



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

Company Name	Powerco Limited
Disclosure Date	31 August 2021
Disclosure Year (year ended)	31 March 2021

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

## Table of Contents

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

### **Disclosure Template Instructions**

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

#### ***Company Name and Dates***

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

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

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

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

#### ***Data Entry Cells and Calculated Cells***

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

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

#### ***Validation Settings on Data Entry Cells***

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

#### ***Conditional Formatting Settings on Data Entry Cells***

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

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

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

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

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

#### ***Inserting Additional Rows and Columns***

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

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

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

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

***Disclosures by Sub-Network***

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

***Schedule References***

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

***Description of Calculation References***

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

***Worksheet Completion Sequence***

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

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

Company Name **Powerco Limited**  
For Year Ended **31 March 2021**

## SCHEDULE 1: ANALYTICAL RATIOS

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

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

sch ref

1(i): Expenditure metrics		Expenditure per GWh energy delivered to ICPs (\$/GWh)	Expenditure per average no. of ICPs (\$/ICP)	Expenditure per MW maximum coincident system demand (\$/MW)	Expenditure per km circuit length (\$/km)	Expenditure per MVA of capacity from EDB-owned distribution transformers (\$/MVA)
7						
8						
9	Operational expenditure	18,637	261	96,341	3,190	27,376
10	Network	8,392	118	43,380	1,436	12,327
11	Non-network	10,245	144	52,961	1,753	15,050
12						
13	Expenditure on assets	49,528	694	256,027	8,476	72,753
14	Network	46,442	651	240,075	7,948	68,220
15	Non-network	3,086	43	15,952	528	4,533
16						
17	1(ii): Revenue metrics					
18						
19	Total consumer line charge revenue	72,402	1,015			
20	Standard consumer line charge revenue	92,353	882			
21	Non-standard consumer line charge revenue	29,899	115,083			
22						
23	1(iii): Service intensity measures					
24						
25	Demand density	33				Maximum coincident system demand per km of circuit length (for supply) (kW/km)
26	Volume density	171				Total energy delivered to ICPs per km of circuit length (for supply) (MWh/km)
27	Connection point density	12				Average number of ICPs per km of circuit length (for supply) (ICPs/km)
28	Energy intensity	14,015				Total energy delivered to ICPs per average number of ICPs (kWh/ICP)
29						
30	1(iv): Composition of regulatory income					
31						
32	Operational expenditure			(\$000)	% of revenue	
33	Pass-through and recoverable costs excluding financial incentives and wash-ups			90,946	28.99%	
34	Total depreciation			103,659	33.04%	
35	Total revaluations			80,369	25.61%	
36	Regulatory tax allowance			29,063	9.26%	
37	Regulatory profit/(loss) including financial incentives and wash-ups			9,885	3.15%	
38	Total regulatory income			55,872	17.81%	
39				313,765		
40	1(v): Reliability					
41						
42	Interruption rate			20.24		Interruptions per 100 circuit km

Company Name	<b>Powerco Limited</b>
For Year Ended	<b>31 March 2021</b>

**SCHEDULE 2: REPORT ON RETURN ON INVESTMENT**

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

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

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sch ref

	CY-2 31 Mar 19 %	CY-1 31 Mar 20 %	Current Year CY 31 Mar 21 %
<b>2(i): Return on Investment</b>			
<b>ROI – comparable to a post tax WACC</b>			
Reflecting all revenue earned	6.12%	6.97%	2.55%
Excluding revenue earned from financial incentives	6.02%	6.99%	2.52%
Excluding revenue earned from financial incentives and wash-ups	6.01%	7.00%	2.54%
<b>Mid-point estimate of post tax WACC</b>			
25th percentile estimate	4.75%	4.27%	3.72%
75th percentile estimate	4.07%	3.59%	3.04%
	5.43%	4.95%	4.40%
<b>ROI – comparable to a vanilla WACC</b>			
Reflecting all revenue earned	6.63%	7.40%	2.88%
Excluding revenue earned from financial incentives	6.53%	7.41%	2.85%
Excluding revenue earned from financial incentives and wash-ups	6.52%	7.43%	2.88%
<b>WACC rate used to set regulatory price path</b>	7.19%	7.19%	4.57%
<b>Mid-point estimate of vanilla WACC</b>			
25th percentile estimate	5.26%	4.69%	4.05%
75th percentile estimate	4.58%	4.01%	3.37%
	5.94%	5.37%	4.73%
<b>2(ii): Information Supporting the ROI</b>			
			(\$000)
Total opening RAB value	1,962,910		
plus Opening deferred tax	(73,280)		
<b>Opening RIV</b>		1,889,630	
<b>Line charge revenue</b>		353,313	
Expenses cash outflow	194,605		
add Assets commissioned	184,197		
less Asset disposals	42,007		
add Tax payments	8,349		
less Other regulated income	(39,548)		
<b>Mid-year net cash outflows</b>		384,692	
<b>Term credit spread differential allowance</b>		2,098	
Total closing RAB value	2,053,806		
less Adjustment resulting from asset allocation	11		
less Lost and found assets adjustment	-		
plus Closing deferred tax	(74,816)		
<b>Closing RIV</b>		1,978,979	
<b>ROI – comparable to a vanilla WACC</b>			2.88%
Leverage (%)			42%
Cost of debt assumption (%)			2.82%
Corporate tax rate (%)			28%
<b>ROI – comparable to a post tax WACC</b>			2.55%

Company Name **Powerco Limited**  
 For Year Ended **31 March 2021**

**SCHEDULE 2: REPORT ON RETURN ON INVESTMENT**

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

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sch ref

**2(iii): Information Supporting the Monthly ROI**

Opening RIV N/A

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

Tax payments N/A

Term credit spread differential allowance N/A

Closing RIV N/A

Monthly ROI – comparable to a vanilla WACC N/A

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

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

Year-end ROI – comparable to a vanilla WACC 2.81%

Year-end ROI – comparable to a post tax WACC 2.48%

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

**2(v): Financial Incentives and Wash-Ups**

Net recoverable costs allowed under incremental rolling incentive scheme	-
Purchased assets – avoided transmission charge	-
Energy efficiency and demand incentive allowance	-
Quality incentive adjustment	786
Other financial incentives	-
<b>Financial incentives</b>	786
<b>Impact of financial incentives on ROI</b>	0.03%

Input methodology claw-back	-
CPP application recoverable costs	-
Catastrophic event allowance	-
Capex wash-up adjustment	(578)
Transmission asset wash-up adjustment	-
2013–15 NPV wash-up allowance	-
Reconsideration event allowance	-
Other wash-ups	-

Company Name **Powerco Limited**  
 For Year Ended **31 March 2021**

**SCHEDULE 2: REPORT ON RETURN ON INVESTMENT**

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*sch ref*

119	Wash-up costs	(578)
120		
121	Impact of wash-up costs on ROI	-0.02%



Company Name **Powerco Limited**For Year Ended **31 March 2021****SCHEDULE 3: REPORT ON REGULATORY PROFIT**

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

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

sch ref

<b>3(i): Regulatory Profit</b>		(\$000)
7	<b>Income</b>	
8	Line charge revenue	353,313
9	<i>plus</i> Gains / (losses) on asset disposals	(41,904)
10	<i>plus</i> Other regulated income (other than gains / (losses) on asset disposals)	2,355
11		
12	<b>Total regulatory income</b>	313,765
13	<b>Expenses</b>	
14	<i>less</i> Operational expenditure	90,946
15	<i>less</i> Pass-through and recoverable costs excluding financial incentives and wash-ups	103,659
16		
17	<b>Operating surplus / (deficit)</b>	119,160
18	<i>less</i> Total depreciation	80,369
19	<i>plus</i> Total revaluations	29,063
20		
21	<b>Regulatory profit / (loss) before tax</b>	67,855
22	<i>less</i> Term credit spread differential allowance	2,098
23	<i>less</i> Regulatory tax allowance	9,885
24		
25	<b>Regulatory profit/(loss) including financial incentives and wash-ups</b>	55,872
26		
27		
28		
29		
30		
31		
32		
33	<b>3(ii): Pass-through and Recoverable Costs excluding Financial Incentives and Wash-Ups</b>	(\$000)
34	<b>Pass through costs</b>	
35	Rates	1,929
36	Commerce Act levies	632
37	Industry levies	1,234
38	CPP specified pass through costs	-
39	<b>Recoverable costs excluding financial incentives and wash-ups</b>	
40	Electricity lines service charge payable to Transpower	88,075
41	Transpower new investment contract charges	7,355
42	System operator services	-
43	Distributed generation allowance	4,435
44	Extended reserves allowance	-
45	Other recoverable costs excluding financial incentives and wash-ups	-
46	<b>Pass-through and recoverable costs excluding financial incentives and wash-ups</b>	103,659
47		

Company Name **Powerco Limited**  
 For Year Ended **31 March 2021**

**SCHEDULE 3: REPORT ON REGULATORY PROFIT**

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

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

sch ref

		(\$000)	
		CY-1	CY
		31 Mar 20	31 Mar 21
48	<b>3(iii): Incremental Rolling Incentive Scheme</b>		
49			
50			
51	Allowed controllable opex		
52	Actual controllable opex		
53			
54	Incremental change in year		
55			
		Previous years' incremental change	Previous years' incremental change adjusted for inflation
56			
57	CY-5 31 Mar 16		
58	CY-4 31 Mar 17		
59	CY-3 31 Mar 18		
60	CY-2 31 Mar 19		
61	CY-1 31 Mar 20		
62	<b>Net incremental rolling incentive scheme</b>		-
63			
64	<b>Net recoverable costs allowed under incremental rolling incentive scheme</b>		-
65	<b>3(iv): Merger and Acquisition Expenditure</b>		
70			(\$000)
66	Merger and acquisition expenditure		
67			
68	<i>Provide commentary on the benefits of merger and acquisition expenditure to the electricity distribution business, including required disclosures in accordance with section 2.7, in Schedule 14 (Mandatory Explanatory Notes)</i>		
69	<b>3(v): Other Disclosures</b>		
70			(\$000)
71	Self-insurance allowance		

Company Name **Powerco Limited**  
 For Year Ended **31 March 2021**

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

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

sch ref

4(i): Regulatory Asset Base Value (Rolled Forward)		for year ended				
		RAB 31 Mar 17 (\$000)	RAB 31 Mar 18 (\$000)	RAB 31 Mar 19 (\$000)	RAB 31 Mar 20 (\$000)	RAB 31 Mar 21 (\$000)
	Total opening RAB value	1,528,013	1,592,546	1,657,737	1,787,100	1,962,910
less	Total depreciation	62,497	66,765	67,008	69,808	80,369
plus	Total revaluations	32,664	17,321	24,327	44,763	29,063
plus	Assets commissioned	108,878	123,688	185,313	208,182	184,197
less	Asset disposals	14,730	9,200	12,096	7,414	42,007
plus	Lost and found assets adjustment	-	-	-	-	-
plus	Adjustment resulting from asset allocation	218	146	(1,173)	86	11
	<b>Total closing RAB value</b>	<b>1,592,546</b>	<b>1,657,737</b>	<b>1,787,100</b>	<b>1,962,910</b>	<b>2,053,806</b>
4(ii): Unallocated Regulatory Asset Base						
	Total opening RAB value		Unallocated RAB * (\$000)	1,977,226	RAB (\$000)	1,962,910
less	Total depreciation		81,728		80,369	
plus	Total revaluations		29,248		29,063	
plus	Assets commissioned (other than below)	186,350			183,865	
	Assets acquired from a regulated supplier	-			-	
	Assets acquired from a related party	332			332	
	<b>Assets commissioned</b>		186,682		184,197	
less	Asset disposals (other than below)	41,998			42,007	
	Asset disposals to a regulated supplier	-			-	
	Asset disposals to a related party	-			-	
	<b>Asset disposals</b>		41,998		42,007	
plus	Lost and found assets adjustment		-		-	
plus	Adjustment resulting from asset allocation					11
	<b>Total closing RAB value</b>		<b>2,069,431</b>		<b>2,053,806</b>	

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

Company Name **Powerco Limited**  
 For Year Ended **31 March 2021**

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

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

*sch ref*

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

CPI <sub>t</sub>	1,068
CPI <sub>t-4</sub>	1,052
Revaluation rate (%)	1.52%

	Unallocated RAB *		RAB	
	(\$000)	(\$000)	(\$000)	(\$000)
Total opening RAB value	1,977,226		1,962,910	
less Opening value of fully depreciated, disposed and lost assets	54,148		51,994	
Total opening RAB value subject to revaluation	1,923,078		1,910,916	
<b>Total revaluations</b>		29,248		29,063

**4(iv): Roll Forward of Works Under Construction**

	Unallocated works under construction		Allocated works under construction	
<b>Works under construction—preceding disclosure year</b>		62,128		61,012
plus Capital expenditure	218,336		215,972	
less Assets commissioned	186,682		184,197	
plus Adjustment resulting from asset allocation			45	
<b>Works under construction - current disclosure year</b>		93,781		92,831
Highest rate of capitalised finance applied				3.59%

Company Name **Powerco Limited**  
 For Year Ended **31 March 2021**

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

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

sch ref

76 **4(v): Regulatory Depreciation**

	Unallocated RAB *	RAB
	(\$000)	(\$000)
79 Depreciation - standard	69,823	69,753
80 Depreciation - no standard life assets	11,904	10,616
81 Depreciation - modified life assets	-	-
82 Depreciation - alternative depreciation in accordance with CPP	-	-
83 <b>Total depreciation</b>	<b>81,728</b>	<b>80,369</b>

85 **4(vi): Disclosure of Changes to Depreciation Profiles**

(\$000 unless otherwise specified)

86 Asset or assets with changes to depreciation*	87 Reason for non-standard depreciation (text entry)	88 Depreciation charge for the period (RAB)	89 Closing RAB value under 'non-standard' depreciation	90 Closing RAB value under 'standard' depreciation

\* include additional rows if needed

96 **4(vii): Disclosure by Asset Category**

(\$000 unless otherwise specified)

	Subtransmission lines	Subtransmission cables	Zone substations	Distribution and LV lines	Distribution and LV cables	Distribution substations and transformers	Distribution switchgear	Other network assets	Non-network assets	Total
98 <b>Total opening RAB value</b>	74,945	52,671	176,560	449,695	326,032	278,228	172,126	356,250	76,403	1,962,910
100 <i>less</i> Total depreciation	2,349	1,351	8,309	15,885	15,931	9,665	6,857	12,141	7,881	80,369
101 <i>plus</i> Total revaluations	1,139	777	2,685	6,845	4,956	4,222	2,613	4,897	929	29,063
102 <i>plus</i> Assets commissioned	27,122	9,143	24,301	66,934	13,673	8,178	2,651	16,276	15,918	184,197
103 <i>less</i> Asset disposals	57	-	0	652	153	665	278	40,133	69	42,007
104 <i>plus</i> Lost and found assets adjustment	-	-	-	-	-	-	-	-	-	-
105 <i>plus</i> Adjustment resulting from asset allocation	(81)	-	-	(1,062)	-	-	-	-	1,155	11
106 <i>plus</i> Asset category transfers	(23,430)	(7,899)	(20,992)	(57,831)	(11,822)	(7,066)	(2,291)	131,331	-	-
107 <b>Total closing RAB value</b>	<b>77,288</b>	<b>53,342</b>	<b>174,244</b>	<b>448,045</b>	<b>316,756</b>	<b>273,232</b>	<b>167,965</b>	<b>456,480</b>	<b>86,454</b>	<b>2,053,806</b>
109 <b>Asset Life</b>										
110 Weighted average remaining asset life	42	44	31	40	32	34	30	45	17	(years)
111 Weighted average expected total asset life	60	53	47	59	49	50	39	47	21	(years)

