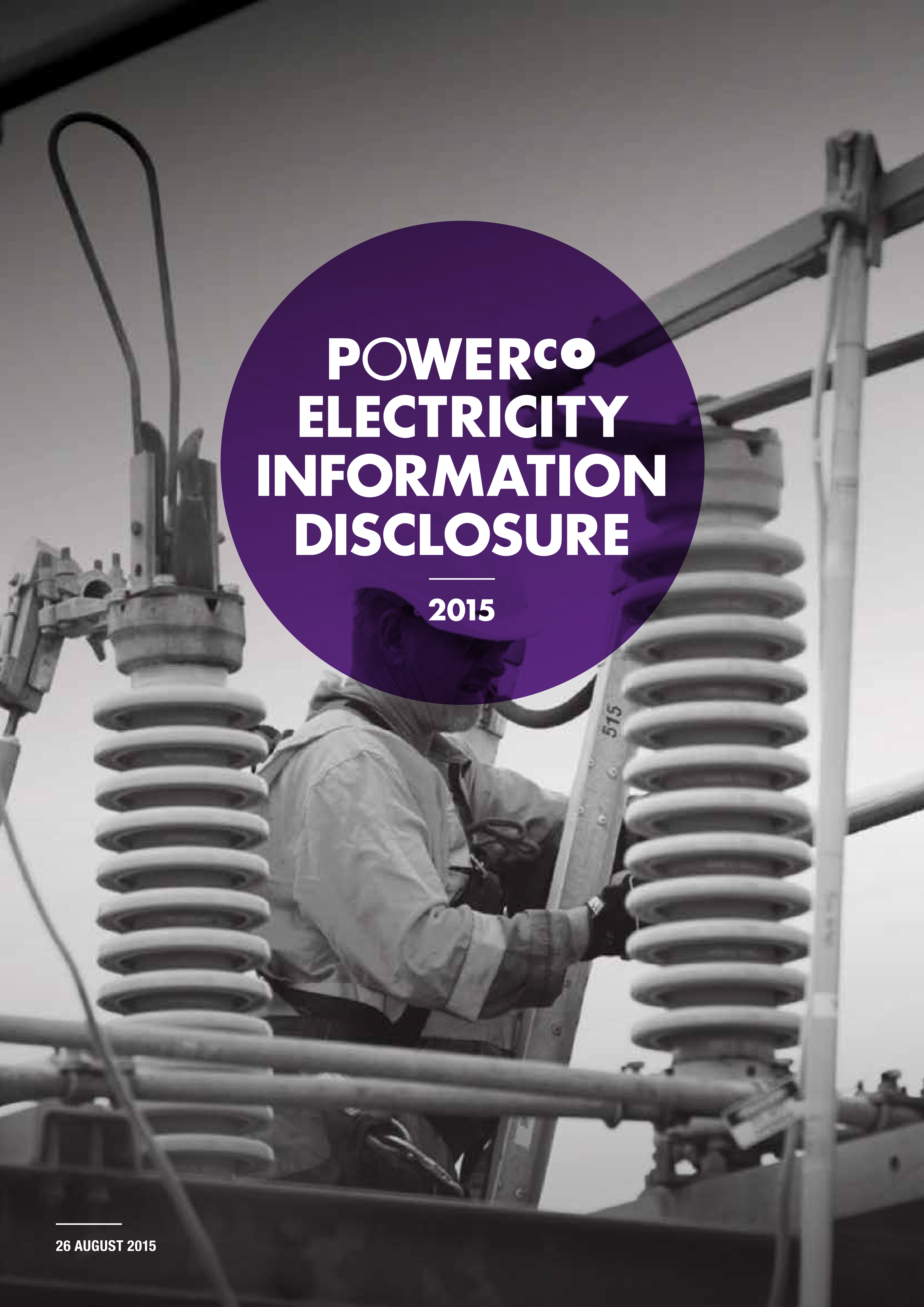


POWERCO

ELECTRICITY INFORMATION DISCLOSURE

2015

26 AUGUST 2015

Contents

1 INTRODUCTION

This disclosure of information is submitted by Powerco Limited ("Powerco") pursuant to subpart 9 of Part 4 of the Commerce Act 1986 and in accordance with the Commerce Commission's Electricity Distribution Information Disclosure Determination 2012 ("IDD") and all its subsequent amendments including the 2015 information disclosure amendments.

Part 4 of the Commerce Act 1986 (the Act") provides a regulatory regime for electricity lines services and sets out the requirements of information disclosure regulation. The purpose of the information disclosure regulation is to ensure that sufficient information is readily available to enable interested persons to assess whether the purpose of Part 4 of the Act is being met. The purpose of Part 4 is to promote the long-term benefit of consumers by promoting outcomes that are consistent with those produced in competitive markets.

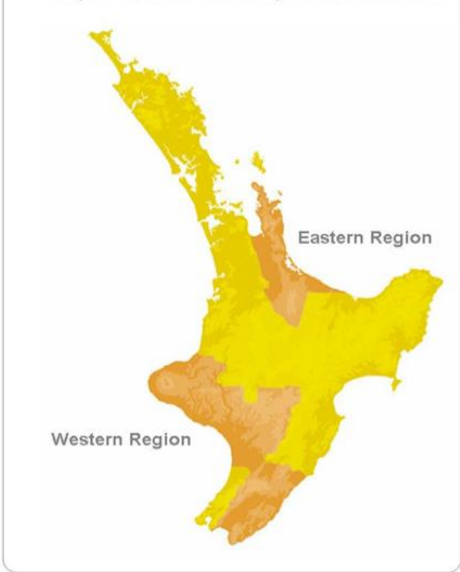
For the purpose of regulatory compliance, Powerco is a provider of "electricity lines services", as defined by section 52C of the Act, and is required to comply with the requirements of Part 4 of the Act.

The IDD requires disclosure of the following information for the 2015 disclosure year:

Schedule	Information provided
1	Analytical ratios
2	Return on investment
3	Regulatory profit
4	Regulatory asset base (rolled forward)
5a	Regulatory tax allowance
5b	Related party transactions
5c	Term credit spread differential
5d	Report on cost allocation
5e	Report on asset allocation
6a	Capital expenditure
6b	Operational expenditure
7	Actual capital and operation expenditure compared to forecast
8	Billed quantities and line charge revenues
9a	Asset register
9b	Asset age profile
9c	Overhead line and underground cable information
9d	Embedded networks
9e	Network demand
10	Network reliability

The IDD also requires that network and billed quantity information be provided for each sub-network (i.e. each geographically separate part) of a supplier's network. Powerco has two sub-networks which it terms the Eastern Region and Western Region of the North Island. These regions are shown in Map 1.

Map 1: Powerco Electricity Distribution Areas



The following schedules are provided separately for Powerco Limited, Powerco's Western Network and Powerco's Eastern Network:

- Schedule 8 Billed Quantities and Line Charge Revenue
- Schedule 9a Asset Register
- Schedule 9b Asset Age Profile
- Schedule 9c Overhead Line and Underground Cable Information
- Schedule 9e Network Demand
- Schedule 10 Network Reliability

Schedules 14 and 15 provide mandatory and voluntary notes to accompany the schedules relating to the current disclosure year.

Directors' certification of the 2015 information disclosure is provided in section 23 at the end of this document.

Further information on Powerco's long term forecasts are included in our Asset Management Plan published on our website.

2 SCHEDULE 1: ANALYTICAL RATIOS

Company Name	**Powerco Limited**
For Year Ended	**31 March 2015**

SCHEDULE 1: ANALYTICAL RATIOS

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

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

sch ref

7 1(i): Expenditure metrics

8		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)
9	**Operational expenditure**	14,646	200	76,157	2,354	21,700
10	Network	6,440	88	33,485	1,035	9,541
11	Non-network	8,206	112	42,672	1,319	12,159
12						
13	**Expenditure on assets**	26,775	366	139,230	4,303	39,671
14	Network	25,804	353	134,179	4,147	38,232
15	Non-network	971	13	5,051	156	1,439
16						

17 1(ii): Revenue metrics

18		Revenue per GWh energy delivered to ICPs ($/GWh)	Revenue per average no. of ICPs ($/ICP)
19	**Total consumer line charge revenue**	82,093	1,122
20	Standard consumer line charge revenue	95,997	995
21	Non-standard consumer line charge revenue	38,618	134,810
22			

23 1(iii): Service intensity measures

24			
25	Demand density	31	*Maximum coincident system demand per km of circuit length (for supply) (kW/km)*
26	Volume density	161	*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	13,663	*Total energy delivered to ICPs per average number of ICPs (kWh/ICP)*
29			

30 1(iv): Composition of regulatory income

31		($000)	% of revenue
32	Operational expenditure	65,510	18.26%
33	Pass-through and recoverable costs excluding financial incentives and wash-ups	119,926	33.43%
34	Total depreciation	57,918	16.14%
35	Total revaluations	1,198	0.33%
36	Regulatory tax allowance	25,887	7.22%
37	Regulatory profit/(loss) including financial incentives and wash-ups	90,731	25.29%
38	**Total regulatory income**	358,774	
39			

40 1(v): Reliability

41			
42	Interruption rate	16.42	*Interruptions per 100 circuit km*

3 SCHEDULE 2: RETURN ON INVESTMENT

Company Name **Powerco Limited**
For Year Ended **31 March 2015**

SCHEDULE 2: REPORT ON RETURN ON INVESTMENT

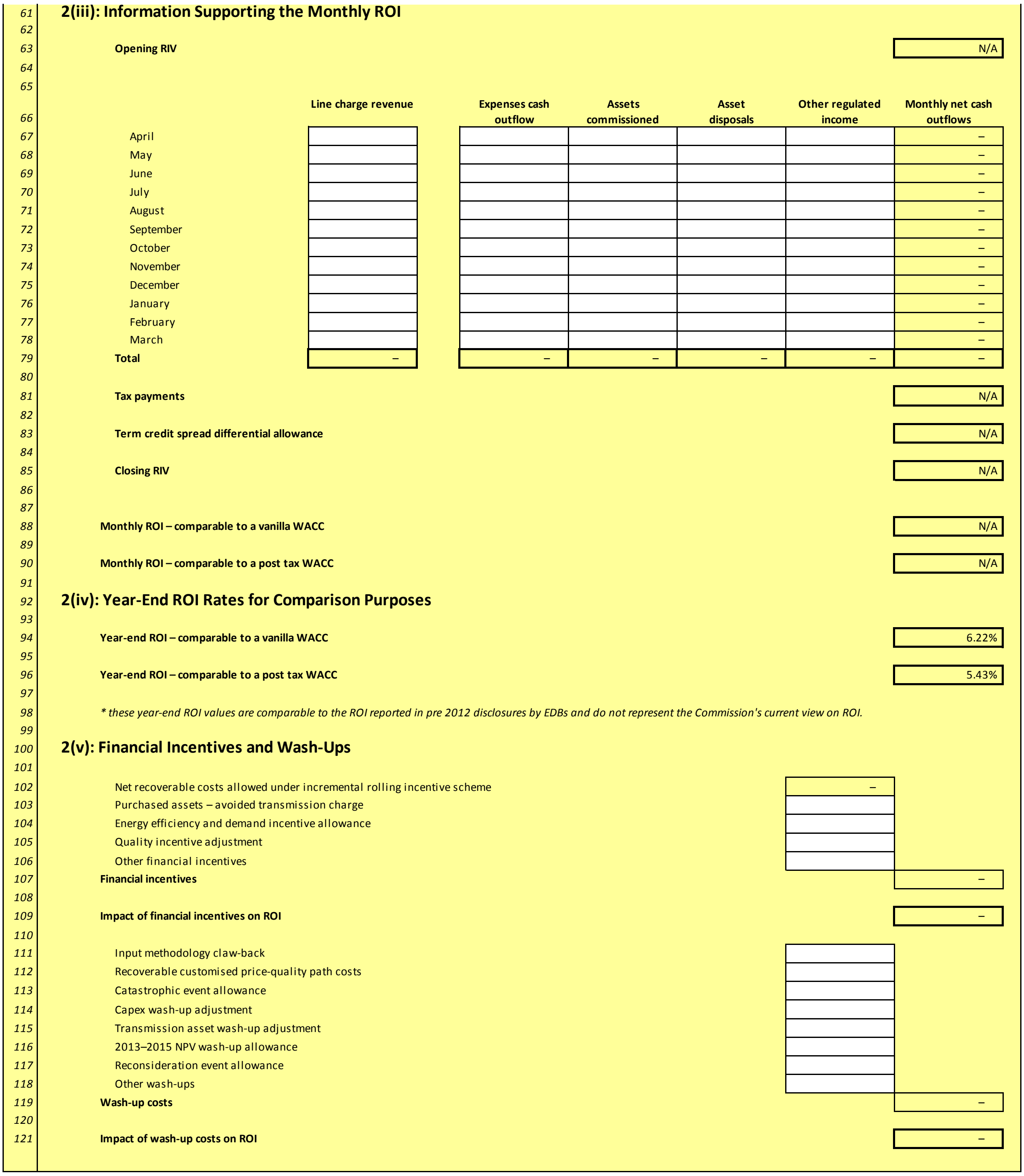
This schedule requires information on the Return on Investment (ROI) for the EDB relative to the Commerce Commission's estimates of post tax WACC and vanilla WACC. EDBs must calculate their ROI based on a monthly basis if required by clause 2.3.3 of the ID Determination or if they elect to. If an EDB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

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

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

sch ref		CY-2	CY-1	Current Year CY
7	**2(i): Return on Investment**			
8		31 Mar 13	31 Mar 14	31 Mar 15
9	**ROI – comparable to a post tax WACC**	%	%	%
10	Reflecting all revenue earned	6.21%	6.87%	5.64%
11	Excluding revenue earned from financial incentives	6.21%	6.87%	5.64%
12	Excluding revenue earned from financial incentives and wash-ups	6.21%	6.87%	5.64%
13				
14	**Mid-point estimate of post tax WACC**	5.85%	5.43%	6.10%
15	25th percentile estimate	5.13%	4.71%	5.39%
16	75th percentile estimate	6.56%	6.14%	6.82%
17				
18				
19	**ROI – comparable to a vanilla WACC**			
20	Reflecting all revenue earned	6.99%	7.55%	6.43%
21	Excluding revenue earned from financial incentives	6.99%	7.55%	6.43%
22	Excluding revenue earned from financial incentives and wash-ups	6.99%	7.55%	6.43%
23				
24	**WACC rate used to set regulatory price path**	8.77%	8.77%	8.77%
25				
26	**Mid-point estimate of vanilla WACC**	6.62%	6.11%	6.89%
27	25th percentile estimate	5.91%	5.39%	6.17%
28	75th percentile estimate	7.34%	6.83%	7.60%
29				

sch ref				($000)	
30	**2(ii): Information Supporting the ROI**				
31					
32		Total opening RAB value	1,439,789		
33	*plus*	Opening deferred tax	(31,590)		
34	**Opening RIV**			1,408,199	
35					
36	**Line charge revenue**			367,197	
37					
38		Expenses cash outflow	185,436		
39	*add*	Assets commissioned	102,247		
40	*less*	Asset disposals	8,941		
41	*add*	Tax payments	17,479		
42	*less*	Other regulated income	(8,423)		
43	**Mid-year net cash outflows**			304,644	
44					
45	**Term credit spread differential allowance**			–	
46					
47		Total closing RAB value	1,476,717		
48	*less*	Adjustment resulting from asset allocation	342		
49	*less*	Lost and found assets adjustment	–		
50	*plus*	Closing deferred tax	(39,998)		
51	**Closing RIV**			1,436,377	
52					
53	**ROI – comparable to a vanilla WACC**				6.43%
54					
55		Leverage (%)			44%
56		Cost of debt assumption (%)			6.36%
57		Corporate tax rate (%)			28%
58					
59	**ROI – comparable to a post tax WACC**				5.64%
60					



61 2(iii): Information Supporting the Monthly ROI

63	**Opening RIV**	N/A

		Line charge revenue	Expenses cash outflow	Assets commissioned	Asset disposals	Other regulated income	Monthly net cash outflows
66							
67	April						–
68	May						–
69	June						–
70	July						–
71	August						–
72	September						–
73	October						–
74	November						–
75	December						–
76	January						–
77	February						–
78	March						–
79	**Total**	–	–	–	–	–	–

81	**Tax payments**	N/A
83	**Term credit spread differential allowance**	N/A
85	**Closing RIV**	N/A
88	**Monthly ROI – comparable to a vanilla WACC**	N/A
90	**Monthly ROI – comparable to a post tax WACC**	N/A

92 2(iv): Year-End ROI Rates for Comparison Purposes

94	**Year-end ROI – comparable to a vanilla WACC**	6.22%
96	**Year-end ROI – comparable to a post tax WACC**	5.43%

98 ** 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.*

100 2(v): Financial Incentives and Wash-Ups

102	Net recoverable costs allowed under incremental rolling incentive scheme	–	
103	Purchased assets – avoided transmission charge		
104	Energy efficiency and demand incentive allowance		
105	Quality incentive adjustment		
106	Other financial incentives		
107	**Financial incentives**		–
109	**Impact of financial incentives on ROI**		–
111	Input methodology claw-back		
112	Recoverable customised price-quality path costs		
113	Catastrophic event allowance		
114	Capex wash-up adjustment		
115	Transmission asset wash-up adjustment		
116	2013–2015 NPV wash-up allowance		
117	Reconsideration event allowance		
118	Other wash-ups		
119	**Wash-up costs**		–
121	**Impact of wash-up costs on ROI**		–

A monthly ROI must only be calculated if during the first three months or last three months of the 2015 disclosure year, the value of assets commissioned by Powerco had exceeded 10% of the total opening regulatory asset base values. This criteria is not met and Powerco has elected to report the ROI for the full disclosure year only.

