (inclusive—other than SWER)	2,857	1,517 4,374
17	Low voltage (< 1kV)	2,228	2,559 4,787
18	Total circuit length (for supply)	5,429	4,226 9,655
19			
20	Dedicated street lighting circuit length (km)	13	202 215
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)		2,153
22			
23	Overhead circuit length by terrain (at year end)	Circuit length (km)	(% of total overhead length)
24	Urban	2,365	44%
25	Rural	3,064	56%
26	Remote only	–	–
27	Rugged only	–	–
28	Remote and rugged	–	–
29	Unallocated overhead lines	–	–
30	Total overhead length	5,429	100%
31			
32		Circuit length (km)	(% of total circuit length)
33	Length of circuit within 10km of coastline or geothermal areas (where known)	9,615	99.58%
34		Circuit length (km)	(% of total overhead length)
35	Overhead circuit requiring vegetation management	5,429	100%

Company Name	Vector
For Year Ended	31 March 2021

SCHEDULE 9d: REPORT ON EMBEDDED NETWORKS

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

sch ref

	Location *	Number of ICPs served	Line charge revenue (\$000)
8			
9	None		
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			

* 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 2021

Network / Sub-network Name

Combined

SCHEDULE 9e: REPORT ON NETWORK DEMAND

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

sch ref

9e(i): Consumer Connections

Number of ICPs connected in year by consumer type

Consumer types defined by EDB*

Residential

Commercial

Number of
connections (ICPs)

8,545

5,309

* include additional rows if needed

Connections total

13,854

Distributed generation

Number of connections made in year

901

connections

Capacity of distributed generation installed in year

4.79

MVA

9e(ii): System Demand**Maximum coincident system demand**

GXP demand

1,715

plus Distributed generation output at HV and above

15

Maximum coincident system demand

1,730

less Net transfers to (from) other EDBs at HV and above

-

Demand on system for supply to consumers' connection points

1,730

Demand at time
of maximum
coincident
demand (MW)**Electricity volumes carried**

Electricity supplied from GXPs

8,395

less Electricity exports to GXPs

-

plus Electricity supplied from distributed generation

147

less Net electricity supplied to (from) other EDBs

-

Electricity entering system for supply to consumers' connection points

8,542

less Total energy delivered to ICPs

8,210

Electricity losses (loss ratio)

332

3.9%

Load factor

0.56

9e(iii): Transformer Capacity

(MVA)

Distribution transformer capacity (EDB owned)

4,682

Distribution transformer capacity (Non-EDB owned, estimated)

646

Total distribution transformer capacity

5,328

Zone substation transformer capacity

4,506

Company Name

Vector

For Year Ended

31 March 2021

Network / Sub-network Name

Southern

SCHEDULE 9e: REPORT ON NETWORK DEMAND

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

sch ref

9e(i): Consumer Connections

Number of ICPs connected in year by consumer type

Consumer types defined by EDB*

Residential

Commercial

Number of
connections (ICPs)

5,589

2,539

* include additional rows if needed

Connections total

8,128

Distributed generation

Number of connections made in year

479

connections

Capacity of distributed generation installed in year

2.51

MVA

9e(ii): System DemandDemand at time
of maximum
coincident
demand (MW)**Maximum coincident system demand**

GXP demand

1,100

plus Distributed generation output at HV and above

4

Maximum coincident system demand

1,104

less Net transfers to (from) other EDBs at HV and above

-

Demand on system for supply to consumers' connection points

1,104

Electricity volumes carried

Energy (GWh)

Electricity supplied from GXPs

5,601

less Electricity exports to GXPs

-

plus Electricity supplied from distributed generation

50

less Net electricity supplied to (from) other EDBs

-

Electricity entering system for supply to consumers' connection points

5,651

less Total energy delivered to ICPs

5,460

Electricity losses (loss ratio)

191

3.4%

Load factor

0.58

9e(iii): Transformer Capacity

(MVA)

Distribution transformer capacity (EDB owned)

2,965

Distribution transformer capacity (Non-EDB owned, estimated)

283

Total distribution transformer capacity

3,248

Zone substation transformer capacity

2,990

Company Name

Vector

For Year Ended

31 March 2021

Network / Sub-network Name

Northern

SCHEDULE 9e: REPORT ON NETWORK DEMAND

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

sch ref

9e(i): Consumer Connections

Number of ICPs connected in year by consumer type

Consumer types defined by EDB*

Residential

Number of
connections (ICPs)

2,956

Commercial

2,770

* include additional rows if needed

Connections total

5,726

Distributed generation

Number of connections made in year

422

connections

Capacity of distributed generation installed in year

2.28

MVA

9e(ii): System Demand**Maximum coincident system demand**

GXP demand

688

plus Distributed generation output at HV and above

11

Maximum coincident system demand

699

less Net transfers to (from) other EDBs at HV and above

-

Demand on system for supply to consumers' connection points

699

Demand at time
of maximum
coincident
demand (MW)**Electricity volumes carried**

Energy (GWh)