Company Name **Powerco Limited**  
 For Year Ended **31 March 2021**

**SCHEDULE 5a: REPORT ON REGULATORY TAX ALLOWANCE**

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

This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 100

sch ref

		(\$000)	
7	<b>5a(i): Regulatory Tax Allowance</b>		
8	<b>Regulatory profit / (loss) before tax</b>		67,855
9			
10	<i>plus</i> Income not included in regulatory profit / (loss) before tax but taxable	1,725	*
11	Expenditure or loss in regulatory profit / (loss) before tax but not deductible	444	*
12	Amortisation of initial differences in asset values	10,038	
13	Amortisation of revaluations	8,655	
14			20,862
15			
16	<i>less</i> Total revaluations	29,063	
17	Income included in regulatory profit / (loss) before tax but not taxable	-	*
18	Discretionary discounts and customer rebates	-	
19	Expenditure or loss deductible but not in regulatory profit / (loss) before tax	210	*
20	Notional deductible interest	24,141	
21			53,414
22			
23	<b>Regulatory taxable income</b>		35,302
24			
25	<i>less</i> Utilised tax losses	-	
26	Regulatory net taxable income		35,302
27			
28	Corporate tax rate (%)	28%	
29	<b>Regulatory tax allowance</b>		9,885

\* Workings to be provided in Schedule 14

**5a(ii): Disclosure of Permanent Differences**

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

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

(\$000)

36	Opening unamortised initial differences in asset values	220,835	
37	<i>less</i> Amortisation of initial differences in asset values	10,038	
38	<i>plus</i> Adjustment for unamortised initial differences in assets acquired	-	
39	<i>less</i> Adjustment for unamortised initial differences in assets disposed	11,223	
40	Closing unamortised initial differences in asset values		199,575
41			
42	Opening weighted average remaining useful life of relevant assets (years)		22

Company Name **Powerco Limited**  
 For Year Ended **31 March 2021**

**SCHEDULE 5a: REPORT ON REGULATORY TAX ALLOWANCE**

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

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

sch ref

44	<b>5a(iv): Amortisation of Revaluations</b>		(\$000)
45			
46	Opening sum of RAB values without revaluations	1,769,251	
47			
48	Adjusted depreciation	71,714	
49	Total depreciation	80,369	
50	Amortisation of revaluations		8,655
51			
52	<b>5a(v): Reconciliation of Tax Losses</b>		(\$000)
53			
54	Opening tax losses	-	
55	plus Current period tax losses	-	
56	less Utilised tax losses	-	
57	Closing tax losses		-
58	<b>5a(vi): Calculation of Deferred Tax Balance</b>		(\$000)
59			
60	Opening deferred tax	(73,280)	
61			
62	plus Tax effect of adjusted depreciation	20,080	
63			
64	less Tax effect of tax depreciation	31,116	
65			
66	plus Tax effect of other temporary differences*	(416)	
67			
68	less Tax effect of amortisation of initial differences in asset values	2,811	
69			
70	plus Deferred tax balance relating to assets acquired in the disclosure year	1,496	
71			
72	less Deferred tax balance relating to assets disposed in the disclosure year	(11,407)	
73			
74	plus Deferred tax cost allocation adjustment	(176)	
75			
76	Closing deferred tax		(74,816)
77			
78	<b>5a(vii): Disclosure of Temporary Differences</b>		
79	<i>In Schedule 14, Box 6, provide descriptions and workings of items recorded in the asterisked category in Schedule 5a(vi) (Tax effect of other temporary differences).</i>		
80			
81	<b>5a(viii): Regulatory Tax Asset Base Roll-Forward</b>		
82			(\$000)
83	Opening sum of regulatory tax asset values	1,232,214	
84	less Tax depreciation	111,128	
85	plus Regulatory tax asset value of assets commissioned	180,495	
86	less Regulatory tax asset value of asset disposals	1,269	
87	plus Lost and found assets adjustment	-	
88	plus Adjustment resulting from asset allocation	(616)	
89	plus Other adjustments to the RAB tax value	5,341	
90	Closing sum of regulatory tax asset values		1,305,038





Company Name **Powerco Limited**  
 For Year Ended **31 March 2021**

**SCHEDULE 5c: REPORT ON TERM CREDIT SPREAD DIFFERENTIAL ALLOWANCE**

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

*sch ref*

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

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

Gross term credit spread differential		4,433
Total book value of interest bearing debt	1,781,859	
Leverage	42%	
Average opening and closing RAB values	2,008,358	
Attribution Rate (%)		47%
Term credit spread differential allowance		2,098

Company Name **Powerco Limited**  
 For Year Ended **31 March 2021**

**SCHEDULE 5d: REPORT ON COST ALLOCATIONS**

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

sch ref

		Value allocated (\$000s)				
		Arm's length deduction	Electricity distribution services	Non-electricity distribution services	Total	OVABAA allocation increase (\$000s)
7	<b>5d(i): Operating Cost Allocations</b>					
8						
9						
10	<b>Service interruptions and emergencies</b>					
11	Directly attributable		6,303			
12	Not directly attributable	-	-	-	-	-
13	<b>Total attributable to regulated service</b>		6,303			
14	<b>Vegetation management</b>					
15	Directly attributable		10,752			
16	Not directly attributable	-	-	-	-	-
17	<b>Total attributable to regulated service</b>		10,752			
18	<b>Routine and corrective maintenance and inspection</b>					
19	Directly attributable		13,365			
20	Not directly attributable	-	-	-	-	-
21	<b>Total attributable to regulated service</b>		13,365			
22	<b>Asset replacement and renewal</b>					
23	Directly attributable		10,531			
24	Not directly attributable	-	-	-	-	-
25	<b>Total attributable to regulated service</b>		10,531			
26	<b>System operations and network support</b>					
27	Directly attributable		16,408			
28	Not directly attributable	-	455	82	537	-
29	<b>Total attributable to regulated service</b>		16,863			
30	<b>Business support</b>					
31	Directly attributable		1,876			
32	Not directly attributable	-	31,257	6,166	37,423	-
33	<b>Total attributable to regulated service</b>		33,133			
34						
35	<b>Operating costs directly attributable</b>		59,234			
36	<b>Operating costs not directly attributable</b>	-	31,712	6,248	37,960	-
37	<b>Operational expenditure</b>		90,946			
38						

Company Name **Powerco Limited**  
 For Year Ended **31 March 2021**

**SCHEDULE 5d: REPORT ON COST ALLOCATIONS**

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

sch ref

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

40 <b>Pass through and recoverable costs</b>		(5000)
41 <b>Pass through costs</b>		
42	Directly attributable	3,594
43	Not directly attributable	200
44	<b>Total attributable to regulated service</b>	<b>3,794</b>
45 <b>Recoverable costs</b>		
46	Directly attributable	99,865
47	Not directly attributable	-
48	<b>Total attributable to regulated service</b>	<b>99,865</b>

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

		(5000)	
		CY-1	Current Year (CY)
52	<b>Change in cost allocation 1</b>		
53	Cost category	Original allocation	
54	Original allocator or line items	New allocation	
55	New allocator or line items	Difference	-
56			
57	Rationale for change		

		(5000)	
		CY-1	Current Year (CY)
61	<b>Change in cost allocation 2</b>		
62	Cost category	Original allocation	
63	Original allocator or line items	New allocation	
64	New allocator or line items	Difference	-
65			
66	Rationale for change		

		(5000)	
		CY-1	Current Year (CY)
70	<b>Change in cost allocation 3</b>		
71	Cost category	Original allocation	
72	Original allocator or line items	New allocation	
73	New allocator or line items	Difference	-
74			
75	Rationale for change		

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

Company Name	Powerco Limited
For Year Ended	31 March 2021

**SCHEDULE 5e: REPORT ON ASSET ALLOCATIONS**

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

sch ref

5e(i): Regulated Service Asset Values		Value allocated (\$000s)
		Electricity distribution services
7	<b>Subtransmission lines</b>	
8	Directly attributable	77,288
9	Not directly attributable	-
10	<b>Total attributable to regulated service</b>	77,288
11	<b>Subtransmission cables</b>	
12	Directly attributable	53,342
13	Not directly attributable	-
14	<b>Total attributable to regulated service</b>	53,342
15	<b>Zone substations</b>	
16	Directly attributable	174,244
17	Not directly attributable	-
18	<b>Total attributable to regulated service</b>	174,244
19	<b>Distribution and LV lines</b>	
20	Directly attributable	448,045
21	Not directly attributable	-
22	<b>Total attributable to regulated service</b>	448,045
23	<b>Distribution and LV cables</b>	
24	Directly attributable	316,756
25	Not directly attributable	-
26	<b>Total attributable to regulated service</b>	316,756
27	<b>Distribution substations and transformers</b>	
28	Directly attributable	273,232
29	Not directly attributable	-
30	<b>Total attributable to regulated service</b>	273,232
31	<b>Distribution switchgear</b>	
32	Directly attributable	167,965
33	Not directly attributable	-
34	<b>Total attributable to regulated service</b>	167,965
35	<b>Other network assets</b>	
36	Directly attributable	456,480
37	Not directly attributable	-
38	<b>Total attributable to regulated service</b>	456,480
39	<b>Non-network assets</b>	
40	Directly attributable	16,028
41	Not directly attributable	70,426
42	<b>Total attributable to regulated service</b>	86,454
43	<b>Regulated service asset value directly attributable</b>	1,983,381
44	<b>Regulated service asset value not directly attributable</b>	70,426
45	<b>Total closing RAB value</b>	2,053,806

5e(ii): Changes in Asset Allocations* †		(\$000)		
Change in asset value allocation 1	Asset category	Original allocation	CY-1	Current Year (CY)
Original allocator or line items				
New allocator or line items				
		Difference	-	-
Rationale for change				
Change in asset value allocation 2		(\$000)		
Asset category		Original allocation	CY-1	Current Year (CY)
Original allocator or line items		New allocation		
New allocator or line items		Difference	-	-
Rationale for change				
Change in asset value allocation 3		(\$000)		
Asset category		Original allocation	CY-1	Current Year (CY)
Original allocator or line items		New allocation		
New allocator or line items		Difference	-	-
Rationale for change				

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

Company Name **Powerco Limited**  
 For Year Ended **31 March 2021**

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

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

sch ref

7	<b>6a(i): Expenditure on Assets</b>		<b>(\$000)</b>	<b>(\$000)</b>
8	Consumer connection			40,770
9	System growth			50,261
10	Asset replacement and renewal			116,468
11	Asset relocations			1,009
12	Reliability, safety and environment:			
13	Quality of supply	10,936		
14	Legislative and regulatory	-		
15	Other reliability, safety and environment	7,187		
16	<b>Total reliability, safety and environment</b>			<b>18,123</b>
17	<b>Expenditure on network assets</b>			<b>226,631</b>
18	Expenditure on non-network assets			15,058
19				
20	<b>Expenditure on assets</b>			<b>241,689</b>
21	plus Cost of financing			1,647
22	less Value of capital contributions			27,364
23	plus Value of vested assets			-
24				
25	<b>Capital expenditure</b>			<b>215,972</b>
26	<b>6a(ii): Subcomponents of Expenditure on Assets (where known)</b>			<b>(\$000)</b>
27	Energy efficiency and demand side management, reduction of energy losses			2,631
28	Overhead to underground conversion			1,363
29	Research and development			305
30	<b>6a(iii): Consumer Connection</b>			
31	<i>Consumer types defined by EDB*</i>		<b>(\$000)</b>	<b>(\$000)</b>
32	Small		29,684	
33	Commercial		6,437	
34	Industrial		4,649	
35				
36				
37	<i>* include additional rows if needed</i>			
38	<b>Consumer connection expenditure</b>			<b>40,770</b>
39				
40	less Capital contributions funding consumer connection expenditure		26,982	
41	<b>Consumer connection less capital contributions</b>			<b>13,788</b>
42	<b>6a(iv): System Growth and Asset Replacement and Renewal</b>			
43			<b>System Growth</b>	<b>Asset Replacement and Renewal</b>
44			<b>(\$000)</b>	<b>(\$000)</b>
45	Subtransmission		9,394	8,844
46	Zone substations		15,091	12,692
47	Distribution and LV lines		6,115	65,368
48	Distribution and LV cables		10,073	7,400
49	Distribution substations and transformers		3,781	8,752
50	Distribution switchgear		184	8,013
51	Other network assets		5,622	5,398
52	<b>System growth and asset replacement and renewal expenditure</b>		<b>50,261</b>	<b>116,468</b>
53	less Capital contributions funding system growth and asset replacement and renewal		-	-
54	<b>System growth and asset replacement and renewal less capital contributions</b>		<b>50,261</b>	<b>116,468</b>
55				
56	<b>6a(v): Asset Relocations</b>			
57	<i>Project or programme*</i>		<b>(\$000)</b>	<b>(\$000)</b>
58	Domain Rd, Papamoa, OHUG		319	
59	PNCC Intersection redevelopment		272	
60	Waikino and Waihou GXP Cable Relocation		182	
61				
62				
63	<i>* include additional rows if needed</i>			
64	All other projects or programmes - asset relocations		236	
65	<b>Asset relocations expenditure</b>			<b>1,009</b>
66	less Capital contributions funding asset relocations		382	
67	<b>Asset relocations less capital contributions</b>			<b>627</b>