4 SCHEDULE 3: REGULATORY PROFIT

Company Name **Powerco Limited**
For Year Ended **31 March 2015**

SCHEDULE 3: REPORT ON REGULATORY PROFIT

This schedule requires information on the calculation of regulatory profit for the EDB for the disclosure year. All EDBs must complete all sections and provide explanatory comment on their regulatory profit in Schedule 14 (Mandatory Explanatory Notes).
This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref			
7	**3(i): Regulatory Profit**		**($000)**
8	**Income**		
9	Line charge revenue		367,197
10	*plus* Gains / (losses) on asset disposals		(8,808)
11	*plus* Other regulated income (other than gains / (losses) on asset disposals)		385
12			
13	**Total regulatory income**		358,774
14	**Expenses**		
15	*less* Operational expenditure		65,510
16			
17	*less* Pass-through and recoverable costs excluding financial incentives and wash-ups		119,926
18			
19	**Operating surplus / (deficit)**		173,338
20			
21	*less* Total depreciation		57,918
22			
23	*plus* Total revaluations		1,198
24			
25	**Regulatory profit / (loss) before tax**		116,618
26			
27	*less* Term credit spread differential allowance		–
28			
29	*less* Regulatory tax allowance		25,887
30			
31	**Regulatory profit/(loss) including financial incentives and wash-ups**		90,731
32			
33	**3(ii): Pass-through and Recoverable Costs excluding Financial Incentives and Wash-Ups**	**($000)**	
34	**Pass through costs**		
35	Rates	1,254	
36	Commerce Act levies	864	
37	Industry levies	1,117	
38	CPP specified pass through costs	–	
39	**Recoverable costs excluding financial incentives and wash-ups**		
40	Electricity lines service charge payable to Transpower	93,996	
41	Transpower new investment contract charges	6,553	
42	System operator services	–	
43	Distributed generation allowance	9,836	
44	Extended reserves allowance	–	
45	Other recoverable costs excluding financial incentives and wash-ups	6,305	
46	**Pass-through and recoverable costs excluding financial incentives and wash-ups**		119,926
47			

3(iii): Incremental Rolling Incentive Scheme

	($000)	
	CY-1 31 Mar 14	CY 31 Mar 15
Allowed controllable opex		
Actual controllable opex		
Incremental change in year		

		Previous years' incremental change	Previous years' incremental change adjusted for inflation
CY-5	31 Mar 10		
CY-4	31 Mar 11		
CY-3	31 Mar 12		
CY-2	31 Mar 13		
CY-1	31 Mar 14		
Net incremental rolling incentive scheme			–
Net recoverable costs allowed under incremental rolling incentive scheme			–

3(iv): Merger and Acquisition Expenditure

	($000)
Merger and acquisition expenditure	

Provide commentary on the benefits of merger and acquisition expenditure to the electricity distribution business, including required disclosures in accordance with section 2.7, in Schedule 14 (Mandatory Explanatory Notes)

3(v): Other Disclosures

	($000)
Self-insurance allowance	

5 SCHEDULE 4: VALUE OF REGULATORY ASSET BASE

Company Name	**Powerco Limited**
For Year Ended	**31 March 2015**

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.

4(i): Regulatory Asset Base Value (Rolled Forward)

sch ref			**RAB**	**RAB**	**RAB**	**RAB**	**RAB**
8		for year ended	**31 Mar 11**	**31 Mar 12**	**31 Mar 13**	**31 Mar 14**	**31 Mar 15**
9			**($000)**	**($000)**	**($000)**	**($000)**	**($000)**
10		**Total opening RAB value**	1,301,790	1,341,797	1,362,264	1,385,118	1,439,789
12	*less*	**Total depreciation**	54,642	57,706	58,272	59,857	57,918
14	*plus*	**Total revaluations**	31,289	20,912	11,627	21,063	1,198
16	*plus*	**Assets commissioned**	69,224	66,670	77,635	101,470	102,247
18	*less*	**Asset disposals**	5,890	9,497	8,111	8,275	8,941
20	*plus*	**Lost and found assets adjustment**	-	-	-	-	–
22	*plus*	**Adjustment resulting from asset allocation**	26	88	(25)	270	342
24		**Total closing RAB value**	1,341,797	1,362,264	1,385,118	1,439,789	1,476,717

4(ii): Unallocated Regulatory Asset Base

sch ref			**Unallocated RAB ***		**RAB**	
28			**($000)**	**($000)**	**($000)**	**($000)**
29		**Total opening RAB value**		1,444,972		1,439,789
30	*less*					
31		**Total depreciation**		58,997		57,918
32	*plus*					
33		**Total revaluations**		1,202		1,198
34	*plus*					
35		Assets commissioned (other than below)	103,358		102,055	
36		Assets acquired from a regulated supplier	–		–	
37		Assets acquired from a related party	192		192	
38		**Assets commissioned**		103,550		102,247
39	*less*					
40		Asset disposals (other than below)	8,941		8,941	
41		Asset disposals to a regulated supplier	–		–	
42		Asset disposals to a related party	–		–	
43		**Asset disposals**		8,941		8,941
45	*plus*	**Lost and found assets adjustment**		–		–
47	*plus*	**Adjustment resulting from asset allocation**				342
49		**Total closing RAB value**		1,481,786		1,476,717

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

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

	CPI_4				1,193
	CPI_4^{-4}				1,192
	Revaluation rate (%)				0.08%

		Unallocated RAB *		RAB	
		($000)	($000)	($000)	($000)
	Total opening RAB value	1,444,972		1,439,789	
less	Opening value of fully depreciated, disposed and lost assets	11,938		11,938	
	Total opening RAB value subject to revaluation	1,433,034		1,427,851	
	Total revaluations		1,202		1,198

4(iv): Roll Forward of Works Under Construction

		Unallocated works under construction		Allocated works under construction	
	Works under construction—preceding disclosure year		49,142		47,742
plus	Capital expenditure	104,188		103,197	
less	Assets commissioned	103,550		102,247	
plus	Adjustment resulting from asset allocation			102	
	Works under construction - current disclosure year		49,780		48,794
	Highest rate of capitalised finance applied				6.57%

4(v): Regulatory Depreciation

	Unallocated RAB *		RAB	
	($000)	($000)	($000)	($000)
Depreciation - standard	52,962		52,881	
Depreciation - no standard life assets	6,035		5,037	
Depreciation - modified life assets	–		–	
Depreciation - alternative depreciation in accordance with CPP	–		–	
Total depreciation		58,997		57,918

4(vi): Disclosure of Changes to Depreciation Profiles

($000 unless otherwise specified)

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

** include additional rows if needed*

4(vii): Disclosure by Asset Category

($000 unless otherwise specified)

		Subtransmission lines	Subtransmission cables	Zone substations	Distribution and LV lines	Distribution and LV cables	Distribution substations and transformers	Distribution switchgear	Other network assets	Non-network assets	Total
	Total opening RAB value	62,917	27,860	134,647	375,893	319,239	244,916	103,953	142,772	27,596	1,439,789
less	Total depreciation	683	851	6,248	13,728	14,822	7,770	4,952	4,033	4,833	57,918
plus	Total revaluations	53	24	115	312	267	201	86	118	22	1,198
plus	Assets commissioned	3,663	1,233	13,775	24,695	13,639	11,645	13,467	14,112	6,018	102,247
less	Asset disposals	321	39	842	3,128	548	1,904	1,813	346	–	8,941
plus	Lost and found assets adjustment	–	–	–	–	–	–	–	–	–	–
plus	Adjustment resulting from asset allocation	–	–	–	–	–	–	–	–	342	342
plus	Asset category transfers	249	169	3,065	(2,091)	(1,119)	(3,733)	446	3,313	(300)	(0)
	Total closing RAB value	65,878	28,397	144,512	381,954	316,656	243,355	111,187	155,936	28,845	1,476,717
	Asset Life										
	Weighted average remaining asset life	40	39	30	34	31	37	28	39	21	(years)
	Weighted average expected total asset life	59	50	52	59	47	54	39	44	27	(years)

6 SCHEDULE 5A: REGULATORY TAX ALLOWANCE

Company Name **Powerco Limited**
For Year Ended **31 March 2015**

SCHEDULE 5a: REPORT ON REGULATORY TAX ALLOWANCE

This schedule requires information on the calculation of the regulatory tax allowance. This information is used to calculate regulatory profit/loss in Schedule 3 (regulatory profit). EDBs must provide explanatory commentary on the information disclosed in this schedule, in Schedule 14 (Mandatory Explanatory Notes).
This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref					
7		**5a(i): Regulatory Tax Allowance**		**($000)**	
8		**Regulatory profit / (loss) before tax**		116,618	
9					
10	*plus*	Income not included in regulatory profit / (loss) before tax but taxable	–		*
11		Expenditure or loss in regulatory profit / (loss) before tax but not deductible	151		*
12		Amortisation of initial differences in asset values	10,664		
13		Amortisation of revaluations	4,428		
14				15,243	
15					
16	*less*	Total revaluations	1,198		
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	–		*
20		Notional deductible interest	38,211		
21				39,409	
22					
23		**Regulatory taxable income**		92,452	
24					
25	*less*	Utilised tax losses	–		
26		Regulatory net taxable income		92,452	
27					
28		Corporate tax rate (%)	28%		
29		**Regulatory tax allowance**		25,887	
30					
31	*	Workings to be provided in Schedule 14			
32		**5a(ii): Disclosure of Permanent Differences**			
33		In Schedule 14, Box 5, provide descriptions and workings of items recorded in the asterisked categories in Schedule 5a(i).			
34		**5a(iii): Amortisation of Initial Difference in Asset Values**		**($000)**	
35					
36		Opening unamortised initial differences in asset values	298,598		
37	*less*	Amortisation of initial differences in asset values	10,664		
38	*plus*	Adjustment for unamortised initial differences in assets acquired	–		
39	*less*	Adjustment for unamortised initial differences in assets disposed	2,561		
40		Closing unamortised initial differences in asset values		285,373	
41					
42		Opening weighted average remaining useful life of relevant assets (years)		28	

5a(iv): Amortisation of Revaluations

($000)

	Opening sum of RAB values without revaluations	1,339,927	
	Adjusted depreciation	53,491	
	Total depreciation	57,918	
	Amortisation of revaluations		4,428

5a(v): Reconciliation of Tax Losses

($000)

	Opening tax losses	–	
plus	Current period tax losses	–	
less	Utilised tax losses	–	
	Closing tax losses		–

5a(vi): Calculation of Deferred Tax Balance

($000)

	Opening deferred tax	(31,590)	
plus	Tax effect of adjusted depreciation	14,977	
less	Tax effect of tax depreciation	20,923	
plus	Tax effect of other temporary differences*	222	
less	Tax effect of amortisation of initial differences in asset values	2,986	
plus	Deferred tax balance relating to assets acquired in the disclosure year	–	
less	Deferred tax balance relating to assets disposed in the disclosure year	(313)	
plus	Deferred tax cost allocation adjustment	(12)	
	Closing deferred tax		(39,998)

5a(vii): Disclosure of Temporary Differences

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).

5a(viii): Regulatory Tax Asset Base Roll-Forward

($000)

	Opening sum of regulatory tax asset values	911,812	
less	Tax depreciation	74,724	
plus	Regulatory tax asset value of assets commissioned	101,000	
less	Regulatory tax asset value of asset disposals	7,824	
plus	Lost and found assets adjustment	–	
plus	Adjustment resulting from asset allocation	300	
plus	Other adjustments to the RAB tax value	–	
	Closing sum of regulatory tax asset values		930,565

7 SCHEDULE 5B: RELATED PARTY TRANSACTIONS

Company Name	**Powerco Limited**
For Year Ended	**31 March 2015**

SCHEDULE 5b: REPORT ON RELATED PARTY TRANSACTIONS

This schedule provides information on the valuation of related party transactions, in accordance with section 2.3.6 and 2.3.7 of the ID determination.
This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

7	**5b(i): Summary—Related Party Transactions**	**($000)**
8	Total regulatory income	–
9	Operational expenditure	–
10	Capital expenditure	–
11	Market value of asset disposals	–
12	Other related party transactions	192

13 5b(ii): Entities Involved in Related Party Transactions

14	**Name of related party**	**Related party relationship**
15	Powerline Limited (trading as Basepower)	Wholly owned subsidiary of Powerco Limited
16		
17		
18		
19		

20 ** include additional rows if needed*

21 5b(iii): Related Party Transactions

22	**Name of related party**	**Related party transaction type**	**Description of transaction**	**Value of transaction ($000)**	**Basis for determining value**
23	Powerline Limited (trading as Basepower)	Sales	Supplies remote area power and storage units	192	IM clause 2.2.11(5)(a)(i)
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					

38 ** include additional rows if needed*

8 SCHEDULE 5C: TERM CREDIT SPREAD DIFFERENTIAL

Company Name **Powerco Limited**
For Year Ended **31 March 2015**

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

7

8 5c(i): Qualifying Debt (may be Commission only)

