

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

Company Name
Disclosure Date
Disclosure Year (year ended)

 Vector

 29 October 2020

 31 March 2020

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

#### **Table of Contents**

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

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
- 40 Cabadula 40

		(	Company Name		Vector			
			For Year Ended	For Year Ended 31 March 2020				
T n ir	SCHEDULE 1: ANALYTICAL RATIOS his schedule calculates expenditure, revenue and service ratios from the information in the interpreted with care. The Commerce Commission will publish a summar information disclosed in accordance with this and other schedules, and information his information is part of audited disclosure information (as defined in section 1.	y and analysis of info on disclosed under th	rmation disclosed in the other requirement	n accordance with took of the determination	he ID determination ation.	n. This will include		
7	1(i): Expenditure metrics			ехрениците рег		Experiulture per IVIVA		
		Expenditure per	Expenditure per	MW maximum	F	of capacity from EDB-		
		GWh energy delivered to ICPs	average no. of ICPs	coincident system demand	Expenditure per km circuit length	owned distribution transformers		
8		(\$/GWh)	(\$/ICP)	(\$/MW)	(\$/km)	(\$/MVA)		
9	Operational expenditure	15,335	225	74,060	6,820	28,131		
9 10	Network	6,270	92	30,280	2,788	11,502		
11	Non-network	9,065	133	43,780	4,032	16,630		
12	NOTHERWORK	3,003	133	43,780	4,032	10,030		
13	Expenditure on assets	104,840	1,540	506,319	46,625	192,322		
14	Network	102,672	1,508	495,847	45,661	188,344		
15	Non-network	2,168	32	10,472	964	3,978		
16				,		· · · · · · · · · · · · · · · · · · ·		
17	1(ii): Revenue metrics							
	• •	Revenue per GWh	Revenue per					
		energy delivered	average no. of					
		to ICPs	ICPs					
18		(\$/GWh)	(\$/ICP)					
19	Total consumer line charge revenue	73,870	1,085					
20	Standard consumer line charge revenue	77,142	1,051					
21	Non-standard consumer line charge revenue	32,018	631,194					
22 23	1(iii): Service intensity measures							
24								
25	Demand density	92	Maximum coinci	dent system deman	d per km of circuit l	ength (for supply) (kW/		
26	Volume density	445	Total energy del	ivered to ICPs per kn	n of circuit length (f	or supply) (MWh/km)		
27	Connection point density	30						
28	Energy intensity	14,685	Total energy del	ivered to ICPs per av	erage number of IC	Ps (kWh/ICP)		
29								
30	1(iv): Composition of regulatory income							
31			(\$000)	% of revenue				
32	Operational expenditure		129,235	21.15%				
33	Pass-through and recoverable costs excluding financial incenti	ives and wash-ups	219,236	35.87%				
34	Total depreciation		113,475	18.57%				
35	Total revaluations		70,964	11.61%				
36	Regulatory tax allowance		43,510	7.12%				
37	Regulatory profit/(loss) including financial incentives and was	n-ups	173,285	28.35%				
38 39	Total regulatory income		611,169					
40	1(v): Reliability							
41 42	Interruption rate		19.67	Interruptions per	r 100 circuit km			
			23.07	122, 1 pc.				

5



Vector Company Name 31 March 2020 For Year Ended **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. ch ref 2(i): Return on Investment **Current Year CY** CY-2 CY-1 31 Mar 18 31 Mar 19 31 Mar 20 ROI – comparable to a post tax WACC % 10 Reflecting all revenue earned 4.90% 5.01% Excluding revenue earned from financial incentives 11 4.90% 5.34% 5.11% 5.41% 12 Excluding revenue earned from financial incentives and wash-ups 4.97% 5.18% 13 14 Mid-point estimate of post tax WACC 5.04% 4.75% 4.27% 15 25th percentile estimate 16 75th percentile estimate 5.72% 5.43% 4.95% 17 18 19 ROI – comparable to a vanilla WACC Reflecting all revenue earned 20 21 Excluding revenue earned from financial incentives 5.499 5.85% 5.54% 22 Excluding revenue earned from financial incentives and wash-ups 5.60% 23 24 WACC rate used to set regulatory price path 7 19% 7 19% 7 19% 25 26 Mid-point estimate of vanilla WACC 27 25th percentile estimate 4.929 4.58% 4.01% 75th percentile estimate 28 5.94% 29 2(ii): Information Supporting the ROI (\$000) 30 31 32 Total opening RAB value 3,075,471 33 plus Opening deferred tax (96.357 34 Opening RIV 2.979.114 35 36 Line charge revenue 622,531 37 38 Expenses cash outflow 348,471 39 add Assets commissioned 815.133 40 less Asset disposals 282,541 41 add Tax payments 36,444 42 Other regulated income (11,362 43 Mid-year net cash outflows 928.869 44 45 Term credit spread differential allowance 3,392 46 47 Total closing RAB value 3,564,758 48 less Adjustment resulting from asset allocation (794) 49 less Lost and found assets adjustment 50 plus Closing deferred tax (103,423 51 Closing RIV 3,462,129 52 53 ROI – comparable to a vanilla WACC 5.44% 54 55 Leverage (%) 42% 56 Cost of debt assumption (%) 3.61% 57 Corporate tax rate (%) 28% 58



5.01%

ROI – comparable to a post tax WACC

Company Name Vector 31 March 2020 For Year Ended **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. 2(iii): Information Supporting the Monthly ROI 61 62 Opening RIV 2,979,114 63 64 65 Line charge **Expenses cash** Assets Asset Other regulated Monthly net cash 66 revenue outflow commissioned disposals income outflows 67 April 47.839 28.889 9.589 1.815 (1.769)38.432 68 Mav 52 062 28 577 15 647 676 (628) 44 176 69 June 56,205 27,771 17,510 993 (942) 45,230 70 July 60.224 29,611 7.815 608 (583) 37,401 71 August 61,018 30,039 12,390 622 (608) 42,415 September 39,368 72 9,819 October 73 52,304 29,700 15,476 (871) 45,151 48,660 29,346 1,504 49,526 74 November 20,203 (1,481 48,194 27,567 21,502 789 49,025 75 December (745) 76 January 47.842 27.573 14.508 1.393 42.081 77 February 45 663 27 964 26.008 876 (866) 53 962 78 March 47 865 31 777 644 666 (946) 405 658 79 Total 348.471 815,133 282,541 (11,362 892,425 80 81 36,444 Tax payments 82 3,392 Term credit spread differential allowance 83 84 85 Closing RIV 3.462.129 86 87 88 Monthly ROI – comparable to a vanilla WACC 89 90 Monthly ROI – comparable to a post tax WACC 91 2(iv): Year-End ROI Rates for Comparison Purposes 92 93 94 Year-end ROI – comparable to a vanilla WACC 5.33% 95 96 Year-end ROI – comparable to a post tax WACC 4.91% 97 \* 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. 98 99 2(v): Financial Incentives and Wash-Ups 100 101 102 Net recoverable costs allowed under incremental rolling incentive scheme 103 Purchased assets – avoided transmission charge 104 Energy efficiency and demand incentive allowance 105 Quality incentive adjustment (4,449) Other financial incentives 106 (4,449) **Financial incentives** 107 108 Impact of financial incentives on ROI -0.10% 109 110 111 Input methodology claw-back 112 CPP application recoverable costs 113 Catastrophic event allowance Capex wash-up adjustment (2.775)114 Transmission asset wash-up adjustment 115 2013-15 NPV wash-up allowance 116 117 Reconsideration event allowance 118 Other wash-ups 119 (2,775) Wash-up costs 120 121 Impact of wash-up costs on ROI -0.06%



Company Name Vector 31 March 2020 For Year Ended **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. ch ref 3(i): Regulatory Profit Income Line charge revenue 622,531 10 Gains / (losses) on asset disposals (11,362 11 Other regulated income (other than gains / (losses) on asset disposals) 12 13 Total regulatory income 14 15 Operational expenditure 129,235 16 less Pass-through and recoverable costs excluding financial incentives and wash-ups 219.236 17 18 19 Operating surplus / (deficit) 262,698 21 Total depreciation 113,475 22 plus Total revaluations 70,964 23 25 Regulatory profit / (loss) before tax 220,187 26 27 less Term credit spread differential allowance 3,392 28 29 less Regulatory tax allowance 43,510 31 Regulatory profit/(loss) including financial incentives and wash-ups 173,285 32 3(ii): Pass-through and Recoverable Costs excluding Financial Incentives and Wash-Ups (\$000) 33 34 Pass through costs 35 Rates 7,885 36 Commerce Act levies 37 Industry levies 1.841 38 CPP specified pass through costs Recoverable costs excluding financial incentives and wash-ups 39 Electricity lines service charge payable to Transpower 40 195.877 41 Transpower new investment contract charges System operator services 43 Distributed generation allowance 966 44 Extended reserves allowance 45 Other recoverable costs excluding financial incentives and wash-ups Pass-through and recoverable costs excluding financial incentives and wash-ups 219,236 47 3(iii): Incremental Rolling Incentive Scheme 48 (\$000) 49 CY-1 CY 50 51 Allowed controllable opex 52 Actual controllable opex 53 Incremental change in year 54 55 Previous vears' Previous years incremental change adjusted 56 change for inflation CY-5 31 Mar 15 57 31 Mar 16 CY-4 59 CY-3 31 Mar 17 60 CY-2 31 Mar 18 61 CY-1 31 Mar 19 Net incremental rolling incentive scheme 62 64 Net recoverable costs allowed under incremental rolling incentive scheme 3(iv): Merger and Acquisition Expenditure 65 70 (\$000) 66 Merger and acquisition expenditure 67 Provide commentary on the benefits of merger and acquisition expenditure to the electricity distribution business, including required disclosures in accordance 68 with section 2.7, in Schedule 14 (Mandatory Explanatory Notes) 3(v): Other Disclosures 69 70 (\$000) 71 Self-insurance allowance