Company Name **Powerco Limited**  
 For Year Ended **31 March 2021**

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

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

sch ref

68				
69	<b>6a(vi): Quality of Supply</b>			
70	<i>Project or programme*</i>	(\$000)	(\$000)	
71	Mobile Substation Site Preparation	328		
72	COVID Generation Projects	1,352		
73	Accelerated LFI Rollout	1,524		
74	Automation Projects	578		
75	Backfeed support	859		
76	<i>* include additional rows if needed</i>			
77	All other projects programmes - quality of supply	6,296		
78	<b>Quality of supply expenditure</b>		10,936	
79	less Capital contributions funding quality of supply		-	
80	<b>Quality of supply less capital contributions</b>		10,936	
81	<b>6a(vii): Legislative and Regulatory</b>			
82	<i>Project or programme*</i>	(\$000)	(\$000)	
83	Nil projects or programmes			
84				
85				
86				
87				
88	<i>* include additional rows if needed</i>			
89	All other projects or programmes - legislative and regulatory			
90	<b>Legislative and regulatory expenditure</b>		-	
91	less Capital contributions funding legislative and regulatory			
92	<b>Legislative and regulatory less capital contributions</b>		-	
93	<b>6a(viii): Other Reliability, Safety and Environment</b>			
94	<i>Project or programme*</i>	(\$000)	(\$000)	
95	LIDAR and Poletop Photography	4,383		
96	Locks and Keys project	758		
97	Safety Reconductoring	380		
98				
99				
100	<i>* include additional rows if needed</i>			
101	All other projects or programmes - other reliability, safety and environment	1,666		
102	<b>Other reliability, safety and environment expenditure</b>		7,187	
103	less Capital contributions funding other reliability, safety and environment		-	
104	<b>Other reliability, safety and environment less capital contributions</b>		7,187	
105				
106	<b>6a(ix): Non-Network Assets</b>			
107	<b>Routine expenditure</b>			
108	<i>Project or programme*</i>	(\$000)	(\$000)	
109	IT Renewal	1,900		
110	Improve network Operations (OMS/DMS)	1,646		
111	Cloud Transition	1,409		
112	IT Leases	1,304		
113	Data & Analytics	850		
114	Land and Building leases	688		
115	IT Transformation	339		
116	<i>* include additional rows if needed</i>			
117	All other projects or programmes - routine expenditure	1,172		
118	<b>Routine expenditure</b>		9,308	
119	<b>Atypical expenditure</b>			
120	<i>Project or programme*</i>	(\$000)	(\$000)	
121	Enterprise Asset Management System	3,209		
122	Kaimai Redevelopment	918		
123	Cybersecurity	691		
124	End User Experience	684		
125				
126	<i>* include additional rows if needed</i>			
127	All other projects or programmes - atypical expenditure	248		
128	<b>Atypical expenditure</b>		5,750	
129				
130	<b>Expenditure on non-network assets</b>		15,058	

Company Name

**Powerco Limited**

For Year Ended

**31 March 2021**

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

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

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

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

sch ref

		(\$000)	(\$000)
7	<b>6b(i): Operational Expenditure</b>		
8	Service interruptions and emergencies	6,303	
9	Vegetation management	10,752	
10	Routine and corrective maintenance and inspection	13,365	
11	Asset replacement and renewal	10,531	
12	<b>Network opex</b>		40,950
13	System operations and network support	16,863	
14	Business support	33,133	
15	<b>Non-network opex</b>		49,996
16			
17	<b>Operational expenditure</b>		90,946
18	<b>6b(ii): Subcomponents of Operational Expenditure (where known)</b>		
19	Energy efficiency and demand side management, reduction of energy losses		178
20	Direct billing*		-
21	Research and development		57
22	Insurance		1,314
23	* Direct billing expenditure by suppliers that directly bill the majority of their consumers		

Company Name	Powerco Limited
For Year Ended	31 March 2021

## SCHEDULE 7: COMPARISON OF FORECASTS TO ACTUAL EXPENDITURE

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

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

sch ref

	Target (\$000) <sup>1</sup>	Actual (\$000)	% variance
<b>7(i): Revenue</b>			
Line charge revenue	351,589	353,313	0%
<b>7(ii): Expenditure on Assets</b>	<b>Forecast (\$000) <sup>2</sup></b>	<b>Actual (\$000)</b>	<b>% variance</b>
Consumer connection	47,661	40,770	(14%)
System growth	65,393	50,261	(23%)
Asset replacement and renewal	93,202	116,468	25%
Asset relocations	3,166	1,009	(68%)
Reliability, safety and environment:			
Quality of supply	3,859	10,936	183%
Legislative and regulatory	–	–	–
Other reliability, safety and environment	3,353	7,187	114%
<b>Total reliability, safety and environment</b>	<b>7,212</b>	<b>18,123</b>	<b>151%</b>
<b>Expenditure on network assets</b>	<b>216,634</b>	<b>226,631</b>	<b>5%</b>
Expenditure on non-network assets	16,736	15,058	(10%)
<b>Expenditure on assets</b>	<b>233,370</b>	<b>241,689</b>	<b>4%</b>
<b>7(iii): Operational Expenditure</b>			
Service interruptions and emergencies	7,742	6,303	(19%)
Vegetation management	9,726	10,752	11%
Routine and corrective maintenance and inspection	16,788	13,365	(20%)
Asset replacement and renewal	12,115	10,531	(13%)
<b>Network opex</b>	<b>46,371</b>	<b>40,950</b>	<b>(12%)</b>
System operations and network support	18,633	16,863	(9%)
Business support	34,656	33,133	(4%)
<b>Non-network opex</b>	<b>53,289</b>	<b>49,996</b>	<b>(6%)</b>
<b>Operational expenditure</b>	<b>99,660</b>	<b>90,946</b>	<b>(9%)</b>
<b>7(iv): Subcomponents of Expenditure on Assets (where known)</b>			
Energy efficiency and demand side management, reduction of energy losses	–	2,631	–
Overhead to underground conversion	–	1,363	–
Research and development	–	305	–
<b>7(v): Subcomponents of Operational Expenditure (where known)</b>			
Energy efficiency and demand side management, reduction of energy losses	–	178	–
Direct billing	–	–	–
Research and development	–	57	–
Insurance	–	1,314	–

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

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



*Company Name* **Powerco Limited**

*For Year Ended* **31 March 2021**

**SCHEDULE 7: COMPARISON OF FORECASTS TO ACTUAL EXPENDITURE**

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

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

*sch ref*



Company Name **Powerco Limited**  
 For Year Ended **31 March 2021**  
 Network / Sub-Network Name **Powerco Limited**

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

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

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

Consumer group name or price category code	Consumer type or types (eg, residential, commercial etc.)	Standard or non-standard consumer group (specify)	Total line charge revenue in disclosure year	Notional revenue foregone from posted discounts (if applicable)
Unmetered	Streetlights	Standard	\$1,682	—
Small	Residential/Small Commercial	Standard	\$264,602	—
Medium	Commercial	Standard	\$21,890	—
Large	Large Commercial/Industrial	Standard	\$18,530	—
Large	XLarge Commercial/Industrial	Non-standard	\$46,608	—
		(select one)	—	—
		(select one)	—	—
		(select one)	—	—
		(select one)	—	—
Standard consumer totals			\$306,705	—
Non-standard consumer totals			\$46,608	—
Total for all consumers			\$353,313	—

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

Total distribution line charge revenue	Total transmission line charge revenue (if available)	Rate (eg, \$ per day, \$ per kWh, etc.)
\$1,076	\$607	
\$198,926	\$65,676	
\$16,814	\$5,075	
\$12,163	\$6,367	
\$28,142	\$18,406	
\$228,980	\$77,725	
\$28,142	\$18,466	
\$257,122	\$96,191	

**Line charge revenues (\$000) by price component**

Price component	Fixed	Fixed	Variable (Anytime)	Variable (Peak)	Variable (Off-Peak)	Demand	Demand	Power Factor	Fixed
	ICP Days	kVA of Capacity	kWh	kWh	kWh	kW of AMD	kW of OPD	kVArh	Fixture Count Days
	—	—	\$238	—	—	—	—	—	\$1,444
	\$37,390	—	\$39,923	\$90,118	\$97,171	—	—	—	—
	\$6,641	—	\$9,296	—	—	\$3,894	\$1,772	\$287	—
	—	\$4,535	—	—	—	\$7,172	\$6,367	\$456	—
	\$45,567	—	—	—	—	—	—	\$1,042	—
	\$44,031	\$4,535	\$49,457	\$90,118	\$97,171	\$11,066			
	\$45,567	—	—	—	—	—	—	—	—
	\$89,598	\$4,535	\$49,457	\$90,118	\$97,171	\$11,066			

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

**8(iii): Number of ICPs directly billed**

Number of directly billed ICPs at year end

Check









Company Name	<b>Powerco Limited</b>
For Year Ended	<b>31 March 2021</b>
Network / Sub-network Name	<b>Powerco Limited</b>

**SCHEDULE 9a: ASSET REGISTER**

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

sch ref

sch ref	Voltage	Asset category	Asset class	Units	Items at start of	Items at end of	Net change	Data accuracy
					year (quantity)	year (quantity)		(1-4)
8	All	Overhead Line	Concrete poles / steel structure	No.	228,709	230,010	1,301	4
9	All	Overhead Line	Wood poles	No.	32,014	30,998	(1,016)	3
10	All	Overhead Line	Other pole types	No.	3,594	3,703	109	2
11	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	1,496	1,494	(2)	4
12	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	-	-	-	4
13	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	229	240	11	3
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	13	13	0	4
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	-	-	-	4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	3	1	(2)	4
17	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	-	-	-	4
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	-	-	-	4
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	-	-	-	4
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	-	-	-	4
21	HV	Subtransmission Cable	Subtransmission submarine cable	km	-	-	-	4
22	HV	Zone substation Buildings	Zone substations up to 66kV	No.	154	156	2	2
23	HV	Zone substation Buildings	Zone substations 110kV+	No.	-	-	-	4
24	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	-	-	-	4
25	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	19	19	-	4
26	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	29	30	1	2
27	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	823	822	(1)	4
28	HV	Zone substation switchgear	33kV RMU	No.	1	1	-	4
29	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	142	141	(1)	3
30	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	184	183	(1)	3
31	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	841	850	9	3
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	50	41	(9)	3
33	HV	Zone Substation Transformer	Zone Substation Transformers	No.	216	216	-	3
34	HV	Distribution Line	Distribution OH Open Wire Conductor	km	14,701	14,697	(4)	4
35	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	-	-	-	4
36	HV	Distribution Line	SWER conductor	km	79	79	0	4
37	HV	Distribution Cable	Distribution UG XLPE or PVC	km	1,936	1,981	45	3
38	HV	Distribution Cable	Distribution UG PILC	km	195	193	(2)	3
39	HV	Distribution Cable	Distribution Submarine Cable	km	11	11	-	4
40	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	759	789	30	3
41	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	421	421	-	3
42	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	39,280	39,910	630	3
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	1,590	1,736	146	2
44	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	2,811	2,770	(41)	2
45	HV	Distribution Transformer	Pole Mounted Transformer	No.	27,278	27,787	509	3
46	HV	Distribution Transformer	Ground Mounted Transformer	No.	8,931	9,095	164	3
47	HV	Distribution Transformer	Voltage regulators	No.	149	133	(16)	3
48	HV	Distribution Substations	Ground Mounted Substation Housing	No.	4,050	4,039	(11)	2
49	LV	LV Line	LV OH Conductor	km	5,360	5,353	(6)	3
50	LV	LV Cable	LV UG Cable	km	4,420	4,452	32	3
51	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	3,043	3,043	0	2
52	LV	Connections	OH/UG consumer service connections	No.	290,633	292,472	1,839	2
53	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	2,401	2,457	56	3
54	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	1	1	-	4
55	All	Capacitor Banks	Capacitors including controls	No.	52	51	(1)	4
56	All	Load Control	Centralised plant	Lot	36	36	-	4
57	All	Load Control	Relays	No.	3,294	3,440	146	2
58	All	Civils	Cable Tunnels	km	-	-	-	4



Company Name	Powerco Limited
For Year Ended	31 March 2021
Network / Sub-network Name	Western Region

**SCHEDULE 9a: ASSET REGISTER**

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

sch ref

sch ref	Voltage	Asset category	Asset class	Units	Items at start of	Items at end of	Net change	Data accuracy
					year (quantity)	year (quantity)		(1-4)
8	All	Overhead Line	Concrete poles / steel structure	No.	147,321	148,142	821	4
9	All	Overhead Line	Wood poles	No.	27,886	27,055	(831)	3
10	All	Overhead Line	Other pole types	No.	1,187	1,277	90	2
11	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	952	952	(0)	4
12	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	-	-	-	4
13	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	80	86	6	3
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	13	13	0	4
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	-	-	-	4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	3	1	(2)	4
17	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	-	-	-	4
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	-	-	-	4
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	-	-	-	4
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	-	-	-	4
21	HV	Subtransmission Cable	Subtransmission submarine cable	km	-	-	-	4
22	HV	Zone substation Buildings	Zone substations up to 66kV	No.	85	85	-	2
23	HV	Zone substation Buildings	Zone substations 110kV+	No.	-	-	-	4
24	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	-	-	-	4
25	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	-	-	-	4
26	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	18	19	1	2
27	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	528	531	3	4
28	HV	Zone substation switchgear	33kV RMU	No.	1	1	-	4
29	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	69	68	(1)	3
30	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	107	106	(1)	3
31	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	467	471	4	3
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	46	41	(5)	3
33	HV	Zone Substation Transformer	Zone Substation Transformers	No.	127	129	2	3
34	HV	Distribution Line	Distribution OH Open Wire Conductor	km	10,072	10,068	(4)	4
35	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	-	-	-	4
36	HV	Distribution Line	SWER conductor	km	17	17	-	4
37	HV	Distribution Cable	Distribution UG XLPE or PVC	km	670	685	15	3
38	HV	Distribution Cable	Distribution UG PILC	km	95	95	(0)	3
39	HV	Distribution Cable	Distribution Submarine Cable	km	-	-	-	4
40	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	444	453	9	3
41	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	279	279	-	3
42	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	24,233	24,514	281	3
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	766	829	63	2
44	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	1,233	1,222	(11)	2
45	HV	Distribution Transformer	Pole Mounted Transformer	No.	18,442	18,912	470	3
46	HV	Distribution Transformer	Ground Mounted Transformer	No.	3,725	3,870	145	3
47	HV	Distribution Transformer	Voltage regulators	No.	101	76	(25)	3
48	HV	Distribution Substations	Ground Mounted Substation Housing	No.	1,612	1,604	(8)	2
49	LV	LV Line	LV OH Conductor	km	3,451	3,448	(3)	3
50	LV	LV Cable	LV UG Cable	km	2,315	2,334	19	3
51	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	1,371	1,370	(1)	2
52	LV	Connections	OH/UG consumer service connections	No.	155,797	156,326	529	2
53	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	1,250	1,264	14	3
54	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	1	1	-	4
55	All	Capacitor Banks	Capacitors including controls	No.	5	5	-	4
56	All	Load Control	Centralised plant	Lot	27	26	(1)	4
57	All	Load Control	Relays	No.	1,591	1,619	28	2
58	All	Civils	Cable Tunnels	km	-	-	-	4

Company Name	<b>Powerco Limited</b>
For Year Ended	<b>31 March 2021</b>
Network / Sub-network Name	<b>Eastern Region</b>