Electricity supplied from GXPs

2,793

less Electricity exports to GXPs

-

plus Electricity supplied from distributed generation

97

less Net electricity supplied to (from) other EDBs

-

Electricity entering system for supply to consumers' connection points

2,890

less Total energy delivered to ICPs

2,750

Electricity losses (loss ratio)

140

4.8%

Load factor

0.47

9e(iii): Transformer Capacity

(MVA)

Distribution transformer capacity (EDB owned)

1,717

Distribution transformer capacity (Non-EDB owned, estimated)

362

Total distribution transformer capacity

2,079

Zone substation transformer capacity

1,516

Company Name	Vector
For Year Ended	31 March 2021
Network / Sub-network Name	Combined

SCHEDULE 10: REPORT ON NETWORK RELIABILITY

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

sch ref

10(i): Interruptions

Interruptions by class

- Class A (planned interruptions by Transpower)
- Class B (planned interruptions on the network)
- Class C (unplanned interruptions on the network)
- 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

Number of interruptions
3
1,616
1,388
2
0
0
0
0
0
3,009

Interruption restoration

- Class C interruptions restored within

≤3Hrs	>3hrs
772	616

SAIFI and SAIDI by class

- Class A (planned interruptions by Transpower)
- Class B (planned interruptions on the network)
- Class C (unplanned interruptions on the network)
- 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

SAIFI	SAIDI
0.00	0.4
0.35	79.1
1.1	85.0
0.04	2.6
0.00	0.0
0.00	0.0
0.00	0.0
0.00	0.0
0.00	0.0
1.49	167.1

Normalised SAIFI and SAIDI

- Classes B & C (interruptions on the network)

Normalised SAIFI	Normalised SAIDI
1.45	164.1

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

Cause

- Lightning
- Vegetation
- Adverse weather
- Adverse environment
- Third party interference
- Wildlife
- Human error
- Defective equipment
- Cause unknown

SAIFI	SAIDI
0	0.1
0.18	16.4
0	0
0.02	1.5
0.21	18.8
0.07	3
0.03	0.8
0.41	34.9
0.18	9.5

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

Main equipment involved

- Subtransmission lines
- Subtransmission cables
- Subtransmission other
- Distribution lines (excluding LV)
- Distribution cables (excluding LV)
- Distribution other (excluding LV)

SAIFI	SAIDI
0.00	0.0
0.00	0.0
0.00	0.0
0.13	37.4
0.02	2.2
0.21	39.5

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

Main equipment involved

- Subtransmission lines
- Subtransmission cables
- Subtransmission other
- Distribution lines (excluding LV)
- Distribution cables (excluding LV)
- Distribution other (excluding LV)

SAIFI	SAIDI
0.14	5.5
0.02	1.4
0.03	0.7
0.54	45.4
0.15	10.9
0.22	21.1

10(v): Fault Rate

Main equipment involved

- Subtransmission lines
- Subtransmission cables
- Subtransmission other
- Distribution lines (excluding LV)
- Distribution cables (excluding LV)
- Distribution other (excluding LV)

Total

Number of Faults	Circuit length (km)
31	392
2	613
6	
830	3738
181	3808
338	
1,388	

Fault rate (faults per 100km)