	4: REPORT ON VALUE OF THE REGULATORY ASSET BASE (ROLLED FO			or Year Ended	3	1 March 2020	
must provid	uires information on the calculation of the Regulatory Asset Base (RAB) value to the end of this disclosure year. Je explanatory comment on the value of their RAB in Schedule 14 (Mandatory Explanatory Notes). This informati			ction 1.4 of the ID	determination), and	so is subject to the	assurance repor
ection 2.8.							
4(i): Reg	gulatory Asset Base Value (Rolled Forward)	for year ended	RAB 31 Mar 16	RAB 31 Mar 17	RAB 31 Mar 18	RAB 31 Mar 19	RAB 31 Mar 20
1	Total opening RAB value		(\$000) 2,660,795	(\$000) 2,682,398	(\$000) 2,879,136	(\$000) 2,951,716	(\$000) 3,075,47
less 1	Total depreciation		94,495	96,289	108,316	108,729	113,47
	Total revaluations		11,077	57,761	31,561	44,091	70,96
	Assets commissioned		116,194	249,121	156,888	203,460	815,13
less I	Asset disposals		11,139	15,951	7,540	7,412	282,54
plus l	ost and found assets adjustment		-	-	-	-	
plus #	Adjustment resulting from asset allocation		(34)	2,095	(13)	(7,655)	(79
1	Total closing RAB value		2,682,398	2,879,136	2,951,716	3,075,471	3,564,75
a/!!\	allowed all Development Pro-						
4(II): Un	allocated Regulatory Asset Base			Unallocate		RAI	
1	Total opening RAB value			(\$000)	(\$000) 3,100,307	(\$000)	(\$000) 3,075,47
less	Adjustment to opening RAB value				(982)		
less	Total depreciation			-	118,389	Г	113,47
plus							
plus	otal revaluations				71,489		70,96
	Assets commissioned (other than below) Assets acquired from a regulated supplier			237,048		234,471	
,	Assets acquired from a related party Assets commissioned			580,662	817,710	580,662	815,13
less	Asset disposals (other than below)			13,145		11,951	
	Asset disposals to a regulated supplier						
,	Asset disposals to a related party Asset disposals			270,590	283,735	270,590	282,54
plus L	ost and found assets adjustment			Г	-		_
	Adjustment resulting from asset allocation			_		_	(79
	rajustinent resulting in our asset anotation					L	(/-
	total elector DAD value				3 596 400	г	2 564 75
1	Total closing RAB value  (located RAB' is the total value of those assets used wholly or partially to provide electricity distribution services w	vithout any allowance being made for	the allocation of costs	to services provided	3,586,400 d by the supplier that	t are not electricity	
* The 'una	Total closing RAB value  Ilocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we he RAB value represents the value of these assets after applying this cost allocation. Neither value includes work		the allocation of costs	to services provided		t are not electricity o	
* The 'una	llocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services w		the allocation of costs	to services provided		t are not electricity o	
† The 'una services. Ti	llocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services w		the allocation of costs	to services provided		t are not electricity of	
† The 'una services. Ti	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets ofter applying this cost allocation. Neither value includes work soliculation of Revaluation Rate and Revaluation of Assets  CPI4		the allocation of costs :	to services provided		t are not electricity of	distribution
† The 'una services. Ti	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we he RAB value represents the value of these assets after applying this cost allocation. Neither value includes work alculation of Revaluation Rate and Revaluation of Assets		the allocation of costs :	<b>T</b>		t are not electricity of	1,09
† The 'una services. Ti	llocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets after applying this cost allocation. Neither value includes work alculation of Revaluation Rate and Revaluation of Assets  CPI <sub>4</sub> CPI <sub>4</sub> CPI <sub>4</sub>		the allocation of costs (	Unallocate	d by the supplier than	RAI	1,05 1,02 2,54
† The 'una services. Ti	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets after applying this cost allocation. Neither value includes work soliculation of Revaluation Rate and Revaluation of Assets  CPI <sub>4</sub> CPI <sub>4</sub> Revaluation rate (%)  Total opening RAB value		the allocation of costs i	Unallocate (\$000) 3,100,307	d by the supplier than		1,05 1,02 2.54
† The 'una services. Ti	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets ofter applying this cost allocation. Neither value includes work solutions of Revaluation Rate and Revaluation of Assets  CPI <sub>4</sub> CPI <sub>4</sub> Revaluation rate (%)  Total opening RAB value  Adjustment to opening RAB value		the allocation of costs :	Unallocate (\$000)	d by the supplier than	RAI (\$000)	1,00 1,00 2,54
* The 'una services. To 4(iii): Ca	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets ofter applying this cost allocation. Neither value includes work allocation of Revaluation Rate and Revaluation of Assets  CPI <sub>4</sub> CPI <sub>4</sub> Revaluation rate (%)  Total opening RAB value Adjustment to opening RAB value Opening value of fully depreciated, disposed and lost assets		the allocation of costs :	Unallocate (\$000) 3,100,307 (982) 286,289	d by the supplier than	(\$000) 3,075,471 283,084	1,00 1,00 2,54
* The 'una services. Ti 4(iii): Ca less less	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets ofter applying this cost allocation. Neither value includes work solutions of Revaluation Rate and Revaluation of Assets  CPI <sub>4</sub> CPI <sub>4</sub> Revaluation rate (%)  Total opening RAB value  Adjustment to opening RAB value		the allocation of costs :	Unallocate (\$000) 3,100,307 (982)	d by the supplier than	(\$000) 3,075,471	1.05 1.07 1.02 2.54 3 (\$000)
* The 'una services. T. 4(iii): Ca less less	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets after applying this cost allocation. Neither value includes work soliculation of Revaluation Rate and Revaluation of Assets  CPI <sub>4</sub> CPI <sub>4</sub> Revaluation rate (%)  Total opening RAB value Adjustment to opening RAB value Opening value of fully depreciated, disposed and lost assets  Total opening RAB value subject to revaluation fotal revaluations		the allocation of costs :	Unallocate (\$000) 3,100,307 (982) 286,289	d by the supplier that  ed RAB *  (\$000)	(\$000) 3,075,471 283,084	1.05 1.07 1.02 2.54 3 (\$000)
* The 'una services. T. 4(iii): Ca less less	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets ofter applying this cost allocation. Neither value includes work accordance of the services were applying this cost allocation. Neither value includes work accordance of the services were applying this cost allocation. Neither value includes work accordance of the services were applying this cost allocation. Neither value includes work accordance of the services work and the services work and the services work and the services were accordance of the services when the serv		the allocation of costs:	Unallocate (\$000) 3,100,307 (982) 286,289	d by the supplier that d by the supplier that ed RAB * (\$000) 71,489	(\$000) 3,075,471 283,084	1,0; 1,0; 1,0,0 2,54
* The 'una * The 'una services. T. 4(iii): Ca less less	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets ofter applying this cost allocation. Neither value includes work accordance of the services were applying this cost allocation. Neither value includes work accordance of the services were applying this cost allocation. Neither value includes work accordance of the services were and the services work accordance of the services work and the services were allocation of the services work and the services were allocation of the services were allocation and the services were allocation of the services when the services were allocation of the services were allocation of the services when the services were services were services when the services were services		the allocation of costs:	Unallocat (\$000) 3,100,307 (982) 286,289 2,813,036	ed RAB * (\$000) 71,489	(\$000) 3,075,471 283,084	1,01 1,01 1,02 1,03 1,03 2,54 3 (\$000)
less less less less less less	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets ofter applying this cost allocation. Neither value includes work according to the search of the services work according to the search of the		the allocation of costs:	Unallocate (\$000) 3,100,307 (982) 286,289 2,813,036 Unallocated v constru	ed RAB * (\$000) 71,489	(\$000) 3,075,471 283,084 2,792,387 Allocated works ur	1,01 1,01 1,02 1,03 1,00 1,00 1,00 1,00 1,00 1,00 1,00
I The 'una de l'est est est est est est est est est est	Illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets ofter applying this cost allocation. Neither value includes work according to the search of the provide electricity distribution services were according to the provide electricity distribution services work according to the provide electricity distribution services work according to the provide electricity distribution services work according to the provide electricity distribution of Assets  CPI4		the allocation of costs	Unallocated v constru	ed RAB * (\$000) 71,489	(\$000) 3,075,471 283,084 2,792,387  Allocated works un 2,312 805,765 815,133	1,01 1,01 1,02 1,03 1,03 2,54 3 (\$000)
less less plus plus plus plus plus plus plus pl	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets ofter applying this cost allocation. Neither value includes work addition of Revaluation Rate and Revaluation of Assets  CPI <sub>4</sub> CPI <sub>4</sub> Total opening RAB value Adjustment to opening RAB value Opening value of fully depreciated, disposed and lost assets  Total opening RAB value subject to revaluation footal revaluations  DII Forward of Works Under Construction  Works under construction—preceding disclosure year Adjustment to Works under construction—preceding disclosure year Capital expenditure		the allocation of costs:	Unallocated (5000) 3,100,307 (982) 286,289 2,813,036  Unallocated v constructions (5,954) 8,954 888,041	ed RAB * (\$000) 71,489	RAI (\$000) 3,075,471 283,084 2,792,387 Allocated works un	1,01 1,01 1,02 1,03 1,03 2,54 3 (\$000) 70,90 der constructio 45,21
less less plus plus plus plus plus plus plus pl	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets ofter applying this cost allocation. Neither value includes work according to the search of the provide electricity distribution services were according to the provide electricity distribution services work according to the provide electricity distribution services work according to the provide electricity distribution services work according to the provide electricity distribution of Assets  CPI4 CPI4 Revaluation rate (%)  Total opening RAB value Adjustment to opening RAB value subject to revaluation otal revaluations  DIF Forward of Works Under Construction  Norks under construction—preceding disclosure year Adjustment to Works under construction—preceding disclosure year Capital expenditure Assets commissioned Adjustment resulting from asset allocation  Norks under construction—current disclosure year		the allocation of costs:	Unallocated (5000) 3,100,307 (982) 286,289 2,813,036  Unallocated v constructions (5,954) 8,954 888,041	ed RAB * (\$000)  71,489  works under action 38,570	(\$000) 3,075,471 283,084 2,792,387  Allocated works un 2,312 805,765 815,133	1,01 1,0,0 1,0,0 2,54 3 (\$000) 70,94 der constructic 45,2
less less plus plus plus plus plus plus plus pl	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets ofter applying this cost allocation. Neither value includes work according to the representation of the representati		the allocation of costs:	Unallocated (5000) 3,100,307 (982) 286,289 2,813,036  Unallocated v constructions (5,954) 8,954 888,041	ed RAB * (\$000)  71,489  works under action 38,570	(\$000) 3,075,471 283,084 2,792,387  Allocated works un 2,312 805,765 815,133	1,01 1,0,0 1,0,0 2,54 3 (\$000) 70,94 der constructic 45,2
less less plus plus less sess	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets ofter applying this cost allocation. Neither value includes work according to the search of the provide electricity distribution services were according to the provide electricity distribution services work according to the provide electricity distribution services work according to the provide electricity distribution services work according to the provide electricity distribution of Assets  CPI4 CPI4 Revaluation rate (%)  Total opening RAB value Adjustment to opening RAB value subject to revaluation otal revaluations  DIF Forward of Works Under Construction  Norks under construction—preceding disclosure year Adjustment to Works under construction—preceding disclosure year Capital expenditure Assets commissioned Adjustment resulting from asset allocation  Norks under construction—current disclosure year		the allocation of costs:	Unallocated (\$000) 3,100,307 (982) 286,289  2,813,036  Unallocated v constructions (\$0,954) 8,954 808,041 817,710	ed RAB * (\$000)  71,489  works under action 38,570  37,855	(\$000) 3,075,471 283,084 2,792,387 Allocated works un 2,312 805,765 815,133 820	1.0: 1.0: 1.0: 1.0: 1.0: 1.0: 1.0: 1.0:
less less plus plus less sess	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets after applying this cost allocation. Neither value includes work advanced by the season of the provide electricity distribution services were salculation of Revaluation Rate and Revaluation of Assets  CPI <sub>4</sub> CPI <sub>4</sub> Total opening RAB value Adjustment to opening RAB value Opening value of fully depreciated, disposed and lost assets  Total opening RAB value subject to revaluation rotal revaluations  Potal revaluations  DIF Forward of Works Under Construction  Works under construction—preceding disclosure year Adjustment to Works under construction—preceding disclosure year Assets commissioned Adjustment resulting from asset allocation  Works under construction - current disclosure year  Highest rate of capitalised finance applied		the allocation of costs:	Unallocated (5000) 3,100,307 (982) 286,289 2,813,036  Unallocated v constructions (5,954) 8,954 888,041	ed RAB * (\$000)  71,489  works under action 38,570  37,855	(\$000) 3,075,471 283,084 2,792,387  Allocated works un 2,312 805,765 815,133	1,0: 1,0: 1,0: 2,54 3 (\$000)  70,96 45,2: 37,35
less less plus less sess sess	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets ofter applying this cost allocation. Neither value includes work allocation of Revaluation Rate and Revaluation of Assets  CPI4 CPI4 CPI4 Total opening RAB value Adjustment to opening RAB value Opening value of fully depreciated, disposed and lost assets  Total opening RAB value subject to revaluation otal revaluations  DIF Forward of Works Under Construction  Works under construction—preceding disclosure year Adjustment to Works under construction—preceding disclosure year Adjustment to Works under construction—preceding disclosure year Adjustment resulting from asset allocation Works under construction - current disclosure year Highest rate of capitalised finance applied  gulatory Depreciation  Depreciation - standard		the allocation of costs :	Unallocate (\$000) 3,100,307 3,100,307 (982) 2,86,289  2,813,036  Unallocated v construction (\$000) 8,954 808,041 817,710  Unallocate (\$000) 7,8,613	ed RAB * (\$000)  71,489  works under cttion 38,570  37,855	(\$000) 3,075,471 283,084 2,792,387 Allocated works un 2,312 805,765 815,133 820	1,01 1,01 1,01 1,02 2,54 3 (\$000) 45,21 37,33 5,09
less less plus plus less sess	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets ofter applying this cost allocation. Neither value includes works alculation of Revaluation Rate and Revaluation of Assets  CPI <sub>4</sub> CPI <sub>4</sub> CPI <sub>4</sub> Revaluation rate (%)  Total opening RAB value Adjustment to opening RAB value Opening value of fully depreciated, disposed and lost assets  Total opening RAB value subject to revaluation fotal revaluations  DIFFORWARD of Works Under Construction  Works under construction—preceding disclosure year Adjustment to Works under construction—preceding disclosure year Capital expenditure Assets commissioned Adjustment resulting from asset allocation Works under construction - urrent disclosure year Highest rate of capitalised finance applied  guilatory Depreciation  Depreciation - standard Depreciation - no standard life assets Depreciation - no standard life assets Depreciation - not and and life assets		the allocation of costs	Unallocated v constructions (5000)  3,100,307 (982) 286,289  2,813,036  Unallocated v constructions (5000)  Unallocated v constructions (5000)  Unallocated (5000)	ed RAB * (\$000)  71,489  works under cttion 38,570  37,855	(\$000) 3,075,471 283,084 2,792,387  Allocated works un 2,312 805,765 815,133 820  RAI (\$000) 78,613	1,01 1,02 1,02 1,02 2,54 3 (\$000) 70,96 der constructio 45,21 37,35 5,09
less less less plus less sess v. V. V. Re	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets after applying this cost allocation. Neither value includes work addition of Revaluation Rate and Revaluation of Assets  CPI <sub>4</sub> CPI <sub>4</sub> Revaluation rate (%)  Total opening RAB value Adjustment to opening RAB value Opening value of fully depreciated, disposed and lost assets  Total opening RAB value subject to revaluation rotal revaluations  Total revaluations  DIF Forward of Works Under Construction  Works under construction—preceding disclosure year Adjustment to Works under construction—preceding disclosure year Capital expenditure Assets commissioned Adjustment resulting from asset allocation  Works under construction - current disclosure year Highest rate of capitalised finance applied  gulatory Depreciation  Depreciation - standard Depreciation - no standard life assets		the allocation of costs	Unallocate (\$000) 3,100,307 3,100,307 (982) 2,86,289  2,813,036  Unallocated v construction (\$000) 8,954 808,041 817,710  Unallocate (\$000) 7,8,613	ed RAB * (\$000)  71,489  works under cttion 38,570  37,855	(\$000) 3,075,471 283,084 2,792,387  Allocated works un 2,312 805,765 815,133 820  RAI (\$000) 78,613	1.00 1.00 1.00 2.54 3 (\$000) 45,2: 45,2: 37,33 5.09
less less less less state of the state of th	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets ofter applying this cost allocation. Neither value includes work and contains the representation of Revaluation Rate and Revaluation of Assets  CPI <sub>4</sub> CPI <sub>4</sub> CPI <sub>4</sub> CPI <sub>4</sub> CPI <sub>6</sub> CPI <sub>6</sub> CPI <sub>6</sub> CPI <sub>6</sub> CPI <sub>7</sub> CPI <sub>8</sub> CPI		the allocation of costs	Unallocated v (5000)  3,100,307 (982) 286,289  2,813,036  Unallocated v construction (5000)  Unallocated v construction (5000)  78,613 39,776	ed RAB * (\$000)  71,489  works under extion 38,570 37,855	(\$000) 3,075,471 283,084 2,792,387  Allocated works un 2,312 805,765 815,133 820  RAA (\$000) 78,613 34,862	1.00 1.00 1.00 2.54 3 (\$000) 45,2: 45,2: 37,33 5.09
less less less less less less less less	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets ofter applying this cost allocation. Neither value includes work and contains the value includes wor		the allocation of costs :	Unallocated v (5000)  3,100,307 (982) 286,289  2,813,036  Unallocated v construction (5000)  Unallocated v construction (5000)  78,613 39,776	ed RAB * (\$000)  71,489  works under action 38,570 37,855  ed RAB * (\$000)	(\$000) 3,075,471 283,084 2,792,387  Allocated works un 2,312 805,765 815,133 820 78,613 34,862	1.000 1.000 2.54 3 (\$000) 45.21 45.21 37,35 5.09
less less less less less less less less	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets ofter applying this cost allocation. Neither value includes work and contains the representation of Revaluation Rate and Revaluation of Assets  CPI <sub>4</sub> CPI <sub>4</sub> CPI <sub>4</sub> CPI <sub>4</sub> CPI <sub>6</sub> CPI <sub>6</sub> CPI <sub>6</sub> CPI <sub>6</sub> CPI <sub>7</sub> CPI <sub>8</sub> CPI		the allocation of costs	Unallocated v (5000)  3,100,307 (982) 286,289  2,813,036  Unallocated v construction (5000)  Unallocated v construction (5000)  78,613 39,776	ed RAB * (\$000)  71,489  works under section 38,570  37,855  ed RAB * (\$000)	(\$000) 3,075,471 283,084 2,792,387  Allocated works un 2,312 805,765 815,133 820 78,613 34,862  ciffed) Closing RAB value under 'non-	1.050 1.050 1.050 2.54 3 (\$000)  der construction 45,23 3.7,35 5.09 3 (\$000)
less less less less less less less less	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets ofter applying this cost allocation. Neither value includes work and contains the representation of Revaluation Rate and Revaluation of Assets  CPI <sub>4</sub> CPI <sub>4</sub> CPI <sub>4</sub> CPI <sub>4</sub> CPI <sub>6</sub> CPI <sub>6</sub> CPI <sub>6</sub> CPI <sub>6</sub> CPI <sub>7</sub> CPI <sub>8</sub> CPI			Unallocated v (\$000)  3,100,307 (982) 286,289  2,813,036  Unallocated v construction (\$000)  78,613 39,776  (\$000 unallocated (\$000)	ed RAB * (\$000)  71,489  works under attion 38,570  37,855  ed RAB * (\$000)	(\$000) 3,075,471 283,084 2,792,387  Allocated works un 2,312 805,765 815,133 820 78,613 34,862  ciffed) Closing RAB value under 'non-	1.05 1.07 1.07 1.08 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1.09
less less less less less less less less	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets ofter applying this cost allocation. Neither value includes works alculation of Revaluation Rate and Revaluation of Assets  CPI <sub>4</sub> CPI <sub>4</sub> CPI <sub>4</sub> Revaluation rate (%)  Total opening RAB value Adjustment to opening RAB value Opening value of fully depreciated, disposed and lost assets Total opening RAB value subject to revaluation fotal revaluations  DIFForward of Works Under Construction  Works under construction—preceding disclosure year Adjustment to Works under construction—preceding disclosure year Capital expenditure Assets commissioned Adjustment resulting from asset allocation Works under construction - urrent disclosure year Highest rate of capitalised finance applied  gulatory Depreciation  Depreciation - standard Depreciation - standard Depreciation - not and del lie assets Depreciation - alternative depreciation in accordance with CPP Total depreciation  isclosure of Changes to Depreciation Profiles	under construction.		Unallocated v (\$000)  3,100,307 (982) 286,289  2,813,036  Unallocated v construction (\$000)  78,613 39,776  (\$000 unallocated (\$000)	ed RAB * (\$000)  71,489  works under cution 38,570  37,855  ed RAB * (\$000)	(\$000) 3,075,471 283,084 2,792,387 Allocated works un 2,312 805,765, 815,133 820  RAI (\$000) 78,613 34,862  Closing RAB value under 'non-standard'	1.05 1.07 1.07 1.08 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1.09
less less less less less less less less	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets ofter applying this cost allocation. Neither value includes works alculation of Revaluation Rate and Revaluation of Assets  CPI <sub>4</sub> CPI <sub>4</sub> CPI <sub>4</sub> Revaluation rate (%)  Total opening RAB value Adjustment to opening RAB value Opening value of fully depreciated, disposed and lost assets Total opening RAB value subject to revaluation fotal revaluations  DIFForward of Works Under Construction  Works under construction—preceding disclosure year Adjustment to Works under construction—preceding disclosure year Capital expenditure Assets commissioned Adjustment resulting from asset allocation Works under construction - urrent disclosure year Highest rate of capitalised finance applied  gulatory Depreciation  Depreciation - standard Depreciation - standard Depreciation - not and del lie assets Depreciation - alternative depreciation in accordance with CPP Total depreciation  isclosure of Changes to Depreciation Profiles	under construction.		Unallocated v (\$000)  3,100,307 (982) 286,289  2,813,036  Unallocated v construction (\$000)  78,613 39,776  (\$000 unallocated (\$000)	ed RAB * (\$000)  71,489  works under cution 38,570  37,855  ed RAB * (\$000)	(\$000) 3,075,471 283,084 2,792,387 Allocated works un 2,312 805,765, 815,133 820  RAI (\$000) 78,613 34,862  Closing RAB value under 'non-standard'	1.05 1.07 1.07 1.08 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1.09
less less less less (4(iii): Rd (4(iv): Rd (4(v): Re (4(	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets ofter applying this cost allocation. Neither value includes works alculation of Revaluation Rate and Revaluation of Assets  CPI <sub>4</sub> CPI <sub>4</sub> CPI <sub>4</sub> Revaluation rate (%)  Total opening RAB value Adjustment to opening RAB value Opening value of fully depreciated, disposed and lost assets Total opening RAB value subject to revaluation fotal revaluations  DIFForward of Works Under Construction  Works under construction—preceding disclosure year Adjustment to Works under construction—preceding disclosure year Capital expenditure Assets commissioned Adjustment resulting from asset allocation Works under construction - urrent disclosure year Highest rate of capitalised finance applied  gulatory Depreciation  Depreciation - standard Depreciation - standard Depreciation - not and del lie assets Depreciation - alternative depreciation in accordance with CPP Total depreciation  isclosure of Changes to Depreciation Profiles	under construction.		Unallocated v (\$000)  3,100,307 (982) 286,289  2,813,036  Unallocated v construction (\$000)  78,613 39,776  (\$000 unallocated (\$000)	ed RAB * (\$000)  71,489  works under cution 38,570  37,855  ed RAB * (\$000)	(\$000) 3,075,471 283,084 2,792,387 Allocated works un 2,312 805,765, 815,133 820  RAI (\$000) 78,613 34,862  Closing RAB value under 'non-standard'	1,05 1,02 2,54: 3 (\$000) 70,96 der construction 45,27 37,39 5,09:
less less less less (4(iii): Rd (4(iv): Rd (4(v): Re (4(	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets ofter applying this cost allocation. Neither value includes works alculation of Revaluation Rate and Revaluation of Assets  CPI <sub>4</sub> CPI <sub>4</sub> CPI <sub>4</sub> Revaluation rate (%)  Total opening RAB value Adjustment to opening RAB value Opening value of fully depreciated, disposed and lost assets Total opening RAB value subject to revaluation fotal revaluations  DIFForward of Works Under Construction  Works under construction—preceding disclosure year Adjustment to Works under construction—preceding disclosure year Capital expenditure Assets commissioned Adjustment resulting from asset allocation Works under construction - urrent disclosure year Highest rate of capitalised finance applied  gulatory Depreciation  Depreciation - standard Depreciation - standard Depreciation - not and del lie assets Depreciation - alternative depreciation in accordance with CPP Total depreciation  isclosure of Changes to Depreciation Profiles	under construction.		Unallocated v (\$000)  3,100,307 (982) 286,289  2,813,036  Unallocated v construction (\$000)  78,613 39,776  (\$000 unallocated (\$000)	ed RAB * (\$000)  71,489  works under cution 38,570  37,855  ed RAB * (\$000)	(\$000) 3,075,471 283,084 2,792,387 Allocated works un 2,312 805,765, 815,133 820  RAI (\$000) 78,613 34,862  Closing RAB value under 'non-standard'	1,05 1,02 1,03 1,02 2,543 3 (\$000) 45,27 37,39 5,099
less less less less less less less less	illocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services we RAB value represents the value of these assets ofter applying this cost allocation. Neither value includes works alculation of Revaluation Rate and Revaluation of Assets  CPI <sub>4</sub> CPI <sub>4</sub> CPI <sub>4</sub> Revaluation rate (%)  Total opening RAB value Adjustment to opening RAB value Opening value of fully depreciated, disposed and lost assets Total opening RAB value subject to revaluation fotal revaluations  DIFForward of Works Under Construction  Works under construction—preceding disclosure year Adjustment to Works under construction—preceding disclosure year Capital expenditure Assets commissioned Adjustment resulting from asset allocation Works under construction - urrent disclosure year Highest rate of capitalised finance applied  gulatory Depreciation  Depreciation - standard Depreciation - standard Depreciation - not and del lie assets Depreciation - alternative depreciation in accordance with CPP Total depreciation  isclosure of Changes to Depreciation Profiles	under construction.		Unallocated v (\$000)  3,100,307 (982) 286,289  2,813,036  Unallocated v construction (\$000)  78,613 39,776  (\$000 unallocated (\$000)	ed RAB * (\$000)  71,489  works under cution 38,570  37,855  ed RAB * (\$000)	(\$000) 3,075,471 283,084 2,792,387 Allocated works un 2,312 805,765, 815,133 820  RAI (\$000) 78,613 34,862  Closing RAB value under 'non-standard'	1,05 1,02 1,03 1,02 2,543 3 (\$000) 45,27 37,39 5,099