**SCHEDULE 9a: ASSET REGISTER**

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

sch ref

sch ref	Voltage	Asset category	Asset class	Units	Items at start of	Items at end of	Net change	Data accuracy
					year (quantity)	year (quantity)		(1-4)
8	All	Overhead Line	Concrete poles / steel structure	No.	81,388	81,868	480	4
10	All	Overhead Line	Wood poles	No.	4,128	3,943	(185)	3
11	All	Overhead Line	Other pole types	No.	2,407	2,426	19	2
12	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	544	542	(2)	4
13	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	-	-	-	4
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	149	154	5	3
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	-	-	-	4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	-	-	-	4
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	-	-	-	4
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	-	-	-	4
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	-	-	-	4
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	-	-	-	4
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	-	-	-	4
22	HV	Subtransmission Cable	Subtransmission submarine cable	km	-	-	-	4
23	HV	Zone substation Buildings	Zone substations up to 66kV	No.	69	71	2	2
24	HV	Zone substation Buildings	Zone substations 110kV+	No.	-	-	-	4
25	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	-	-	-	4
26	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	19	19	-	4
27	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	11	11	-	2
28	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	295	291	(4)	4
29	HV	Zone substation switchgear	33kV RMU	No.	-	-	-	4
30	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	73	73	-	3
31	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	77	77	-	3
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	374	379	5	3
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	4	-	(4)	3
34	HV	Zone Substation Transformer	Zone Substation Transformers	No.	89	87	(2)	3
35	HV	Distribution Line	Distribution OH Open Wire Conductor	km	4,629	4,629	(0)	4
36	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	-	-	-	4
37	HV	Distribution Line	SWER conductor	km	61	61	0	4
38	HV	Distribution Cable	Distribution UG XLPE or PVC	km	1,266	1,296	29	3
39	HV	Distribution Cable	Distribution UG PILC	km	100	98	(2)	3
40	HV	Distribution Cable	Distribution Submarine Cable	km	11	11	-	4
41	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	315	336	21	3
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	142	142	-	3
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	15,047	15,396	349	3
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	824	907	83	2
45	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	1,578	1,548	(30)	2
46	HV	Distribution Transformer	Pole Mounted Transformer	No.	8,836	8,875	39	3
47	HV	Distribution Transformer	Ground Mounted Transformer	No.	5,206	5,225	19	3
48	HV	Distribution Transformer	Voltage regulators	No.	48	57	9	3
49	HV	Distribution Substations	Ground Mounted Substation Housing	No.	2,438	2,435	(3)	2
50	LV	LV Line	LV OH Conductor	km	1,909	1,905	(3)	3
51	LV	LV Cable	LV UG Cable	km	2,105	2,118	13	3
52	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	1,672	1,673	1	2
53	LV	Connections	OH/UG consumer service connections	No.	134,836	136,146	1,310	2
54	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	1,151	1,193	42	3
55	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	1	1	-	4
56	All	Capacitor Banks	Capacitors including controls	No.	47	46	(1)	4
57	All	Load Control	Centralised plant	Lot	9	10	1	4
58	All	Load Control	Relays	No.	1,703	1,821	118	2
59	All	Civils	Cable Tunnels	km	-	-	-	4







Company Name	Powerco Limited
For Year Ended	31 March 2021
Network / Sub-network Name	Powerco Limited

**SCHEDULE 9c: REPORT ON OVERHEAD LINES AND UNDERGROUND CABLES**

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

sch ref

9				
10	<b>Circuit length by operating voltage (at year end)</b>			<b>Total circuit length</b>
11	> 66kV	Overhead (km)	Underground (km)	(km)
12	50kV & 66kV	163	6	169
13	33kV	1,331	248	1,579
14	SWER (all SWER voltages)	79	—	79
15	22kV (other than SWER)	121	1	122
16	6.6kV to 11kV (inclusive—other than SWER)	14,576	2,184	16,760
17	Low voltage (< 1kV)	5,353	4,452	9,805
18	<b>Total circuit length (for supply)</b>	<b>21,623</b>	<b>6,891</b>	<b>28,514</b>
19				
20	Dedicated street lighting circuit length (km)	1,070	1,973	3,043
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)			—
22				
23	<b>Overhead circuit length by terrain (at year end)</b>	<b>Circuit length (km)</b>	<b>(% of total overhead length)</b>	
24	Urban	2,454	11%	
25	Rural	7,749	36%	
26	Remote only	—	—	
27	Rugged only	11,104	51%	
28	Remote and rugged	315	1%	
29	Unallocated overhead lines	—	—	
30	<b>Total overhead length</b>	<b>21,623</b>	<b>100%</b>	
31				
32		<b>Circuit length (km)</b>	<b>(% of total circuit length)</b>	
33	Length of circuit within 10km of coastline or geothermal areas (where known)	11,505	40%	
34		<b>Circuit length (km)</b>	<b>(% of total overhead length)</b>	
35	Overhead circuit requiring vegetation management	21,623	100%	

Company Name	Powerco Limited
For Year Ended	31 March 2021
Network / Sub-network Name	Western Region

**SCHEDULE 9c: REPORT ON OVERHEAD LINES AND UNDERGROUND CABLES**

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

sch ref

9				
10	<b>Circuit length by operating voltage (at year end)</b>			<b>Total circuit length</b>
11	> 66kV	Overhead (km)	Underground (km)	(km)
12	50kV & 66kV	–	–	–
13	33kV	952	100	1,052
14	SWER (all SWER voltages)	17	–	17
15	22kV (other than SWER)	121	1	122
16	6.6kV to 11kV (inclusive—other than SWER)	9,947	779	10,726
17	Low voltage (< 1kV)	3,448	2,334	5,782
18	<b>Total circuit length (for supply)</b>	<b>14,485</b>	<b>3,213</b>	<b>17,699</b>
19				
20	Dedicated street lighting circuit length (km)	748	622	1,370
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)			–
22				
23	<b>Overhead circuit length by terrain (at year end)</b>			<b>(% of total</b>
24	Urban	<b>Circuit length (km)</b>		<b>overhead length)</b>
25	Rural	1,584		11%
26	Remote only	4,369		30%
27	Rugged only	–		–
28	Remote and rugged	8,217		57%
29	Unallocated overhead lines	315		2%
30	<b>Total overhead length</b>	<b>14,485</b>		<b>100%</b>
31				
32				<b>(% of total circuit</b>
33	Length of circuit within 10km of coastline or geothermal areas (where known)	<b>Circuit length (km)</b>		<b>length)</b>
34		5,425		31%
35	Overhead circuit requiring vegetation management			<b>(% of total</b>
		<b>Circuit length (km)</b>		<b>overhead length)</b>
		14,485		100%

Company Name	Powerco Limited
For Year Ended	31 March 2021
Network / Sub-network Name	Eastern Region

**SCHEDULE 9c: REPORT ON OVERHEAD LINES AND UNDERGROUND CABLES**

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

sch ref

9				
10	<b>Circuit length by operating voltage (at year end)</b>			<b>Total circuit length</b>
11	> 66kV	Overhead (km)	Underground (km)	(km)
12	50kV & 66kV	163	6	169
13	33kV	379	149	527
14	SWER (all SWER voltages)	61	—	61
15	22kV (other than SWER)	—	—	—
16	6.6kV to 11kV (inclusive—other than SWER)	4,629	1,405	6,034
17	Low voltage (< 1kV)	1,905	2,118	4,023
18	<b>Total circuit length (for supply)</b>	<b>7,138</b>	<b>3,678</b>	<b>10,815</b>
19				
20	Dedicated street lighting circuit length (km)	323	1,351	1,673
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)			—
22				
23	<b>Overhead circuit length by terrain (at year end)</b>			<b>(% of total</b>
24	Urban	870		12%
25	Rural	3,380		47%
26	Remote only	—		—
27	Rugged only	2,887		40%
28	Remote and rugged	—		—
29	Unallocated overhead lines	—		—
30	<b>Total overhead length</b>	<b>7,138</b>		<b>100%</b>
31				
32				<b>(% of total circuit</b>
33	Length of circuit within 10km of coastline or geothermal areas (where known)	6,081		56%
34				<b>(% of total</b>
35	Overhead circuit requiring vegetation management	7,138		100%



Company Name **Powerco Limited**  
 For Year Ended **31 March 2021**

**SCHEDULE 9d: REPORT ON EMBEDDED NETWORKS**

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

sch ref

	Location *	Number of ICPs served	Line charge revenue (\$000)
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26	* Extend embedded distribution networks table as necessary to disclose each embedded network owned by the EDB which is embedded in another EDB's network or in another embedded network		

Company Name	Powerco Limited
For Year Ended	31 March 2021
Network / Sub-network Name	Powerco Limited

### SCHEDULE 9e: REPORT ON NETWORK DEMAND

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

sch ref

8	<b>9e(i): Consumer Connections</b>		
9	Number of ICPs connected in year by consumer type		
10	Consumer types defined by EDB*	Number of connections (ICPs)	
11	Residential/Small Commercial	4,893	
12	Commercial	51	
13	Large Commercial/Industrial	14	
14			
15			
16	* include additional rows if needed		
17	<b>Connections total</b>	4,958	
18			
19	<b>Distributed generation</b>		
20	Number of connections made in year	820	connections
21	Capacity of distributed generation installed in year	6,720.57	MVA
22	<b>9e(ii): System Demand</b>		
23			
24		Demand at time of maximum coincident demand (MW)	
25	<b>Maximum coincident system demand</b>		
26	GXP demand	800	
27	plus Distributed generation output at HV and above	144	
28	<b>Maximum coincident system demand</b>	944	
29	less Net transfers to (from) other EDBs at HV and above	-	
30	<b>Demand on system for supply to consumers' connection points</b>	944	
31	<b>Electricity volumes carried</b>	Energy (GWh)	
32	Electricity supplied from GXPs	4,557	
33	less Electricity exports to GXPs	145	
34	plus Electricity supplied from distributed generation	742	
35	less Net electricity supplied to (from) other EDBs	-	
36	<b>Electricity entering system for supply to consumers' connection points</b>	5,154	
37	less Total energy delivered to ICPs	4,880	
38	<b>Electricity losses (loss ratio)</b>	274	5.3%
39			
40	<b>Load factor</b>	0.62	
41	<b>9e(iii): Transformer Capacity</b>		
42		(MVA)	
43	Distribution transformer capacity (EDB owned)	3,322	
44	Distribution transformer capacity (Non-EDB owned, estimated)	143	
45	<b>Total distribution transformer capacity</b>	3,465	
46			
47	<b>Zone substation transformer capacity</b>	2,240	

Company Name	Powerco Limited
For Year Ended	31 March 2021
Network / Sub-network Name	Western Region

**SCHEDULE 9e: REPORT ON NETWORK DEMAND**

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

sch ref

8	<b>9e(i): Consumer Connections</b>		
9	Number of ICPs connected in year by consumer type		
10	Consumer types defined by EDB*	Number of connections (ICPs)	
11	Residential/Small Commercial	2,177	
12	Commercial	10	
13	Large Commercial/Industrial	2	
14			
15			
16	* include additional rows if needed		
17	<b>Connections total</b>	<b>2,189</b>	
18			
19	<b>Distributed generation</b>		
20	Number of connections made in year	387	connections
21	Capacity of distributed generation installed in year	4,042.50	MVA
22	<b>9e(ii): System Demand</b>		
23			
24		Demand at time of maximum coincident demand (MW)	
25	<b>Maximum coincident system demand</b>		
26	GXP demand	365	
27	plus Distributed generation output at HV and above	71	
28	<b>Maximum coincident system demand</b>	<b>436</b>	
29	less Net transfers to (from) other EDBs at HV and above	-	
30	<b>Demand on system for supply to consumers' connection points</b>	<b>436</b>	
31	<b>Electricity volumes carried</b>	Energy (GWh)	
32	Electricity supplied from GXPs	2,039	
33	less Electricity exports to GXPs	3	
34	plus Electricity supplied from distributed generation	346	
35	less Net electricity supplied to (from) other EDBs	-	
36	<b>Electricity entering system for supply to consumers' connection points</b>	<b>2,382</b>	
37	less Total energy delivered to ICPs	2,216	
38	<b>Electricity losses (loss ratio)</b>	<b>166</b>	<b>7.0%</b>
39			
40	<b>Load factor</b>	<b>0.62</b>	
41	<b>9e(iii): Transformer Capacity</b>		
42		(MVA)	
43	Distribution transformer capacity (EDB owned)	1,668	
44	Distribution transformer capacity (Non-EDB owned, estimated)	99	
45	<b>Total distribution transformer capacity</b>	<b>1,767</b>	
46			
47	<b>Zone substation transformer capacity</b>	<b>1,090</b>	

Company Name	Powerco Limited
For Year Ended	31 March 2021
Network / Sub-network Name	Eastern Region

### SCHEDULE 9e: REPORT ON NETWORK DEMAND

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

sch ref

8	<b>9e(i): Consumer Connections</b>		
9	Number of ICPs connected in year by consumer type		
10			<b>Number of connections (ICPs)</b>
11	<i>Consumer types defined by EDB*</i>		
12	Residential/Small Commercial		2,716
13	Commercial		41
14	Large Commercial/Industrial		12
15			
16	* include additional rows if needed		
17	<b>Connections total</b>		<b>2,769</b>
18			
19	<b>Distributed generation</b>		
20	Number of connections made in year	433	connections
21	Capacity of distributed generation installed in year	2,678.07	MVA
22	<b>9e(ii): System Demand</b>		
23			
24			<b>Demand at time of maximum coincident demand (MW)</b>
25	<b>Maximum coincident system demand</b>		
26	GXP demand	411	
27	plus Distributed generation output at HV and above	78	
28	<b>Maximum coincident system demand</b>	<b>489</b>	
29	less Net transfers to (from) other EDBs at HV and above	-	
30	<b>Demand on system for supply to consumers' connection points</b>	<b>489</b>	
31	<b>Electricity volumes carried</b>		<b>Energy (GWh)</b>
32	Electricity supplied from GXPs	2,518	
33	less Electricity exports to GXPs	142	
34	plus Electricity supplied from distributed generation	396	
35	less Net electricity supplied to (from) other EDBs	-	
36	<b>Electricity entering system for supply to consumers' connection points</b>	<b>2,772</b>	
37	less Total energy delivered to ICPs	4,880	
38	<b>Electricity losses (loss ratio)</b>	<b>(2,108)</b>	<b>(76.0%)</b>
39			
40	<b>Load factor</b>	<b>0.65</b>	
41	<b>9e(iii): Transformer Capacity</b>		
42			<b>(MVA)</b>
43	Distribution transformer capacity (EDB owned)	1,654	
44	Distribution transformer capacity (Non-EDB owned, estimated)	44	
45	<b>Total distribution transformer capacity</b>	<b>1,699</b>	
46			
47	<b>Zone substation transformer capacity</b>	<b>1,150</b>	

Company Name	Powerco Limited
For Year Ended	31 March 2021
Network / Sub-network Name	Powerco Limited