9

sch ref	Issuing party	Issue date	Pricing date	Original tenor (in years)	Coupon rate (%)	Book value at issue date (NZD)	Book value at date of financial statements (NZD)	Term Credit Spread Difference	Cost of executing an interest rate swap	Debt issue cost readjustment
11	2004 Guaranteed Bonds - 3	29/3/2004	25/3/2004	11.3	6.53%	50,000,000	50,364,674	75,000	7,933	(97,222)
	2005 Guaranteed Bonds - 2	28/9/2005	26/9/2005	12.0	6.74%	50,000,000	49,722,717	75,000	9,561	(102,083)
	USPP (2003) US$56m/NZ$94.2m	25/11/2003	24/9/2003	11.0	BKBM+0.89%	94,165,125	–	141,248	–	(179,770)
	USPP (2003) US$54m/NZ$90.8m	25/11/2003	24/9/2003	12.0	BKBM+0.88%	90,802,085	74,516,854	136,203	–	(185,388)
	USPP (2003) US$65m/NZ$109.3m	25/11/2003	24/9/2003	13.0	BKBM+0.88%	109,298,806	92,540,201	163,948	–	(235,413)
	USPP (2011) US$72m/NZ$91.4m	7/6/2011	7/6/2011	9.0	BKBM+1.945%	91,370,558	102,831,758	147,655	–	(142,132)
	USPP (2011) US$90m/NZ$114.2m	7/6/2011	7/6/2011	12.0	BKBM+1.835%	114,213,198	131,288,315	171,320	–	(233,185)
12	USPP (2011) US$83m/NZ$105.3m	7/6/2011	7/6/2011	15.0	BKBM+1.980%	105,329,949	122,694,961	157,995	–	(245,770)
	2011 Wholesale Bond - Fixed rate	20/12/2011	20/12/2011	7.0	6.31%	65,000,000	65,997,651	97,500	13,187	(65,000)
	2011 Wholesale Bond - Floating rate	20/12/2011	20/12/2011	7.0	BKBM + 2.60%	35,000,000	34,990,762	52,500	6,992	(35,000)
13	USPP(2013) US$25m/NZ$30.4m	23/1/2013	1/11/2012	12.0	BKBM + 2.20%	30,439,547	32,850,322	45,659	–	(62,147)
14	USPP(2013) US$80m/NZ$97.4m	23/1/2013	1/11/2012	15.0	BKBM + 2.21%	97,406,551	103,139,414	146,110	–	(227,282)
15	NZD USPP(2014) NZ$135m	15/10/2014	3/7/2014	12.5	6.62%	135,000,000	135,717,298	202,500	20,358	(283,500)
16	** include additional rows if needed*						996,654,928	1,612,638	58,031	(2,093,892)

17

18 5c(ii): Attribution of Term Credit Spread Differential

19

sch ref			
20	**Gross term credit spread differential**		(423,224)
21			
22	Total book value of interest bearing debt	1,183,604	
23	Leverage	44%	
24	Average opening and closing RAB values	1,458,253	
25	**Attribution Rate (%)**		54%
26			
27	**Term credit spread differential allowance**		–

9 SCHEDULE 5D: COST ALLOCATIONS

Company Name **Powerco Limited**
For Year Ended **31 March 2015**

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

7 5d(i): Operating Cost Allocations

8 **Value allocated ($000s)**

sch ref		Arm's length deduction	Electricity distribution services	Non-electricity distribution services	Total	OVABAA allocation increase ($000s)
9						
10	**Service interruptions and emergencies**					
11	Directly attributable		7,006			
12	Not directly attributable				–	
13	**Total attributable to regulated service**		7,006			
14	**Vegetation management**					
15	Directly attributable		5,009			
16	Not directly attributable				–	
17	**Total attributable to regulated service**		5,009			
18	**Routine and corrective maintenance and inspection**					
19	Directly attributable		8,885			
20	Not directly attributable				–	
21	**Total attributable to regulated service**		8,885			
22	**Asset replacement and renewal**					
23	Directly attributable		7,904			
24	Not directly attributable				–	
25	**Total attributable to regulated service**		7,904			
26	**System operations and network support**					
27	Directly attributable		9,122			
28	Not directly attributable		719	164	883	
29	**Total attributable to regulated service**		9,840			
30	**Business support**					
31	Directly attributable		3,704			
32	Not directly attributable		23,162	5,067	28,228	
33	**Total attributable to regulated service**		26,866			
34						
35	**Operating costs directly attributable**		41,630			
36	**Operating costs not directly attributable**	–	23,881	5,231	29,111	–
37	**Operational expenditure**		65,510			
38						

5d(ii): Other Cost Allocations

Pass through and recoverable costs	($000)
Pass through costs	
Directly attributable	3,117
Not directly attributable	118
Total attributable to regulated service	3,235
Recoverable costs	
Directly attributable	116,690
Not directly attributable	
Total attributable to regulated service	116,690

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

Change in cost allocation 1			($000) CY-1	Current Year (CY)
Cost category	Business Support-corporate services	Original allocation	9,781	10,242
Original allocator or line items	Line charge Revenue	New allocation	9,372	9,778
New allocator or line items	Distribution line charge revenue	Difference	409	464

Rationale for change: Pass through costs have been removed from our revenue allocator as they are not a significant driver of corporate services expenditure.

Change in cost allocation 2			($000) CY-1	Current Year (CY)
Cost category	Business Support - Information services and projects	Original allocation	9,095	9,644
Original allocator or line items	Fixed Assets - Historic Cost	New allocation	7,853	9,541
New allocator or line items	Fixed Assets - Depreciated Cost	Difference	1,241	103

Rationale for change: Project Office costs are separated into those directly attributable to the electricity or gas business and the electricity portion of not directly attributable costs is determined using the depreciated cost value of network assets as the allocator. Using the depreciated cost value aligns cost allocation with the methodology applied to allocate not directly attributable assets.

Change in cost allocation 3			($000) CY-1	Current Year (CY)
Cost category	Business support -Human Resource department	Original allocation	912	1,181
Original allocator or line items	Line charge Revenue	New allocation	806	1,072
New allocator or line items	Employee numbers	Difference	106	109

Rationale for change: Employee numbers are considered a more accurate driver of HR department expenses.

Change in cost allocation 4			($000) CY-1	Current Year (CY)
Cost category	Business support - insurance	Original allocation	997	1,033
Original allocator or line items	Fixed Assets-Historic Cost	New allocation	1,091	1,117
New allocator or line items	value	Difference	(94)	(84)

Rationale for change: Disaggregation of our insurance costs has enabled more causal relationships to be established.

Change in cost allocation 5			($000) CY-1	Current Year (CY)
Cost category	Business support -facility costs	Original allocation	1,470	1,446
Original allocator or line items	Fixed assets - historical cost	New allocation	1,292	1,287
New allocator or line items	Employee numbers/Fixed Assets-NBV	Difference	177	159

Rationale for change: Employee numbers by location area are also an important driver of facility costs

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

† include additional rows if needed

10 SCHEDULE 5E: ASSET ALLOCATIONS

Company Name **Powerco Limited**
For Year Ended **31 March 2015**

SCHEDULE 5e: REPORT ON ASSET ALLOCATIONS

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

sch ref

5e(i): Regulated Service Asset Values

	Value allocated ($000s) Electricity distribution services
Subtransmission lines	
Directly attributable	65,878
Not directly attributable	–
Total attributable to regulated service	65,878
Subtransmission cables	
Directly attributable	28,397
Not directly attributable	–
Total attributable to regulated service	28,397
Zone substations	
Directly attributable	144,512
Not directly attributable	–
Total attributable to regulated service	144,512
Distribution and LV lines	
Directly attributable	381,954
Not directly attributable	–
Total attributable to regulated service	381,954
Distribution and LV cables	
Directly attributable	316,656
Not directly attributable	–
Total attributable to regulated service	316,656
Distribution substations and transformers	
Directly attributable	243,355
Not directly attributable	–
Total attributable to regulated service	243,355
Distribution switchgear	
Directly attributable	111,187
Not directly attributable	–
Total attributable to regulated service	111,187
Other network assets	
Directly attributable	155,936
Not directly attributable	–
Total attributable to regulated service	155,936
Non-network assets	
Directly attributable	6,723
Not directly attributable	22,120
Total attributable to regulated service	28,843
Regulated service asset value directly attributable	1,454,598
Regulated service asset value not directly attributable	22,120
Total closing RAB value	1,476,717

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

Change in asset value allocation 1

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

Rationale for change

Change in asset value allocation 2

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

Rationale for change

Change in asset value allocation 3

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

Rationale for change

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

† include additional rows if needed

11 SCHEDULE 6A: CAPITAL EXPENDITURE

Company Name **Powerco Limited**
For Year Ended **31 March 2015**

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

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

sch ref				
7		**6a(i): Expenditure on Assets**	**($000)**	**($000)**
8		Consumer connection		26,177
9		System growth		27,514
10		Asset replacement and renewal		45,954
11		Asset relocations		2,322
12		Reliability, safety and environment:		
13		Quality of supply	5,936	
14		Legislative and regulatory	–	
15		Other reliability, safety and environment	7,518	
16		**Total reliability, safety and environment**		13,454
17		**Expenditure on network assets**		115,421
18		Expenditure on non-network assets		4,344
19				
20		**Expenditure on assets**		119,765
21	*plus*	Cost of financing		1,247
22	*less*	Value of capital contributions		17,815
23	*plus*	Value of vested assets		–
24				
25		**Capital expenditure**		103,197
26		**6a(ii): Subcomponents of Expenditure on Assets (where known)**		**($000)**
27		Energy efficiency and demand side management, reduction of energy losses		521
28		Overhead to underground conversion		178
29		Research and development		14
30		**6a(iii): Consumer Connection**		
31		*Consumer types defined by EDB**	**($000)**	**($000)**
32		Small	9,465	
33		Commercial	5,853	
34		Industrial	10,859	
35		[EDB consumer type]		
36		[EDB consumer type]		
37		** include additional rows if needed*		
38		**Consumer connection expenditure**		26,177
39				
40	*less*	Capital contributions funding consumer connection expenditure	16,529	
41		**Consumer connection less capital contributions**		9,648
42		**6a(iv): System Growth and Asset Replacement and Renewal**		**Asset Replacement**
43			**System Growth**	**and Renewal**
44			**($000)**	**($000)**
45		Subtransmission	6,147	6,058
46		Zone substations	8,593	5,870
47		Distribution and LV lines	4,368	22,704
48		Distribution and LV cables	5,409	1,198
49		Distribution substations and transformers	1,088	5,098
50		Distribution switchgear	161	3,349
51		Other network assets	1,747	1,676
52		**System growth and asset replacement and renewal expenditure**	27,514	45,954
53	*less*	Capital contributions funding system growth and asset replacement and renewal	–	–
54		**System growth and asset replacement and renewal less capital contributions**	27,514	45,954
55				
56		**6a(v): Asset Relocations**		
57		*Project or programme**	**($000)**	**($000)**
58		NZTA Devon St Waiwhakaio Bridge	704	
59		NZTA Papamoa Underground cable lowering	573	
60		HV relocation – driveway access	117	
61		NZTA SH2 Waihi overhead reloaction	168	
62				
63		** include additional rows if needed*		
64		All other projects or programmes - asset relocations	761	
65		**Asset relocations expenditure**		2,322
66	*less*	Capital contributions funding asset relocations	1,287	
67		**Asset relocations less capital contributions**		1,035

68				
69	**6a(vi): Quality of Supply**			
70		*Project or programme**	**($000)**	**($000)**
71		Automation Projects	2,556	
72		Distribution backfeed enhancement	902	
73		Subtransmission and zone security enhancement	410	
74		Voltage Regulator	355	
75		Whitianga 66kV Ring Project	403	
76		Rangiuru Namu Distribution OH Renewal	392	
77		** include additional rows if needed*		
78	**Quality of supply expenditure**	All other projects programmes - quality of supply	918	5,936
79	*less*			
80	**Quality of supply less capital c**	Capital contributions funding quality of supply	–	5,936
81	**6a(vii): Legislative and Regulatory**			
82				**($000)**
83		*Project or programme**	**($000)**	
84		Nil projects or programmes		
85				
86				
87				
88				
89		** include additional rows if needed*		
90	**Legislative and regulatory exp**	All other projects or programmes - legislative and regulatory		–
91	*less*			
92	**Legislative and regulatory les**	Capital contributions funding legislative and regulatory		–
93	**6a(viii): Other Reliability, Safety and Environment**			
94				**($000)**
95		*Project or programme**	**($000)**	
96		LV Safety Improvement	311	
97		Oil containment	162	
98		Switchgear safety replacement	664	
99		Zone sub equipment upgrades	625	
100		New cable and overhead line	824	
101		Masterton Defected Pole Replacement	171	
102	**Other reliability, safety and e**	** include additional rows if needed*		7,518
103	*less*	All other projects or programmes - other reliability, safety and environment	4,761	
104	**Other reliability, safety and environment less capital contributions**			7,518
105		Capital contributions funding other reliability, safety and environment	–	
106	**6a(ix): Non-Network Assets**			
107	**Routine expenditure**			
108				**($000)**
109				
110		*Project or programme**	**($000)**	
111		IT Renewal	1,084	
112		Improve and Expand Network Data & Tools	352	
113		Site Improvement Capex	322	
114				
115				
116	**Routine expenditure**	** include additional rows if needed*		2,127
117	**Atypical expenditure**	All other projects or programmes - routine expenditure	370	
118				**($000)**
119				
120		*Project or programme**	**($000)**	
121		Improve network operations (OMS)	1,747	
122				
123				
124				
125				
126	**Atypical expenditure**	** include additional rows if needed*		2,217
127		All other projects or programmes - atypical expenditure	470	
128	**Expenditure on non-network assets**			4,344

12 SCHEDULE 6B: OPERATIONAL EXPENDITURE

Company Name **Powerco Limited**
For Year Ended **31 March 2015**

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

This schedule requires a breakdown of operational expenditure incurred in the disclosure year.
EDBs must provide explanatory comment on their operational expenditure in Schedule 14 (Explanatory notes to templates). This includes explanatory comment on any atypical operational expenditure and assets replaced or renewed as part of asset replacement and renewal operational expenditure, and additional information on insurance.
This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref			
7	**6b(i): Operational Expenditure**	**($000)**	**($000)**
8	Service interruptions and emergencies	7,006	
9	Vegetation management	5,009	
10	Routine and corrective maintenance and inspection	8,885	
11	Asset replacement and renewal	7,904	
12	**Network opex**		28,804
13	System operations and network support	9,840	
14	Business support	26,866	
15	**Non-network opex**		36,707
16			
17	**Operational expenditure**		65,510

18	**6b(ii): Subcomponents of Operational Expenditure (where known)**	
19	Energy efficiency and demand side management, reduction of energy losses	–
20	Direct billing*	–
21	Research and development	529
22	Insurance	1,117
23	** Direct billing expenditure by suppliers that directly bill the majority of their consumers*	

13 SCHEDULE 7 FORECAST V ACTUAL EXPENDITURE

Company Name	**Powerco Limited**
For Year Ended	**31 March 2015**

SCHEDULE 7: COMPARISON OF FORECASTS TO ACTUAL EXPENDITURE

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

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

sch ref				
7	**7(i): Revenue**	**Target ($000) [1]**	**Actual ($000)**	**% variance**
8	Line charge revenue	369,098	367,197	(1%)
9	**7(ii): Expenditure on Assets**	**Forecast ($000) [2]**	**Actual ($000)**	**% variance**
10	Consumer connection	17,141	26,177	53%
11	System growth	29,161	27,514	(6%)
12	Asset replacement and renewal	43,008	45,954	7%
13	Asset relocations	2,338	2,322	(1%)
14	Reliability, safety and environment:			
15	Quality of supply	15,736	5,936	(62%)
16	Legislative and regulatory	–	–	–
17	Other reliability, safety and environment	4,930	7,518	52%
18	**Total reliability, safety and environment**	20,666	13,454	(35%)
19	**Expenditure on network assets**	112,314	115,421	3%
20	Expenditure on non-network assets	7,063	4,344	(38%)
21	Expenditure on assets	119,377	119,765	0%
22	**7(iii): Operational Expenditure**			
23	Service interruptions and emergencies	7,201	7,006	(3%)
24	Vegetation management	5,080	5,009	(1%)
25	Routine and corrective maintenance and inspection	8,778	8,885	1%
26	Asset replacement and renewal	9,044	7,904	(13%)
27	**Network opex**	30,102	28,804	(4%)
28	System operations and network support	12,317	9,840	(20%)
29	Business support	24,908	26,866	8%
30	**Non-network opex**	37,225	36,707	(1%)
31	**Operational expenditure**	67,327	65,510	(3%)
32	**7(iv): Subcomponents of Expenditure on Assets (where known)**			
33	Energy efficiency and demand side management, reduction of energy losses	1,400	521	(63%)
34	Overhead to underground conversion	300	178	(41%)
35	Research and development	–	14	–
36				
37	**7(v): Subcomponents of Operational Expenditure (where known)**			
38	Energy efficiency and demand side management, reduction of energy losses	165	–	(100%)
39	Direct billing	–	–	–
40	Research and development	484	529	9%
41	Insurance	1,057	1,117	6%
42				