Th ED	CHEDULE 4: REPORT ON VALUE OF THE R is schedule requires information on the calculation of the Regulate Bs must provide explanatory comment on the value of their RAB in section 2.8.	ory Asset Base (RAB)	value to the end of	this disclosure year.	This informs the RO		edule 2.	Company Name For Year Ended section 1.4 of the ID		Vector 31 March 2020 d so is subject to the	
sch rej	f										
103	Total opening RAB value	74,690	361,251	278,120	331,855	802,376	280,143	209,450	679,239	58,347	3,075,471
104	less Total depreciation	2,162	9,638	10,685	10,035	26,788	9,519	8,765	21,335	14,548	113,475
05	plus Total revaluations	1,893	6,319	6,960	8,487	20,243	7,061	5,204	13,471	1,326	70,964
06	plus Assets commissioned	-	275,134	24,718	48,943	15,489	17,485	42,454	363,564	27,346	815,133
07	less Asset disposals	46	111,648	3,347	2,094	1,412	1,410	4,097	146,669	11,818	282,541
08	plus Lost and found assets adjustment	-	-	-	-	-	_	-	-	-	-
109	plus Adjustment resulting from asset allocation	-	-	_	-	_	_	_	_	(794)	(794)
110	plus Asset category transfers	101	(334)	(4)	2,153	(1,970)	(5)	31	28	-	-
111	Total closing RAB value	74,476	521,084	295,762	379,309	807,938	293,755	244,277	888,298	59,859	3,564,758
112 113	Asset Life										
114	Weighted average remaining asset life	43	47	33	43	38	35	29	32	12	(years)
115	Weighted average expected total asset life	59	72	42	58	60	45	36	41	16	(years)



Company Name Vector For Year Ended 31 March 2020 **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 sch rei 5a(i): Regulatory Tax Allowance 220,187 8 Regulatory profit / (loss) before tax 9 10 Income not included in regulatory profit / (loss) before tax but taxable plus Expenditure or loss in regulatory profit / (loss) before tax but not deductible 8.907 11 12 Amortisation of initial differences in asset values 34,251 13 Amortisation of revaluations 12,711 55,869 14 15 16 less Total revaluations 70,964 Income included in regulatory profit / (loss) before tax but not taxable 17 18 Discretionary discounts and customer rebates 19 Expenditure or loss deductible but not in regulatory profit / (loss) before tax 1,992 20 Notional deductible interest 47.707 21 120,664 22 155,392 23 Regulatory taxable income 24 25 Utilised tax losses 26 155,392 Regulatory net taxable income 27 28 Corporate tax rate (%) 43,510 29 Regulatory tax allowance 30 \* Workings to be provided in Schedule 14 31 5a(ii): Disclosure of Permanent Differences 32 In Schedule 14, Box 5, provide descriptions and workings of items recorded in the asterisked categories in Schedule 5a(i). 33 34 5a(iii): Amortisation of Initial Difference in Asset Values (\$000) 35 1.027.534 36 Opening unamortised initial differences in asset values 37 less Amortisation of initial differences in asset values 34,251 38 Adjustment for unamortised initial differences in assets acquired plus 39 less Adjustment for unamortised initial differences in assets disposed 64.714 40 Closing unamortised initial differences in asset values 928,569 41 42 Opening weighted average remaining useful life of relevant assets (years) 30



Company Name **Vector** For Year Ended 31 March 2020 **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 ch re (\$000) 5a(iv): Amortisation of Revaluations 45 46 Opening sum of RAB values without revaluations 2,792,726 47 48 Adjusted depreciation 100,764 49 Total depreciation 113,475 50 Amortisation of revaluations 12,711 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** 5a(vi): Calculation of Deferred Tax Balance (\$000) 58 59 60 Opening deferred tax (96,357) 61 plus 62 Tax effect of adjusted depreciation 28,214 63 32,736 Tax effect of tax depreciation 64 less 65 66 Tax effect of other temporary differences\* 750 plus 67 Tax effect of amortisation of initial differences in asset values 9,590 68 less 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 (7,042)73 74 plus Deferred tax cost allocation adjustment (745) 75 76 Closing deferred tax (103.423) 77 5a(vii): Disclosure of Temporary Differences 78 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 79 80 5a(viii): Regulatory Tax Asset Base Roll-Forward 81 82 (\$000) Opening sum of regulatory tax asset values 1,304,575 83 84 less Tax depreciation 116,915 85 Regulatory tax asset value of assets commissioned 248,839 plus 173.733 86 less Regulatory tax asset value of asset disposals 87 Lost and found assets adjustment plus 88 plus Adjustment resulting from asset allocation (3,456 89 plus Other adjustments to the RAB tax value 90 Closing sum of regulatory tax asset values 1,259,310



	Company Name	Vector
	For Year Ended	31 March 2020
	PARTY TRANSACTIONS  d party transactions, in accordance with clause 2.3.6  defined in clause 1.4 of the ID determination), and so	
ummary—Related Party Transa	ctions	(\$000)
Total regulatory income		,
		·
Market value of asset disposals		
Service interruptions and emergencies		_
Vegetation management		9,750
Routine and corrective maintenance and	inspection	_
Asset replacement and renewal (opex)		
Network opex		
Business support		
System operations and network support		5,452
Operational expenditure		
Consumer connection		- E78.00E
System growth Asset replacement and renewal (capex)		578,985 1,493
Asset replacement and renewal (capex)		1,495
Quality of supply		_
Legislative and regulatory		_
Other reliability, safety and environmen	t	366
Expenditure on non-network assets		
Expenditure on assets		
Cost of financing		
Value of capital contributions		
Value of vested assets		
Capital Expenditure		
Total expenditure		l
Other related party transactions		
Total Opex and Capex Related F	Party Transactions  Nature of opex or capex service  provided	
Name of related party		
PowerSmart NZ Limited	Other reliability, safety and environment	
PowerSmart NZ Limited PowerSmart NZ Limited	System growth	
PowerSmart NZ Limited PowerSmart NZ Limited Vector Communications Limited	System growth Asset replacement and renewal (capex)	
PowerSmart NZ Limited PowerSmart NZ Limited Vector Communications Limited Vector Communications Limited	System growth Asset replacement and renewal (capex) System growth	
PowerSmart NZ Limited PowerSmart NZ Limited Vector Communications Limited Vector Communications Limited Vector Communications Limited	System growth  Asset replacement and renewal (capex)  System growth  Other reliability, safety and environment	
PowerSmart NZ Limited PowerSmart NZ Limited Vector Communications Limited	System growth Asset replacement and renewal (capex) System growth Other reliability, safety and environment System operations and network support	
PowerSmart NZ Limited PowerSmart NZ Limited Vector Communications Limited Vector Communications Limited Vector Communications Limited Vector Communications Limited Tree Scape Limited	System growth Asset replacement and renewal (capex) System growth Other reliability, safety and environment System operations and network support Vegetation management	
PowerSmart NZ Limited PowerSmart NZ Limited Vector Communications Limited Tree Scape Limited Tree Scape Limited	System growth Asset replacement and renewal (capex) System growth Other reliability, safety and environment System operations and network support Vegetation management Asset replacement and renewal (capex)	
PowerSmart NZ Limited PowerSmart NZ Limited Vector Communications Limited Tree Scape Limited Tree Scape Limited Tree Scape Limited	System growth  Asset replacement and renewal (capex)  System growth  Other reliability, safety and environment  System operations and network support  Vegetation management  Asset replacement and renewal (capex)  Other reliability, safety and environment	
PowerSmart NZ Limited PowerSmart NZ Limited Vector Communications Limited Vector Communications Limited Vector Communications Limited Vector Communications Limited Tree Scape Limited Tree Scape Limited Tree Scape Limited Tree Scape Limited Vector Auckland Property Limited	System growth  Asset replacement and renewal (capex)  System growth  Other reliability, safety and environment  System operations and network support  Vegetation management  Asset replacement and renewal (capex)  Other reliability, safety and environment  System growth	
PowerSmart NZ Limited PowerSmart NZ Limited Vector Communications Limited Tree Scape Limited Tree Scape Limited Tree Scape Limited	System growth  Asset replacement and renewal (capex)  System growth  Other reliability, safety and environment  System operations and network support  Vegetation management  Asset replacement and renewal (capex)  Other reliability, safety and environment	



Company Name Vector
For Year Ended 31 March 2020

## 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.

7 8

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

						Book value at date		
			Original tenor (in		Book value at	of financial	Term Credit	Debt issue cost
Issuing party	Issue date	Pricing date	years)	Coupon rate (%)	issue date (NZD)	statements (NZD)	Spread Difference	readjustment
[]VCI	15-Mar-17	23-Dec-16	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				
Subtotal of bank facilities- variable rate						393,819		
Capital bonds – fixed rate	15-Jun-17	14-Jun-17	5	5.7	307,205	306,192	[]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	243,859	[]VCI	[]VCI
Senior notes - 2004 USPP 15yr	16-Sep-04	19-Jul-04	15	5.75	296,623		[]VCI	[]VCI
Senior notes - 2010 USPP 12yr	22-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					1,112,939	1,220,546	[]vcı	[]vcı
Floating rate notes- variable rate	26-Oct-05	26-Oct-05	15	BKBM + []VCI	350,000	349,477	[]vcı	[]vcı
Unsubordinated fixed rate bonds	27-May-19	16-May-19	6.0	3.45	250.000	247,086	[]vci	[]vci
* include additional rows if needed	uy-17	<b></b>		2.40	250,000	2,760,979	8,570	(1,855)
metade additional rows if needed						2,760,979	8,570	(1,855)

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



					Company Name For Year Ended		Vector 31 March 2020	)
nis schedule provides in	REPORT ON COST ALLO formation on the allocation of operati of audited disclosure information (as do	ional costs. EDBs mus				otes), including on th	ne impact of any rec	lassifications.
5d(i): Operati	ing Cost Allocations				Value alloca Electricity	Non-electricity		
				Arm's length deduction	distribution services	distribution services	Total	OVABAA allocation increase (\$000s
	nterruptions and emergencies tly attributable				11,253			
	irectly attributable			_	-	_	_	_
	ributable to regulated service				11,253			
	on management tly attributable				11,164			
	irectly attributable			-	- 11,104	-	-	_
	ributable to regulated service			<u> </u>	11,164			
	and corrective maintenance and	d inspection						
	tly attributable irectly attributable			_	16,593	_		_
	ributable to regulated service				16,593			
	lacement and renewal							
	tly attributable				13,829			
	irectly attributable tributable to regulated service				13,829			
	perations and network support	t						
	tly attributable				29,809	-		1
	irectly attributable			_	8,328	1,167	9,495	_
Business	ributable to regulated service				38,137			
	ly attributable				2,089			
	irectly attributable			_	36,170	16,703	52,873	_
Total att	tributable to regulated service				38,259			
Operating	g costs directly attributable				84,737			
	g costs not directly attributable	9		-	44,498	17,870	62,368	-
Operation	nal expenditure				129,235			
5d(ii): Other	Cost Allocations							
Pace thro	ugh and recoverable costs				(\$000)			
	ough costs				(\$000)			
	tly attributable				11,190			
Not di	irectly attributable				-			
	tributable to regulated service				11,190			
	able costs :ly attributable				208,046			
	irectly attributable				_			
Total att	tributable to regulated service				208,046			
5d(iii): Chang	es in Cost Allocations* †					(\$0	00)	
Change i	in cost allocation 1					CY-1	Current Year (CY)	
Cost o	ategory				Original allocation			
	al allocator or line items allocator or line items				New allocation Difference	_	_	
ew c								
Ration	nale for change							
						(\$0	00)	
	in cost allocation 2					CY-1	Current Year (CY)	7
	ategory al allocator or line items				Original allocation New allocation			_
	allocator or line items				Difference	-	-	
					<u>-</u>			-
Ration	nale for change							
						(\$0	00)	
Change i	in cost allocation 3					(ŞU CY-1	Current Year (CY)	
Cost o	ategory				Original allocation			
	al allocator or line items allocator or line items				New allocation Difference		_	
Ration	nale for change							