**SCHEDULE 10: REPORT ON NETWORK RELIABILITY**

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

sch ref

8	<b>10(i): Interruptions</b>		
9	<b>Interruptions by class</b>	<b>Number of interruptions</b>	
10	Class A (planned interruptions by Transpower)	16	
11	Class B (planned interruptions on the network)	2,149	
12	Class C (unplanned interruptions on the network)	3,051	
13	Class D (unplanned interruptions by Transpower)	8	
14	Class E (unplanned interruptions of EDB owned generation)		
15	Class F (unplanned interruptions of generation owned by others)	1	
16	Class G (unplanned interruptions caused by another disclosing entity)		
17	Class H (planned interruptions caused by another disclosing entity)		
18	Class I (interruptions caused by parties not included above)	545	
19	<b>Total</b>	5,770	
20			
21	<b>Interruption restoration</b>	<b>≤3Hrs</b>	<b>&gt;3hrs</b>
22	Class C interruptions restored within	1,751	1,300
23			
24	<b>SAIFI and SAIDI by class</b>	<b>SAIFI</b>	<b>SAIDI</b>
25	Class A (planned interruptions by Transpower)	0.16	23.7
26	Class B (planned interruptions on the network)	0.37	88.6
27	Class C (unplanned interruptions on the network)	1.84	169.0
28	Class D (unplanned interruptions by Transpower)	0.10	7.4
29	Class E (unplanned interruptions of EDB owned generation)		
30	Class F (unplanned interruptions of generation owned by others)	0.00	0.0
31	Class G (unplanned interruptions caused by another disclosing entity)		
32	Class H (planned interruptions caused by another disclosing entity)		
33	Class I (interruptions caused by parties not included above)	0.10	21.4
34	<b>Total</b>	2.57	310.2
35			
36	<b>Normalised SAIFI and SAIDI</b>	<b>Normalised SAIFI</b>	<b>Normalised SAIDI</b>
37	Classes B & C (interruptions on the network)	2.21	257.6
38			

Company Name	<b>Powerco Limited</b>
For Year Ended	<b>31 March 2021</b>
Network / Sub-network Name	<b>Powerco Limited</b>

**SCHEDULE 10: REPORT ON NETWORK RELIABILITY**

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

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

Cause	SAIFI	SAIDI
Lightning	0.12	12.48
Vegetation	0.22	30.93
Adverse weather	0.01	0.48
Adverse environment	0.01	2.73
Third party interference	0.25	29.39
Wildlife	0.12	11.06
Human error	0.09	2.38
Defective equipment	0.77	62.32
Cause unknown	0.26	17.19

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

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	0.00	0.61
Subtransmission cables		
Subtransmission other		
Distribution lines (excluding LV)	0.32	77.85
Distribution cables (excluding LV)	0.01	1.76
Distribution other (excluding LV)	0.04	8.42

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

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	0.33	23.0
Subtransmission cables		
Subtransmission other	0.04	2.01
Distribution lines (excluding LV)	1.26	129.37
Distribution cables (excluding LV)	0.11	9.66
Distribution other (excluding LV)	0.10	4.94

**10(v): Fault Rate**

Main equipment involved	Number of Faults	Circuit length (km)	Fault rate (faults per 100km)
Subtransmission lines	160	1,494	10.71
Subtransmission cables		254	-
Subtransmission other	9		
Distribution lines (excluding LV)	3,836	14,776	25.96
Distribution cables (excluding LV)	131	2,185	6.00
Distribution other (excluding LV)	220		
<b>Total</b>	<b>4,356</b>		

Company Name	Powerco Limited
For Year Ended	31 March 2021
Network / Sub-network Name	Western Region

**SCHEDULE 10: REPORT ON NETWORK RELIABILITY**

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

sch ref

8	<b>10(i): Interruptions</b>		
9	<b>Interruptions by class</b>	<b>Number of interruptions</b>	
10	Class A (planned interruptions by Transpower)	9	
11	Class B (planned interruptions on the network)	1,266	
12	Class C (unplanned interruptions on the network)	2,085	
13	Class D (unplanned interruptions by Transpower)	7	
14	Class E (unplanned interruptions of EDB owned generation)		
15	Class F (unplanned interruptions of generation owned by others)	1	
16	Class G (unplanned interruptions caused by another disclosing entity)		
17	Class H (planned interruptions caused by another disclosing entity)		
18	Class I (interruptions caused by parties not included above)	299	
19	<b>Total</b>	<b>3,667</b>	
20			
21	<b>Interruption restoration</b>	<b>≤3Hrs</b>	<b>&gt;3hrs</b>
22	Class C interruptions restored within	1,243	842
23			
24	<b>SAIFI and SAIDI by class</b>	<b>SAIFI</b>	<b>SAIDI</b>
25	Class A (planned interruptions by Transpower)	0.07	9.56
26	Class B (planned interruptions on the network)	0.43	99.68
27	Class C (unplanned interruptions on the network)	1.96	170.37
28	Class D (unplanned interruptions by Transpower)	0.17	13.92
29	Class E (unplanned interruptions of EDB owned generation)		
30	Class F (unplanned interruptions of generation owned by others)	0.00	0.0
31	Class G (unplanned interruptions caused by another disclosing entity)		
32	Class H (planned interruptions caused by another disclosing entity)		
33	Class I (interruptions caused by parties not included above)	0.13	22.9
34	<b>Total</b>	<b>2.76</b>	<b>316.5</b>
35			
36	<b>Normalised SAIFI and SAIDI</b>	<b>Normalised SAIFI</b>	<b>Normalised SAIDI</b>
37	Classes B & C (interruptions on the network)	2.39	270.0
38			

Company Name	<b>Powerco Limited</b>
For Year Ended	<b>31 March 2021</b>
Network / Sub-network Name	<b>Western Region</b>

**SCHEDULE 10: REPORT ON NETWORK RELIABILITY**

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

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

Cause	SAIFI	SAIDI
Lightning	0.06	5.55
Vegetation	0.24	34.52
Adverse weather	0.01	0.70
Adverse environment	0.00	4.13
Third party interference	0.27	25.99
Wildlife	0.13	10.74
Human error	0.07	1.85
Defective equipment	0.94	70.58
Cause unknown	0.24	16.30

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

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	0.00	1.1
Subtransmission cables		
Subtransmission other		
Distribution lines (excluding LV)	0.36	86.45
Distribution cables (excluding LV)	0.01	1.46
Distribution other (excluding LV)	0.05	10.65

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

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	0.25	11.9
Subtransmission cables		
Subtransmission other	0.04	2.1
Distribution lines (excluding LV)	1.48	147.12
Distribution cables (excluding LV)	0.07	4.20
Distribution other (excluding LV)	0.13	5.06

**10(v): Fault Rate**

Main equipment involved	Number of Faults	Circuit length (km)	Fault rate (faults per 100km)
Subtransmission lines	127	952	13.34
Subtransmission cables		100	-
Subtransmission other	6		
Distribution lines (excluding LV)	2,682	10,085	26.59
Distribution cables (excluding LV)	46	780	5.90
Distribution other (excluding LV)	141		
<b>Total</b>	<b>3,002</b>		



Company Name	Powerco Limited
For Year Ended	31 March 2021
Network / Sub-network Name	Eastern Region

**SCHEDULE 10: REPORT ON NETWORK RELIABILITY**

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

sch ref

8	<b>10(i): Interruptions</b>		
9	<b>Interruptions by class</b>	<b>Number of interruptions</b>	
10	Class A (planned interruptions by Transpower)	7	
11	Class B (planned interruptions on the network)	883	
12	Class C (unplanned interruptions on the network)	966	
13	Class D (unplanned interruptions by Transpower)	1	
14	Class E (unplanned interruptions of EDB owned generation)		
15	Class F (unplanned interruptions of generation owned by others)		
16	Class G (unplanned interruptions caused by another disclosing entity)		
17	Class H (planned interruptions caused by another disclosing entity)		
18	Class I (interruptions caused by parties not included above)	246	
19	<b>Total</b>	<b>2,103</b>	
20			
21	<b>Interruption restoration</b>	<b>≤3Hrs</b>	<b>&gt;3hrs</b>
22	Class C interruptions restored within	508	458
23			
24	<b>SAIFI and SAIDI by class</b>	<b>SAIFI</b>	<b>SAIDI</b>
25	Class A (planned interruptions by Transpower)	0.26	39.43
26	Class B (planned interruptions on the network)	0.31	76.46
27	Class C (unplanned interruptions on the network)	1.70	167.41
28	Class D (unplanned interruptions by Transpower)	0.02	0.15
29	Class E (unplanned interruptions of EDB owned generation)		
30	Class F (unplanned interruptions of generation owned by others)		-
31	Class G (unplanned interruptions caused by another disclosing entity)		
32	Class H (planned interruptions caused by another disclosing entity)		
33	Class I (interruptions caused by parties not included above)	0.08	19.7
34	<b>Total</b>	<b>2.37</b>	<b>303.2</b>
35			
36	<b>Normalised SAIFI and SAIDI</b>	<b>Normalised SAIFI</b>	<b>Normalised SAIDI</b>
37	Classes B & C (interruptions on the network)	2.01	243.9
38			

Company Name	<b>Powerco Limited</b>
For Year Ended	<b>31 March 2021</b>
Network / Sub-network Name	<b>Eastern Region</b>

**SCHEDULE 10: REPORT ON NETWORK RELIABILITY**

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

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

Cause	SAIFI	SAIDI
Lightning	0.18	20.14
Vegetation	0.19	26.96
Adverse weather	0.01	0.25
Adverse environment	0.01	1.19
Third party interference	0.22	33.14
Wildlife	0.10	11.40
Human error	0.12	2.97
Defective equipment	0.58	53.20
Cause unknown	0.29	18.17

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

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	0.00	0.1
Subtransmission cables		
Subtransmission other		
Distribution lines (excluding LV)	0.28	68.34
Distribution cables (excluding LV)	0.01	2.10
Distribution other (excluding LV)	0.03	5.97

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

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	0.41	35.3
Subtransmission cables		
Subtransmission other	0.05	1.90
Distribution lines (excluding LV)	1.01	109.75
Distribution cables (excluding LV)	0.16	15.69
Distribution other (excluding LV)	0.08	4.81

**10(v): Fault Rate**

Main equipment involved	Number of Faults	Circuit length (km)	Fault rate (faults per 100km)
Subtransmission lines	33	542	6.09
Subtransmission cables		154	-
Subtransmission other	3		
Distribution lines (excluding LV)	1,154	4,690	24.60
Distribution cables (excluding LV)	85	1,405	6.05
Distribution other (excluding LV)	79		
<b>Total</b>	<b>1,354</b>		

Company Name	Powerco Limited
For Year Ended	31 March 2021

## Schedule 14 Mandatory Explanatory Notes

*(Guidance Note: This Microsoft Word version of Schedules 14, 14a and 15 is from the Electricity Distribution Information Disclosure Determination 2012 – as amended and consolidated 3 April 2018. Clause references in this template are to that determination)*

1. This schedule requires EDBs to provide explanatory notes to information provided in accordance with clauses 2.3.1, 2.4.21, 2.4.22, and subclauses 2.5.1(1)(f), and 2.5.2(1)(e).
2. This schedule is mandatory—EDBs must provide the explanatory comment specified below, in accordance with clause 2.7.1. Information provided in boxes 1 to 11 of this schedule is part of the audited disclosure information, and so is subject to the assurance requirements specified in section 2.8.
3. Schedule 15 (Voluntary Explanatory Notes to Schedules) provides for EDBs to give additional explanation of disclosed information should they elect to do so.

### *Return on Investment (Schedule 2)*

4. In the box below, comment on return on investment as disclosed in Schedule 2. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

#### **Box 1: Explanatory comment on return on investment**

The disclosed ROI under both a Vanilla and Post tax approach for 2021 is lower than 2020 (decreased 4.51% to 2.88% and 4.42% to 2.55% respectively). This is primarily driven by a \$49.2m (12.2%) decrease in line charge revenue to \$353.3m and the inclusion of a disposals provision on Commissioned Work in Progress (WIP).

### *Regulatory Profit (Schedule 3)*

5. In the box below, comment on regulatory profit for the disclosure year as disclosed in Schedule 3. This comment must include-
  - 5.1 a description of material items included in other regulated income (other than gains / (losses) on asset disposals), as disclosed in 3(i) of Schedule 3
  - 5.2 information on reclassified items in accordance with subclause 2.7.1(2).

**Box 2: Explanatory comment on regulatory profit**

Regulatory profit for the year ended 31 March 2021 is \$55.87m reflecting an decrease of \$75.5m (57.5%) compared to the previous year. This was primarily due to decreases in total regulatory income (↓\$83.4m, 21.0%), lower revaluations (↓\$15.7m, 35.1%), higher depreciation (↑\$10.6m, 15.1%), higher operating expenditure (↑\$1.2m, 1.3%) offset by lower pass-through and recoverable costs (↓\$13.9m, 11.8%), and regulatory tax (↓\$21.7m, 68.7%).

Other regulated income includes:

- reimbursement of costs arising from network damage caused by a third party (e.g. income received from insurers or directly from the third parties), and
- revenue for shared corporate services provided by the regulated business to related parties.

*Merger and acquisition expenses (3(iv) of Schedule 3)*

6. If the EDB incurred merger and acquisitions expenditure during the disclosure year, provide the following information in the box below-

6.1 information on reclassified items in accordance with subclause 2.7.1(2)

6.2 any other commentary on the benefits of the merger and acquisition expenditure to the EDB.

**Box 3: Explanatory comment on merger and acquisition expenditure**

No merger and acquisition expenditure was incurred during the disclosure year.

*Value of the Regulatory Asset Base (Schedule 4)*

7. In the box below, comment on the value of the regulatory asset base (rolled forward) in Schedule 4. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

**Box 4: Explanatory comment on the value of the regulatory asset based (rolled forward)**

The closing Regulatory Asset Base (RAB) value has increased by \$90.9m (4.6%) during the year to \$2,054m. Commissioned assets (↓\$24.0m, 11.5%) and Revaluations (↓\$15.7m, 35.1%) were lower than 2020. Depreciation (↑\$10.6m, 15.1%) and Disposals (↑\$34.6m) were higher than 2020.

The Disposals number is significantly higher than 2020 because of a change in the underlying methodology to calculate the Disposals. The change is that Disposals now include a provision amount which aligns with the accounting treatment. This provision is for disposals related to Commissioned Work in Progress (WIP).

One of the drivers of the increased depreciation is that a Depreciation provision on WIP has been recognised in 2021 for the first time. This now aligns with the accounting treatment.

The inclusion of provisions for Depreciation and Disposals related to WIP was driven by the increasing WIP balance over the last two years, resulting from our transition to a new ERP system.

The adjustment resulting from asset allocations consists of two main items.

- 1) A change in treatment of some non-network easements assets. They were previously classified as a shared asset, subject to asset allocation. They are now classified as an electricity non-network asset.
- 2) The removal of the 2021 movement in fibre related pole assets from the RAB. This is due to the removal of Avoidable Cost Allocation Methodology (ACAM) as a stand-alone cost allocation methodology from 01 April 2018.

The asset category transfer line in Schedule 4 (vii) represents the movement in WIP. The movements are detailed below.