7.92
0.33
22.20
4.75



		Company Name	Vector	
		For Year Ended	31 March 2021	
		Network / Sub-network Name	Southern	
SCHEDULE 10: REPORT ON NETWORK RELIABILITY				
This schedule requires a summary of the key measures of network reliability (interruptions, SAIDI, SAIFI and fault rate) for the disclosure year. EDBs must provide explanatory comment on their network reliability for the disclosure year in Schedule 14 (Explanatory notes to templates). The SAIFI and SAIDI information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.				
sch ref				
8	10(i): Interruptions			
9	Interruptions by class		Number of interruptions	
10	Class A (planned interruptions by Transpower)		1	
11	Class B (planned interruptions on the network)		866	
12	Class C (unplanned interruptions on the network)		498	
13	Class D (unplanned interruptions by Transpower)		1	
14	Class E (unplanned interruptions of EDB owned generation)		0	
15	Class F (unplanned interruptions of generation owned by others)		0	
16	Class G (unplanned interruptions caused by another disclosing entity)		0	
17	Class H (planned interruptions caused by another disclosing entity)		0	
18	Class I (interruptions caused by parties not included above)		0	
19	Total		1,366	
20				
21	Interruption restoration		≤3Hrs >3hrs	
22	Class C interruptions restored within		262 236	
23				
24	SAIFI and SAIDI by class		SAIFI SAIDI	
25	Class A (planned interruptions by Transpower)		0.00 0.0	
26	Class B (planned interruptions on the network)		0.31 56	
27	Class C (unplanned interruptions on the network)		0.83 64.5	
28	Class D (unplanned interruptions by Transpower)		0.03 1.2	
29	Class E (unplanned interruptions of EDB owned generation)		0.00 0.0	
30	Class F (unplanned interruptions of generation owned by others)		0.00 0.0	
31	Class G (unplanned interruptions caused by another disclosing entity)		0.00 0.0	
32	Class H (planned interruptions caused by another disclosing entity)		0.00 0.0	
33	Class I (interruptions caused by parties not included above)		0.00 0.0	
34	Total		1.17 121.7	
35				
36	Normalised SAIFI and SAIDI		Normalised SAIFI Normalised SAIDI	
37	Classes B & C (interruptions on the network)		1.14 120.6	
38				
39	10(ii): Class C Interruptions and Duration by Cause			
40				
41	Cause		SAIFI SAIDI	
42	Lightning		0.00 0.1	
43	Vegetation		0.09 8.5	
44	Adverse weather		0.00 0.0	
45	Adverse environment		0.01 0.6	
46	Third party interference		0.22 20.6	
47	Wildlife		0.04 2.4	
48	Human error		0.04 1.0	
49	Defective equipment		0.37 27.7	
50	Cause unknown		0.07 3.6	
51				
52	10(iii): Class B Interruptions and Duration by Main Equipment Involved			
53				
54	Main equipment involved		SAIFI SAIDI	
55	Subtransmission lines		0.00 0.0	
56	Subtransmission cables		0.00 0.0	
57	Subtransmission other		0.00 0.0	
58	Distribution lines (excluding LV)		0.12 29.9	
59	Distribution cables (excluding LV)		0.02 2.5	
60	Distribution other (excluding LV)		0.17 23.7	
61	10(iv): Class C Interruptions and Duration by Main Equipment Involved			
62				
63	Main equipment involved		SAIFI SAIDI	
64	Subtransmission lines		0.01 0	
65	Subtransmission cables		0.03 2.3	
66	Subtransmission other		0.02 0.4	
67	Distribution lines (excluding LV)		0.36 28.1	
68	Distribution cables (excluding LV)		0.17 12.3	
69	Distribution other (excluding LV)		0.24 21.5	
70	10(v): Fault Rate			
71	Main equipment involved		Number of Faults Circuit length (km)	
72	Subtransmission lines		2 48	
73	Subtransmission cables		1 462	
74	Subtransmission other		2	
75	Distribution lines (excluding LV)		223 881	
76	Distribution cables (excluding LV)		107 2,291	
77	Distribution other (excluding LV)		163	
78	Total		498	
			Fault rate (faults per 100km)	
			4.17	
			0.22	
			25.31	
			4.67	

Company Name	Vector
For Year Ended	31 March 2021
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

- Class A (planned interruptions by Transpower)
- Class B (planned interruptions on the network)
- Class C (unplanned interruptions on the network)
- 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

Number of interruptions
2
750
890
1
0
0
0
0
0
1,643

Interruption restoration

- Class C interruptions restored within

≤3Hrs	>3hrs
510	380

SAIFI and SAIDI by class

- Class A (planned interruptions by Transpower)
- Class B (planned interruptions on the network)
- Class C (unplanned interruptions on the network)
- 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

SAIFI	SAIDI
0.00	0.90
0.42	112.80
1.49	115.00
0.07	4.60
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
1.98	233.3

Normalised SAIFI and SAIDI

- Classes B & C (interruptions on the network)

Normalised SAIFI	Normalised SAIDI
1.91	227.8

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

Cause

- Lightning
- Vegetation
- Adverse weather
- Adverse environment
- Third party interference
- Wildlife
- Human error
- Defective equipment
- Cause unknown

SAIFI	SAIDI
0.00	0.3
0.32	27.9
0.00	0
0.03	2.8
0.21	16.2
0.10	3.9
0.02	0.4
0.47	45.4
0.34	18.1

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

Main equipment involved

- Subtransmission lines
- Subtransmission cables
- Subtransmission other
- Distribution lines (excluding LV)
- Distribution cables (excluding LV)
- Distribution other (excluding LV)

SAIFI	SAIDI
0.00	0.0
0.00	0.0
0.00	0.0
0.14	48.3
0.01	1.7
0.27	62.7

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

Main equipment involved

- Subtransmission lines
- Subtransmission cables
- Subtransmission other
- Distribution lines (excluding LV)
- Distribution cables (excluding LV)
- Distribution other (excluding LV)

SAIFI	SAIDI
0.34	13.5
0.01	0.2
0.04	1
0.81	70.8
0.11	9
0.17	20.5

10(v): Fault Rate

Main equipment involved

- Subtransmission lines
- Subtransmission cables
- Subtransmission other
- Distribution lines (excluding LV)
- Distribution cables (excluding LV)
- Distribution other (excluding LV)

Total

Number of Faults	Circuit length (km)
29	344
1	150
4	
607	2,857
74	1,517
175	
890	

Fault rate (faults per 100km)

8.44
0.67
21.25
4.88