_			Company Name For Year Ended		Vector 31 March 2020
	CHEDULE 5e: REPORT ON ASSET AL	LOCATIONS et values. This information supports the calculation of the	RAB value in Schedule 4.		
ED	Bs must provide explanatory comment on their cost allo	cation in Schedule 14 (Mandatory Explanatory Notes), incl etermination), and so is subject to the assurance report re	uding on the impact of a		ations. This information is part of audited
ch rej	r				
7	5e(i): Regulated Service Asset Values				
8				Value allocated (\$000s)	
9				Electricity distribution services	
10 11	Subtransmission lines Directly attributable			73,144	
12	Not directly attributable			1,332	
13 14	Total attributable to regulated service Subtransmission cables			74,476	
15 16	Directly attributable  Not directly attributable			521,084	
17	Total attributable to regulated service			521,084	
18 19	Zone substations Directly attributable			295,762	
20 21	Not directly attributable  Total attributable to regulated service			295,762	
22	Distribution and LV lines				
23 24	Directly attributable  Not directly attributable			339,277 40,032	
25 26	Total attributable to regulated service Distribution and LV cables			379,309	
27 28	Directly attributable  Not directly attributable			790,077 17,861	
29	Total attributable to regulated service			807,938	
30 31	Distribution substations and transform Directly attributable	ners		293,755	
32 33	Not directly attributable  Total attributable to regulated service			293,755	
34	Distribution switchgear				
35 36	Directly attributable  Not directly attributable			244,277	
37 38	Total attributable to regulated service Other network assets			244,277	
39	Directly attributable			882,804	
40 41	Not directly attributable Total attributable to regulated service			5,494 888,298	
42 43	Non-network assets Directly attributable			24,439	
44 45	Not directly attributable			35,420	
46	Total attributable to regulated service			59,859	
47 48	Regulated service asset value directly attribut Regulated service asset value not directly attr			3,464,619 100,139	
49 50	Total closing RAB value			3,564,758	-
51	5e(ii): Changes in Asset Allocations* †				
52 53	Change in asset value allocation 1				(\$000) CY-1 Current Year (CY)
54 55	Asset category Original allocator or line items	Non Network Assets Directly attributable		Original allocation New allocation	129 80 113 70
56	New allocator or line items	Property, plant and equipment ratio for regulated businesses		Difference	16 10
57 58	Rationale for change	Assets have been repurposed.			
59	Kationale for Change	Assets have been repurposed.			
60 61					(\$000)
62 63	Change in asset value allocation 2 Asset category	Non Network Assets		Original allocation	CY-1 Current Year (CY) 65 45
64 65	Original allocator or line items  New allocator or line items	Directly attributable Property, plant and equipment ratio		New allocation Difference	47 32 18 13
66 67		Assets have been repurposed.			
68	Rationale for change	Assets have been repurposed.			
69 70					(\$000)
71 72	Change in asset value allocation 3 Asset category	Non Network Assets		Original allocation	CY-1 Current Year (CY)
73 74	Original allocator or line items  New allocator or line items	Directly attributable  Not attributable		New allocation Difference	5
		These assets are now solely used by unregulated by	usiness		
75 76	Rationale for change	ese assets are now solely used by unregulated bi	uu		
76 77					
76				Original allocation	CY-1 Current Year (CY) 639 377
76 77	Change in asset value allocation 4 Asset category	Non Network Assets			
76 77	Asset category Original allocator or line items	Property, plant and equipment ratio		New allocation	639 277
76 77	Asset category Original allocator or line items New allocator or line items	Property, plant and equipment ratio  Not attributable	uringe		639 377
76 77	Asset category Original allocator or line items	Property, plant and equipment ratio	usiness.	New allocation	639 377
76 77	Asset category Original allocator or line items New allocator or line items	Property, plant and equipment ratio  Not attributable	usiness.	New allocation	639 377
76 77	Asset category Original allocator or line items New allocator or line items Rationale for change  Change in asset value allocation 5	Property, plant and equipment ratio Not attributable  These assets are now solely used by unregulated by	usiness.	New allocation Difference	CY-1 Current Year (CY)
76 77	Asset category Original allocator or line items New allocator or line items Rationale for change  Change in asset value allocation 5 Asset category Original allocator or line items	Property, plant and equipment ratio Not attributable  These assets are now solely used by unregulated by  Non Network Assets Relevant employee ratio	usiness.	New allocation Difference Original allocation New allocation	CY-1 Current Year (CY)  110 115
76 77	Asset category Original allocator or line items New allocator or line items Rationale for change  Change in asset value allocation 5 Asset category Original allocator or line items New allocator or line items	Property, plant and equipment ratio Not attributable  These assets are now solely used by unregulated by  Non Network Assets Relevant employee ratio Not attributable		New allocation Difference  Original allocation	CY-1 Current Year (CY)  110 115
76 77	Asset category Original allocator or line items New allocator or line items Rationale for change  Change in asset value allocation 5 Asset category Original allocator or line items	Property, plant and equipment ratio Not attributable  These assets are now solely used by unregulated by  Non Network Assets Relevant employee ratio		New allocation Difference Original allocation New allocation	CY-1 Current Year (CY)  110 115



Company Name Vector 31 March 2020 For Year Ended 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. ch ref 6a(i): Expenditure on Assets (\$000) (\$000) Consumer connection 70,441 System growth 615,001 Asset replacement and renewal 118,534 11 Asset relocations Reliability, safety and environment: 13 Quality of supply 1,991 Legislative and regulatory 15 Other reliability, safety and environment 16 Total reliability, safety and environment 32,998 17 Expenditure on network assets 18 Expenditure on non-network assets 18,273 19 20 Expenditure on assets 21 Cost of financing plus Value of capital contributions 22 less 79,409 23 plus Value of vested assets 25 Capital expenditure 6a(ii): Subcomponents of Expenditure on Assets (where known) (\$000) 26 27 Energy efficiency and demand side management, reduction of energy losses 28 Overhead to underground conversion 9.270 29 Research and development 6a(iii): Consumer Connection 30 Consumer types defined by EDB\* (\$000) (\$000) 31 32 Service connection 15,468 33 Customer substation 17.582 34 **Business subdivisions** 2.130 35 Residential subdivisions 28.578 36 Capacity change 5 354 Street lighting 1,329 37 \* include additional rows if needed 70.441 38 Consumer connection expenditure 39 40 Capital contributions funding consumer connection expenditure 61,551 41 Consumer connection less capital contributions Asset 6a(iv): System Growth and Asset Replacement and Renewal Replacement and 43 System Growth Renewal 44 (\$000) (\$000) 45 Subtransmission 287 213 5 417 46 Zone substations 12.987 24.465 47 Distribution and LV lines 1.493 49.042 48 Distribution and LV cables 4.052 49 Distribution substations and transformers 2,744 5,870 50 Distribution switchgear 1.990 17.892 51 Other network assets 304.522 52 System growth and asset replacement and renewal expenditure 118 534 53 Capital contributions funding system growth and asset replacement and renewal 102 54 System growth and asset replacement and renewal less capital contributions 55 6a(v): Asset Relocations 57 (\$000) (\$000) Project or progra 58 59 60 61 63 \* include additional rows if needed 64 All other projects or programmes - asset relocations 28,279 65 Asset relocations expenditure 66 Capital contributions funding asset relocations 17.680 67 Asset relocations less capital contributions



Company Name Vector 31 March 2020 For Year Ended 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. ch ref 6a(vi): Quality of Supply 69 70 Project or programme\* (\$000) (\$000) 71 72 73 74 75 76 \* include additional rows if needed 77 All other projects programmes - quality of supply 1.991 78 Quality of supply expenditure 1,991 79 Capital contributions funding quality of supply 80 Quality of supply less capital contributions 1,991 6a(vii): Legislative and Regulatory 81 (\$000) 82 Project or programme\* (\$000) 83 84 85 86 87 88 \* include additional rows if needed 89 All other projects or programmes - legislative and regulatory 334 334 Legislative and regulatory expenditure 90 91 Capital contributions funding legislative and regulatory 92 Legislative and regulatory less capital contributions 325 6a(viii): Other Reliability, Safety and Environment 93 (\$000) 94 Project or programme\* (\$000) 95 96 97 98 99 100 \* include additional rows if needed All other projects or programmes - other reliability, safety and environment 101 30.673 102 Other reliability, safety and environment expenditure 30,673 103 Capital contributions funding other reliability, safety and environment 104 Other reliability, safety and environment less capital contributions 30.673 105 6a(ix): Non-Network Assets 106 107 Routine expenditure (\$000) (\$000) 108 Project or programme 109 110 111 112 113 114 \* include additional rows if needed 115 All other projects or programmes - routine expenditure 4.701 116 Routine expenditure 4,701 **Atypical expenditure** 117 (\$000) (\$000) 118 Project or programme 119 120 121 122 123 \* include additional rows if needed 124 125 All other projects or programmes - atypical expenditure Atypical expenditure 13,572 126 127 128 Expenditure on non-network assets



Company Name Vector 31 March 2020 For Year Ended SCHEDULE 6b: REPORT ON OPERATIONAL EXPENDITURE FOR THE DISCLOSURE YEAR This schedule requires a breakdown of operational expenditure incurred in the disclosure ye 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. ch ref (\$000) 6b(i): Operational Expenditure (\$000) Service interruptions and emergencies 11,253 9 Vegetation management 11.164 10 Routine and corrective maintenance and inspection 16.593 11 Asset replacement and renewal 13,829 52,839 12 Network opex 13 System operations and network support 38,137 14 **Business support** 38,259 Non-network opex 76,396 16 17 Operational expenditure 129,235 6b(ii): Subcomponents of Operational Expenditure (where known) 18 Energy efficiency and demand side management, reduction of energy losses 19 20 Direct billing\* 21 Research and development 22 Insurance \* Direct billing expenditure by suppliers that directly bill the majority of their consumers



Company Name Vector
For Year Ended 31 March 2020

## **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	Si	ch	ı r	e	f
---------	----	----	-----	---	---

43

44

7	7(i): Revenue	Target (\$000) 1	Actual (\$000)	% variance
8	Line charge revenue	623,553	622,531	(0%
g	7(ii): Expenditure on Assets	Forecast (\$000) <sup>2</sup>	Actual (\$000)	% variance
10	Consumer connection	72,214	70,441	(2%
11	System growth	50,140	615,001	1,127%
12	Asset replacement and renewal	109,368	118,534	8%
13	Asset relocations	30,140	28,279	(6%
14	Reliability, safety and environment:			
15	Quality of supply	924	1,991	115%
16	Legislative and regulatory	398	334	(16%
17	Other reliability, safety and environment	18,684	30,673	64%
18	Total reliability, safety and environment	20,006	32,998	65%
19	Expenditure on network assets	281,868	865,253	207%
20	Expenditure on non-network assets	28,003	18,273	(35%
21	Expenditure on assets	309,871	883,526	185%
	<b>-</b> (***) <b>0</b>			
22				
23	Service interruptions and emergencies	12,607	11,253	(11%
24		7,837	11,164	42%
25	· ·	17,772	16,593	(7%
26	·	13,227	13,829	5%
27	Network opex	51,443	52,839	3%
28		42,198	38,137	(10%
29	Business support	37,232	38,259	3%
30	Non-network opex	79,430	76,396	(4%
31	Operational expenditure	130,873	129,235	(1%
32	7(iv): Subcomponents of Expenditure on Assets (where known)			
33			_	
34		9,808	9,270	(5%
35		-	4,900	-
36	·	<u> </u>	4,500	
37		)		
38		_	-	_
39		_	-	_
40			_	
41	Insurance	2,864	3,056	7%



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

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

the disclosure year (the second to last disclosure of Schedules 11a and 11b)

Company Name
For Year Ended
Network / Sub-Network Name

Combined

#### SCHEDULE 8: REPORT ON BILLED QUANTITIES AND LINE CHARGE REVENUES

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

8(i): Billed Quantities by Price Component

10	
11	

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	128,945	687,176
ARCS	residential	Standard	75,004	742,998
ARUL	residential	Standard	29,793	116,115
ARUS	residential	Standard	18,103	127,940
ARHL	residential	Standard	2,570	12,902
ARHS	residential	Standard	1,232	12,380
ARGL	residential	Standard	28,047	136,099
ARGS	residential	Standard	14,432	150,865
ABSN	general	Standard	36,072	711,357
ABSU	general	Standard	1,706	29,324
ABSH	general	Standard	465	26,961
ALVN	low voltage	Standard	2,253	240,654
ALVT	low voltage	Standard	1,446	554,082
ATXN	transformer	Standard	158	22,275
ATXT	transformer	Standard	926	1,144,642
AHVN	high voltage	Standard	7	654
AHVT	high voltage	Standard	138	432,604
WRCL	residential	Standard	87,902	479,538
WRCS	residential	Standard	62,429	631,846
WRUL	residential	Standard	16,189	80,645
WRUS	residential	Standard	16,679	131,510
WRHL	residential	Standard	2,188	12,282
WRHS	residential	Standard	1,592	16,824
WRGL	residential	Standard	13,950	68,123
WRGS	residential	Standard	6,950	68,126
WBSN	general	Standard	22,190	375,657
WBSU	general	Standard	636	17,481
WBSH	general	Standard	257	15,968
WLVN	low voltage	Standard	881	120,721
WLVH	low voltage	Standard	258	129,459
WTXN	transformer	Standard	128	35,672
WTXH	transformer	Standard	278	361,833
WHVN	high voltage	Standard	1	-
WHVH	high voltage	Standard	24	121,525
NS	non-standard	Non-standard	31	611,124
Add extra rows for additional con	sumer groups or price category cod	es as necessary		
		Standard consumer totals	573,829	7,816,238
		Non-standard consumer totals	31	611,124

Total for all consumers

	Billed quantities by	price component								<u> </u>
Price component	FIXD	AICO	24UC	OFPK	PEAK	CAPY	DAMD	DEXA	PWRF	Add extra
Unit charging basis (eg, days, kW of demand, kVA of capacity, etc.)	Day	kWh	kWh	kWh	kWh	kVA/Day	kVA/Day	kVA/Day	kVAr/Day	columns for additional billed quantities by price component as
			·		·		·			necessary
	47,221,911	687,175,675	-	-	-	-	-	-	-	,
	27,473,957	742,997,873	_	_	_	_	-	-	_	
	10,905,140	1	116,114,704	-	-	-	-	1	-	
	6,622,112		127,939,506	-	-	-	-	1	-	
	936,123	-	-	9,027,738	3,873,838	-	-	-	_	
	448,995	-	_	8,715,756	3,664,452	-	-	-	-	
	10,268,737	_	136,099,449	_	_	-	_	_	_	
	5,284,705	-	150,864,827	-	-	-	-	-	-	
	13,179,981	_	711,356,935	_	_	_	-	_	_	
	25,790,084	-	29,323,906	_	-	-	-	-	-	
	170,743	_	-	18,086,910	8,874,184	-	-	-		
	825,094	-	240,654,239	_	-	122,818,665	-	-	367,349	
	_	_	554,081,638	-	-	137,950,271	46,891,384	-	4,048,147	
	57,688	-	22,274,731	_	-	13,005,038	-	-	30,391	
	-	-	1,144,642,133	-	-	243,151,474	91,276,944	-	4,054,413	
	2,768	-	654,351	-	-	550,254	-	-	8,759	
			432,603,681	-	-	58,292,666	32,482,990	130,041	1,342,080	
	32,188,380	479,538,407	-	-	-	-	-	-		
	22,865,308	631,846,285	-	-	_	-	-	_	_	
	5,921,483 6,116,044		80,644,668 131,510,396	-	-	-	-	-		
	796,838 580.168	_	-	8,676,041 11.810.946	3,605,634 5.013.265	-	-	_		
	5.107.256	_	68.123.135	11,810,946	5,013,265	-	_	_		
	2,544,829		68,123,135	_		_	_			-
	2,544,829 8,090,408		375,656,552	_	_	_	_			
	16,004,177		17,481,178	_		-				1
	94.196	_	17,461,176	10,802,484	5,165,751	_	_			
	322,564	_	120.720.687	10,802,464	3,103,731	47.336.885	_	_	311.954	1
	94,548	_	129,458,613	_	_	24,330,497	9,943,698		671,772	
	46,669	_	35,672,069	_	_	11,265,342	-	_	164,971	
	101.768	_	361.832.981	_	_	76,456,940	28.816.387	_	1,404,237	
	-	_	-	-	-	-	-	_	-	
	8,768	_	121,524,537	-	-	14,501,498	8,726,198	113,288	426,829	
	1,464	_	_	-	_	-	-	-	11,172	
										,
	250,071,442	2,541,558,240	5,177,361,194	67,119,875	30,197,124	749,659,530	218,137,601	243,329	12,830,902	
	1,464	-	-	-	-	-	-	-	11,172	
	250,072,906	2,541,558,240	5,177,361,194	67,119,875	30,197,124	749,659,530	218,137,601	243,329	12,842,074	

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 or each price category code used by the EDB in its pricing schedules. Information is also required on the number of ICPs that are included in each consumer group or price category code, and the energy delivered to these ICPs. 8(ii): Line Charge Revenues (\$000) by Price Component Line charge revenues (\$000) by price component Price compone FIXD AICO 24UC OFPK DEAK CAPV DAMD DEXA PWRF Add extra columns for Total transmission additional line Total distribution Rate (eg, \$ per day, \$ per line charge harge revenues kWh kVA/Day Consumer group name or price Consumer type or types (eg. Standard or non-standard Total line charge revenue foregone from posted line charge category code residential, commercial etc.) consumer group (specify) in disclosure year mponent as necessary residential Standard \$70.723 \$51,466 \$63,653 \$67,449 \$46,628 \$27,698 \$20,821 \$39,751 \$14,440 ARHL residential Standard \$1,320 \$973 \$347 \$140 \$580 \$600 \$1,096 \$768 \$328 \$453 \$424 dential Standard \$14,144 \$13,399 \$56,458 \$31,469 \$24,989 \$13,287 \$43,171 \$5,851 \$1,654 \$794 \$1,027 low voltage Standard \$21,923 \$16,723 \$5,200 \$15,181 \$5,161 Standard Standard \$29,665 \$1,179 low voltage \$19.092 \$10,573 \$7,688 \$5,797 Standard \$55,367 \$34,787 \$20,580 \$15,653 \$9,999 \$28,535 \$1,180 AHVN high voltage Standard \$69 \$55 \$39 \$18,332 \$11,008 \$7,324 \$5,700 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 \$49,315 residential \$56,944 \$39,237 \$17,707 \$23,087 \$33.857 \$8,062 \$8,950 \$6,117 esidential \$14,168 \$4,620 residential Standard \$1,237 \$914 \$559 \$1,465 \$449 \$581 \$7,086 \$5,177 \$766 Standard \$31,002 \$17,806 \$8.169 \$2,400 Standard \$3,588 \$2,974 \$614 \$1,188 \$272 \$8,903 \$5,790 WLVH low voltage Standard \$3,548 \$2,242 \$1,114 \$764 \$2.891 \$196 \$2,051 \$1,280 \$1,366 \$48 \$263 \$374 \$8,187 \$3.836 \$1.868 \$1,968 \$2,395 \$124 \$19,567 Add extra rows for additional consumer groups or price category codes as necessary \$3,737 \$217 Standard consumer totals \$602,964 \$403,064 \$199,900 \$123,680 \$181,749 \$190,973 \$2,383 \$3,790 \$29,644 \$66,814 \$194 Non-standard consumer totals Total for all consumer \$66.814 8(iii): Number of ICPs directly billed Number of directly billed ICPs at year end