43 *1 From the nominal dollar target revenue for the disclosure year disclosed under clause 2.4.3(3) of this determination*

44 *2 From the CY+1 nominal dollar expenditure forecasts disclosed in accordance with clause 2.6.6 for the forecast period starting at the beginning of the disclosure year (the second to last disclosure of Schedules 11a and 11b)*

14 SCHEDULE 8 BILLED QUANTITIES AND LINE CHARGE REVENUE

Company Name	**Powerco Limited**
For Year Ended	**31 March 2015**
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.

sch ref

8(i): Billed Quantities by Price Component

Consumer group name or price category code	Consumer type or types (eg, residential, commercial etc.)	Standard or non-standard consumer group (specify)	Average no. of ICPs in disclosure year	Energy delivered to ICPs in disclosure year (MWh)
Unmetered	Streetlights	Standard	446	3,294
Small	Residential/Small Commercial	Standard	325,122	2,573,833
Medium	Commercial	Standard	1,238	233,261
Large	Large Commercial/Industrial	Standard	270	578,654
Large	Large Commercial/Industrial	Non-standard	311	1,083,903

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

Standard consumer totals	327,075	3,389,042
Non-standard consumer totals	311	1,083,903
Total for all consumers	327,386	4,472,945

Billed quantities by price component

Price component	Fixed	Fixed	Variable	Demand	Demand	Power Factor	Fixed
Unit charging basis (eg, days, kW of demand, kVA of capacity, etc.)	ICP days	kVA of capacity	kWh	kW of demand	kVA of demand	kVArh of demand	Fixture count
Unmetered	–	–	3,293,944	–	–	–	8,784,559
Small	113,802,585	–	2,683,893,988	3,725,514	–	–	–
Medium	436,202	–	233,260,274	–	395,821	16,460	–
Large	–	3,113,296	578,653,757	–	1,817,495	4,927	–
Large	108,770	–	1,083,903,670	–	–	135,850	–
Standard consumer totals	114,238,788	3,113,296	3,499,101,964	3,725,514	2,213,316	21,388	8,784,559
Non-standard consumer totals	108,770	–	1,083,903,670	–	–	135,850	–
Total for all consumers	114,347,558	3,113,296	4,583,005,634	3,725,514	2,213,316	157,238	8,784,559

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

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

Consumer group name or price category code	Consumer type or types (eg, residential, commercial etc.)	Standard or non-standard consumer group (specify)	Total line charge revenue in disclosure year	Notional revenue foregone from posted discounts (if applicable)	Total distribution line charge revenue	Total transmission line charge revenue (if available)
Unmetered	Streetlights	Standard	$1,807		$1,807	
Small	Residential/Small Commercial	Standard	$275,509		$275,509	
Medium	Commercial	Standard	$20,907		$20,907	
Large	Large Commercial/Industrial	Standard	$27,116		$27,116	
Large	Large Commercial/Industrial	Non-standard	$41,858		$41,858	
			–			
			–			
			–			
			–			
			–			

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

Standard consumer totals	$325,339	–	$325,339	–
Non-standard consumer totals	$41,858	–	$41,858	–
Total for all consumers	$367,197	–	$367,197	–

Line charge revenues ($000) by price component

Price component	Fixed	Fixed	Variable	Demand	Demand	Power Factor	Fixed
Rate (eg, $ per day, $ per kWh, etc.)	$/ICP/Day	$/kVA of capacity	$/kWh	$/kW of demand	$/kVA of demand	$/kVArh of demand	$/streetlight/day
Unmetered	–	–	$364	–	–	–	$1,444
Small	$32,099	–	$178,067	$65,343	–	–	–
Medium	$6,694	–	$7,350	–	$6,747	$115	–
Large	–	$5,851	$470	–	$20,761	$34	–
Large	$40,908	–	–	–	–	$951	–
Standard consumer totals	$38,793	$5,851	$186,250	$65,343	$27,508	$150	$1,444
Non-standard consumer totals	$40,908	–	–	–	–	$951	–
Total for all consumers	$79,700	$5,851	$186,250	$65,343	$27,508	$1,101	$1,444

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

Check OK

8(iii): Number of ICPs directly billed

Number of directly billed ICPs at year end 17

Company Name **Powerco Limited**
For Year Ended **31 March 2015**
Network / Sub-Network Name **Western Region**

SCHEDULE 8: REPORT ON BILLED QUANTITIES AND LINE CHARGE REVENUES

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

sch ref

8(i): Billed Quantities by Price Component

sch ref	Consumer group name or price category code	Consumer type or types (eg, residential, commercial etc.)	Standard or non-standard consumer group (specify)	Average no. of ICPs in disclosure year	Energy delivered to ICPs in disclosure year (MWh)
15	E1	Residential/Small Commercial	Standard	176,448	1,437,910
16	E100	Commercial	Standard	233	95,800
17	E300/E300R	Large Commercial/Industrial	Standard	241	569,649
18	Special	Large Commercial/Industrial	Non-standard	21	133,994
19					
20					
21					
22					
23					
24					
25	*Add extra rows for additional consumer groups or price category codes as necessary*				
26			**Standard consumer totals**	176,922	2,103,359
27			**Non-standard consumer totals**	21	133,994
28			**Total for all consumers**	176,943	2,237,353

Billed quantities by price component

sch ref	**Price component**	Fixed	Fixed	Variable	Demand	Demand	Power Factor	Fixed
13	**Unit charging basis (eg, days, kW of demand, kVA of capacity, etc.)**	ICP days	kVA of capacity	kWh	kW of demand	kVA of demand	kVArh of demand	Fixture count
15		60,991,022	–	1,547,970,544	3,725,514	–	–	–
16		83,283	–	95,799,711	–	395,821	–	–
17		–	2,964,496	569,649,100	–	1,817,495	–	–
18		9,125	–	133,994,321	–	–	6,819	–
19								
20								
21								
22								
23								
24								
26		61,074,305	2,964,496	2,213,419,355	3,725,514	2,213,316	–	–
27		9,125	–	133,994,321	–	–	6,819	–
28		61,083,430	2,964,496	2,347,413,676	3,725,514	2,213,316	6,819	–

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

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

sch ref	Consumer group name or price category code	Consumer type or types (eg, residential, commercial etc.)	Standard or non-standard consumer group (specify)	Total line charge revenue in disclosure year	Notional revenue foregone from posted discounts (if applicable)	Total distribution line charge revenue	Total transmission line charge revenue (if available)
37	E1	Residential/Small Commercial	Standard	$152,636		$152,636	
38	E100	Commercial	Standard	$7,543		$7,543	
39	E300/E300R	Large Commercial/Industrial	Standard	$26,361		$26,361	
40	Special	Large Commercial/Industrial	Non-standard	$4,823		$4,823	
41				–			
42				–			
43				–			
44				–			
45				–			
46				–			
47	*Add extra rows for additional consumer groups or price category codes as necessary*						
48			**Standard consumer totals**	$186,541	–	$186,541	–
49			**Non-standard consumer totals**	$4,823	–	$4,823	–
50			**Total for all consumers**	$191,364	–	$191,364	–

Line charge revenues ($000) by price component

sch ref	**Price component**	Fixed	Fixed	Variable	Demand	Demand	Power Factor	Fixed
35	**Rate (eg, $ per day, $ per kWh, etc.)**	$/ICP/Day	$/kVA of capacity	$/kWh	$/kW of demand	$/kVA of demand	$/kVArh of demand	$/streetlight/day
37		$4,401	–	$82,893	$65,343	–	–	–
38		$796	–	–	–	$6,747	–	–
39		–	$5,601	–	–	$20,761	–	–
40		$4,775	–	–	–	–	$48	–
41								
42								
43								
44								
45								
46								
48		$5,197	$5,601	$82,893	$65,343	$27,508	–	–
49		$4,775	–	–	–	–	$48	–
50		$9,972	$5,601	$82,893	$65,343	$27,508	$48	–

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

8(iii): Number of ICPs directly billed

Check OK

Number of directly billed ICPs at year end 9

Company Name	Powerco Limited
For Year Ended	31 March 2015
Network / Sub-Network Name	Eastern Region

SCHEDULE 8: REPORT ON BILLED QUANTITIES AND LINE CHARGE REVENUES

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

sch ref

8 8(i): Billed Quantities by Price Component

sch ref	Consumer group name or price category code	Consumer type or types (eg, residential, commercial etc.)	Standard or non-standard consumer group (specify)	Average no. of ICPs in disclosure year	Energy delivered to ICPs in disclosure year (MWh)
15	V01, V02, T01, T02	Streetlights	Standard	446	3,294
16	V05, V06, T05, T06	Residential/Small Commercial	Standard	148,674	1,135,923
17	V24, V28, T22, T24, T41	Commercial	Standard	1,005	137,461
18	T43	Large Commercial/Industrial	Standard	29	9,005
19	V40, T50, V60, T60	Large Commercial/Industrial	Non-standard	290	949,909
20					
21					
22					
23					
24					
26			Standard consumer totals	150,153	1,285,683
27			Non-standard consumer totals	290	949,909
28			Total for all consumers	150,443	2,235,592

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

Billed quantities by price component

sch ref	Price component	Fixed	Fixed	Variable	Demand	Demand	Power Factor	Fixed
13	Unit charging basis (eg, days, kW of demand, kVA of capacity, etc.)	ICP days	kVA of capacity	kWh	kW of demand	kVA of demand	kVArh of demand	Fixture count
15		–	–	3,293,944	–	–	–	8,784,559
16		52,811,563	–	1,135,923,444	–	–	–	–
17		352,919	–	137,460,563	–	–	16,460	–
18		–	148,800	9,004,658	–	–	4,927	–
19		99,645	–	949,909,349	–	–	129,031	–
20								
21								
22								
23								
24								
26		53,164,482	148,800	1,285,682,609	–	–	21,388	8,784,559
27		99,645	–	949,909,349	–	–	129,031	–
28		53,264,127	148,800	2,235,591,958	–	–	150,419	8,784,559

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

31 8(ii): Line Charge Revenues ($000) by Price Component

sch ref	Consumer group name or price category code	Consumer type or types (eg, residential, commercial etc.)	Standard or non-standard consumer group (specify)	Total line charge revenue in disclosure year	Notional revenue foregone from posted discounts (if applicable)	Total distribution line charge revenue	Total transmission line charge revenue (if available)
37	V01, V02, T01, T02	Streetlights	Standard	$1,807		$1,807	
38	V05, V06, T05, T06	Residential/Small Commercial	Standard	$122,873		$122,873	
39	V24, V28, T22, T24, T41	Commercial	Standard	$13,363		$13,363	
40	T43	Large Commercial/Industrial	Standard	$755		$755	
41	V40, T50, V60, T60	Large Commercial/Industrial	Non-standard	$37,036		$37,036	
42				–			
43				–			
44				–			
45				–			
46				–			
48			Standard consumer totals	$138,798	–	$138,798	–
49			Non-standard consumer totals	$37,036	–	$37,036	–
50			Total for all consumers	$175,834	–	$175,834	–

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

Line charge revenues ($000) by price component

sch ref	Price component	Fixed	Fixed	Variable	Demand	Demand	Power Factor	Fixed
35	Rate (eg, $ per day, $ per kWh, etc.)	$/ICP/Day	$/kVA of capacity	$/kWh	$/kW of demand	$/kVA of demand	$/kVArh of demand	$/streetlight/day
37		–	–	$364	–	–	–	$1,444
38		$27,698	–	$95,174	–	–	–	–
39		$5,898	–	$7,350	–	–	$115	–
40		–	$250	$470	–	–	$34	–
41		$36,133	–	–	–	–	$903	–
42								
43								
44								
45								
46								
48		$33,596	$250	$103,358	–	–	$150	$1,444
49		$36,133	–	–	–	–	$903	–
50		$69,729	$250	$103,358	–	–	$1,053	$1,444

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

Check: OK

52 8(iii): Number of ICPs directly billed

53 **Number of directly billed ICPs at year end**: 8

15 SCHEDULE 9A ASSET REGISTER

Company Name **Powerco Limited**
For Year Ended **31 March 2015**
Network / Sub-network Name **Powerco Limited**

SCHEDULE 9a: ASSET REGISTER

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

sch ref	Voltage	Asset category	Asset class	Units	Items at start of year (quantity)	Items at end of year (quantity)	Net change	Data accuracy (1–4)
8								
9	All	Overhead Line	Concrete poles / steel structure	No.	218,746	220,472	1,726	4
10	All	Overhead Line	Wood poles	No.	41,611	40,138	(1,473)	3
11	All	Overhead Line	Other pole types	No.	5,945	5,400	(545)	2
12	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	1,506	1,506	0	4
13	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	-	–	–	4
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	124	121	(3)	3
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	20	20	(0)	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	6	6	(0)	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.	141	136	(5)	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.	15	14	(1)	4
27	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	16	20	4	3
28	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	890	870	(20)	3
29	HV	Zone substation switchgear	33kV RMU	No.	1	6	5	4
30	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	107	96	(11)	3
31	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	195	190	(5)	3
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	777	797	20	3
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	58	54	(4)	3
34	HV	Zone Substation Transformer	Zone Substation Transformers	No.	180	197	17	3
35	HV	Distribution Line	Distribution OH Open Wire Conductor	km	14,761	14,764	4	4
36	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	-	–	–	4
37	HV	Distribution Line	SWER conductor	km	86	86	(0)	4
38	HV	Distribution Cable	Distribution UG XLPE or PVC	km	1,660	1,721	60	3
39	HV	Distribution Cable	Distribution UG PILC	km	217	213	(4)	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.	404	453	49	3
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	317	323	6	3
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	37,465	37,832	367	3
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	4,300	2,367	(1,933)	3
45	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	1,234	2,070	836	3
46	HV	Distribution Transformer	Pole Mounted Transformer	No.	27,550	27,873	323	3
47	HV	Distribution Transformer	Ground Mounted Transformer	No.	7,720	7,845	125	3
48	HV	Distribution Transformer	Voltage regulators	No.	169	105	(64)	4
49	HV	Distribution Substations	Ground Mounted Substation Housing	No.	4,863	5,407	544	2
50	LV	LV Line	LV OH Conductor	km	5,448	5,439	(8)	2
51	LV	LV Cable	LV UG Cable	km	3,892	3,945	53	2
52	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	2,702	2,737	35	2
53	LV	Connections	OH/UG consumer service connections	No.	249,342	259,824	10,482	3
54	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	2,515	2,512	(3)	4
55	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	2	1	(1)	4
56	All	Capacitor Banks	Capacitors including controls	No	49	49	–	4
57	All	Load Control	Centralised plant	Lot	42	37	(5)	3
58	All	Load Control	Relays	No	2,126	2,259	133	3
59	All	Civils	Cable Tunnels	km	-	–	–	4