Subtransmission lines	Subtransmission cables	Zone substations	Distribution and LV Lines	Distribution & LV cables	Distribution substations & transformers	Distribution Switchgear	Other network assets	Non-network assets
(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
(\$23)	(\$8)	(\$21)	(\$58)	(\$12)	(\$7)	(\$2)	\$131	\$0

*Regulatory tax allowance: disclosure of permanent differences (5a(i) of Schedule 5a)*

8. In the box below, provide descriptions and workings of the material items recorded in the following asterisked categories of 5a(i) of Schedule 5a-

- 8.1 Income not included in regulatory profit / (loss) before tax but taxable;
- 8.2 Expenditure or loss in regulatory profit / (loss) before tax but not deductible;
- 8.3 Income included in regulatory profit / (loss) before tax but not taxable;
- 8.4 Expenditure or loss deductible but not in regulatory profit / (loss) before tax.

**Box 5: Regulatory tax allowance: permanent differences**

There is \$1.7m of income that is not included in regulatory profit / (loss) before tax but is taxable. This relates predominantly to customer contribution revenue that is recognised over 10 years for tax purposes.

There is \$0.4m of expenditure in regulatory profit that is not deductible for tax relating to legal and entertainment expenditure.

There is no income included in regulatory profit / (loss) before tax but not taxable.

There is \$0.2m deductible for tax but not in regulatory profit / (loss) relating to interest on leases under NZ IFRS-16.

*Regulatory tax allowance: disclosure of temporary differences (5a(vi) of Schedule 5a)*

9. In the box below, provide descriptions and workings of material items recorded in the asterisked category 'Tax effect of other temporary differences' in 5a(vi) of Schedule 5a.

**Box 6: Tax effect of other temporary differences (current disclosure year)**

Temporary differences amount to -\$1.5m. The total tax effect of -\$0.4m relates to:

- \$0.3m CIW income that will be recognised as taxable income over a period of 10 years
- -\$0.2m movement in employee related provisions
- -\$0.5m other provisions associated with year-end

*Cost allocation (Schedule 5d)*

10. In the box below, comment on cost allocation as disclosed in Schedule 5d. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

**Box 7: Cost allocation**

Powerco has adopted a fully distributed cost approach to allocate shared costs between Powerco's electricity distribution, gas distribution and unregulated businesses.

**Directly attributable costs**

\$59.2m operating costs (65.1% of total operating costs) are directly attributable to the electricity distribution business (EDB) compared to \$58.8m in the previous disclosure year.

All operating costs except specified systems operations and network support (SONS) costs and specified business support costs are directly attributable to the specific regulated businesses. Costs that are directly attributable to the electricity distribution business primarily relate to:

- SONS (except network information services management costs)
- Customised Price-Quality Path related costs
- Network management and administration
- Customer related costs

**Proxy allocators**

Powerco adopts ABBA (accounting-based allocation approach) to determine the cost allocators that are used to allocate operating costs not directly attributable (less any arm's length deduction) to the electricity distribution business or any other regulated service. If a causal relationship cannot be established between the cost incurred and the cost driver a proxy relationship may be used to determine the cost allocator.

Following analysis of each financial statement item by Powerco's management team and based on a combination of experience, knowledge and the comparative sizes of Powerco's regulated businesses proxy relationships have been used to allocate operating costs for which a causal relationship cannot be established. The main reason a causal relationship cannot be established is that some costs do not have just one driver. The use of one cost allocator would unfairly affect the allocation of costs between regulated businesses.

**Costs not directly attributable**

\$31.7m operating costs (34.9% of total) that are not directly attributable to the EDB have been allocated to the EDB, compared to \$31.0m in the prior disclosure year.

Costs that are not directly attributable to the electricity distribution business primarily relate to SONS network information services management and business support costs.

SONS network information services management costs include personnel costs and professional service fees. A proxy fixed asset allocator based on the carrying value of network fixed assets is used.

Business support costs include personnel, professional services, information technology, building & insurance, administration and communication & marketing. The allocators vary as follows:

- Corporate services apply a proxy allocator of distribution line charge revenue
- Human resources apply a proxy allocator of employee numbers
- Regulatory management apply a causal allocation of managements estimate of staff time working on electricity regulated, other regulated and unregulated services and legal apply a proxy fixed asset allocator
- Insurance apply causal allocators of indemnity values, vehicle allocations and employee numbers
- Facility costs apply a causal allocator of employee numbers and a proxy fixed assets allocator
- Information systems and projects apply a proxy fixed asset allocator

Only one allocation methodology has been applied to each functional area and there have been no changes to any cost allocator used in the current disclosure year.

### *Asset allocation (Schedule 5e)*

11. In the box below, comment on asset allocation as disclosed in Schedule 5e. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

#### **Box 8: Commentary on asset allocation**

\$1,983m (96.6%) of the total RAB value is directly attributable to the electricity distribution business (EDB). \$70.4m (3.4%) of the total RAB value is not directly attributable but has been allocated to the EDB. In the previous disclosure year, the proportionate split was 96.7% and 3.3% respectively.

The principles supporting Powerco's asset allocation are consistent with the principles supporting cost allocation described in Box 7.

Shared non-network assets have been allocated to the regulatory asset base based on the proxy allocator of fixed asset net book value.

There have been no reclassifications in the period reported.

### *Capital Expenditure for the Disclosure Year (Schedule 6a)*

12. In the box below, comment on expenditure on assets for the disclosure year, as disclosed in Schedule 6a. This comment must include-

- 12.1 a description of the materiality threshold applied to identify material projects and programmes described in Schedule 6a;
- 12.2 information on reclassified items in accordance with subclause 2.7.1(2).

#### **Box 9: Explanation of capital expenditure for the disclosure year**

Expenditure on assets for the year ended March 2021 totalled \$241.7m which is \$46.3m (23.7%) more than the prior year (\$195.4m). This reflects increased expenditure across all asset expenditure categories except consumer connection and non-network. A \$33.8m increase in asset replacement and renewal, a \$5.9m increase in quality of supply and a \$5.3m increase in system growth accounts for 97% of the total \$46.3m increase.

#### **Materiality threshold**

A number of capex project and programme classifications exist. Whether they are material is defined as follows:

- quality of supply project - the project value exceeds 5% of the category's total value
- asset relocation project - the project value exceeds \$100k
- other reliability, safety and environment project or programme - expenditure exceeds \$150k
- non-network programme - expenditure exceeds \$300k

#### **Reclassified items**

No capital expenditure has been reclassified during the current disclosure year.

### *Operational Expenditure for the Disclosure Year (Schedule 6b)*

13. In the box below, comment on operational expenditure for the disclosure year, as disclosed in Schedule 6b. This comment must include-



- 13.1 Commentary on assets replaced or renewed with asset replacement and renewal operational expenditure, as reported in 6b(i) of Schedule 6b;
- 13.2 Information on reclassified items in accordance with subclause 2.7.1(2);
- 13.3 Commentary on any material atypical expenditure included in operational expenditure disclosed in Schedule 6b, a including the value of the expenditure the purpose of the expenditure, and the operational expenditure categories the expenditure relates to.

**Box 10: Explanation of operational expenditure for the disclosure year**

Operating expenditure (opex) for the year ended March 2021 totalled \$90.9m which is \$1.2m (1.3%) more than the prior year (\$89.8m). Service interruptions and emergency expenditure decreased \$1.2m, vegetation management increased \$0.6m, while business support expenditure increased \$1.8m. Variances noted across the remaining opex categories are small and account for the balance of the total opex increase.

**Reclassified items**

No items have been reclassified during this disclosure year.

**Atypical expenditure**

There have been no material items of atypical expenditure.

*Variance between forecast and actual expenditure (Schedule 7)*

14. In the box below, comment on variance in actual to forecast expenditure for the disclosure year, as reported in Schedule 7. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

**Box 11: Explanatory comment on variance in actual to forecast expenditure**  
**Expenditure on assets**

Expenditure on assets (network and non-network) for the year ended March 2021 totalled \$241.7m which is \$8.3m (3.6%) above the 2020 Asset Management Plan (AMP) forecast (\$233.4m). This net overspend is the result of a \$10m (4.6%) overspend on expenditure on network assets and a \$1.7m (10%) underspend on expenditure on non-network assets.

- Consumer connection

Customer development remained relatively strong across much of the Powerco footprint and was only \$6.9m (14.5%) lower than forecast. The six-week lockdown in April and early May had a significant impact on Customer activity, with contractors unable to carry out work during that period. However, there were several records broken for volume and value of customer projects in subsequent months. A small decline in activity in the Powerco Eastern Network was offset by record growth across the Western Network. Subdivisions and associated residential connections were exceptionally strong, along with numerous Retirement Home developments. There was also a significant amount of Commercial and Industrial activity, with Coolstore upgrades across the Tauranga Network, new Distribution Centres in Palmerston North and multiple light industrial subdivisions across the entire Powerco footprint.

- System growth

Actual expenditure on system growth is less than forecast by \$15.1m (23%). Much of this variance is due to the challenges encountered with the design and landowner agreements on several large projects that has seen the construction expenditure deferred to FY2022 and FY2023.

- Omokoroa – Detailed design and the finalisation of landowner agreements occurred in FY2021 with the commencement of construction deferred to FY2022.
- Putaruru-Tirau – Detailed design and procurement activities are now complete, with construction now scheduled for FY2022.
- Kaimarama-Whitianga – Landowner agreement has been reached in principal for the switching station site. It is now planned to complete detailed design and procurement in FY2022 and begin substation civil works.
- Taupo Quay Second Circuit – this project was halted due to escalating cost forecasts and has been substituted with an alternative project with FY22/23 construction.
- Roberts Ave to Peat Street Circuit - delayed due to consenting and cable route discussions with Nga Tangata Tiaki.
- Feilding Transformer Upgrade - deferred to allow further options analysis to be undertaken.

- Asset replacement and renewal

Asset replacement and renewal expenditure was higher than forecast by \$23.7m (25%). A significant amount of overhead renewals work was brought forward into FY2021 in response to the anticipated underspend in system growth projects. Overhead renewal projects provided this opportunity given a large pool of construction-ready projects with resources available to deliver.

During FY2021, we carried out a review of the different types of equipment on our electricity network, including the required repair times and the risk to supply for specific equipment failures. Following this network criticality review, we decided to strengthen our holdings of critical spares by \$3m. This additional asset replacement and renewal expenditure was not included in our AMP20 forecasts.

- Asset relocations.

Asset Relocations were mostly related to Council roading projects throughout the Powerco Network area. The upgrade of a Transpower substation at Waikino created the underground conversion of Powerco 33kV lines on adjacent properties. There were a number of smaller projects related to relocating Powerco assets for safety, such as LV fuse pillars near driveways that were vulnerable to vehicle damage.

- Reliability, safety and environment

- Quality of supply

Expenditure on quality of supply exceeded forecast for the period by \$7.1m (183%). This increase in expenditure was primarily due to a focus on accelerating reliability initiatives. This was to help maintain expenditures levels in anticipation of reduced spend in consumer connections due to the impacts of Covid 19 on the demand for new connections. These initiatives included the rollout of line

fault indicators (LFI), low voltage monitoring equipment and generation projects.

- Other reliability, safety and environment

Expenditure on other reliability, safety and environment was \$3.8m (114%) higher than forecast. This variance is largely due to expenditure on LiDAR data capture. In FY2021, we undertook a full LiDAR survey (\$3.4m) following a successful trial in FY2020. This full survey wasn't originally included in the AMP20 forecasts.

- Expenditure on non-network assets

Expenditure on non-network assets was \$1.7m (10.0%) under forecast. The variance resulted from the timing of a planned upgrade of the Enterprise Asset Management System.

#### **Operational expenditure**

Operational expenditure (opex) totalled \$90.9m during the period which is \$8.7m (8.7%) below the 2020 Asset Management Plan (AMP) forecast (\$99.6m). Network opex was \$5.4m (11.7%) lower than forecast, primarily driven by underspend on routine corrective maintenance and inspections while non-network opex was \$3.3m (4.4%) below the forecast.

Commentary is provided for each category where the variance against target exceeds 5.0% (subject to the difference being material in dollar terms).

- Service interruptions and emergencies

Expenditure on service interruptions and emergencies was \$1.4m (18.6%) lower than forecast. The underspend relates primarily to the actual rate of unplanned faults on the network during FY2021 being lower than forecast, particularly regarding distribution line faults.

- Vegetation management

Expenditure on vegetation management was \$1.0m (10.5%) higher than forecast. Management approved an in-year increase in spend to enable the removal of a greater number of risk trees from the network, and additional expenditure was allocated to achieving wider corridors from selected sub transmission feeders using mechanical and aerial methodology.

- Routine corrective maintenance and inspections

Expenditure on routine corrective maintenance and inspections was \$3.4m (20.4%) lower than forecast. The primary reasons for this underspend are:

- The impact of Covid lockdown restrictions on the completion of non-urgent maintenance activities;
- Poletop photography (\$1.2m) was originally forecast under Opex, but delivered as a Capex project; and
- Some high value maintenance activities deferred to FY22 due to planned SAIDI/SAIFI constraints.

- Asset replacement and renewal

Expenditure on asset replacement and renewal was \$1.6m (13.1%) lower than forecast. As for the underspend in Service interruptions and emergencies Opex, a lower than forecast unplanned fault rate has resulted in a lesser requirement for remedial work following faults.

#### *Information relating to revenues and quantities for the disclosure year*

15. In the box below provide-

- 15.1 a comparison of the target revenue disclosed before the start of the disclosure year, in accordance with clause 2.4.1 and subclause 2.4.3(3) to total billed line charge revenue for the disclosure year, as disclosed in Schedule 8; and

- 15.2 explanatory comment on reasons for any material differences between target revenue and total billed line charge revenue.

**Box 12: Explanatory comment relating to revenue for the disclosure year**

Powerco's actual revenue for the year ended 31 March 2021 was \$353.3m compared to target revenue of \$351.6m. There is no material difference between target revenue and total billed line charge revenue.

*Network Reliability for the Disclosure Year (Schedule 10)*

16. In the box below, comment on network reliability for the disclosure year, as disclosed in Schedule 10.

**Box 13: Commentary on network reliability for the disclosure year**

For the year ended March 2021, Powerco's normalised SAIDI (Class B and Class C) was 258 minutes, slightly extending the worsening trend in unplanned fault restoration durations. SAIFI (Class B and Class C) dropped slightly to 2.21 reflecting the impact of fewer major storms.

The increasing SAIDI supports Powerco's analysis in its customised price path (CPP) application of underlying deterioration in the network performance, reflecting declining asset condition. This is one of the drivers for increasing our investment in asset renewal. Despite increasing expenditure across a number of areas, we expect at best, only marginal improvement in network performance (measured by the average level of unplanned interruptions) during the CPP period; but with increasing improvements over the longer term.