Company Name Vector Ltd 31 March 2020 For Year Ended Network / Sub-Network Name Southern SCHEDULE 8: REPORT ON BILLED QUANTITIES AND LINE CHARGE REVENUES s 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(i): Billed Quantities by Price Component Billed quantities by price component Price componen AICO 24UC OFPK PEAK CAPY DAMD DEXA Add extra columns for Energy delivered to ICPs Unit charging basis (eg, days, kW of demand kVA of capacity, etc.) additional billed kVA/Day kVA/Day Consumer group name or price Consumer type or types (eg. Average no. of ICPs in Standard or non-standard in disclosure year category code residential, commercial etc.) consumer group (specify) disclosure year component as 128,945 687.176 47,221,911 687,175,675 75,004 742,998 27,473,957 742,997,873 6,622,11 9.027.738 3.873.838 1,232 Standard 10,268,737 14,432 150,865 5,284,705 esidential standard 150,864,827 13.179.981 36.072 711.357 711.356.935 18,086,910 825.094 low voltage standard 240,654 240 654 239 122 818 665 367 349 1,446 554,082 low voltage transformer 554,081,638 46,891,384 4,048,147 Standard 137,950,271 926 2,768 high voltage Standard 654,351 550,254 8,759 516,094 9.882 Add extra rows for additional consumer groups or price category codes as necessary Standard consumer totals 149,188,038 1,430,173,548 3,666,610,100 35,830,404 16,412,474 575,768,368 341,297 5,149,028 170,651,318 130,041 9,851,139 Non-standard consumer totals Total for all consumer 341,324 5,665,122 149.197.920 1.430.173.548 3.666.610.100 35.830.404 16.412.474 575.768.368 9,868,360

			IE CHARGE REVENU												Network / Sub-l	For Year Ended Network Name		31 March 2020 Southern
		y Price Component	n price category code used by the	e EDB in its pricing schedules	Information is also require	ed on the nun	nber of ICPs that are i	ncluded in each con:	sumer group or price categ	ory code, and the en	ergy delivered to the	se ICPs.						
										Line charge revenue	es (\$000) by price co	mponent						
									Price component	FIXD	AICO	24UC	OFPK	PEAK	CAPY	DAMD	DEXA	PWRF
Consumer group r category		nsumer type or types (eg, idential, commercial etc.)	Standard or non-standard consumer group (specify)	Total line charge revenue in disclosure year	Notional revenue foregone from posted discounts (if applicable)		Total distribution line charge revenue	Total transmission line charge revenue (if available)	Rate (eg, \$ per day, \$ per kWh, etc.)	Day	kWh	kWh	kWh	kWh	kVA/Day	kVA/Day	kVA/Day	kVAr/Day
ARCI	reside	ential	Standard	\$70,723		1	\$51,466	\$19.257	1	\$7.070	\$63,653			_	-	- 1		
ARCS	reside		Standard	\$67,449			\$46.628	\$20,821		\$27,698	\$39,751	_	_		_	_		
ARUL	reside	ential	Standard	\$13,223			\$9,144	\$4,079		\$1,633	-	\$11,590	_	_	_	-	_	_
ARUS	reside	ential	Standard	\$14,440			\$9,946	\$4,494		\$6,676	-	\$7,764	_	_	_	-	_	_
ARHL	reside	ential	Standard	\$1,320			\$973	\$347		\$140	-	-	\$580	\$600	-	-	-	-
ARHS		ential	Standard	\$1,096			\$768	\$328		\$453	-	_	\$219	\$424	_	_	_	_
ARGL	reside		Standard	\$14,144			\$10,330	\$3,814		\$1,537	-	\$12,607	-	-	-	-	-	-
ARGS	reside		Standard	\$13,399			\$9,171	\$4,228		\$5,328	-	\$8,071	-	-	-	-	_	_
ABSN	genera		Standard	\$56,458			\$31,469	\$24,989		\$13,287	-	\$43,171	-	-	-	-	_	-
ABSU ABSH	genera		Standard Standard	\$5,851 \$1,654			\$4,821 \$860	\$1,030 \$794		\$3,861 \$172	-	\$1,990	- \$455	\$1,027	-	-		
ALVN	0	oltage	Standard	\$1,654			\$16,723	\$5,200		\$1,474		\$15,181	5455	\$1,027	\$5.161	-		\$107
ALVT	low vo		Standard	\$29,665			\$19,092	\$10.573		31,474 -	-	\$7,688	_		\$5,797	\$15.001		\$1.179
ATXN		former	Standard	\$2,020			\$1,539	\$481		\$100	_	\$1,376	_		\$535	515,001		\$1,179
ATXT	transfe		Standard	\$55,367			\$34,787	\$20,580		-	-	\$15,653	-	_	\$9,999	\$28,535	_	\$1,180
AHVN	high v	voltage	Standard	\$69			\$55	\$14		\$5	_	\$39	-	_	\$22	_	_	\$3
AHVT		voltage	Standard	\$18,332			\$11,008	\$7,324		_	-	\$5,700	-	-	\$2,322	\$9,805	\$114	\$391
NS		tandard	Non-standard	\$16,747			\$9,344	\$7,403		\$16,619	-	_	_	_	_	-	_	\$128
Add extra rows for	additional consumer g	groups or price category codes							,									
			Standard consumer totals		-		\$258,780	\$128,353		\$69,434	\$103,404	\$130,830	\$1,254	\$2,051	\$23,836	\$53,341	\$114	\$2,869
			Non-standard consumer totals	\$16,747 \$403.880	-		\$9,344 \$268.124	\$7,403 \$135,756		\$16,619 \$86,053	\$103,404	\$130,830	\$1,254	\$2,051	\$23,836	\$53,341	\$114	\$128 \$2,997
			Total for all consumers	\$403,880	-	ı	\$268,124	\$135,/56	ı	\$86,053	\$103,404	\$130,830	\$1,254	\$2,051	\$23,836	\$53,341	\$114	\$2,997
ii): Number of ICPs	A1 A1 L101 - A						Check	OK	1									

Company Name Vector Ltd 31 March 2020 For Year Ended Network / Sub-Network Name Northern SCHEDULE 8: REPORT ON BILLED QUANTITIES AND LINE CHARGE REVENUES s 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(i): Billed Quantities by Price Component Billed quantities by price component Price componen AICO 24UC OFPK PEAK CAPY DAMD DEXA Add extra columns for Energy delivered to ICPs Unit charging basis (eg, days, kW of demand kVA of capacity, etc.) additional billed kVA/Day kVA/Day Consumer group name or price Consumer type or types (eg. Average no. of ICPs in Standard or non-standard in disclosure year residential, commercial etc.) consumer group (specify) disclosure year category code component as 87.902 479,538 32,188,380 479.538.407 Standard 62,429 631,846 22,865,308 631,846,285 6,116,044 2,188 8,676,041 3,605,634 1,592 5,107,256 6,950 2,544,829 esidential Standard 68,126 68,126,278 8.090.408 Standard 22.190 375.657 375,656,552 low voltage Standard 120 721 322 564 120 720 687 47 336 885 258 129,459 94,548 low voltage transformer Standard 24,330,497 9,943,698 101,768 28.816.387 high voltage Standard Standard 8,768 14,501,498 426,829 95,030 Add extra rows for additional consumer groups or price category codes as necessary Standard consumer totals 1,111,384,692 1,510,751,094 31,289,471 13,784,650 232,532 2,667,210 100,883,404 173,891,162 47,486,283 113,288 2,979,763 Non-standard consumer totals Total for all consumer 232.536 2,762,240 100.884.868 1.111.384.692 1.510.751.094 31.289.471 13.784.650 2.990.935

															Network / Sub-I	For Year Ended Network Name		31 March 202 Northern
ule requires ti	ne billed quantities and asso	O QUANTITIES AND LI clated line charge revenues for ea			Information is also require	ed on the numb	per of ICPs that are in	ncluded in each con:										
										Line charge revenue	es (\$000) by price co	mponent						
									Price component	FIXD	AICO	24UC	OFPK	PEAK	CAPY	DAMD	DEXA	PWRF
Cons	umer group name or price category code	Consumer type or types (eg, residential, commercial etc.)	Standard or non-standard consumer group (specify)	Total line charge revenue in disclosure year	Notional revenue foregone from posted discounts (if applicable)		Total distribution line charge revenue	Total transmission line charge revenue (if available)	Rate (eg, \$ per day, \$ per kWh, etc.)	Day	kWh	kWh	kWh	kWh	kVA/Day	kVA/Day	kVA/Day	kVAr/Day
WRCI		residential	Standard	\$49,315		F	\$35,877	\$13,438	1	\$4,827	\$44,488			_ 1				_
WRCS		residential	Standard	\$56,944			\$39,237	\$17,707		\$23.087	\$33,857	_	_	_	_	_		
WRUI		residential	Standard	\$8,950			\$6,117	\$2,833		\$888	-	\$8,062	_	_	_	-	_	_
WRU:	S	residential	Standard	\$14,168			\$9,548	\$4,620		\$6,175	_	\$7,993	_	_	-	-	_	-
WRHI		residential	Standard	\$1,237			\$914	\$323		\$119	-	-	\$559	\$559	-	-	-	-
WRH!		residential	Standard	\$1,465			\$1,016	\$449		\$586	-	-	\$298	\$581	_	-	_	-
WRGI		residential	Standard	\$7,086			\$5,177	\$1,909		\$766	-	\$6,320	_	_	_	-	_	-
WRG!		residential	Standard	\$6,219			\$4,310	\$1,909		\$2,569	-	\$3,650	-	-	-	-	-	_
WBSN		general	Standard	\$31,002		-	\$17,806	\$13,196		\$8,169	-	\$22,833	-	-	-	-		-
WBSI		general	Standard	\$3,588		-	\$2,974	\$614		\$2,400	-	\$1,188			-	-		-
WIN		general	Standard Standard	\$966		-	\$504 \$6,294	\$462 \$2,609		\$95 \$2.019	-	\$5.189	\$272	\$599	\$1.604	_		\$91
WLVF		low voltage low voltage	Standard Standard	\$8,903 \$5,790			\$3,548	\$2,609		\$2,019	-	\$5,189		_	\$1,604	\$2,891		\$196
WIXIW		transformer	Standard	\$2,051			\$1,280	\$2,242		\$1,114		\$1,366	_		\$374	\$2,691		\$196
WTXI		transformer	Standard	\$14,311			\$7,814	\$6,497		\$1,079	_	\$2,098	_	_	\$2,538	\$8,187		\$409
WHV		high voltage	Standard	-			-	-		-	_	-	_	_	-	-	_	-
WHV		high voltage	Standard	\$3,836			\$1,868	\$1,968		\$90	-	\$680	-	_	\$467	\$2,395	\$80	\$124
NS		non-standard	Non-standard	\$2,820			\$2,077	\$743		\$2,731	_	-	_	_	-	-	_	\$89
Add e	xtra rows for additional cons	umer groups or price category cod	es as necessary															
			Standard consumer totals		-		\$144,284	\$71,547		\$54,246	\$78,345	\$60,143	\$1,129	\$1,739	\$5,808	\$13,473	\$80	\$868
			Non-standard consumer totals		-		\$2,077	\$743		\$2,731	-	-	-	-	-	-	-	\$89
			Total for all consumers	\$218,651	-		\$146,361	\$72,290		\$56,977	\$78,345	\$60,143	\$1,129	\$1,739	\$5,808	\$13,473	\$80	\$957
iii). Numb	er of ICPs directly bi	illad					Check	ОК	1									

Company Name
For Year Ended
Network / Sub-network Name
Vector
31 March 2020
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	ı re	f
-----	------	---

8	Voltage	Asset category	Asset class	Units	Items at start of year (quantity)	Items at end of year (quantity)	Net change	Data accuracy (1–4)
9	All	Overhead Line	Concrete poles / steel structure	No.	115,938	117,263	1,325	3
10	All	Overhead Line	Wood poles	No.	6,171	5,826	-345	2
11	All	Overhead Line	Other pole types	No.	831	935	104	4
12	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	369	368	-1	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	348	354	5	4
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	145	145	0	4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	2	2	0	4
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	50	50	0	4
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	30	30	0	4
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	17	17	0	4
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	0	0	0	N/A
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	0	0	0	4
22	HV	Subtransmission Cable	Subtransmission submarine cable	km	12	12	0	4
23	HV	Zone substation Buildings	Zone substations up to 66kV	No.	101	102	1	4
24	HV	Zone substation Buildings	Zone substations 110kV+	No.	6	7	1	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 (Cround Mounted)	No.	245	183	-62	4
29	HV	Zone substation switchgear	33kV RMU	No.	9	13	-02 A	4
30	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	245	260	15	4
31	HV	Zone substation switchgear	22/33kV CB (indoor)	No.	130	105	-25	4
32	HV	•		No.	1,330	1,369	39	4
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)		0	1,369	0	N/A
34	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No. No.	216	219	3	4
35	HV	Zone Substation Transformer Distribution Line	Zone Substation Transformers	km	3,758	3,746	-12	3
	HV		Distribution OH Open Wire Conductor		3,758	3,746	-12	N/A
36 37	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	0	0	0	N/A N/A
-	HV	Distribution Line	SWER conductor	km	1,510	1,561	51	4
38 39	HV	Distribution Cable	Distribution UG XLPE or PVC Distribution UG PILC	km km	2,201	1,561 2,184	-17	4
		Distribution Cable						
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.	261	274	13	4
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	272	293	21	3
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	10,343	10,536	193	3
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	3,204	3,246	42	3
45	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	6,160	6,216	56	4
46	HV	Distribution Transformer	Pole Mounted Transformer	No.	7,577	7,600	23	4
47	HV	Distribution Transformer	Ground Mounted Transformer	No.	14,317	14,559	242	4
48	HV	Distribution Transformer	Voltage regulators	No.	11	12	1	4
49	HV	Distribution Substations	Ground Mounted Substation Housing	No.	12,847	13,075	228	3
50	LV	LV Line	LV OH Conductor	km	4,028	4,154	127	3
51	LV	LV Cable	LV UG Cable	km	6,202	6,290	88	4
52	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	463	479	15	3
53	LV	Connections	OH/UG consumer service connections	No.	568,897	578,106	9,209	4
54	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	3,748	3,934	186	3
55	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	332	356	24	2
56	All	Capacitor Banks	Capacitors including controls	No	77	76	-1	4
57	All	Load Control	Centralised plant	Lot	33	33	0	3
58	All	Load Control	Relays	No	0	0	0	N/A
59	All	Civils	Cable Tunnels	km	10	10	0	3

Company Name Vector
For Year Ended 31 March 2020
Network / Sub-network Name Southern

## **SCHEDULE 9a: ASSET REGISTER**

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

8	Voltage	Asset category	Asset class	Units	Items at start of year (quantity)	Items at end of year (quantity)	Net change	Data accuracy (1–4)
9	All	Overhead Line	Concrete poles / steel structure	No.	49,982	50,392	410	3
10	All	Overhead Line	Wood poles	No.	3,868	3,706	-162	2
11	All	Overhead Line	Other pole types	No.	407	437	30	4
12	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	51	51	0	4
13	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	0	0	0	N/A
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	205	209	4	4
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	143	142	0	4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	2	2	0	4
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	49	49	0	4
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	30	30	0	4
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	17	17	0	4
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	0	0	0	N/A
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	0	0	0	4
22	HV	Subtransmission Cable	Subtransmission submarine cable	km	11	11	0	4
23	HV	Zone substation Buildings	Zone substations up to 66kV	No.	50	50	0	4
24	HV	Zone substation Buildings	Zone substations 110kV+	No.	5	5	0	4
25	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	20	20	0	4
26	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	0	0	0	N/A
27	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	0	0	0	N/A
28	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	0	0	0	N/A
29	HV	Zone substation switchgear	33kV RMU	No.	0	0	0	N/A
30	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	132	124	-8	4
31	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	0	0	0	N/A
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	833	859	26	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.	129	129	0	4
35	HV	Distribution Line	Distribution OH Open Wire Conductor	km	885	883	-2	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	674	697	22	4
39	HV	Distribution Cable	Distribution UG PILC	km	1,576	1,564	-12	4
40	HV	Distribution Cable	Distribution Submarine Cable	km	2	2	0	4
41	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	58	60	2	4
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	216	235	19	3
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	2,428	2,438	10	3
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	2,503	2,463	-40	3
45	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	4,535	4,535	0	4
46	HV	Distribution Transformer	Pole Mounted Transformer	No.	1,975	1,977	2	4
47	HV	Distribution Transformer	Ground Mounted Transformer	No.	6,893	7,027	134	4
48	HV	Distribution Transformer	Voltage regulators	No.	4	5	1	4
49	HV	Distribution Substations	Ground Mounted Substation Housing	No.	6,103	6,187	84	3
50	LV	LV Line	LV OH Conductor	km	1,900	1,934	34	3
51	LV	LV Cable	LV UG Cable	km	3,757	3,799	42	4
52	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	260	264	4	3
53	LV	Connections	OH/UG consumer service connections	No.	338,487	343,703	5,216	4
54	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	2,080	2,161	81	3
55	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	180	197	17	2
56	All	Capacitor Banks	Capacitors including controls	No	13	13	0	4
57	All	Load Control	Centralised plant	Lot	22	22	0	3
58	All	Load Control	Relays	No	0	0	0	N/A
59	All	Civils	Cable Tunnels	km	10	10	0	3
								-