Company Name **Powerco Limited**
For Year Ended **31 March 2015**
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	Voltage	Asset category	Asset class	Units	Items at start of year (quantity)	Items at end of year (quantity)	Net change	Data accuracy (1–4)
8								
9	All	Overhead Line	Concrete poles / steel structure	No.	139,688	140,942	1,254	4
10	All	Overhead Line	Wood poles	No.	35,726	34,569	(1,157)	3
11	All	Overhead Line	Other pole types	No.	2,320	2,280	(40)	2
12	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	961	961	(0)	4
13	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	-	–	–	4
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	39	41	1	3
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	20	20	(0)	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	6	6	(0)	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.	82	79	(3)	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.	-	–	–	4
27	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	10	10	–	3
28	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	558	543	(15)	3
29	HV	Zone substation switchgear	33kV RMU	No.	1	5	4	4
30	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	77	63	(14)	3
31	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	106	98	(8)	3
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	445	460	15	3
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	57	53	(4)	3
34	HV	Zone Substation Transformer	Zone Substation Transformers	No.	103	111	8	3
35	HV	Distribution Line	Distribution OH Open Wire Conductor	km	10,129	10,123	(6)	4
36	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	-	–	–	4
37	HV	Distribution Line	SWER conductor	km	17	17	(0)	4
38	HV	Distribution Cable	Distribution UG XLPE or PVC	km	566	590	24	3
39	HV	Distribution Cable	Distribution UG PILC	km	107	104	(3)	3
40	HV	Distribution Cable	Distribution Submarine Cable	km	-	–	–	4
41	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	243	266	23	3
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	141	148	7	3
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	23,025	23,286	261	3
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	2,286	1,114	(1,172)	3
45	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	280	774	494	3
46	HV	Distribution Transformer	Pole Mounted Transformer	No.	18,463	18,681	218	3
47	HV	Distribution Transformer	Ground Mounted Transformer	No.	3,011	3,084	73	3
48	HV	Distribution Transformer	Voltage regulators	No.	105	65	(40)	4
49	HV	Distribution Substations	Ground Mounted Substation Housing	No.	1,837	2,208	371	2
50	LV	LV Line	LV OH Conductor	km	3,468	3,469	2	2
51	LV	LV Cable	LV UG Cable	km	2,090	2,118	28	2
52	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	1,337	1,343	6	2
53	LV	Connections	OH/UG consumer service connections	No.	142,412	147,900	5,488	3
54	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	1,444	1,437	(7)	4
55	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	2	1	(1)	4
56	All	Capacitor Banks	Capacitors including controls	No	4	4	–	4
57	All	Load Control	Centralised plant	Lot	30	25	(5)	3
58	All	Load Control	Relays	No	1,179	1,168	(11)	3
59	All	Civils	Cable Tunnels	km	-	–	–	4

Company Name	**Powerco Limited**
For Year Ended	**31 March 2015**
Network / Sub-network Name	**Eastern 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								
8	**Voltage**	**Asset category**	**Asset class**	**Units**	**Items at start of year (quantity)**	**Items at end of year (quantity)**	**Net change**	**Data accuracy (1–4)**
9	All	Overhead Line	Concrete poles / steel structure	No.	79,058	79,530	472	4
10	All	Overhead Line	Wood poles	No.	5,885	5,569	(316)	3
11	All	Overhead Line	Other pole types	No.	3,625	3,120	(505)	2
12	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	545	545	0	4
13	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	-	–	–	4
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	84	80	(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.	59	57	(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.	15	14	(1)	4
27	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	6	10	4	3
28	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	332	327	(5)	3
29	HV	Zone substation switchgear	33kV RMU	No.	-	1	1	4
30	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	30	33	3	3
31	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	89	92	3	3
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	332	337	5	3
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	1	1	–	3
34	HV	Zone Substation Transformer	Zone Substation Transformers	No.	77	86	9	3
35	HV	Distribution Line	Distribution OH Open Wire Conductor	km	4,632	4,641	9	4
36	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	-	–	–	4
37	HV	Distribution Line	SWER conductor	km	69	69	(0)	4
38	HV	Distribution Cable	Distribution UG XLPE or PVC	km	1,095	1,131	37	3
39	HV	Distribution Cable	Distribution UG PILC	km	110	109	(1)	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.	161	187	26	3
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	176	175	(1)	3
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	14,440	14,546	106	3
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	2,014	1,253	(761)	3
45	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	954	1,296	342	3
46	HV	Distribution Transformer	Pole Mounted Transformer	No.	9,087	9,192	105	3
47	HV	Distribution Transformer	Ground Mounted Transformer	No.	4,709	4,761	52	3
48	HV	Distribution Transformer	Voltage regulators	No.	64	40	(24)	4
49	HV	Distribution Substations	Ground Mounted Substation Housing	No.	3,026	3,199	173	2
50	LV	LV Line	LV OH Conductor	km	1,980	1,970	(10)	2
51	LV	LV Cable	LV UG Cable	km	1,802	1,827	25	2
52	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	1,365	1,394	29	2
53	LV	Connections	OH/UG consumer service connections	No.	106,930	111,924	4,994	3
54	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	1,071	1,075	4	4
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	45	45	–	4
57	All	Load Control	Centralised plant	Lot	12	12	–	3
58	All	Load Control	Relays	No	947	1,091	144	3
59	All	Civils	Cable Tunnels	km	-	–	–	4

16 SCHEDULE 9B ASSET AGE PROFILE

Company Name	**Powerco Limited**
For Year Ended	**31 March 2015**
Network / Sub-network Name	**Powerco Limited**

SCHEDULE 9b: ASSET AGE PROFILE

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

sch ref

8 **Disclosure Year (year ended)** 31 March 2015

Number of assets at disclosure year end by installation date

9	**Voltage**	**Asset category**	**Asset class**	**Units**	**pre-1940**	**1940 –1949**	**1950 –1959**	**1960 –1969**	**1970 –1979**	**1980 –1989**	**1990 –1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**No. with age unknown**	**Items at end of year (quantity)**	**No. with default dates**	**Data accuracy (1–4)**
10	All	Overhead Line	Concrete poles / steel structure	No.	19	1,007	5,801	34,232	59,070	52,445	27,857	3,448	3,200	2,136	2,426	1,992	1,854	1,925	2,192	2,450	2,794	2,614	2,261	2,460	3,336	3,350	1,603	–	220,472	7,070	3
11	All	Overhead Line	Wood poles	No.	35	55	1,130	8,459	10,595	8,511	8,580	434	265	390	447	317	259	154	198	100	75	90	31	4	4	2	3	–	40,138	1,331	3
12	All	Overhead Line	Other pole types	No.	–	–	1	26	4,709	49	73	28	60	44	41	52	102	74	32	34	25	8	13	3	9	5	12	–	5,400	4,624	2
13	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	–	19	102	345	366	316	231	9	0	3	2	2	14	2	9	4	11	3	34	17	1	15	0	–	1,506	0	3
14	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	–	–	–	0	20	7	23	7	1	6	1	1	1	2	5	2	7	7	19	6	5	1	2	–	121	4	4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	–	–	–	17	2	1	0	0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	20	1	4
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	–	–	–	1	1	4	0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6	–	4
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
22	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
23	HV	Subtransmission Cable	Subtransmission submarine cable	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
24	HV	Zone substation Buildings	Zone substations up to 66kV	No.	–	–	1	5	48	13	13	–	–	–	–	2	32	2	6	1	1	1	3	2	3	3	–	–	136	39	2
25	HV	Zone substation Buildings	Zone substations 110kV+	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
26	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
27	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	–	–	–	–	2	4	1	–	–	–	–	1	1	1	4	–	–	–	–	–	–	–	–	–	14	–	2
28	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	–	–	–	–	–	2	–	–	–	–	–	–	1	–	–	2	1	–	4	6	4	–	–	–	20	–	2
29	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	–	–	–	181	176	207	127	10	6	3	4	6	13	3	11	9	16	15	14	31	26	9	3	–	870	23	2
30	HV	Zone substation switchgear	33kV RMU	No.	–	–	–	–	–	1	–	–	–	–	–	–	–	2	–	–	3	–	–	–	–	–	–	–	6	–	2
31	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	–	–	–	–	–	–	23	–	–	–	–	–	–	5	6	6	5	23	13	–	9	6	–	–	96	–	2
32	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	–	–	2	30	40	38	26	6	2	2	3	4	5	6	4	5	4	1	–	1	5	6	–	–	190	8	2
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	–	–	–	111	213	119	108	4	9	–	7	20	10	18	36	18	27	16	20	20	29	11	1	–	797	61	2
34	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	–	–	–	2	3	9	16	–	–	3	3	–	1	–	2	–	5	3	–	5	–	1	1	–	54	2	3
35	HV	Zone Substation Transformer	Zone Substation Transformers	No.	–	–	6	49	77	28	7	2	2	2	2	–	5	2	4	–	3	1	1	2	4	–	–	–	197	23	2
36	HV	Distribution Line	Distribution OH Open Wire Conductor	km	81	119	1,409	3,091	3,607	3,630	1,494	46	72	104	79	84	69	86	84	68	85	86	67	99	136	117	50	–	14,764	21	3
37	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
38	HV	Distribution Line	SWER conductor	km	–	–	0	16	32	13	8	–	–	–	5	–	–	–	0	1	0	0	–	–	–	10	–	–	86	–	3
39	HV	Distribution Cable	Distribution UG XLPE or PVC	km	–	0	6	35	226	429	305	49	43	26	29	41	48	57	59	60	53	48	41	39	41	40	47	–	1,721	52	3
40	HV	Distribution Cable	Distribution UG PILC	km	–	–	1	26	70	76	21	2	3	3	3	1	1	2	2	0	0	0	0	0	0	0	0	–	213	5	3
41	HV	Distribution Cable	Distribution Submarine Cable	km	–	–	–	–	–	2	8	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	11	–	3
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	–	–	–	1	36	33	42	4	9	16	9	21	19	18	14	18	29	27	27	30	34	38	28	–	453	32	2
43	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	–	–	9	53	115	29	58	6	1	1	3	2	3	7	1	1	3	8	10	4	7	–	2	–	323	36	2
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	20	21	694	2,768	8,017	6,871	5,911	481	1,109	1,029	754	792	981	758	870	828	829	820	713	836	895	1,194	641	–	37,832	531	2
45	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	–	3	14	156	637	460	341	51	76	41	44	71	65	82	75	46	63	32	41	33	24	11	1	–	2,367	29	2
46	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	–	–	4	38	168	237	295	29	57	47	55	66	86	107	129	125	111	81	82	93	91	103	66	–	2,070	18	3
47	HV	Distribution Transformer	Pole Mounted Transformer	No.	35	43	878	3,110	4,531	4,415	4,954	502	500	550	635	721	780	723	609	788	688	574	525	565	584	716	447	–	27,873	33	4
48	HV	Distribution Transformer	Ground Mounted Transformer	No.	1	8	71	420	1,229	1,532	1,204	179	179	163	162	263	273	364	300	293	239	172	168	191	131	185	118	–	7,845	12	4
49	HV	Distribution Transformer	Voltage regulators	No.	–	1	1	2	8	3	10	1	1	7	2	3	4	7	2	16	4	5	3	6	4	10	5	–	105	6	4
50	HV	Distribution Substations	Ground Mounted Substation Housing	No.	3	–	5	147	1,077	1,498	960	111	112	83	149	159	137	102	115	117	112	78	73	69	59	113	128	–	5,407	5	4
51	LV	LV Line	LV OH Conductor	km	2	71	368	1,505	1,690	1,037	433	38	33	25	27	24	20	21	21	24	17	16	13	12	17	17	6	–	5,439	34	2
52	LV	LV Cable	LV UG Cable	km	0	0	8	146	1,031	900	708	57	60	49	55	95	107	114	131	127	113	58	44	41	37	43	21	–	3,945	270	2
53	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	0	20	114	384	708	516	401	41	40	25	26	67	69	61	63	50	54	29	22	18	13	11	6	–	2,737	88	2
54	LV	Connections	OH/UG consumer service connections	No.	31	229	2,777	18,527	107,469	48,213	32,336	2,593	2,777	2,274	2,893	3,283	3,671	3,281	3,777	3,775	3,399	3,159	3,346	2,822	3,496	3,310	2,386	–	259,824	63,252	2
55	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	–	–	–	256	789	409	259	73	8	20	7	28	49	56	37	66	79	26	74	57	76	112	31	–	2,512	262	3
56	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	1	–	2
57	All	Capacitor Banks	Capacitors including controls	No	–	–	–	–	1	–	34	2	–	–	–	–	–	–	–	–	2	1	–	6	1	–	2	–	49	1	4
58	All	Load Control	Centralised plant	Lot	–	–	–	–	6	5	9	–	1	–	–	–	1	–	–	–	3	2	1	6	1	2	–	–	37	3	3
59	All	Load Control	Relays	No	–	–	9	19	1,098	158	115	40	18	23	11	35	24	58	82	38	72	80	64	33	201	62	19	–	2,259	940	2
60	All	Civils	Cable Tunnels	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Company Name	**Powerco Limited**
For Year Ended	**31 March 2015**
Network / Sub-network Name	**Western Region**