**Calculating reliability results**

Powerco has well developed processes to capture outage/interruption information and ensure the accuracy of these records. In utilising this data to complete schedule 10 the following key calculation steps are applied:

- To calculate SAIDI and SAIFI customer connection numbers ("ICPs") are calculated from the Geographic Information System ("GIS") for the transformers affected. ICPs are updated to the GIS daily from the Electricity Registry;
- The customer connection number used in the annual calculation of SAIDI and SAIFI is the average of the daily customer numbers over the Assessment year. The sum of all customer minutes interrupted is divided by the average customer connection numbers to derive the annual SAIDI minutes and SAIFI value; and
- Calculation of the final year result is completed using the outage/interruption records in the Outage Management Database noting refinements to the data to correct for a number of practical delays affecting the recorded restoration time for many faults; these include SCADA polling delays, voice communication constraints and clock time coding discrepancies. Consistent with previous reporting periods, an adjustment of three minutes per interruption is made across all fault records to correct for these discrepancies. Powerco's CPP proposal includes investment planned to improve communication systems over the five-year CPP period ending March 2023. It is expected the improved communications systems will see the communications adjustment phased out by the end of the CPP period.

**The normalised results for Powerco**

The normalised result (line 37 of Schedule 10) reports SAIDI and SAIFI by applying the methodology contained in the Information Disclosure Determination (IDD).

This methodology is different to the methodology used for calculating SAIDI and SAIFI for the Customised Price-Quality Path (CPP) compliance statement therefore the actual normalised result reported in this information disclosure should not be compared with the CPP quality path normalised reliability limits.

The Commerce Commission is aware of this inherent inconsistency and will consider this issue in future amendments to the Information Disclosure Determination<sup>1</sup>. From 2019 the quality path normalised reliability limits are not required to be disclosed in this Schedule 10.

**The normalised results for Powerco's sub-networks**

When calculating the normalised SAIDI and SAIFI for the sub-networks for the purposes of Information Disclosure, Powerco has derived normalised datasets for each sub-network using boundary values calculated using the reference dataset (2005-2009 disclosure years) for each sub-network. This approach follows one of the two options provided by the Commerce Commission in its Issues Register for Electricity and Gas Information Disclosure<sup>2</sup>. Powerco has chosen this option as we consider it provides a more meaningful analysis of the actual performance of each sub-network than the alternative option of applying a Powerco

<sup>1</sup> Commerce Commission's issues register for gas and electricity information disclosure, item number 447.

<sup>2</sup> Commerce Commission's issues register for gas and electricity information disclosure, item number 231.

wide network boundary value to the sub-networks.

### *Insurance cover*

17. In the box below, provide details of any insurance cover for the assets used to provide electricity distribution services, including-
  - 17.1 The EDB's approaches and practices in regard to the insurance of assets used to provide electricity distribution services, including the level of insurance;
  - 17.2 In respect of any self insurance, the level of reserves, details of how reserves are managed and invested, and details of any reinsurance.

#### **Box 14: Explanation of insurance cover**

Powerco holds significant insurance cover relating to material damage and business interruption, targeted at key assets. This includes full cover for buildings and contents, substations and IS server equipment, and natural disaster cover for distribution transformers and SCADA equipment.

Powerco continues to prudently insure our network and other assets where it is economically feasible to do so, in line with good industry practice. Cover for poles, wires and pipes (commonly referred to as transmission and distribution cover) are, for all practical purposes, unavailable in NZ. Where it may be available in small amounts across our geographic region, the cost is considered to be uneconomic versus the risk, as there is a restricted retained limit and a premium cost of 10-15% of the sum insured.

To manage the immediate financial exposure to a catastrophic event affecting uninsured assets, the company maintains headroom in its debt facilities as explained below. The geographically diverse nature of Powerco's assets, and the resilience of those assets, also provides some practical mitigation of seismic risks.

Powerco maintains debt facilities, in excess of net (drawn) debt, that would be available for use should events occur which require extra funds to be made available quickly. This headroom amount is in excess of our day-to-day working capital requirements.

The value of this facility headroom, currently \$70 million, is based primarily on an assessment of the uninsured damage to Powerco's network assets undertaken by Marsh Risk Consulting. This analysis reviewed the catastrophic risk and expected loss from a catastrophic event, and was last assessed at \$50-70 million.

Insurance costs are allocated to Powerco's separate businesses following Powerco's allocation policies discussed earlier in this document.

### *Amendments to previously disclosed information*

18. In the box below, provide information about amendments to previously disclosed information disclosed in accordance with clause 2.12.1 in the last 7 years, including:
  - 18.1 a description of each error; and
  - 18.2 for each error, reference to the web address where the disclosure made in accordance with clause 2.12.1 is publicly disclosed.

**Box 15: Disclosure of amendment to previously disclosed information**

There have been no amendments to previously disclosed information.

Company Name \_\_\_\_\_

For Year Ended \_\_\_\_\_

## **Schedule 15      Voluntary Explanatory Notes**

*(In this Schedule, clause references are to the Electricity Distribution Information Disclosure Determination 2012 – as amended and consolidated 3 April 2018.)*

1. This schedule enables EDBs to provide, should they wish to-
  - 1.1 additional explanatory comment to reports prepared in accordance with clauses 2.3.1, 2.4.21, 2.4.22, 2.5.1 and 2.5.2;
  - 1.2 information on any substantial changes to information disclosed in relation to a prior disclosure year, as a result of final wash-ups.
2. Information in this schedule is not part of the audited disclosure information, and so is not subject to the assurance requirements specified in section 2.8.
3. Provide additional explanatory comment in the box below.



**Box 1: Voluntary explanatory comment on disclosed information  
Finance (schedules 2-7)**

*Weighted average remaining useful life of assets (schedule 4)*

The weighted average remaining useful life of assets has been calculated in accordance with Schedule 16 of the Information Disclosure Determination which specifies the weighting is based on opening RAB values. Opening RAB is a depreciated value that skews the weighted average remaining useful life value towards the newer, and consequently, higher value longer remaining life assets. This measure is therefore not a true reflection of the age of Powerco's assets.

It is also important to note that asset age, particularly total average remaining asset life, is not a key driver of the need to replace network assets. Good asset management practice would suggest this is primarily driven by overall asset health – i.e. condition/performance/criticality. For this reason, Powerco's forecast investment profiles set out in the company's current Asset Management Plan are not directly linked to addressing specific movements in average asset age although this is one of a number of key considerations.

*Disposals and Depreciation provisions*

As noted in Box 4 the disposals and depreciation result for the current year include provisions related to Commissioned WIP that is included in RAB.

Powerco implemented a new ERP system in the 2020 Disclosure year, and since this implementation, the balance of assets that are commissioned but remain in WIP has increased significantly. Any disposal or depreciation related to these new assets is not captured in the ERP system. This has highlighted the need to include provisions in 2021, to reflect that the growth in value of Commissioned WIP should also result in disposals related to the commissioned WIP, and depreciation where the assets have been included in commissioned WIP for more than one year.

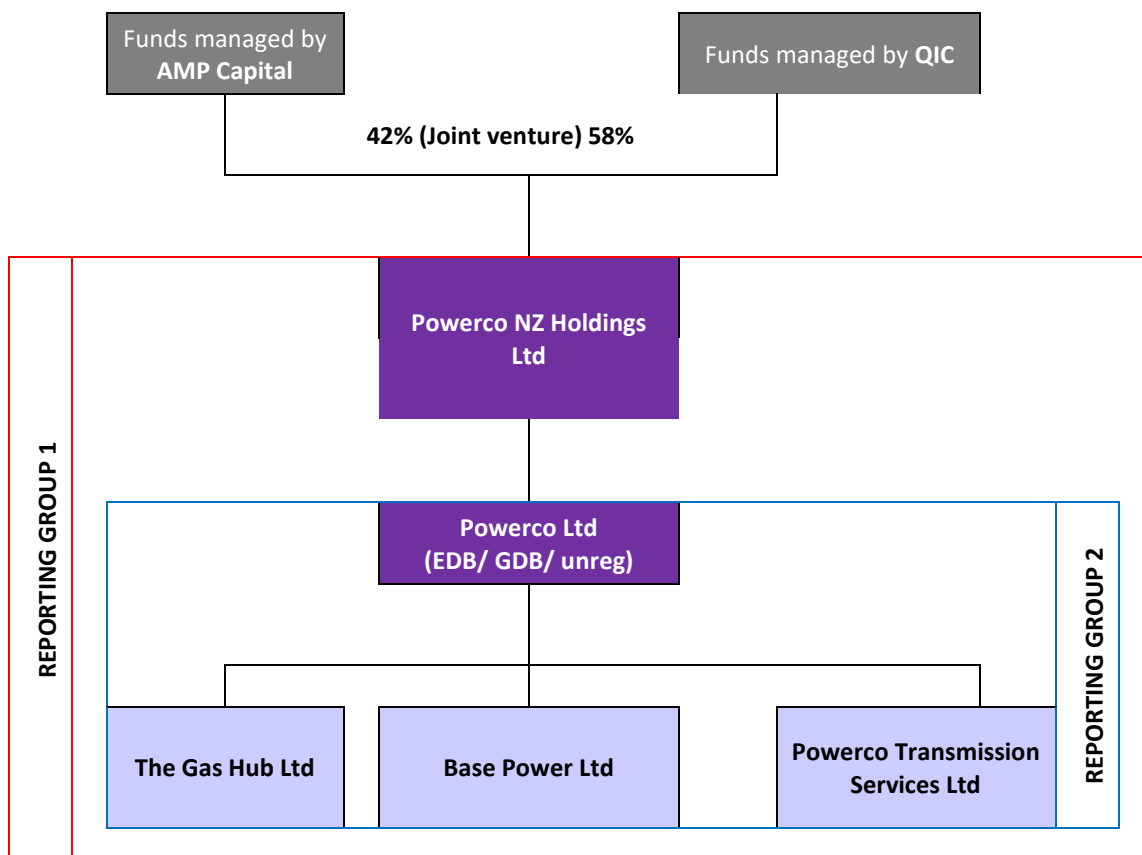
The disposal and depreciation provisions apply the same methodology as is used for accounting, while also ensuring that these provisions are calculated in line with the relevant Input Methodology.

The high level of disposals included in 2021 reflects this change in methodology. The provision included in 2021 captures new assets included in commissioned WIP this year, and assets that remain in commissioned WIP from previous years.

This provision-based approach will be used in future years.

*Related parties (schedule 5b)*

Referencing limb a) of the related party definition, Powerco Limited's external related parties include:



- Powerco NZ Holdings Limited does not trade. Its purpose is to form a corporate group through share ownership.
- Powerco Limited is primarily a regulated electricity and gas distribution business. It also conduct's unregulated activities such as gas metering and includes a business development team to identify and take advantage of both regulated and unregulated opportunities. Powerco Limited provides business support services to Base Power Ltd and the unregulated 'parts' of the regulated business.
- The Gas Hub Limited and Powerco Transmission Limited are not active.
- Base Power Limited provides remote area power supply units to the market and Powerco's Electricity Distribution business.

Referencing limb b) of the related party definition, Powerco Limited's internal related parties include:

- Gas metering

All related party transactions are valued on an equivalent arm's length basis. Powerco Limited has not adopted the consolidation approach. Depending on the type of transaction the valuation method may require the application of a:

- a) market-tested value; or
- b) market-tested margin.

Powerco applies a market-tested value to expenditure on assets purchased from Base Power Ltd.

Powerco applies a market-tested margin to regulatory income for business support services provided to related parties. To ensure Powerco's valuation of related party transactions is based on an objective and

independent measure, PwC were engaged to report the margin benchmarks observed in the market for relevant corporate services.

- The equivalent arm's length value of services provided to Base Power Limited is \$34.1k, of which \$33.6k is allocated to Powerco's Electricity Distribution business.
- The equivalent arm's length value of services provided to Gas metering is \$507k, of which \$2.5k is allocated to Powerco's Electricity Distribution business.

#### *Overhead to underground conversion (schedule 6a)*

Powerco does not collect information separately where the conversion from overhead line to underground cable forms part of a larger project. The capital expenditure for this metric reported in schedule 6a is for those projects that are only converting overhead distribution to underground.

#### *Reintroduction of building depreciation*

Most buildings have not been eligible for tax depreciation since 2011; however, with effect from the 2020/21 income year, certain buildings will once again be eligible for depreciation using the diminishing value method at a rate of 2% per annum or the straight-line rate of 1.5% per annum.

As a result of this Powerco has included an additional \$5.3m adjustment to the Regulatory Tax Asset Base Roll-Forward Schedule 5a(viii). This is in addition to a \$7.3m adjustment that was included in 2020. This is included in the Other adjustments to the RAB tax value line. The further adjustments in the current disclosure year reflect additional buildings that need to be included in the Regulatory Tax Asset Base that were not identified in the 2020 Information Disclosure.

#### **Asset Information (schedules 9a-9c)**

##### *Asset management system*

The implementation of a new ERP system during the 2020 disclosure period brought transformational change to asset management processes, applications, and technology. In particular, the asset register migrated from GIS to SAP. While the migration approach generally avoided transformation of asset data structure and content, some change was inherent. Applications and process were significantly transformed with some impact to asset data outcomes. Some shifts within the age profile were caused by the way installation dates have been inferred where they are not directly recorded.

##### *Data quality*

Powerco's network is made up of fifteen legacy lines networks that have been amalgamated over time. This diversity has created ongoing data and systems integration and improvement challenges. We continue to invest in improving the quality and completeness of our asset-related data sets. Whilst we believe that the quality of our data is adequate for business purposes, and in line with the levels of quality available by other electricity distributors, there are some known limitations to our current data set as set out in schedules 9a and 9b; key points are noted as follows:

- Underlying asset data comprises a comprehensive set of network information that is generally complete and consistently applied. However, a small proportion of the asset data is either internally conflicting or not wholly reliable and, for a small number of asset categories, there are also gaps in the attribute information.
- Ongoing programmes of work are underway to improve the completeness and accuracy of our asset data. This work can impact asset quantities and age profile.
- Some asset ages have been estimated after initial data capture. While based on the best information available, these estimates are likely to contain some inaccuracies.
- Some date information is known to have been defaulted and is reported as such.

##### *Network asset classification*

The programmes we have put in place to ensure ongoing improvement of asset data over time, as well as the process of clarification used by the Commission to ensure data is calculated on a consistent basis between companies, means that from time to time we re-categorise small numbers of assets to reflect the latest

guidance and latest available data.

#### *Asset categorisation*

Powerco operates network assets, as set out in table 2, which do not clearly fit into a specified category. These assets have been included in the category that most closely relates to the asset type and function

Table 2: Asset categorisation

Type	Included in	
	Category	Class
<b>Ground mounted 33/66kV fuses</b>	Zone substation switchgear	33kV switch (ground mounted)
<b>Pole mounted 33/66kV fuses</b>	Zone substation switchgear	33kV switch (pole mounted)
<b>33kV reclosers</b>	Zone substation switchgear	22/33kV CB (outdoor)
<b>Reclosers in zone substations</b>	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)
<b>Ground mounted 3.3/6.6/11/22kV fuses</b>	Distribution switchgear	3.3/6.6/11/22kV switch (ground mounted) except RMU
<b>Pole mounted distribution conversion and SWER isolation transformers</b>	Distribution transformer	Pole mounted transformer
<b>Ground mounted distribution conversion and SWER isolation transformers</b>	Distribution transformer	Ground mounted transformer
<b>Ground mounted subtransmission switchgear (not in zone substations)</b>	Zone substation switchgear	33kV switch (ground mounted)
<b>Pole mounted subtransmission switchgear (not in zone substations)</b>	Zone substation switchgear	33kV switch (pole mounted)
<b>Protection system pilot circuits</b>	Not included <sup>3</sup>	Not included

#### *Low voltage circuit length*

Powerco notes that low voltage circuit length has been calculated in accordance with information provided by the Commission. This requires low voltage service lines in transport corridors (other than road crossings) to be excluded. For completeness, Powerco considers that this definition understates the practical circuit length under management by Powerco.