Company Name
For Year Ended
Network / Sub-network Name

Vector
31 March 2020
Northern

## **SCHEDULE 9a: ASSET REGISTER**

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

sch	ref
-----	-----

8	Voltage	Asset category	Asset class	Units	Items at start of year (quantity)	Items at end of year (quantity)	Net change	Data accuracy (1–4)
9	All	Overhead Line	Concrete poles / steel structure	No.	65,956	66,871	915	3
10	All	Overhead Line	Wood poles	No.	2,303	2,120	-183	2
11	All	Overhead Line	Other pole types	No.	424	498	74	4
12	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	318	317	-1	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	144	145	1	4
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	2	2	0	4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	0	0	0	N/A
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	1	1	0	4
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	0	0	0	N/A
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	0	0	0	N/A
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	0	0	0	N/A
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	0	0	0	N/A
22	HV	Subtransmission Cable	Subtransmission submarine cable	km	1	1	0	4
23	HV	Zone substation Buildings	Zone substations up to 66kV	No.	51	52	1	4
24	HV	Zone substation Buildings	Zone substations 110kV+	No.	1	2	1	4
25	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	0	0	0	N/A
26	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	2	2	0	4
27	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	0	0	0	N/A
28	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	245	183	-62	4
29	HV	Zone substation switchgear	33kV RMU	No.	9	13	4	4
30	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	113	136	23	4
31	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	130	105	-25	4
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	497	510	13	4
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	0	0	0	N/A
34	HV	Zone Substation Transformer	Zone Substation Transformers	No.	87	90	3	4
35	HV	Distribution Line	Distribution OH Open Wire Conductor	km	2,873	2,863	-11	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	835	864	29	4
39	HV	Distribution Cable	Distribution UG PILC	km	625	620	-5	4
40	HV	Distribution Cable	Distribution Submarine Cable	km	7	7	0	4
41	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	203	214	11	4
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	56	58	2	3
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	7,915	8,098	183	3
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	701	783	82	3
45	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	1,625	1,681	56	4
46	HV	Distribution Transformer	Pole Mounted Transformer	No.	5,602	5,623	21	4
47	HV	Distribution Transformer	Ground Mounted Transformer	No.	7,424	7,532	108	4
48	HV	Distribution Transformer	Voltage regulators	No.	7	7	0	4
49	HV	Distribution Substations	Ground Mounted Substation Housing	No.	6,744	6,888	144	3
50	LV	LV Line	LV OH Conductor	km	2,128	2,221	93	3
51	LV	LV Cable	LV UG Cable	km	2,445	2,491	46	4
52	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	203	215	12	3
53	LV	Connections	OH/UG consumer service connections	No.	230,410	234,403	3,993	4
54	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	1,668	1,773	105	3
55	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	152	159	7	2
56	All	Capacitor Banks	Capacitors including controls	No	64	63	-1	4
57	All	Load Control	Centralised plant	Lot	11	11	0	3
58	All	Load Control	Relays	No	0	0	0	N/A
59	All	Civils	Cable Tunnels	km	0	0	0	N/A
33	All		Coole rainies	KIII		•		1975

Company Name For Year Ended Network / Sub-network Name Vector 31 March 2020

	Disclosure Year (year ended)	31 March 2020								ura waar cad	by installation date															
	Disclosure Year (year ended)	31 March 2020						Number of asset	s at disclos	ure year end	by installation date													No. v	vith Items at	No. with
							1970 1980 1990																	ago	e end of	default Data ac
	Asset category				-1959		-1979 -1989 -1999	2000 2001				2006 2007											2022 2023			dates (1-
	Overhead Line	Concrete poles / steel structure	No.	12 296	5,051	15,612	16,222 15,611 9,92	583 7	60 9	39 800	390 1,305		05 1,791	1,942	1,668 1,183 1,	411 1,95	1,788	1,886	2,612 3,486	4,840 4	,714 2,796				3,540 117,263	3
	Overhead Line	Wood poles	No.	4 8	127	429	492 585 83	190	48	70 82	36 95	137 1	05 64	53	114 14	26 3	2 26	16	10 5	21	31 23				2,152 5,826	
	Overhead Line	Other pole types	No.	0 0	0	0	0 0	0	0	0 0	0 0	0	0 0	0	0 1	0 !	5 12	28	66 186	279	175 179				2 935	4
	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	2 2	24	73	159 72	0	0	3 1	. 0 1	4	1 (	13	1 7	0 1	0	2	1 0	0	0 0	)			0 368	4
	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	0 0	0	7	12 0	0	0	0 0	0 0	0	7 (	0	0 0	0 1	0	0	0 0	0	0 0	)			0 27	4
	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	0 0	0	0	19 11 5	56	1 .	22 6	2 4	8	32 8	25	21 4	10	7 3	16	16 13	6	3 9				0 354	4
	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	0 0	0	40	74 24 -	0	0	0 0	0 1	1	1 (	0	0 0	0 1	0	0	0 0	0	0 0	)			0 145	4
	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	0 0	0	2	0 0	0	0	0 0	0 0	0	0 0	0	0 0	0 1	0	0	0 0	0	0 0	)			0 2	4
	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	7 3	17	15	3 2	0	0	0 0	0 0	0	0 1	. 0	0 0	0 1	0	0	0 0	0	0 0	)			0 50	4
	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	0 0	0	0	0 0	0	0	18 0	0 1	0	0 0	0	0 2	0 1	0	0	0 0	0	0 0				0 30	- 4
	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	0 0	0	11	0 5	0	0	0 0	0 1	0	0 0	0	0 0	0 1	0	0	0 0	0	0 0	)			0 17	- 4
	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 1	0	0	0 0	0	0 0	1			0 -	N,
	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 1	0	0	0 0	0	0 0	1			0 0	- 4
	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 1	0	0	0 0	0	0 0	-			0 12	- 4
	Zone substation Buildings	Zone substations up to 66kV	No.	0 1	4	23	26 18 1	3	1	0 2	0 0	1	1 3	1	2 2	0 1	1	0	1 1	0	1 0	)			0 102	4
	Zone substation Buildings	Zone substations 110kV+	No.	0 0	0	0	2 4	0	0	0 0	0 0	0	0 0	0	0 0	0 1	0	0	0 0	0	0 0	)			0 7	4
	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 1	0	11	0 0	0	0 0	)			0 20	4
	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 1	0	0	0 0	0	0 0	)			0 2	4
	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 1	0	0	0 0	0	0 0	)			0 -	N,
	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	0 0	31	74	50 8	0	0	0 0	0 1	0	5 5	0	2 0	1 1	1	0	4 0	1	0 0	)			0 183	
	Zone substation switchgear	33kV RMU	No.	0 0	0	0	0 0	0	0	0 5	1 0	4	3 (	0	0 0	0 1	0	0	0 0	0	0 0	)			0 13	4
	Zone substation switchgear	22/33kV CB (Indoor)	No.	0 0	0	0	11 19 ;	4	10	4 0	0 10	6	3 46	1	0 6	0 1	5 51	10	51 0	9	5 0	)			0 260	4
	Zone substation switchgear	22/33kV CB (Outdoor)	No.	0 0	5	20	19 27	0	1	0 1	. 0 3	1	1 9	5	1 3	1 1	0	2	0 2	0	0 0	)			0 105	4
	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	0 0	9	144	151 243 10	11	6	2 7	0 18	15	44 85	44	39 34	25 4	29	17	55 111	37	52 39				0 1,369	
	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 1	0	0	0 0	0	0 0	)			0 -	N,
	Zone Substation Transformer	Zone Substation Transformers	No.	0 0	3	41	49 35 2	4	1	2 1	1 0	1	2 3	6	5 8	5	1 2	7	4 4	0	2 4				0 219	4
	Distribution Line	Distribution OH Open Wire Conductor	km	1 4	143	539	994 1,369 29.	95	11	5 11	6 22	36	62 21	22	11 8	6 !	5 7	8	4 7	5	8 16				30 3,746	
	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 1	0	0	0 0	0	0 0	)			0 -	N,
	Distribution Line	SWER conductor	km	0 0	0	0	0 0	0	0	0 0	0 0	0	0 0	0	0 0	0 1	0	0	0 0	0	0 0				0 -	N,
	Distribution Cable	Distribution UG XLPE or PVC	km	0 0	0	0	17 32 17	37	40 :	30 22	18 97	136 1	02 60	107	54 72	40 4	70	63	67 65	79	63 58	3			6 1,561	
	Distribution Cable	Distribution UG PILC	km	13 3	25	196	625 699 51	34	13	4 1	2 12	7	19 5	6	2 1	0 1	0	1	0 0	0	0 0	)			6 2,184	4
	Distribution Cable	Distribution Submarine Cable	km	0 0	- 6	0	1 0	0	0	0 0	0 0	0	0 0	0	0 0	0 1	0	0	0 0	0	0 0	)			0 8	4
	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionaliser	No.	0 0	0	0	0 0 1	4	5	1 2	0 3	9	34 68	39	5 0	8 1	2 1	2	3 3	0	22 36				0 274	4
	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	0 0	2	0	4 5	0	11	0 4	2 4	2	13 1	10	8 10	3 26	8	9	18 29	13	41 34				32 293	
	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	0 0	8	215	966 1,688 1,37.	239 1	60 1	35 147	62 218	293 2	48 241	257	156 108	162 25	319	405	490 574	457	524 642				191 10,536	
	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	7 0	1	327	853 653 44	80	74	65 53	69 81	69	51 23	42	38 42	53 3	41	21	25 22	16	33 19				7 3,246	
	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	4 0	2	235	860 1,204 67	101	77	95 155	147 159	119	98 66	55	95 117	127 17	203	184	220 266	260	334 210				7 6,216	4
	Distribution Transformer	Pole Mounted Transformer	No.	12 27	121	235	592 1,228 1,22	255 1		68 138		258 3				206 16		198	172 205	250	260 241				4 7,600	
	Distribution Transformer	Ground Mounted Transformer	No.	6 35	136	742	1,907 2,273 2,250	277 2	72 2	53 224	83 585	420 4	86 296	304	283 318	258 32	388	349	298 363	477	468 473				1 14,559	4
	Distribution Transformer	Voltage regulators	No.	0 0	0	0	0 0	0	0	0 0	1 0	0	2 (	0	0 1	4 :	2 1	0	0 0	0	0 0				0 12	4
	Distribution Substations	Ground Mounted Substation Housing	No.	11 62	177	1,285	3,011 3,393 2,05	185 Z	35 1	24 141	200 125	120	86 70	60	48 52	54 10	2 154	203	147 168	192	237 261	4			113 13,075	
	LV Line	LV OH Conductor	km	0 4	114	537	1,043 1,776 15	114	6	6 11	4 17	27	47 17	13	9 12	10 1	9	10	9 16	28	29 48				77 4,154	
	LV Cable	LV UG Cable	km	5 20	45	430	1,065 1,055 1,26	118	97	55 49	47 211	260 1	60 80	114	72 73	45 6	99	124	130 134	160	153 138				22 6,290	
	LV Street lighting	LV OH/UG Streetlight circuit	km	3 1	9	24	45 52 8	9	7	4 3	3 15	15	15 11	16	9 17	8 :	3 17	12	21 17	14	14 16				7 479	
	Connections	OH/UG consumer service connections	No.	0 0	0	162	33,865 171,292 125,690	23,223 8,8	20 7,7	01 11,644	14,849 18,102	18,865 13,7		6,905	6,726 6,573 6,	041 6,66		8,237	9,131 12,027	14,991 15	,975 19,237				0 578,106	
	Protection	Protection relays (electromechanical, solid state and numeric)	No.	0 0	5	149	445 343 23	34	32	14 15	33 46	79	38 143	309	215 166	103 23	116	95	144 200	147	189 166				245 3,934	
	SCADA and communications	SCADA and communications equipment operating as a single sys	Lot	0 0	0	0	0 0	0	0	0 0	5 3	5	24 12	10	14 7	17 2	5 4	14	55 21	30	17 18				72 356	
	Capacitor Banks	Capacitors including controls	No	0 0	0	0	0 0 1	45	0	0 1	0 0	2	0 0	0	1 0	1 1	1 0	0	5 0	0	0 0				0 76	
	Load Control	Centralised plant	Lot	0 0	0	8	1 7 1	0	0	0 0	0 1	0	1 3	0	0 0	0 1	0	0	0 0	0	0 0				1 33	
M	Load Control	Relays																								N