SCHEDULE 9b: ASSET AGE PROFILE

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

sch ref

8 **Disclosure Year (year ended)** 31 March 2015

Number of assets at disclosure year end by installation date

9	Voltage	Asset category	Asset class	Units	pre-1940	1940 –1949	1950 –1959	1960 –1969	1970 –1979	1980 –1989	1990 –1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	No. with age unknown	Items at end of year (quantity)	No. with default dates	Data accuracy (1–4)
10	All	Overhead Line	Concrete poles / steel structure	No.	19	1,003	4,553	18,551	30,624	35,587	22,103	3,382	3,048	1,671	1,890	1,428	1,360	1,225	1,337	1,408	1,661	1,462	1,429	1,585	2,245	2,440	931	–	140,942	4,304	3
11	All	Overhead Line	Wood poles	No.	35	54	769	7,935	9,335	7,465	6,398	419	240	386	446	315	244	153	194	66	62	20	23	4	4	1	1	–	34,569	1,047	3
12	All	Overhead Line	Other pole types	No.	–	–	1	18	1,992	41	57	18	5	8	17	45	31	9	2	7	4	3	12	2	1	4	3	–	2,280	1,942	2
13	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	–	19	65	251	239	198	147	2	0	2	2	1	11	–	3	–	11	3	0	2	0	5	0	–	961	0	3
14	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	–	–	–	0	5	6	3	3	0	6	0	1	0	–	4	0	6	0	4	0	1	0	1	–	41	4	4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	–	–	–	17	2	1	0	0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	20	1	4
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	–	–	–	1	1	4	0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6	–	4
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
22	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
23	HV	Subtransmission Cable	Subtransmission submarine cable	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
24	HV	Zone substation Buildings	Zone substations up to 66kV	No.	–	–	1	3	42	9	10	–	–	–	–	2	2	–	5	–	–	1	2	–	1	1	–	–	79	37	2
25	HV	Zone substation Buildings	Zone substations 110kV+	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
26	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
27	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2
28	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4	6	–	–	–	–	10	–	2
29	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	–	–	–	101	106	157	93	10	6	3	4	6	6	1	2	–	3	2	8	19	8	5	3	–	543	18	2
30	HV	Zone substation switchgear	33kV RMU	No.	–	–	–	–	–	1	–	–	–	–	–	–	–	1	–	–	3	–	–	–	–	–	–	–	5	–	2
31	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	–	–	–	–	–	–	23	–	–	–	–	–	–	5	6	–	5	13	7	–	4	–	–	–	63	–	2
32	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	–	–	1	25	19	29	9	–	–	2	1	1	2	2	2	1	1	–	–	–	2	1	–	–	98	6	2
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	–	–	–	54	152	67	77	–	9	–	5	17	4	1	29	1	–	2	19	4	17	1	1	–	460	51	2
34	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	–	–	–	2	2	9	16	–	–	3	3	–	1	–	2	–	5	3	–	5	–	1	1	–	53	2	3
35	HV	Zone Substation Transformer	Zone Substation Transformers	No.	–	–	6	31	45	11	6	1	2	1	2	–	2	–	2	–	1	1	–	–	–	–	–	–	111	12	2
36	HV	Distribution Line	Distribution OH Open Wire Conductor	km	81	119	1,312	2,230	2,101	2,547	1,017	41	53	87	62	49	42	39	41	29	37	18	30	44	61	63	20	–	10,123	9	3
37	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
38	HV	Distribution Line	SWER conductor	km	–	–	–	–	5	9	0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3	–	–	17	–	3
39	HV	Distribution Cable	Distribution UG XLPE or PVC	km	–	0	5	30	124	131	82	12	9	11	6	8	10	14	16	22	17	19	12	12	16	18	16	–	590	42	3
40	HV	Distribution Cable	Distribution UG PILC	km	–	–	0	23	43	21	7	0	0	2	3	1	1	2	1	0	0	0	0	0	0	0	0	–	104	5	3
41	HV	Distribution Cable	Distribution Submarine Cable	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	–	–	–	1	32	30	22	4	7	14	9	10	13	11	3	14	16	10	10	19	13	16	12	–	266	30	2
43	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	–	–	8	28	48	11	16	6	–	1	3	1	2	2	–	–	2	2	7	4	5	–	2	–	148	33	2
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	20	21	649	1,805	5,847	3,849	2,936	316	899	800	530	490	589	402	475	466	447	397	387	465	461	668	367	–	23,286	506	2
45	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	–	3	8	110	284	201	132	39	59	26	30	33	20	21	33	18	31	12	18	14	12	10	–	–	1,114	20	2
46	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	–	–	3	34	72	93	82	4	43	30	34	21	19	31	39	31	30	34	20	36	39	53	26	–	774	5	3
47	HV	Distribution Transformer	Pole Mounted Transformer	No.	35	42	870	2,560	3,222	2,735	2,944	368	381	415	425	422	530	448	332	415	398	263	364	392	341	459	320	–	18,681	26	4
48	HV	Distribution Transformer	Ground Mounted Transformer	No.	1	7	51	203	542	497	429	92	70	114	69	81	83	122	76	105	94	46	71	77	68	115	71	–	3,084	8	4
49	HV	Distribution Transformer	Voltage regulators	No.	–	1	1	2	8	2	7	–	1	7	–	–	2	4	1	9	4	1	1	4	2	4	4	–	65	6	4
50	HV	Distribution Substations	Ground Mounted Substation Housing	No.	3	–	1	62	422	510	381	64	51	60	91	69	55	41	42	55	38	31	32	26	36	67	71	–	2,208	3	4
51	LV	LV Line	LV OH Conductor	km	2	71	309	1,032	916	615	257	36	28	21	21	19	17	16	15	16	12	11	10	10	14	14	4	–	3,469	30	2
52	LV	LV Cable	LV UG Cable	km	0	0	8	86	618	497	332	29	27	31	31	36	46	50	63	66	64	33	27	18	20	22	14	–	2,118	223	2
53	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	0	20	101	272	392	229	130	15	14	12	12	15	23	17	19	18	22	8	7	4	5	4	3	–	1,343	64	2
54	LV	Connections	OH/UG consumer service connections	No.	31	229	1,962	9,600	55,408	27,534	17,574	2,015	1,965	1,945	2,186	2,345	2,819	2,683	2,741	2,723	2,404	2,137	2,202	1,737	2,270	2,171	1,219	–	147,900	33,501	2
55	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	–	–	–	172	455	215	150	65	8	18	3	25	23	27	10	26	35	23	52	26	34	53	17	–	1,437	168	3
56	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	1	–	2
57	All	Capacitor Banks	Capacitors including controls	No	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4	–	–	–	–	4	–	4
58	All	Load Control	Centralised plant	Lot	–	–	–	–	4	5	9	–	1	–	–	–	–	–	–	–	–	–	–	5	–	1	–	–	25	3	3
59	All	Load Control	Relays	No	–	–	–	7	878	73	25	9	12	19	7	25	4	11	22	13	10	8	14	3	8	12	8	–	1,168	839	2
60	All	Civils	Cable Tunnels	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Company Name	**Powerco Limited**
For Year Ended	**31 March 2015**
Network / Sub-network Name	**Eastern Region**

SCHEDULE 9b: ASSET AGE PROFILE

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

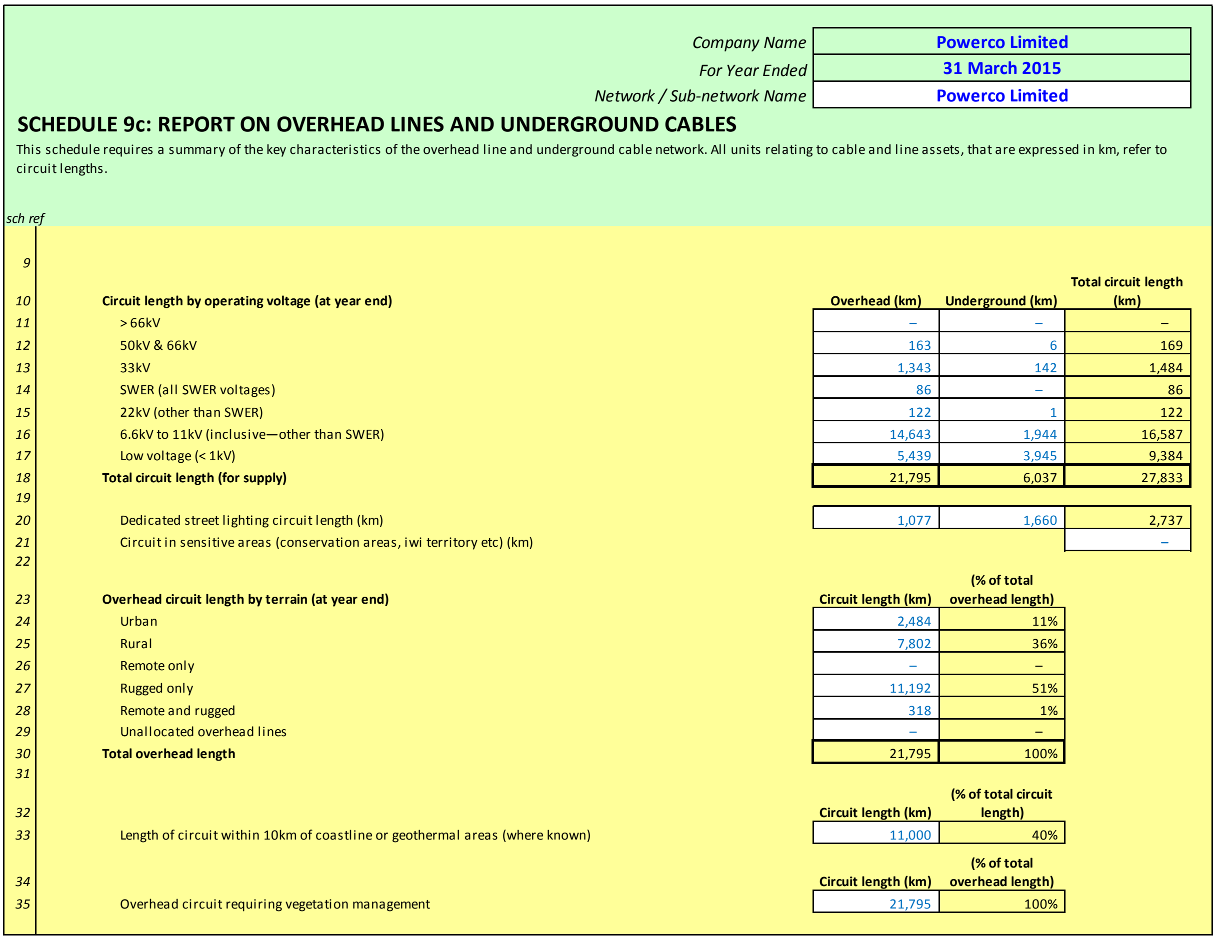
sch ref

8 **Disclosure Year (year ended)** 31 March 2015

Number of assets at disclosure year end by installation date

9	Voltage	Asset category	Asset class	Units	pre-1940	1940 –1949	1950 –1959	1960 –1969	1970 –1979	1980 –1989	1990 –1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	No. with age unknown	Items at end of year (quantity)	No. with default dates	Data accuracy (1–4)
10	All	Overhead Line	Concrete poles / steel structure	No.	–	4	1,248	15,681	28,446	16,858	5,754	66	152	465	536	564	494	700	855	1,042	1,133	1,152	832	875	1,091	910	672	–	79,530	2,766	3
11	All	Overhead Line	Wood poles	No.	–	1	361	524	1,260	1,046	2,182	15	25	4	1	2	15	1	4	34	13	70	8	–	–	1	2	–	5,569	284	3
12	All	Overhead Line	Other pole types	No.	–	–	–	8	2,717	8	16	10	55	36	24	7	71	65	30	27	21	5	1	1	8	1	9	–	3,120	2,682	2
13	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	–	–	37	94	127	118	84	7	–	1	1	1	3	2	6	4	0	0	34	15	1	10	0	–	545	–	3
14	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	–	–	–	–	16	1	19	5	1	–	0	0	1	2	1	2	1	6	15	5	4	1	1	–	80	1	4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
22	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
23	HV	Subtransmission Cable	Subtransmission submarine cable	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
24	HV	Zone substation Buildings	Zone substations up to 66kV	No.	–	–	–	2	6	4	3	–	–	–	–	–	30	2	1	1	1	–	1	2	2	2	–	–	57	2	2
25	HV	Zone substation Buildings	Zone substations 110kV+	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
26	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
27	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	–	–	–	–	2	4	1	–	–	–	–	1	1	1	4	–	–	–	–	–	–	–	–	–	14	–	2
28	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	–	–	–	–	–	2	–	–	–	–	–	–	1	–	–	2	1	–	–	–	4	–	–	–	10	–	2
29	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	–	–	–	80	70	50	34	–	–	–	–	–	7	2	9	9	13	13	6	12	18	4	–	–	327	5	2
30	HV	Zone substation switchgear	33kV RMU	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	1	–	2
31	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6	–	10	6	–	5	6	–	–	33	–	2
32	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	–	–	1	5	21	9	17	6	2	–	2	3	3	4	2	4	3	1	–	1	3	5	–	–	92	2	2
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	–	–	–	57	61	52	31	4	–	–	2	3	6	17	7	17	27	14	1	16	12	10	–	–	337	10	2
34	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	3
35	HV	Zone Substation Transformer	Zone Substation Transformers	No.	–	–	–	18	32	17	1	1	–	1	–	–	3	2	2	–	2	–	1	2	4	–	–	–	86	11	2
36	HV	Distribution Line	Distribution OH Open Wire Conductor	km	–	–	97	861	1,507	1,083	477	5	20	18	17	35	27	46	43	39	48	67	37	54	76	54	30	–	4,641	12	3
37	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
38	HV	Distribution Line	SWER conductor	km	–	–	0	16	27	4	8	–	–	–	5	–	–	–	0	1	0	0	–	–	–	7	–	–	69	–	3
39	HV	Distribution Cable	Distribution UG XLPE or PVC	km	–	–	1	5	102	298	223	37	33	15	23	33	38	43	43	38	36	29	29	27	25	21	31	–	1,131	10	3
40	HV	Distribution Cable	Distribution UG PILC	km	–	–	0	3	28	55	15	2	3	1	0	0	0	1	1	0	0	–	–	–	–	–	–	–	109	0	3
41	HV	Distribution Cable	Distribution Submarine Cable	km	–	–	–	–	–	2	8	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	11	–	3
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	–	–	–	–	4	3	20	–	2	2	–	11	6	7	11	4	13	17	17	11	21	22	16	–	187	2	2
43	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	–	–	1	25	67	18	42	–	1	–	–	1	1	5	1	1	1	6	3	–	2	–	–	–	175	3	2
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	–	–	45	963	2,170	3,022	2,975	165	210	229	224	302	392	356	395	362	382	423	326	371	434	526	274	–	14,546	25	2
45	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	–	–	6	46	353	259	209	12	17	15	14	38	45	61	42	28	32	20	23	19	12	1	1	–	1,253	9	2
46	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	–	–	1	4	96	144	213	25	14	17	21	45	67	76	90	94	81	47	62	57	52	50	40	–	1,296	13	3
47	HV	Distribution Transformer	Pole Mounted Transformer	No.	–	1	8	550	1,309	1,680	2,010	134	119	135	210	299	250	275	277	373	290	311	161	173	243	257	127	–	9,192	7	4
48	HV	Distribution Transformer	Ground Mounted Transformer	No.	–	1	20	217	687	1,035	775	87	109	49	93	182	190	242	224	188	145	126	97	114	63	70	47	–	4,761	4	4
49	HV	Distribution Transformer	Voltage regulators	No.	–	–	–	–	–	1	3	1	–	–	2	3	2	3	1	7	–	4	2	2	2	6	1	–	40	–	4
50	HV	Distribution Substations	Ground Mounted Substation Housing	No.	–	–	4	85	655	988	579	47	61	23	58	90	82	61	73	62	74	47	41	43	23	46	57	–	3,199	2	4
51	LV	LV Line	LV OH Conductor	km	–	–	58	473	774	422	177	2	4	4	6	5	3	4	6	8	5	4	4	2	3	3	2	–	1,970	16	2
52	LV	LV Cable	LV UG Cable	km	–	–	0	60	412	403	377	28	33	18	24	59	60	63	69	62	49	25	17	23	17	21	7	–	1,827	47	2
53	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	–	–	13	112	316	286	270	25	26	13	14	53	46	44	43	32	32	21	15	14	8	7	3	–	1,394	23	2
54	LV	Connections	OH/UG consumer service connections	No.	–	–	815	8,927	52,061	20,679	14,762	578	812	329	707	938	852	598	1,036	1,052	995	1,022	1,144	1,085	1,226	1,139	1,167	–	111,924	35,298	2
55	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	–	–	–	84	334	194	109	8	–	2	4	3	26	29	27	40	44	3	22	31	42	59	14	–	1,075	94	3
56	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	1	–	2
57	All	Capacitor Banks	Capacitors including controls	No	–	–	–	–	1	–	34	2	–	–	–	–	–	–	–	–	2	1	–	2	1	–	2	–	45	1	4
58	All	Load Control	Centralised plant	Lot	–	–	–	–	2	–	–	–	–	–	–	–	1	–	–	–	3	2	1	1	1	1	–	–	12	–	3
59	All	Load Control	Relays	No	–	–	9	12	220	85	90	31	6	4	4	10	20	47	60	25	62	72	50	30	193	50	11	–	1,091	101	2
60	All	Civils	Cable Tunnels	km	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

17 SCHEDULE 9C REPORT ON OVERHEAD LINES AND UNDERGROUND CABLES



Company Name	**Powerco Limited**
For Year Ended	**31 March 2015**
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		Overhead (km)	Underground (km)	Total circuit length (km)
9				
10	**Circuit length by operating voltage (at year end)**	**Overhead (km)**	**Underground (km)**	**Total circuit length (km)**
11	> 66kV	–	–	–
12	50kV & 66kV	163	6	169
13	33kV	1,343	142	1,484
14	SWER (all SWER voltages)	86	–	86
15	22kV (other than SWER)	122	1	122
16	6.6kV to 11kV (inclusive—other than SWER)	14,643	1,944	16,587
17	Low voltage (< 1kV)	5,439	3,945	9,384
18	**Total circuit length (for supply)**	21,795	6,037	27,833
19				
20	Dedicated street lighting circuit length (km)	1,077	1,660	2,737
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)			–
22				

sch ref		Circuit length (km)	(% of total overhead length)
23	**Overhead circuit length by terrain (at year end)**	**Circuit length (km)**	**(% of total overhead length)**
24	Urban	2,484	11%
25	Rural	7,802	36%
26	Remote only	–	–
27	Rugged only	11,192	51%
28	Remote and rugged	318	1%
29	Unallocated overhead lines	–	–
30	**Total overhead length**	21,795	100%
31			
32		**Circuit length (km)**	**(% of total circuit length)**
33	Length of circuit within 10km of coastline or geothermal areas (where known)	11,000	40%
34		**Circuit length (km)**	**(% of total overhead length)**
35	Overhead circuit requiring vegetation management	21,795	100%