#### *Circuits in sensitive areas*

Powerco does not record sensitive area geography and therefore no circuit length is reported for this criterion.

<sup>3</sup> Refer to the information disclosure determination issues register published by the Commerce Commission

#### *Circuit length under vegetation management*

Powerco's vegetation management policy applies to the whole overhead electricity network. Subject to annual budget constraints, this strategy involves an intensive trimming period in high criticality areas until the areas are under control and then a reduction to a sustainable level of vegetation management to maintain clearance from the lines.

#### **Transformer capacity (schedule 9e)**

##### *Distribution transformer capacity*

The disclosed Powerco owned distribution transformer capacity includes transformers that are recorded as being network connected. In accordance with Powerco's operational approach to ownership, transformer assets with no clear owner are regarded as Powerco owned for disclosure purposes. Assumptions have been made for operational distribution substations where installed capacity is not known.

##### *Zone substation transformer capacity*

Powerco owns transformers provided by various suppliers with ratings calculated at varying temperatures. The capacity reported in the information disclosure uses a standardised rating for continuous operation at 20°C.

#### **Successive interruptions (Schedule 10)**

As required by the exemption granted 17 May 2021 Powerco confirms that successive interruptions have been treated in the same way for the 2021 disclosure as they were for the 2020 disclosures.

Powerco's methodology for recognising successive interruptions is summarised below.

- If supply is cut for more than 1 minute - SAIDI and SAIFI will apply
- If supply is restored for less than 1 minute - it is a continuation of the initial interruption. SAIDI continues to apply and there isn't a new SAIFI
- If supply is restored for more than 1 minute but then fails again for greater than 1 minute – SAIDI applies, and this event incurs a new SAIFI. There is a no SAIDI component whilst the power is on

## ELECTRICITY DISTRIBUTION SERVICES INFORMATION DISCLOSURE FOR THE YEAR ENDED 31 MARCH 2021

Certificate for year-end disclosures

Pursuant to clause 2.9.2 of section 2.9

We, John Loughlin and Paul Callow,

being directors of Powerco Limited certify that, having made all reasonable enquiry, to the best of our knowledge—

- a) The information prepared for the purposes of clauses 2.3.1, 2.3.2, 2.4.21, 2.4.22, 2.5.1, 2.5.2 and 2.7.1 of the Electricity Distribution Information Disclosure 2012 in all material respects complies with that determination; and
- b) The historical information used in the preparation of Schedules 8, 9a, 9b, 9c, 9d, 9e, 10, and 14 has been properly extracted from the Powerco Limited's accounting and other records sourced from its financial and non-financial systems, and that sufficient appropriate records have been retained.
- c) In respect of information concerning assets, costs and revenues valued or disclosed in accordance with clause 2.3.6 of the Electricity Distribution Information Disclosure Determination 2012 and clauses 2.2.11(1)(g) and 2.2.11(5) of the Electricity Distribution Services Input Methodologies Determination 2012, we are satisfied that-
  - i. the costs and values of assets or goods or services acquired from a related party comply, in all material respects, with clauses 2.3.6(1) and 2.3.6(3) of the Electricity Distribution Information Disclosure Determination 2012 and clauses 2.2.11(1)(g) and 2.2.11(5)(a)-2.2.11(5)(b) of the Electricity Distribution Services Input Methodologies Determination 2012; and
  - ii. the value of assets or goods or services sold or supplied to a related party comply, in all material respects, with clause 2.3.6(2) of the Electricity Distribution Information Disclosure Determination 2012.

\_\_\_\_\_  
Director

19 August 2021

Date

\_\_\_\_\_  
Director

19 August 2021

Date



**INDEPENDENT AUDITOR'S REPORT  
TO THE DIRECTORS OF POWERCO LIMITED AND THE COMMERCE COMMISSION**

**Report on the Disclosure Information prepared in accordance with the Electricity Distribution Information Disclosure Determination 2012 (consolidated April 2018)**

We have conducted a reasonable assurance engagement on whether the information disclosed by Powerco Limited (the 'Company') required to be disclosed in accordance with the Electricity Information Disclosure Determination 2012 (consolidated April 2018) as amended by the Information Disclosure exemption: Disclosure and auditing of reliability information within Schedule 10, issued by the Commerce Commission on 17 May 2021 ('the Determination') for the disclosure year ended 31 March 2021, has been prepared in all material respects, in accordance with the Determination.

The information required to be reported by the Company, under the Determination is in Schedule 1 to 4, 5a to 5g, 6a and 6b, 7, 10, and the explanatory notes in boxes 1 to 11 of Schedule 14 ('the Disclosure Information').

Further, we have conducted a reasonable assurance engagement on whether the Company's basis for valuation of related party transactions ('the Related Party Transaction Information') for the disclosure year ended 31 March 2021, has been prepared, in all material respects, in accordance with clauses 2.3.6 and 2.3.8 of the Determination, and clauses 2.2.11(1)(g) and 2.2.11(5) of the Electricity Distribution Services Input Methodologies Determination 2012 (consolidated May 2020) ('the Input Methodologies Determination').

**Opinion**

This opinion has been formed on the basis of, and is subject to, the inherent limitations outlined elsewhere in this independent assurance report.

In our opinion:

- The Company has complied, in all material respects, with the Determination in preparing the Disclosure Information;
- The Related Party Transaction Information complies, in all material respects, with the Determination and the Input Methodologies Determination;
- As far as appears from an examination of them, proper records to enable the complete and accurate compilation of the Disclosure Information and the Related Party Transaction information have been kept by the Company; and
- As far as appears from an examination of the records, the information used in the preparation of the Disclosure Information and the Related Party Transaction Information has been properly extracted from the Company's accounting and other records and has been sourced, where appropriate, from the Company's financial and non-financial systems.

**Basis of opinion**

We conducted our engagement in accordance with the International Standard on Assurance Engagements (New Zealand) 3000 (Revised): *Assurance Engagements Other Than Audits or Reviews of Historical Financial Information* and the Standard on Assurance Engagements 3100 (Revised): *Compliance Engagements* issued by the New Zealand Auditing and Assurance Standards Board. Copies of these standards are available on the External Reporting Board's website.

These standards require that we comply with ethical requirements and plan and perform our assurance engagement to provide reasonable assurance about whether the Disclosure Information has been prepared, in all material respects, with the Determination, and about whether the Related Party Transaction Information has been

prepared, in all material respects, with the Determination and the Input Methodologies Determination. Reasonable assurance is a high level of assurance.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

## Key assurance matters

Key assurance matter are those matters that, in our professional judgement, were of most significance in our assurance procedures of the Disclosure Information. These matters were addressed in the context of our audit of the Disclosure Information, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key assurance matter	How our procedures addressed the key assurance matter
<b>Capital expenditure and assets commissioned into the regulatory asset base ('RAB')</b>	
<p>The Company carries out a large number of individual network system projects that can be either operational (network maintenance) or capital (asset replacement or network growth) in nature.</p> <p>Capital expenditure in the current year was \$216 million and commissioned assets in to the RAB of \$184 million, compared to network operating expenditure of \$91 million.</p> <p>Capital expenditure and assets commissioned into the RAB are a key assurance matter due to the significant judgment pertaining to the assessment of whether the capital expenditure and assets commissioned meet the definition under the Determination.</p>	<p>Our procedures on capital expenditure and commissioned assets into the RAB included the following:</p> <ul style="list-style-type: none"> <li>Assessing the Company's capitalisation policy was in line with NZ IAS 16 – <i>Property, plant and equipment</i>, NZ IFRS 16 – <i>Leases</i> and NZ IAS 38 – <i>Intangible assets</i>;</li> <li>Evaluating the design and implementation of controls over the classification of network expenditure;</li> <li>Examining a sample of capital expenditure and assets included in the RAB to invoice(s) or other supporting information to determine whether the expenditure met the capitalisation criteria in the Determination; and</li> <li>Comparing the assets commissioned into the RAB to those commissioned for financial statement purposes and investigating any significant variances.</li> </ul>
<b>Valuation of the provision for asset disposals</b>	
<p>As detailed in Schedule 14 and Schedule 15, the Company included a provision for assets disposals amounting to \$40 million in the regulatory asset base disclosed in the information disclosure Schedule 4.</p> <p>The provision is calculated using an input assumption based on historical trends. The input factor is applied against the proportion of asset replacement and renewals in commissioned assets.</p> <p>This is a key assurance matter due to the quantum of the balance and the level of judgement required in determining the estimate.</p>	<p>Our procedures on management's estimation of the provision for asset disposals included the following:</p> <ul style="list-style-type: none"> <li>Evaluating the design and implementation of key controls over the disposals provision;</li> <li>Assessing key assumptions against internal information such as disposals and capitalisation history;</li> <li>Assessing changes in assumptions and methodologies from prior periods;</li> <li>Testing the arithmetical accuracy of the calculation; and</li> <li>Evaluating the sensitivity of the calculation to changes in the key variables and assumptions.</li> </ul>



Key assurance matter	How our procedures addressed the key assurance matter
<b>Completeness and accuracy of System Average Interruption Duration Index ('SAIDI') and System Average Interruption Frequency Index ('SAIFI')</b>	
<p>The Determination defines certain quality measures in relation to the number of interruptions, faults, cause of faults and the average SAIDI and SAIFI values.</p> <p>SAIFI and SAIDI is calculated using aggregate faults and interruptions information for the period through prescribed formulas and requirements per Attachment B of the Determination.</p> <p>The completeness and accuracy of SAIDI and SAIFI is a key assurance matter due to the reliance on manual switching sheets to inform the data entry of interruption information for a large volume of faults.</p> <p>Additionally, the SAIDI and SAIFI calculation is subject to manual adjustments processed to normalise the calculation.</p>	<p>Our procedures on the completeness and accuracy of SAIDI and SAIFI included the following:</p> <ul style="list-style-type: none"> <li>• Obtaining a robust understanding of the Company's methods for recording electricity outages and their duration;</li> <li>• Evaluating the design and implementation of key controls related to the recording and the reviewing of outage data;</li> <li>• Utilising media searches to assess whether there are major events omitted from the outages recorded;</li> <li>• On a sample basis, we selected faults recorded on the outage database and traced the number of customers, number of minutes, the class type and fault cause to the information recorded on the outage listing;</li> <li>• On a sample basis, we selected faults recorded on the switching sheets and traced the number of customers, number of minutes, the class type and fault cause to the information recorded in the system and the information recorded on the outage listing;</li> <li>• Where a manual adjustment is processed, for planned or unplanned, we have, on a sample basis, obtained supporting information for the adjustment;</li> <li>• Recalculating the normalised SAIDI and SAIFI according to the methodology of the Determination; and</li> <li>• Reviewing the disclosures in Schedule 15 in respect of the treatment of successive interruptions.</li> </ul>

## Responsibilities of the Board of Directors for the Disclosure Information and Related Party Transaction Information

The Board of Directors is responsible on behalf of the Company for the preparation of the Disclosure Information and Related Party Transaction Information in accordance with the Determination. The responsibility includes the design, implementation and maintenance of internal control relevant to the Company's preparation of the Disclosure Information and the Related Party Transaction Information with the Determination.



## **Our Independence and Quality Control**

We have complied with the independence and other ethical requirements of Professional and Ethical Standard 1 *International Code of Ethics for Assurance Practitioners (including International Independence Standards) (New Zealand)* ('PES-1') issued by the New Zealand Auditing and Assurance Standards Board, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

Other than in our capacity as auditor and the provision of other assurance services including the audit of financial statements, the audit of regulatory disclosure statements, greenhouse gas assurance and project quality assurance, we have no relationship with or interests in the Company or any of its subsidiaries. These services have not impaired our independence as auditor of the Company as required by the Determination.

The firm applies Professional and Ethical Standard 3 (Amended): *Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance Engagements* issued by the New Zealand Auditing and Assurance Standards Board, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

## **Our responsibility for the audit of the Disclosure Information and the Related Party Transaction Information**

Our responsibility is to express an opinion whether the Disclosure Information and the Related Party Transaction Information has been prepared, in all material respects, in accordance with the Determination and the Input Methodologies Determination. ISAE 3000 (Revised) and SAE 3100 (Revised) require that we plan and perform our procedures to obtain reasonable assurance that the Company has complied, in all material respects, with the Determination and the Input Methodologies Determination in relation to the preparation of the Disclosure Information and the Related Party Transaction Information.

An assurance engagement to report on the Company's preparation of the Disclosure Information and the Related Party Transaction Information in accordance with the Determination and the Input Methodologies Determination involves performing procedures to obtain evidence about the compliance activity and controls implemented to meet the requirements of the Determination and the Input Methodologies Determination. The procedures selected depend on our judgement, including the identification and assessment of risk of material non-compliance with the Determination and the Input Methodologies Determination.

We have performed procedures to obtain evidence about the amounts and disclosures in the Disclosure Information and the basis of valuation in the Related Party Transaction Information. The procedures selected depend on our judgement, including the assessment of the risks of material misstatement of the Disclosure Information and Related Party Transaction Information, whether due to fraud or error or non-compliance with the Determination or the Input Methodologies Determination. In making those risk assessments, we considered internal control relevant to the Company's preparation of the Disclosure Information and Related Party Transaction Information in order to design procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.

## **Inherent Limitations**

Because of the inherent limitations of a reasonable assurance engagement, and the test basis of the procedures performed, it is possible that fraud, error or non-compliance may occur and not be detected.

We did not examine every transaction, adjustment or event underlying the Disclosure Information or the Related Party Transaction Information nor do we guarantee complete accuracy of the Disclosure Information or the Related Party Transaction Information. Also we did not evaluate the security and controls over the electronic publication of the Disclosure Information or the Related Party Transaction Information.

The opinion expressed in this report has been formed on the above basis.



## Use of Report

This independent assurance report has been prepared solely for the directors of the Company and the Commerce Commission for the purpose of providing those parties with reasonable assurance about whether the Disclosure Information has been prepared, in all material respects, in accordance with the Determination, and about whether the Related Party Transaction Information has been prepared in all material respects with the Determination and the Input Methodologies Determination. We disclaim any assumption of responsibility for any reliance on this report to any person other than the directors of the Company or the Commerce Commission, or for any other purpose than that for which it was prepared.

*Deloitte Limited*

Auckland, New Zealand  
19 August 2021