 Company Name
 Vector

 1 Short Year Ended
 31 March 2020

 Network / Sune-twock Name
 Southern

#### CHEDULE 9b: ASSET AGE PROFILE

	Disclosure Year (year ended)	31 March 2020								Number	r of assets	at disclos	sure year o	end by install	ation date																							
																																			N		ems at No. wit	
				1940 40 -1949	1950 -1959				1990 -1999	2000	2001	2002	200	3 2004	2005	2006	2007	2008	2009	2010	2011		2013	2014	201	5 2016	2017							2024			nd of defaul year dates	
Voltage	Asset category Overhead Line	Asset class Concrete poles / steel structure	Units pre-19	40 -1949	-1959		-19/9	2 720	-1999 3 968	2000				545 1	2005									2014		910 1						2022	2023	2024	2025 UI		year dates	(1-4)
All	Overhead Line	Wood poles	No.	0 0	163	4,753	117	2,720	3,968	177	48	sb t	22	545 1	94 92	3 1,5: 0 -	70 5	1,40	1,2	92 1,1	36 8	12 1,011	1,21	5 1,0	4	910 1,	124 1,8	2 2,41	A 2,41	8 1,19	6	_	+-	++	-+	2 126	3,706	2
All	Overhead Line	Other pole types	No.	0 0	0	0	0	0	-0	- 10	1	0	0	0	0	0	0		0	0	0	0 0		0	2	8	29 1	45 17	4 4	17 2	9		+	1-1	-	2,220	437	4
HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	0 0	0	0	34	0	0	0		0	3	1	0	0	0		0	5	0	6 6		0	0	2	0	0	0	0	0		+	1-1	-	0	51	4
HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	0 0		0	0	0	0	0	5	0	0	0	0	0	0		0	0	0	0 0		0	0	0	0	0	0	0	0		+	1-1	-	0	-	N/A
HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	0 0		0	0	2	32	48	3	1	21	5	0	1	1 1		1	3	19	0 5		5	2	14	13	9	2	1	4		+	_	-	0	209	4
HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	0 0		39	72	24	- 4	0		0	0	0	0 :	1	1		0	0	0	0 0	)	0	0	0	0	0	0	0	0		$\top$			0	142	4
HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	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
HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	7 3	17	15	3	2	0	0		0	0	0	0 (	0	0		1	0	0	0 0		0	0	0	0	0	0	0	0					0	49	4
HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	0 0	0	0	0	0	8	0	)	0	18	0	0 :	1	0		0	0	0	2 0		0	0	0	0	0	0	0	0					0	30	4
HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	0 0	0	11	0	5	0	0		0	0	0	0	1	0		0	0	0	0 (	)	0	0	0	0	0	0	0	0					0	17	4
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	_	N/A
HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	0 0	0	0	0	0	0	0	)	0	0	0	0 1	0	0		0	0	0	0 0	1	0	0	0	0	0	0	0	0					0	0	4
HV	Subtransmission Cable	Subtransmission submarine cable	km	0 0	0	0	0	11	0	0	)	0	0	0	0 1	0	0		0	0	0	0 0	1	0	0	0	0	0	0	0	0					0	11	4
HV	Zone substation Buildings	Zone substations up to 66kV	No.	0 1	2	11	15	7	5	3	3	0	0	1	0 1	0	1		0	0	1	1 (	1	0	0	0	1	0	0	0	0		4—	++	_	0	50	4
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 (	1	0	0	0	0	0	0	0	0	_	+	++	-	0	5	4
HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	0 0	0	0	0	0	9	0	)	0	0	0	0 1	0	0		0	0	0	0 0		0	0	11	0	0	0	0	0		4	+		0	20	4
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 (	1	0	0	0	0	0	0	0	0	_	+	++	-	0	-	N/A N/A
HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	0 0	0	- 0	- 0	- 0	0	0	1	0	0	0	0 1	0	0		0	0	0	0 0		0	0	0	0	0	0	0	0	_	+-	++	-	0	-	N/A N/A
HV	Zone substation switchgear Zone substation switchgear	33kV Switch (Pole Mounted) 33kV RMU	No.	0 0	0	- 0	- 0	- 0	0	0	1	0	0	0	0 1	0	0		0	0	0	0 0		0	0	0	0	0	0	0	0	_	+-	++	-	0	-	N/A N/A
HV			NO.	0 0			- 0	10	0	- 0		0	0	0	0	0	0		0	0	0	0 0		0	45	0	70	0	0	0	0	_	+-	++	-+		-	N/A 4
HV	Zone substation switchgear	22/33kV CB (Indoor) 22/33kV CB (Outdoor)	No.	0 0			- 11	19				0	0	0	0	0	0		0	0	0	0 0		0	.0		30	0	0	0	0	-	+-	+	-	0	124	N/A
HV	Zone substation switchgear Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	0 0		118	70	178		- 0		0		0	0		9 4	-			43	22 44		-	43		20	70 7				_	+-	++	-+		859	4
HV	Zone substation switchgear	3.3/6.6/11/22kV CB (globina mounted)	No.	0 0		110	/3	1/0	0/	- 11		0	0	0	0	0	0 4	3		0	0	0 6	-	0	0	0	0	0 2	0	0	0	_	+-	+-+	-+	0	639	N/A
HV	Zone Substation Transformer	Zone Substation Transformers	No.	0 0	1	23	33	17	20	4		0	1	1	0	0	1		3	0	5	5 4		0	1	3	3	1	0	2	1		+	1-1	-	0	129	4
HV	Distribution Line	Distribution OH Open Wire Conductor	km	0 0	0	0	66	610	35	87	,	2	2	9	1	5	6 1		9	4	4	3 3		1	1	0	0	2	0	2	3		+	1-1	-	19	883	3
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	-	N/A
HV	Distribution Line	SWER conductor	km	0 0		0	0	0	0	0		0	0	0	0 1	0	0		0	0	0	0 0	)	0	0	0	0	0	0	0	0		$\top$			0	-	N/A
HV	Distribution Cable	Distribution UG XLPE or PVC	km	0 0		0	11	11	25	8	1	17	14	14	5 6	5 5	55 6	31	10 3	34	25	41 22	2	14	44	27	34	30 3	1 3	19 2	16		+		-	5	697	4
HV	Distribution Cable	Distribution UG PILC	km	13 3	25	179	507	434	316	26	. 1	11	3	1	0 1	1	5 1		4	4	2	1 0	)	0	0	0	0	0	0	0	0		$\top$			4	1,564	4
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	2	4
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	1	0	0	7 1	13	13	2	2	0 2	2	2	1	0	0	1	0	4	9		Т	T		0	60	4
HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	0 0	2	0	3	3	4	0	1	11	0	4	2	3	1 1	1	1	4	8	8 3	25	5	8	8	11	16	7 2	7 3	1					32	235	3
HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	0 0	0	4	34	453	132	85	5 4	12	34	46	0 8	4 5	50 8	78	16	40	37	32 61	11	7 1	140	101	116 1	23 10	0 11	19 17	'5						2,438	3
HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	7 (	1	318	820	529	256	38	4	14	25	28	11 4	8 4	46 3	- 19	5 3	25	15	29 32	1	5	19	12	11	10	9 1	8 1	4					7	2,463	3
HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	4 0	2	225	823	1,046	470	54	1 5	51	59	101	92 11	5 8	85 6		12 3	39	43	81 73	13	3 1	105	105	123 1	35 11	5 19	17 14	17			$\bot$			4,535	4
HV	Distribution Transformer	Pole Mounted Transformer	No.	0 0	1 1	34	137	227	258	107		28		59	1 5		45 8			92	72	38 69	9 5	9	75	70	33	62 E	,	1 6						2	1,977	4
HV	Distribution Transformer	Ground Mounted Transformer	No.	0 0	2	79	1,028	1,451	1,338	126	5 15	50 1	115	108	15 16	2 17	70 27	137	17 13	20	90 1	.13 123	17	9 1	190	158	122 1	46 16	2 20	19 26	1					1	7,027	4
HV	Distribution Transformer	Voltage regulators	No.	0 0	0	0	0	0	1	0	3	0	0	0	0 1	0	0		0	0	0	0 3		0	0	0	0	0	0	0	0		4—	++	_	0	5	4
HV	Distribution Substations	Ground Mounted Substation Housing	No.	0 1	. 2	165	1,419	2,113	1,110	81		02	55	60	71 6	0 9	53 5	3	19 4	41	15	28 30	5	S	71	72	51	32 6	7 10	17 11	.7					112	6,187	3
	LV Line	LV OH Conductor	km	0 0	0	2	238	1,356	87	105	5	5	5	11	2	7	4		5	5	3	5 4		5	4	3	3	3	3	2	5		4—	++	_	54	1,934	3
LV	LV Cable	LV UG Cable	km	4 16	36	231	666	780	770	55	6	57	34	35	17 15	0 11	18 10	-	19 6	52	45	45 26	3	8	53	55	65	52 6	9 7	2 6	19		4	+		14	3,799	- 4
LV	LV Street lighting	LV OH/UG Streetlight circuit	km	3 0	8	15	27	33	50	3		5	3	2	1 1	2 1	11 1		9	8	4	6 4	_	4	5	5	9 77	7	6	6	3	+	+	+	-+	3	264	3
LV	Connections	OH/UG consumer service connections	No.	0 0	0	96	6,496	126,993	38,391	17,758	4,80	3 4,1	150 7,	356 10,2	13,90		99 10,59	6,88	17 4,70			92 3,988	4,34	9 4,8		983 5, 47		04 10,16	2 11,48			_	+-	++	-+		343,703	4
All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	U C	0	108	243	180	129	34	2	64	10	4	4	1 6	5/ 1	8	15	90 1	28	851 65	6	e e	66	42	116 1	12 6	A 13	. 8	V .	+	+-	++	-+	105	-,	3
All	SCADA and communications	SCADA and communications equipment operating as a single sys	Lot	0 0	0	0	0	0	- 1	0	1	0	0	0	5 1	-	5	-	ь	9	4	4 8	1	4	4	9	35	11 1	/ 1	4 1	.1	_	+-	++	$\rightarrow$	30	197	
All	Capacitor Banks	Capacitors including controls	No	U C	0	0	0	0	10	1	-	U	U	U	0 1	U	0		U	U	U	0 1		0	U	U	-1	0	U	U	U	_	+-	++	-+	0	13	4
All	Load Control	Centralised plant	Lot	U C	0	0	0	5	11	0	1	U	U	U	U	1	U		3	U	U	0 0		0	U	U	U	0	U	U	U	_	+-	++	-+	- 1	22	N/A
All	Load Control	Relays	NO																															1 1			-	

Company Name For Year Ended Network / Sub-network Name Vector 31 March 2020 Northern

	Disclosure Year (year ended)	31 March 2020							N	umber of asse	ts at disclo	sure year er	nd by install:	ation date																		No	. with Items at N	lo. with
					40 1950		1970		.990																									default
	Asset category	Asset class		-1940 -19	349 -1959 296 4.8		-1979 15.37		1999 2	342		2 2003	2004	2005	2006	2007	382	103 202		308 4			2015	2016	2017			1 598	2021	2022	2023 2024	2025 unk	126 66.871	dates
	Overhead Line Overhead Line	Concrete poles / steel structure	No.	- 8	296 4,8	88 10,859 27 206		12,891	5,957	342	274	255 2	55 19	16 382	511	388	382	700	480	308 4	00 73	38 75	971	1,188	1,684	2,426	2,236	1,598	-	$\rightarrow$	-	++	126 66,871 26 2.120	
	Overhead Line	Wood poles Other pole types	No.	4	8 1	27 206	37	487	3/2	18	13	4/	18	8 4/	58	53	20	3/	88	1	19 :	1/ 2	2 1	8	- 3	105	420	8	-+	$\rightarrow$	-+-	++	0 498	
	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	2	2	24 73	12	77	- 2	0	0	0	0	0 1	4	- 1	0		1	2	0	0	2	3/		105	120	150	-	-		+-+	0 317	
	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	0	0	0 3	1	0	0	0	0	0	0	0 0	0	7	0	0	0	0	0	0			0	0	0	0	_	-		1	0 27	
	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	0	0	0 0	1		23		0	1	1	2 3	7	18	7	22	2	3	1	3		3	4	4	2	- 1	_	-		1	0 145	
	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	0	0	0 1			0	0	0	0	0	0 0	0	0	0	0	0	0	0	0			0	0	0	0		-			0 2	
	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 -	
	Subtransmission Cable	Subtransmission UG up to 66kV (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		$\neg$			0 1	
v	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 -	
	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	1	0	0	0	0	0					0 -	
/	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 -	
	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	1	0	0	0	0	0			-		0 -	
	Subtransmission Cable	Subtransmission submarine cable	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 1	
	Zone substation Buildings	Zone substations up to 66kV	No.	0	0	2 17	1	11	5	0	1	0	1	0 0	0	0	3	1	1	1	0	0	1	0	1	0	1	0				+	0 52	
	Zone substation Buildings	Zone substations 110kV+	No.	0	0	0 0		0	1	0	0	0	0	0 0	0	0	0	0	0	0	0	0	1	0	0	0	0	0		$\rightarrow$			0 2	
	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	1	0	0	0	0	0	$-\!+$	$\rightarrow$		++	0 -	
	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	0	0	0 0	-	0	2	0	0	0	0	0 0	0	0	0	0	0	0	0	0	1	0	0	0	0	0		-		++	0 2	
	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	1	0	0	0	0	0		$\rightarrow$			0 -	
	Zone substation switchgear	33kV Switch (Pole Mounted) 33kV RMU	No.	- 0	0	0 0	5	8	- 0	0	0	0	0 .	0 1		5	5	- 0	2	0	1	0		4		- 1	0	0	-	$\rightarrow$	-	++	0 183	
	Zone substation switchgear	22/33kV CB (Indoor)	NO.	0	0	0 (					0		5	0 10	- 4	- 3	20	- 0	0	0	0	0 3		- 0	0	0	- 0	0	-+	$\rightarrow$	-+-	++	0 136	
	Zone substation switchgear	22/33kV CB (Indoor) 22/33kV CB (Outdoor)	No.		0	5 30		- 22	- 4	- 4		-		0 10		- 4	30	-		2		0 3		- 13						$\rightarrow$	-+-	+	0 105	
	Zone substation switchgear Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.		0	3 20		- 27	- 40	0	-	3	4	0 10				3	20	3	4			30	- 4	- 0		0	-+	$\rightarrow$	-+-	++	0 510	
	Zone substation switchgear	3.3/6.6/11/22kV CB (globila mounted)	No.	0	0	0 0	- /	0.0		0	0	0	0	0 0		0	40	0	0	0	9 .	0		- 40	- 32	14		0	-	-		+-+	0 510	
	Zone Substation Transformer	Zone Substation Transformers	No.	0	0	2 15	1	18	8	0	1	1	0	1 0	0	2	0	6	0	3	1	1		1	3	0	0	3	_	-		1	0 90	
	Distribution Line	Distribution OH Open Wire Conductor	km	0	4 1	43 538		759	258	8	9	3	2	5 16	30	52	12	18	7	5	3	4		4	5	5	5	13	_	-		1	11 2.863	
	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 -	
	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			i		0 -	
V	Distribution Cable	Distribution UG XLPE or PVC	km	0	0	0 0		21	150	29	23	17	8 1	3 32	81	43	30	73	28	31	18 2	25 2	5 31	34	35	48	24	32			i		1 864	
v	Distribution Cable	Distribution UG PILC	km	0	0	1 16	11	265	194	8	2	2	0	2 1	2	2	1	2	0	0	0	0		0	0	0	0	0					3 620	
v	Distribution Cable	Distribution Submarine Cable	km	0	0	6 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	
/	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionaliser	No.	0	0	0 0		0	16	4	5	1	1	0 3	2	19	55	37	3	0	6 :	10		3	2	0	18	27					0 214	
/	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	0	0	0 0		2	0	0	0	0	0	0 1	1	0	0	6	0	2	0	1		7	13	6	14	3					0 58	
	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	0	0	8 211	93	1,235	1,240	154	118	101 1	01 6	134	243	166	165	217	119	76 1	01 14	42 17	304	374	451	357	405	467					36 8,098	
	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	0	0	0 9	3	124	191	42	30	40 :	25 2	18 33	23	20	8	17	23	13	21 :	19 2	2 !	14	12	7	15	5		$\rightarrow$			0 783	
	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	0	0	0 10		158	208	47	26	36	54 5	i5 44	34	34	24	16	52	36		45 5	7	97	131	145	137	63				+	1 1,681	
	Distribution Transformer	Pole Mounted Transformer	No.	12	27 1	20 201		1,001	965	148	80	91	79 3	17 169	213	217	112	158	139	83 1		06 12	121	133	143	181	189	177				+	2 5,623	
	Distribution Transformer	Ground Mounted Transformer	No.	6	35 1	34 663	87	822	920	151	122	138 1	16 6	8 423	250	214	159	184	193	205 1	35 14	47 19	19:	176	217	315	259	212		$\longrightarrow$		+	0 7,532	
	Distribution Transformer	Voltage regulators	No.	0	61 1	0 0	159	1 280	0	104	0	0	81 12	1 0	0	1	0	0	0	74	1	2 8	1 13	0	136	125	0	144	-	$\rightarrow$		+	0 7	
	Distribution Substations	Ground Mounted Substation Housing	No.	11					949	104	133	69 :	81 12	19 65	67	28	31	19	33	24	24 4	4/ 8	13:	96	136		130	144	-	$\longrightarrow$		+	1 6,888	
	LV Line	LV OH Conductor	km	0	4 1	9 199		420	68	9	4	4		2 10	22	40	8	9	ь	-/	0	3		6	13	25	21	43	-+	-		+	23 2,221	
	LV Cable LV Street lighting	LV UG Cable LV OH/UG Streetlight circuit	km	0	3	9 198	39	275	490	63	50	Z1 :	14 3	iu 61	141	55	31	52	27	28	ZU :	51 4	61	66	82	92	80	69	-+	$\rightarrow$	-+-	++	8 2,491 4 215	
	LV Street lighting Connections	LV OH/UG Streetlight circuit OH/UG consumer service connections	No.	0	0	0 66	27.36	44,299	87 307	5.465 4.0	117 7	551 42	1 88 4 60	2 3 17 4 199	3,366	3.126	3,170	2 197 2	.426 Z	12	53 23	4 1	3 3.25	3.846	4,323	4,829	4 488	4 871	-+	$\rightarrow$	-+-	++	0 234,403	
	Protections	Protection relays (electromechanical, solid state and numeric)	No.	0	0	5 41			102	J,400 4,1	0 3,	4,00	0 7	9 45		3,120	62		97	(181 Z,U 81	38 16		3,25		4,323	4,829	9,906	70	-	$\rightarrow$	-+-	+-+	140 1.773	
	SCADA and communications	SCADA and communications equipment operating as a single sys	Lot	0	0	0 4	20	103	2	0	0	0	0 2	0 2	- 12	15	6	1	7	3	9 1	11		20	10	12	52 C	79	-+	$\rightarrow$	-	+	42 159	
	SCADA and communications  Capacitor Banks	Capacitors including controls	No	0	0	0 0			o o	44	0	0	1	0 0	2	0	0	0	1	0	0	11		4	- 10	-3 0	0	n	-+	$\rightarrow$		+-+	0 63	
	Load Control	Centralised plant	Lot	0	0	0 8		2	0	0	0	0	0	0 0	0	0	0	-	-	0		0		-	0	0	0	0	-+	$\rightarrow$	-	+-+	0 11	

Company Name Vector 31 March 2020 For Year Ended Network / Sub-network Name Combined SCHEDULE 9c: REPORT ON OVERHEAD LINES AND UNDERGROUND CABLES This schedule requires a summary of the key characteristics of the overhead line and underground cable network. All units relating to cable and line assets, that are expressed in km, refer to circuit lengths. sch ref Total circuit Underground Overhead (km) length (km) 10 Circuit length by operating voltage (at year end) (km) 11 > 66kV 47 74 12 50kV & 66kV 365 422 787 13 SWER (all SWER voltages) 14 15 22kV (other than SWER) 187 190 16 6.6kV to 11kV (inclusive—other than SWER) 3,746 3,708 7,454 17 Low voltage (< 1kV) 4 154 10.445 18 Total circuit length (for supply) 8,295 10,65 18,950 19 Dedicated street lighting circuit length (km) 461 20 479 21 Circuit in sensitive areas (conservation areas, iwi territory etc) (km) 4,481 22 Circuit length (% of total 23 Overhead circuit length by terrain (at year end) (km) overhead length) 24 Urban 25 Rural 3,533 43% 26 Remote only 27 Rugged only 28 Remote and rugged 29 Unallocated overhead lines 30 Total overhead length 8,295 100% 31 Circuit length (% of total circuit 32 (km) length) 33 Length of circuit within 10km of coastline or geothermal areas (where known) 18,915 99.8% Circuit length (% of total 34 (km) overhead length) 35 Overhead circuit requiring vegetation management 8,295 100%