Company Name **Powerco Limited**
For Year Ended **31 March 2015**
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	**Circuit length by operating voltage (at year end)**	**Overhead (km)**	**Underground (km)**	**Total circuit length (km)**
11	> 66kV	–	–	–
12	50kV & 66kV	–	–	–
13	33kV	961	67	1,028
14	SWER (all SWER voltages)	17	–	17
15	22kV (other than SWER)	122	1	122
16	6.6kV to 11kV (inclusive—other than SWER)	10,002	692	10,694
17	Low voltage (< 1kV)	3,469	2,118	5,587
18	**Total circuit length (for supply)**	14,571	2,878	17,449
19				
20	Dedicated street lighting circuit length (km)	753	590	1,343
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)			–
22				
23	**Overhead circuit length by terrain (at year end)**	**Circuit length (km)**	**(% of total overhead length)**	
24	Urban	1,588	11%	
25	Rural	4,383	30%	
26	Remote only	–	–	
27	Rugged only	8,282	57%	
28	Remote and rugged	318	2%	
29	Unallocated overhead lines	–	–	
30	**Total overhead length**	14,571	100%	
31				
32		**Circuit length (km)**	**(% of total circuit length)**	
33	Length of circuit within 10km of coastline or geothermal areas (where known)	5,283	30%	
34		**Circuit length (km)**	**(% of total overhead length)**	
35	Overhead circuit requiring vegetation management	14,571	100%	

Company Name	**Powerco Limited**
For Year Ended	**31 March 2015**
Network / Sub-network Name	**Eastern Region**

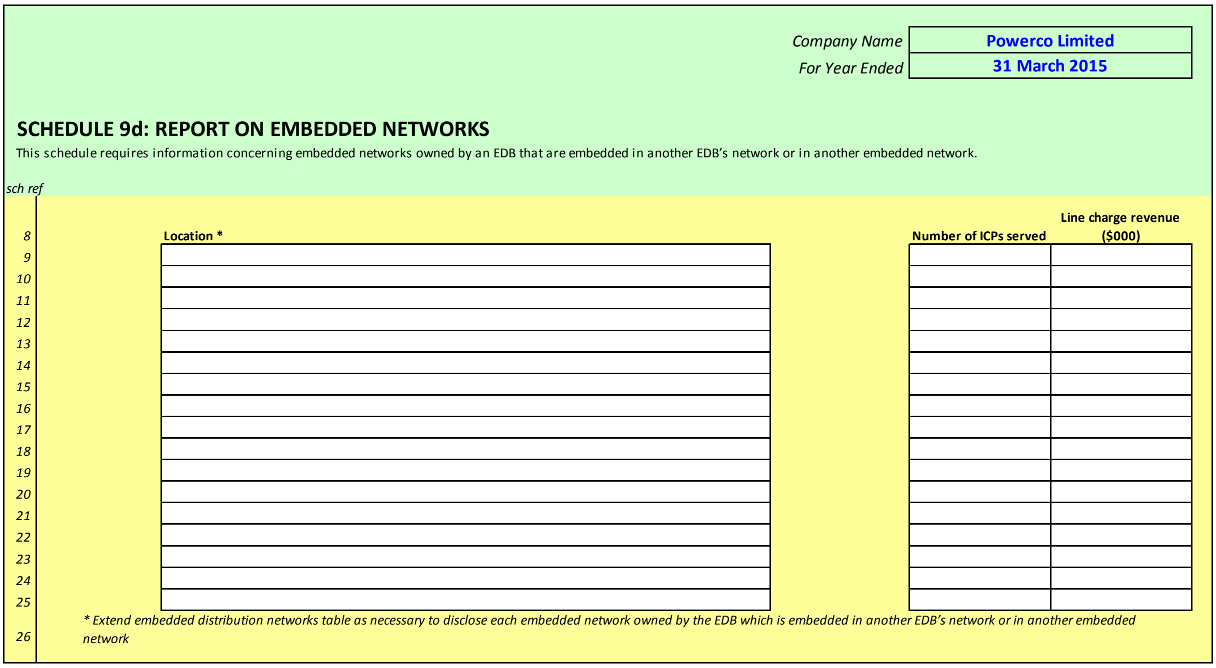
SCHEDULE 9c: REPORT ON OVERHEAD LINES AND UNDERGROUND CABLES

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	**Circuit length by operating voltage (at year end)**	**Overhead (km)**	**Underground (km)**	**Total circuit length (km)**
11	> 66kV	–	–	–
12	50kV & 66kV	163	6	169
13	33kV	382	74	456
14	SWER (all SWER voltages)	69	–	69
15	22kV (other than SWER)	–	–	–
16	6.6kV to 11kV (inclusive—other than SWER)	4,641	1,252	5,893
17	Low voltage (< 1kV)	1,970	1,827	3,798
18	**Total circuit length (for supply)**	7,224	3,159	10,384
19				
20	Dedicated street lighting circuit length (km)	325	1,070	1,394
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)			–
22				

23	**Overhead circuit length by terrain (at year end)**	**Circuit length (km)**	**(% of total overhead length)**
24	Urban	896	12%
25	Rural	3,419	47%
26	Remote only	–	–
27	Rugged only	2,909	40%
28	Remote and rugged	–	–
29	Unallocated overhead lines	–	–
30	**Total overhead length**	7,224	100%
31			
32		**Circuit length (km)**	**(% of total circuit length)**
33	Length of circuit within 10km of coastline or geothermal areas (where known)	5,716	55%
34		**Circuit length (km)**	**(% of total overhead length)**
35	Overhead circuit requiring vegetation management	7,224	100%

18 SCHEDULE 9D: EMBEDDED NETWORKS



Company Name: **Powerco Limited**
For Year Ended: **31 March 2015**

SCHEDULE 9d: REPORT ON EMBEDDED NETWORKS

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

sch ref	**Location ***	**Number of ICPs served**	**Line charge revenue ($000)**
9			
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*

Powerco has no networks embedded in another network

19 SCHEDULE 9E: NETWORK DEMAND

Company Name	**Powerco Limited**
For Year Ended	**31 March 2015**
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	**9e(i): Consumer Connections**			
9	*Number of ICPs connected in year by consumer type*			
10	*Consumer types defined by EDB**		**Number of connections (ICPs)**	
11	Residential & Small Commercial		3,813	
12	Commerical		41	
13	Industrial		21	
14				
15				
16	** include additional rows if needed*			
17	**Connections total**		3,875	
18				
19	**Distributed generation**			
20	Number of connections made in year		303	**connections**
21	Capacity of distributed generation installed in year		2.20	**MVA**
22	**9e(ii): System Demand**			
23				
24				
25	**Maximum coincident system demand**		**Demand at time of maximum coincident demand (MW)**	
26	GXP demand		778	
27	Distributed generation output at HV and above	*plus*	82	
28	**Maximum coincident system demand**		860	
29	Net transfers to (from) other EDBs at HV and above	*less*		
30	**Demand on system for supply to consumers' connection points**		860	
31	**Electricity volumes carried**		**Energy (GWh)**	
32	Electricity supplied from GXPs		4,423	
33	Electricity exports to GXPs	*less*	289	
34	Electricity supplied from distributed generation	*plus*	581	
35	Net electricity supplied to (from) other EDBs	*less*	–	
36	**Electricity entering system for supply to consumers' connection points**		4,715	
37	Total energy delivered to ICPs	*less*	4,473	
38	**Electricity losses (loss ratio)**		242	5.1%
39				
40	**Load factor**		0.63	
41	**9e(iii): Transformer Capacity**			
42			**(MVA)**	
43	Distribution transformer capacity (EDB owned)		3,019	
44	Distribution transformer capacity (Non-EDB owned, estimated)		114	
45	**Total distribution transformer capacity**		3,133	
46				
47	**Zone substation transformer capacity**		2,000	

Company Name	**Powerco Limited**
For Year Ended	**31 March 2015**
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	**9e(i): Consumer Connections**			
9	*Number of ICPs connected in year by consumer type*			
10	*Consumer types defined by EDB**		**Number of connections (ICPs)**	
11		Residential & Small Commercial	1,456	
12		Commerical	4	
13		Industrial	9	
14				
15				
16	** include additional rows if needed*			
17	**Connections total**		1,469	
18				
19	**Distributed generation**			
20		Number of connections made in year	172	**connections**
21		Capacity of distributed generation installed in year	1.67	**MVA**
22	**9e(ii): System Demand**			
23				
24				
25	**Maximum coincident system demand**		**Demand at time of maximum coincident demand (MW)**	
26		GXP demand	388	
27	*plus*	Distributed generation output at HV and above	24	
28	**Maximum coincident system demand**		412	
29	*less*	Net transfers to (from) other EDBs at HV and above	–	
30	**Demand on system for supply to consumers' connection points**		412	
31	**Electricity volumes carried**		**Energy (GWh)**	
32		Electricity supplied from GXPs	1,990	
33	*less*	Electricity exports to GXPs	23	
34	*plus*	Electricity supplied from distributed generation	416	
35	*less*	Net electricity supplied to (from) other EDBs	–	
36	**Electricity entering system for supply to consumers' connection points**		2,383	
37	*less*	Total energy delivered to ICPs	2,237	
38	**Electricity losses (loss ratio)**		146	6.1%
39				
40	**Load factor**		0.66	
41	**9e(iii): Transformer Capacity**			
42			**(MVA)**	
43		Distribution transformer capacity (EDB owned)	1,553	
44		Distribution transformer capacity (Non-EDB owned, estimated)	73	
45	**Total distribution transformer capacity**		1,626	
46				
47	**Zone substation transformer capacity**		1,051	

Company Name **Powerco Limited**
For Year Ended **31 March 2015**
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 9e(i): Consumer Connections

9		*Number of ICPs connected in year by consumer type*		
10		*Consumer types defined by EDB**	**Number of connections (ICPs)**	
11		Residential & Small Commercial	2,357	
12		Commerical	37	
13		Industrial	12	
14				
15				
16		** include additional rows if needed*		
17		**Connections total**	2,406	
18				
19		**Distributed generation**		
20		Number of connections made in year	131	**connections**
21		Capacity of distributed generation installed in year	0.54	**MVA**

22 9e(ii): System Demand

23				
24				
25		**Maximum coincident system demand**	**Demand at time of maximum coincident demand (MW)**	
26		GXP demand	408	
27	*plus*	Distributed generation output at HV and above	31	
28		**Maximum coincident system demand**	440	
29	*less*	Net transfers to (from) other EDBs at HV and above		
30		**Demand on system for supply to consumers' connection points**	440	
31		**Electricity volumes carried**	**Energy (GWh)**	
32		Electricity supplied from GXPs	2,433	
33	*less*	Electricity exports to GXPs	266	
34	*plus*	Electricity supplied from distributed generation	165	
35	*less*	Net electricity supplied to (from) other EDBs	–	
36		**Electricity entering system for supply to consumers' connection points**	2,332	
37	*less*	Total energy delivered to ICPs	2,236	
38		**Electricity losses (loss ratio)**	97	4.2%
39				
40		**Load factor**	0.61	

41 9e(iii): Transformer Capacity

42		**(MVA)**	
43	Distribution transformer capacity (EDB owned)	1,466	
44	Distribution transformer capacity (Non-EDB owned, estimated)	41	
45	**Total distribution transformer capacity**	1,507	
46			
47	**Zone substation transformer capacity**	949	

20 SCHEDULE 10: RELIABILITY

Company Name	**Powerco Limited**
For Year Ended	**31 March 2015**
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

10(i): Interruptions

sch ref		Number of interruptions
9	**Interruptions by class**	
10	Class A (planned interruptions by Transpower)	2
11	Class B (planned interruptions on the network)	1,319
12	Class C (unplanned interruptions on the network)	2,760
13	Class D (unplanned interruptions by Transpower)	14
14	Class E (unplanned interruptions of EDB owned generation)	1
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)	475
19	**Total**	4,571
20		

sch ref		≤3Hrs	>3hrs	Total
21	**Interruption restoration**			
22	Class C interruptions restored within	1,919	841	
23				

sch ref		SAIFI	SAIDI
24	**SAIFI and SAIDI by class**		
25	Class A (planned interruptions by Transpower)	0.02	7.17
26	Class B (planned interruptions on the network)	0.20	46.00
27	Class C (unplanned interruptions on the network)	2.10	231.80
28	Class D (unplanned interruptions by Transpower)	0.18	23.16
29	Class E (unplanned interruptions of EDB owned generation)	0.00	0.06
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)	0.06	13.92
34	**Total**	2.55	322.1
35			

sch ref		Normalised SAIFI	Normalised SAIDI
36	**Normalised SAIFI and SAIDI**		
37	Classes B & C (interruptions on the network)	2.29	217.65
38			

sch ref		SAIFI reliability limit	SAIDI reliability limit
39	**Quality path normalised reliability limit**		
40	SAIFI and SAIDI limits applicable to disclosure year*	2.80	210.13
41	** not applicable to exempt EDBs*		

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

Cause	SAIFI	SAIDI
Lightning	0.03	2.53
Vegetation	0.34	60.07
Adverse weather	0.18	37.40
Adverse environment	0.01	0.56
Third party interference	0.11	11.12
Wildlife	0.13	8.04
Human error	0.04	0.32
Defective equipment	0.67	81.79
Cause unknown	0.58	29.98

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

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	0.00	0.15
Subtransmission cables	–	–
Subtransmission other	–	–
Distribution lines (excluding LV)	0.16	39.53
Distribution cables (excluding LV)	0.00	0.08
Distribution other (excluding LV)	0.03	6.23

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

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	0.61	49.90
Subtransmission cables	0.01	2.67
Subtransmission other	0.02	0.54
Distribution lines (excluding LV)	1.40	173.17
Distribution cables (excluding LV)	0.01	1.14
Distribution other (excluding LV)	0.05	4.37

10(v): Fault Rate

Main equipment involved	Number of Faults	Circuit length (km)	Fault rate (faults per 100km)
Subtransmission lines	149	1,506	9.89
Subtransmission cables	2	147	1.36
Subtransmission other	11		
Distribution lines (excluding LV)	3,349	14,850	22.55
Distribution cables (excluding LV)	18	1,945	0.93
Distribution other (excluding LV)	108		
Total	3,637		

Company Name	**Powerco Limited**
For Year Ended	**31 March 2015**
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	**10(i): Interruptions**		
9	**Interruptions by class**	**Number of interruptions**	
10	Class A (planned interruptions by Transpower)	1	
11	Class B (planned interruptions on the network)	751	
12	Class C (unplanned interruptions on the network)	1,871	
13	Class D (unplanned interruptions by Transpower)	5	
14	Class E (unplanned interruptions of EDB owned generation)	1	
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)	296	
19	**Total**	2,925	
20			
21	**Interruption restoration**	**≤3Hrs**	**>3hrs**
22	Class C interruptions restored within	1,262	609
23			
24	**SAIFI and SAIDI by class**	**SAIFI**	**SAIDI**
25	Class A (planned interruptions by Transpower)	0.01	2.37
26	Class B (planned interruptions on the network)	0.21	48.69
27	Class C (unplanned interruptions on the network)	2.14	210.64
28	Class D (unplanned interruptions by Transpower)	0.31	36.63
29	Class E (unplanned interruptions of EDB owned generation)	0.00	0.10
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	18.96
34	**Total**	2.76	317.4
35			
36	**Normalised SAIFI and SAIDI**	**Normalised SAIFI**	**Normalised SAIDI**
37	Classes B & C (interruptions on the network)	2.36	221.3
38			
39	**Quality path normalised reliability limit**	**SAIFI reliability limit**	**SAIDI reliability limit**
40	SAIFI and SAIDI limits applicable to disclosure year*		
41	** not applicable to exempt EDBs*		