Company Name Vector 31 March 2020 For Year Ended Network / Sub-network Name Southern SCHEDULE 9c: REPORT ON OVERHEAD LINES AND UNDERGROUND CABLES This schedule requires a summary of the key characteristics of the overhead line and underground cable network. All units relating to cable and line assets, that are expressed in km, refer sch ref Total circuit Underground Overhead (km) length (km) 10 Circuit length by operating voltage (at year end) (km) 11 > 66kV 47 12 50kV & 66kV 48 13 273 321 SWER (all SWER voltages) 14 15 22kV (other than SWER) 187 190 16 6.6kV to 11kV (inclusive—other than SWER) 883 2,216 3,099 17 Low voltage (< 1kV) 1 934 3 799 5.733 18 Total circuit length (for supply) 2,868 6,522 9,390 19 Dedicated street lighting circuit length (km) 20 264 21 Circuit in sensitive areas (conservation areas, iwi territory etc) (km) 2,370 22 Circuit length (% of total 23 Overhead circuit length by terrain (at year end) (km) overhead length) 24 Urban 25 Rural 473 16% 26 Remote only 27 Rugged only 28 Remote and rugged 29 Unallocated overhead lines 30 Total overhead length 2,868 100% 31 Circuit length (% of total circuit 32 (km) length) 33 Length of circuit within 10km of coastline or geothermal areas (where known) 99.9% Circuit length (% of total 34 (km) overhead length) 35 Overhead circuit requiring vegetation management 2,868 100%

Company Name Vector 31 March 2020 For Year Ended 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 Total circuit Underground Overhead (km) length (km) 10 Circuit length by operating voltage (at year end) (km) 11 > 66kV 12 50kV & 66kV 149 466 13 317 SWER (all SWER voltages) 14 15 22kV (other than SWER) 2,863 1.492 16 6.6kV to 11kV (inclusive—other than SWER) 4,355 17 Low voltage (< 1kV) 2 221 2 491 4.712 4,132 18 Total circuit length (for supply) 5,427 9,559 19 Dedicated street lighting circuit length (km) 202 20 12 215 21 Circuit in sensitive areas (conservation areas, iwi territory etc) (km) 2,111 22 Circuit length (% of total 23 Overhead circuit length by terrain (at year end) (km) overhead length) 24 Urban 25 Rural 3,060 56% 26 Remote only 27 Rugged only 28 Remote and rugged 29 Unallocated overhead lines 30 Total overhead length 5,427 100% 31 Circuit length (% of total circuit 32 (km) length) 33 Length of circuit within 10km of coastline or geothermal areas (where known) 99.72% Circuit length (% of total 34 (km) overhead length)

5,427

100%

Overhead circuit requiring vegetation management

	Company		Ved	
	For Year	Ended	31 Mar	ch 2020
_	SCHEDULE 9d: REPORT ON EMBEDDED NETWORKS his schedule requires information concerning embedded networks owned by an EDB that are embedded in another EDB's network or in	n another em	nbedded network.	
		N	lumber of ICPs	Line charge revenue
8	Location *		served	(\$000)
9	None			
10				
11				
12				
13				
14				
15				
16				
17				
18				
19		_		
20				
21				
22		_		
23 24				
24 25				
23	* Extend embedded distribution networks table as necessary to disclose each embedded network owned by the EDB which is em	hedded in an	other FDR's netwo	ark or in another
26	embedded network	beaueu III UII	other EDD 3 HELWC	ik of all unother

	Company Name	Vector
	For Year Ended	31 March 2020
	Network / Sub-network Name	Combined
This	<b>HEDULE 9e: REPORT ON NETWORK DEMAND</b> schedule requires a summary of the key measures of network utilisation for the disclosure year (number of ributed generation, peak demand and electricity volumes conveyed).	new connections including
	Oolily Consumer Connections	
8 9	9e(i): Consumer Connections  Number of ICPs connected in year by consumer type	
		Number of
10	Consumer types defined by EDB*	connections (ICPs)
11	Residential	7,650
12	Commercial	4,828
13		
14		
15 16	* include additional rows if needed	
17	Connections total	12,478
18	Connections total	12,470
19	Distributed generation	
20	Number of connections made in year	519 connections
21	Capacity of distributed generation installed in year	3.37 MVA
22	9e(ii): System Demand	
23		
24		Demand at time
		of maximum
		coincident demand (MW)
25	Maximum coincident system demand	
26	GXP demand	1,731
27	plus Distributed generation output at HV and above	14
28 29	Maximum coincident system demand  less Net transfers to (from) other EDBs at HV and above	1,745
30	Demand on system for supply to consumers' connection points	1,745
31	Electricity volumes carried	Energy (GWh)
32	Electricity supplied from GXPs	8,612
33	less Electricity exports to GXPs	-
34	plus Electricity supplied from distributed generation	136
35	less Net electricity supplied to (from) other EDBs	
36	Electricity entering system for supply to consumers' connection points	8,748
37	less Total energy delivered to ICPs	8,427
38 39	Electricity losses (loss ratio)	321 3.7%
40	Load factor	0.57
41	9e(iii): Transformer Capacity	(1994)
42	Distribution transformer conscitu/FDD	(MVA)
43 44	Distribution transformer capacity (EDB owned)	4,594 531
45	Distribution transformer capacity (Non-EDB owned, estimated)  Total distribution transformer capacity	5,125
46	Total distribution dansionner capacity	5,125
47	Zone substation transformer capacity	4,566
.,		1,550

	Company Name	Vector
	For Year Ended	31 March 2020
	Network / Sub-network Name	Southern
This	<b>HEDULE 9e: REPORT ON NETWORK DEMAND</b> schedule requires a summary of the key measures of network utilisation for the disclosure year (number of ributed generation, peak demand and electricity volumes conveyed).	new connections including
ا	Calily Canauman Connections	
8 9	9e(i): Consumer Connections  Number of ICPs connected in year by consumer type	
		Number of
10	Consumer types defined by EDB*	connections (ICPs)
11	Residential	5,207
12	Commercial	2,364
13		
14 15		
16	* include additional rows if needed	
17	Connections total	7,571
18		
19	Distributed generation	
20	Number of connections made in year	219 connections
21	Capacity of distributed generation installed in year	1.76 <b>MVA</b>
22	9e(ii): System Demand	
23		
24		Demand at time
		of maximum
		coincident
25	Maximum coincident system demand	demand (MW)
26	GXP demand	1,076
27	plus Distributed generation output at HV and above	4
28	Maximum coincident system demand	1,080
29	less Net transfers to (from) other EDBs at HV and above	-
30	Demand on system for supply to consumers' connection points	1,080
31	Electricity volumes carried	Energy (GWh)
32	Electricity supplied from GXPs	5,798
33	less Electricity exports to GXPs	-
34	plus Electricity supplied from distributed generation	50
35	less Net electricity supplied to (from) other EDBs	-
36	Electricity entering system for supply to consumers' connection points	5,848
37	less Total energy delivered to ICPs	5,665
38 39	Electricity losses (loss ratio)	183 3.1%
40	Load factor	0.62
41	9e(iii): Transformer Capacity	
42		(MVA)
43	Distribution transformer capacity (EDB owned)	2,900
44	Distribution transformer capacity (Non-EDB owned, estimated)	475
45	Total distribution transformer capacity	3,375
46 47	Zone substation transformer capacity	2,992
4/	Zone substation transformer capacity	2,332

	Company Name	Vector
	Company Name	31 March 2020
	For Year Ended	
	Network / Sub-network Name	Northern
SCI	HEDULE 9e: REPORT ON NETWORK DEMAND	
	schedule requires a summary of the key measures of network utilisation for the disclosure year (number of	new connections including
distri	buted generation, peak demand and electricity volumes conveyed).	
sch ref		
8	9e(i): Consumer Connections	
9	Number of ICPs connected in year by consumer type	
		Number of
10	Consumer types defined by EDB*	connections (ICPs)
11	Residential	2,443
12	Commercial	2,464
13		
14		
15 16	* include additional rows if needed	
17	Connections total	4,907
18		· · ·
19	Distributed generation	
20	Number of connections made in year	300 connections
21	Capacity of distributed generation installed in year	1.61 MVA
	0 (") 0 1 1	
22	9e(ii): System Demand	
23 24		
24		Demand at time
		of maximum coincident
	Market and the state of the sta	demand (MW)
25	Maximum coincident system demand	
26 27	GXP demand  plus Distributed generation output at HV and above	694 10
28	Maximum coincident system demand	704
29	less Net transfers to (from) other EDBs at HV and above	-
30	Demand on system for supply to consumers' connection points	704
31	Electricity volumes carried	Energy (GWh)
32	Electricity supplied from GXPs	2,814
33	less Electricity exports to GXPs	-
34	plus Electricity supplied from distributed generation	86
35 36	less Net electricity supplied to (from) other EDBs  Electricity entering system for supply to consumers' connection points	2,900
37	less Total energy delivered to ICPs	2,762
38	Electricity losses (loss ratio)	138 4.8%
39		
40	Load factor	0.47
	0.700 = .000	
41	9e(iii): Transformer Capacity	
42	21.11.11.11.11.11.11.11.11.11.11.11.11.1	(MVA)
43	Distribution transformer capacity (EDB owned)	1,694
44 45	Distribution transformer capacity (Non-EDB owned, estimated)  Total distribution transformer capacity	2,088
	Total distribution transformer capacity	2,000
46 47	Zone substation transformer capacity	1,574
7/	Lone Substation transformer capacity	1,374

Company Name Vector 31 March 2020 For Year Ended Network / Sub-network Name Combined **SCHEDULE 10: REPORT ON NETWORK RELIABILITY** This schedule requires a summary of the key measures of network reliability (interruptions, SAIDI, SAIFI and fault rate) for the disclosure year. EDBs must provide explanatory comment on their network reliability for the disclosure year in Schedule 14 (Explanatory notes to templates). The SAIFI and SAIDI information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8. 10(i): Interruptions Number of Interruptions by class interruptions Class A (planned interruptions by Transpower) Class B (planned interruptions on the network) 12 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) 14 16 Class G (unplanned interruptions caused by another disclosing entity) Class H (planned interruptions caused by another disclosing entity) 18 Class I (interruptions caused by parties not included above) 20 21 22 Interruption restoration Class C interruptions restored within 23 SAIFI and SAIDI by class SAIFI Class A (planned interruptions by Transpower)
Class B (planned interruptions on the network) 25 26 27 Class C (unplanned interruptions on the network) 119.7 Class D (unplanned interruptions by Transpower) 29 Class E (unplanned interruptions of EDB owned generation) Class F (unplanned interruptions of generation owned by others) 31 Class G (unplanned interruptions caused by another disclosing entity) 0.00 0.0 Class H (planned interruptions caused by another disclosing entity) 33 Class I (interruptions caused by parties not included above) 0.0 34 35 Normalised SAIFI and SAIDI 36 Normalised SAIFI Normalised SAIDI Classes B & C (interruptions on the network) (under the 2015 DPP) Classes B & C (interruptions on the network) (under the ID Determination 2012) 37 38 10(ii): Class C Interruptions and Duration by Cause 39 41 Cause 43 Vegetation 44 45 Adverse weather Adverse environment 46 47 Third party interference Wildlife 48 49 Human error 0.04 Defective equipment 0.55 48.0 50 51 Cause unknown 10(iii): Class B Interruptions and Duration by Main Equipment Involved 53 Main equipment involved 54 SAIFI Subtransmission lines 56 Subtransmission cables 57 58 Subtransmission other Distribution lines (excluding LV) 69 Distribution cables (excluding LV) 60 Distribution other (excluding LV) 10(iv): Class C Interruptions and Duration by Main Equipment Involved 62 Main equipment involved 64 Subtransmission lines 0.16 65 66 Subtransmission cables Subtransmission other Distribution lines (excluding LV)
Distribution cables (excluding LV) 69 Distribution other (excluding LV) 10(v): Fault Rate 70 Circuit length Fault rate (faults Main equipment involved per 100km) **Number of Faults** (km) 72 Subtransmission lines Subtransmission cables 0.16 74 Subtransmission other Distribution lines (excluding LV) 29.23 Distribution cables (excluding LV)
Distribution other (excluding LV) 76 77 78 248 Total



Company Name Vector 31 March 2020 For Year Ended Network / Sub-network Name Southern **SCHEDULE 10: REPORT ON NETWORK RELIABILITY** This schedule requires a summary of the key measures of network reliability (interruptions, SAIDI, SAIFI and fault rate) for the disclosure year. EDBs must provide explanatory comment on their network reliability for the disclosure year in Schedule 14 (Explanatory notes to templates). The SAIFI and SAIDI information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8. 10(i): Interruptions Number of Interruptions by class interruptions Class A (planned interruptions by Transpower) Class B (planned interruptions on the network) 12 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) 14 15 16 Class G (unplanned interruptions caused by another disclosing entity) Class H (planned interruptions caused by another disclosing entity) 18 Class I (interruptions caused by parties not included above) 20 21 22 Interruption restoration Class C interruptions restored within 23 SAIFI and SAIDI by class SAIFI Class A (planned interruptions by Transpower)
Class B (planned interruptions on the network) 25 26 27 Class C (unplanned interruptions on the network) 1.03 83.7 Class D (unplanned interruptions by Transpower) 29 Class E (unplanned interruptions of EDB owned generation) Class F (unplanned interruptions of generation owned by others) 31 Class G (unplanned interruptions caused by another disclosing entity) 0.00 0.0 Class H (planned interruptions caused by another disclosing entity) 33 Class I (interruptions caused by parties not included above) 0.0 34 35 Normalised SAIFI and SAIDI Normalised SAIFI Normalised SAIDI 37 ruptions on the network) (under the 2015 DPP) Classes B & C (interruptions on the network) (under the ID Determination 2012) 10(ii): Class C Interruptions and Duration by Cause 40 42 Lightning Vegetation 44 Adverse weather 45 46 Third party interference 47 48 Wildlife Human error 49 50 Defective equipment 0.47 Cause unknown 51 10(iii): Class B Interruptions and Duration by Main Equipment Involved 52 53 54 55 Main equipment involved Subtransmission lines Subtransmission cables 0.00 57 Subtransmission other 58 69 Distribution lines (excluding LV)
Distribution cables (excluding LV) 60 Distribution other (excluding LV) 10(iv): Class C Interruptions and Duration by Main Equipment Involved 61 63 Main equipment involved SAIFI 64 65 Subtransmission lines Subtransmission cables Subtransmission other Distribution lines (excluding LV) 66 67 68 Distribution cables (excluding LV)
Distribution other (excluding LV) 69 10(v): Fault Rate Fault rate (faults Circuit length 71 Main equipment involved Number of Faults (km) per 100km) Subtransmission lines 11.79 Subtransmission cables Subtransmission other 75 76 77 Distribution lines (excluding LV) 883 27.97 Distribution cables (excluding LV)
Distribution other (excluding LV)



Company Name Vector 31 March 2020 For Year Ended Network / Sub-network Name Northern **SCHEDULE 10: REPORT ON NETWORK RELIABILITY** This schedule requires a summary of the key measures of network reliability (interruptions, SAIDI, SAIFI and fault rate) for the disclosure year. EDBs must provide explanatory comment on their network reliability for the disclosure year in Schedule 14 (Explanatory notes to templates). The SAIFI and SAIDI information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8. 10(i): Interruptions Number of Interruptions by class interruptions Class A (planned interruptions by Transpower) Class B (planned interruptions on the network) 12 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) 14 15 16 Class G (unplanned interruptions caused by another disclosing entity) Class H (planned interruptions caused by another disclosing entity) 18 Class I (interruptions caused by parties not included above) 20 21 22 Interruption restoration Class C interruptions restored within 23 SAIFI and SAIDI by class SAIFI Class A (planned interruptions by Transpower)
Class B (planned interruptions on the network) 25 26 27 Class C (unplanned interruptions on the network) 1.84 172.3 Class D (unplanned interruptions by Transpower) 29 Class E (unplanned interruptions of EDB owned generation) Class F (unplanned interruptions of generation owned by others) 31 Class G (unplanned interruptions caused by another disclosing entity) 0.00 0.0 Class H (planned interruptions caused by another disclosing entity) 33 Class I (interruptions caused by parties not included above) 34 35 Normalised SAIFI and SAIDI Normalised SAIFI Normalised SAIDI 37 ruptions on the network) (under the 2015 DPP) Classes B & C (interruptions on the network) (under the ID Determination 2012) 10(ii): Class C Interruptions and Duration by Cause 40 42 Lightning Vegetation 44 Adverse weather 45 46 Third party interference 0.21 47 48 Wildlife Human error 49 50 Defective equipment Cause unknown 51 10(iii): Class B Interruptions and Duration by Main Equipment Involved 52 53 54 55 Main equipment involved Subtransmission lines Subtransmission cables 0.00 57 Subtransmission other 58 69 Distribution lines (excluding LV)
Distribution cables (excluding LV) 60 Distribution other (excluding LV) 10(iv): Class C Interruptions and Duration by Main Equipment Involved 61 63 Main equipment involved SAIFI 64 65 Subtransmission lines Subtransmission cables Subtransmission other Distribution lines (excluding LV) 66 67 68 Distribution cables (excluding LV)
Distribution other (excluding LV) 69 10(v): Fault Rate Fault rate (faults Circuit length 71 Main equipment involved Number of Faults per 100km) Subtransmission lines Subtransmission cables 149 0.67 Subtransmission other 75 76 77 Distribution lines (excluding LV) 2863 29.62 Distribution cables (excluding LV)
Distribution other (excluding LV) 93