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

Cause	SAIFI	SAIDI
Lightning	0.05	3.90
Vegetation	0.23	34.40
Adverse weather	0.12	21.35
Adverse environment	0.01	1.02
Third party interference	0.13	9.25
Wildlife	0.16	10.83
Human error	0.07	0.23
Defective equipment	0.72	91.11
Cause unknown	0.67	38.54

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

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	0.00	0.13
Subtransmission cables	–	–
Subtransmission other	–	–
Distribution lines (excluding LV)	0.17	41.54
Distribution cables (excluding LV)	0.00	0.07
Distribution other (excluding LV)	0.04	6.95

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

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	0.59	25.98
Subtransmission cables	0.01	3.58
Subtransmission other	0.03	1.00
Distribution lines (excluding LV)	1.46	175.87
Distribution cables (excluding LV)	0.00	0.55
Distribution other (excluding LV)	0.05	3.65

10(v): Fault Rate

Main equipment involved	Number of Faults	Circuit length (km)	Fault rate (faults per 100km)
Subtransmission lines	91	961	9.47
Subtransmission cables	1	67	1.49
Subtransmission other	8		
Distribution lines (excluding LV)	2,330	10,140	22.98
Distribution cables (excluding LV)	4	693	0.58
Distribution other (excluding LV)	57		
Total	2,491		

Company Name	**Powerco Limited**
For Year Ended	**31 March 2015**
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 10(i): Interruptions

sch ref	Interruptions by class	Number of interruptions
9	**Interruptions by class**	
10	Class A (planned interruptions by Transpower)	1
11	Class B (planned interruptions on the network)	568
12	Class C (unplanned interruptions on the network)	889
13	Class D (unplanned interruptions by Transpower)	9
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)	179
19	**Total**	1,646
20		

sch ref		≤3Hrs	>3hrs
21	**Interruption restoration**		
22	Class C interruptions restored within	657	232
23			

sch ref		SAIFI	SAIDI
24	**SAIFI and SAIDI by class**		
25	Class A (planned interruptions by Transpower)	0.04	12.82
26	Class B (planned interruptions on the network)	0.17	42.85
27	Class C (unplanned interruptions on the network)	2.04	256.67
28	Class D (unplanned interruptions by Transpower)	0.02	7.32
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)	0.03	7.99
34	**Total**	2.30	327.6
35			

sch ref		Normalised SAIFI	Normalised SAIDI
36	**Normalised SAIFI and SAIDI**		
37	Classes B & C (interruptions on the network)	2.21	211.3
38			

sch ref		SAIFI reliability limit	SAIDI reliability limit
39	**Quality path normalised reliability limit**		
40	SAIFI and SAIDI limits applicable to disclosure year*		
41	** not applicable to exempt EDBs*		

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

Cause	SAIFI	SAIDI
Lightning	0.01	0.91
Vegetation	0.47	90.24
Adverse weather	0.26	56.27
Adverse environment	0.00	0.02
Third party interference	0.10	13.32
Wildlife	0.10	4.76
Human error	0.02	0.42
Defective equipment	0.61	70.83
Cause unknown	0.47	19.90

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

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	0.00	0.18
Subtransmission cables	–	–
Subtransmission other	–	–
Distribution lines (excluding LV)	0.15	37.17
Distribution cables (excluding LV)	0.00	0.10
Distribution other (excluding LV)	0.02	5.40

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

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	0.63	78.03
Subtransmission cables	0.02	1.60
Subtransmission other	0.00	0.00
Distribution lines (excluding LV)	1.33	169.99
Distribution cables (excluding LV)	0.02	1.82
Distribution other (excluding LV)	0.05	5.23

10(v): Fault Rate

Main equipment involved	Number of Faults	Circuit length (km)	Fault rate (faults per 100km)
Subtransmission lines	58	545	10.65
Subtransmission cables	1	80	1.25
Subtransmission other	3		
Distribution lines (excluding LV)	1,019	4,709	21.64
Distribution cables (excluding LV)	14	1,252	1.12
Distribution other (excluding LV)	51		
Total	1,146		

21 SCHEDULE 14 MANDATORY EXPLANATORY NOTES

Schedule 14 contains mandatory explanatory notes required by the IDD. All clause references refer to the IDD.

21.1 Return on investment (Schedule 2)

This comment must include information on reclassified items in accordance with clause 2.7.1(2).

Powerco has restated the return on investment results for prior years in Schedule 2 to reflect the requirements in the amended Information Disclosure Determination issued in 2015 and using the calculation workbook provided by the Commerce Commission.

Our disclosed ROI under both a Vanilla and Post tax approach for 2015 is lower than 2014 primarily as a result of lower CPI.

21.2 Regulatory profit (Schedule 3)

This comment includes—

a) 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

b) information on reclassified items required by subclause 2.7.1(2).

Regulatory profit for the year to 31 March 2015 is in line with expectations.

Other regulated income is largely income received to reimburse Powerco's operational costs that arise from network damage caused by a third party (e.g. income received from insurers or directly from the third parties). This amount varies between years as Powerco has no control over the events that lead to this income.

There have been no reclassified items.

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

Information on merger and acquisitions expenditure during the disclosure year is provided below and includes—

a) information on reclassified items required by subclause 2.7.1(2);

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

No merger and acquisition expenditure has been incurred during the disclosure year.

21.4 Value of the regulatory asset base (Schedule 4)

The comments below refer to the value of the regulatory asset base (rolled forward) in Schedule 4 and include information on reclassified items required by subclause 2.7.1(2).

The Regulatory Asset Base (RAB) has increased by $36.9m during the 2015 disclosure year. This increase was lower than 2014 primarily due to the lower revaluation rate in 2015 compared to 2014.

There have been no reclassified items in 2014.

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

This narrative provides descriptions and workings of the material items recorded in the following asterisked categories in 5a(i) of Schedule 5a—

a) income not included in regulatory profit / (loss) before tax but taxable;

b) expenditure or loss in regulatory profit / (loss) before tax but not deductible;

c) income included in regulatory profit / (loss) before tax but not taxable;

d) expenditure or loss deductible but not in regulatory profit / (loss) before tax.

$0.151m of expenditure in regulatory profit but not deductible for tax related to entertainment expenditure.

$1.198m of income in regulatory profit but not taxable was the revaluation of RAB

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

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

Temporary differences amount to $793,000 ($222,000 tax affected) and relate to—

- the provisions for employee entitlements $939,000
- contractor provisions ($131,000)
- ACC provisions ($15,000)

21.7 Related party transactions: disclosure of related party transactions (Schedule 5b)

Related party transactions beyond those disclosed on schedule 5b are described below. These include identification and descriptions of the nature of directly attributable costs disclosed under subclause 2.3.6(1)(b).

There are no further related party transactions, other than those disclosed in schedule 5b

21.8 Cost allocation (Schedule 5d)

Comments on cost allocation as disclosed in Schedule 5d are set out below, including information on any reclassified items in accordance with subclause 2.7.1(2).

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

Costs have been allocated on the following basis:

- direct allocation of all components of financial statement items which are directly attributable to the specific business; and
- for any components of financial statement items that are not directly attributable to a specific business, costs have been allocated between the businesses using allocators that are based on key cost drivers such as directly allocated revenue, employee numbers and the carrying value of network fixed assets.

Powerco has refined the cost allocators applied to its disclosure accounts and, where possible, has allocated shared service costs at a greater level of disaggregation than in the 2014 disclosure year. This allows for the use of more causal allocators. Further information on the change in allocators and the effect of this change on the disclosure accounts is provided in schedule 5d.

21.9 Asset allocation (Schedule 5e)

Comments on asset allocation as disclosed in Schedule 5e are set out below, including information on any reclassified items required by subclause 2.7.1(2).

Non-network assets have been allocated to the regulatory asset base (RAB) based on the split of accounting net book value between the electricity and gas businesses.

There have been no reclassifications in the period reported.

21.10 Capital Expenditure for the Disclosure Year (Schedule 6a)

The box below includes comment on expenditure on assets for the disclosure year, as disclosed in Schedule 6a. This comment includes—

a) a description of the materiality threshold applied to identify material projects and programmes described in Schedule 6a;
b) information on reclassified items required by subclause 2.7.1(2).

a) In addition to the programmes outlined in previous AMPs, a material project is defined as any project where

- Quality of Supply projects where the value of the project exceeds 5% of the expenditure category's total value;
- Asset Relocations projects where the total value of the project exceeds $100k;
- Other Reliability, Safety and Environment projects or programmes where expenditure exceeds $150k;and,
- Non-network expenditure programmes exceeding $300k.

b) Powerco has reclassified one item of capital expenditure in FY15. As required under 2.7.2 of the 2012 information disclosure determination, we provide the following information.

- The item of expenditure is the Taihape Substation installation and substation improvement works.
- Taihape Substation transformer installation and substation improvement works were reclassified in FY15 as the primary driver of the substation work was growth capex. This reclassification moved $532k of FY13 expenditure and $6k of FY14 expenditure from Quality of Supply and $80k of FY14 Other Reliability, Safety and Environment expenditure all to growth capex.
- The value reported for the item in FY15 is $669k in Growth capex. The expenditure reported in this category relates entirely to the transfer from Quality of Supply and Other Reliability, Safety and Environment cost categories in FY15.
- This item was reclassified to align all costs to the network growth category as this is the primary driver of the substation work.

Further information is provided in section 21.12

21.11 Operational expenditure for the disclosure year (Schedule 6b)

The box below contains commentary on operational expenditure for the disclosure year, as disclosed in Schedule 6b. This includes—

a) commentary on assets replaced or renewed by way of asset replacement and renewal operational expenditure, as reported in 6b(i) of Schedule 6b;

b) information on reclassified items required by subclause 2.7.1(2);

c) commentary on any material atypical expenditure included in operational expenditure disclosed in Schedule 6b, including the value of the expenditure, the purpose of the expenditure, and the operational expenditure categories the expenditure relates to.

Operational expenditure (“opex”) in the disclosure year has decreased by 3% compared to that reported for the 2014 disclosure year. Most of the movement is attributable to decreases in network operating expenditure as Powerco has entered into a new service level agreement in this period achieving some cost savings.

Information on operational expenditure required by points a, b and c is provided below:

Asset replacement

Asset replacement and renewal opex is primarily driven by asset replacement following storms and correcting defects. For example, contributing to expenditure in this category for FY15 was—

- a large storm in May 2014 which affected areas around Masterton and Palmerston North, costing $377k in asset replacement and renewal opex.
- a 33kV insulator replacement programme in Whanganui at a cost of $188k.

Reclassified items

A prior period project was reclassified from asset replacement and renewal to asset replacement and renewal opex during FY15. This project entailed the replacement of sub-transmission line component items in the Coromandel Valley area, with a cost of $143k. It was reclassified to opex after detailed scoping revealed the cross-arms (a capital item) did not require replacement. This resulted in a change in scope for the project to insulator replacement. Replacement of a component item is considered a maintenance activity by Powerco.

Material atypical expenditure

There have been no items of atypical expenditure.

Further information regarding opex expenditure for the disclosure year is contained in section 21.12

21.12 Variance between forecast and actual expenditure (Schedule 7)

This section comments on the variance between actual and forecast expenditure for the disclosure year, as reported in Schedule 7. This comment includes information on reclassified items required by subclause 2.7.1(2).

Total reported "Expenditure on assets (7(ii))" and "Operational Expenditure (7(iii))" is in line with the forecasts provided in the Electricity 2014 Asset Management Plan ("AMP"). Some movement of expenditure between categories has occurred. The reasons for variances are noted briefly below:

7(ii) Expenditure on Assets

Powerco continues to manage its actual expenditure in line with total forecast expenditure in the AMP. Actual expenditure on assets was $119.8m for FY15 compared to the 2014 AMP forecast of $119.4m.

Commentary is provided for each category showing a forecast to actual variance greater than 5% (subject to being material in dollar terms).

The variances noted in this disclosure are considered routine, and in line with the level of variance to be expected given the scale of Powerco's operations and normal delivery uncertainties. In particular they relate to the following:

- Variances in the physical timing of works (between years) reflecting the uncertain timing associated with land and land access discussions;
- Variances in work volumes and final cost of projects as a result of detailed design and optimisation of delivery in the field;
- Variances in the volume of customer related works, based on in the year customer; and requirements; and
- Variations of expenditure between categories to align with Commission guidance based on detailed review of the focus and delivery mix for each project.

Consumer connection

Consumer connection expenditure exceeded the forecast by $9.0m (53%). All consumer types (small, commercial and industrial) had higher than forecast customer demand for expenditure as follows:

- There were more residential consumer connections due to subdivision growth (in Tauranga in particular) than initially forecast.
- Commercial expenditure was somewhat higher than forecast due to small commercial upgrades such as those to dairy farms and cool stores.
- Industrial consumer connection expenditure was $7m higher than forecast primarily due to higher than anticipated load growth in the dairy sector. .

Note this increase in expenditure is partially offset by the corresponding increase in Capital contributions shown in “Expenditure on assets 6a(i)”.

System growth

System growth expenditure is less than forecast by $1.6m (6%). This is primarily due to the delayed purchase of the Hinuera Spur Line from Transpower. Transfer was originally anticipated to be in FY15, but is now forecast for FY17. Had the transfer occurred as previously forecast, system growth expenditure would have been in line with forecast.

Asset replacement and renewal

Capital expenditure on asset replacement and renewal exceeded the forecast by $2.9m (7%). $2.5m of this variance related to the reclassification of projects forecast to fall into the Reliability Safety and Environment category being determined as more appropriately being recorded as asset replacement and renewal based on detailed evaluation of project scope and drivers.

Powerco note that there is a degree of discretion involved in allocating the value of works where they have more than one driver (for example line condition upgrades targeted at improving reliability) and so a degree of project reallocation is to be expected based on detailed review of project scope and drivers as part of the project scoping stage.

Reliability, Safety and Environment

Total capital expenditure on Reliability, safety and environment was $7.2m (35%) lower than forecast relating to the following key areas:

- Reclassification of $2.5m of projects anticipated to fall within the RSE category, but confirmed as more appropriately falling into the asset replacement and renewal category to better align with disclosure requirements (see comments in the asset replacement and renewal section above).
- Delays to a number of quality of supply projects (to the value of $1.1m) as a result of delays in progressing land access and consenting. These were the Paeroa to Kerepehi 33kV line, the Kopu to Kaueranga 110kV line and the Whangamata 33kV second line.
- Delays in the progression of the Putaruru GXP project, due to slower than anticipated progress with land access negotiations resulted in the deferment of $3.6m in this period. Commissioning is now anticipated during FY18.
- There were also some reclassification of projects within Reliability Safety and the Environment categories. The changes were made to ensure accurate alignment of expenditures to information disclosure requirements.

Non-network Capex

Expenditure in this category was $2.7m (38%) under that forecast for the period. The variance resulted primarily from:

- The upgrade of the network Operations Centre and Data Centre project forecast to incur $1.66m of costs in FY15 has been deferred to FY16 and FY17;
- Several information systems projects undertaken in FY15 were more resource

intensive than originally forecast. This resulted in delays to other delays to other planned information services projects; and

- Costs associated with a customer works management system were originally forecast as capex, but eventuated as opex. Costs were transferred to opex in FY15.

7(iii) Operational Expenditure

Actual expenditure of $65.5m was in line with the target for the year with some normal variances evident. The following commentary is provided for each category where the variance against target exceeds 5% (subject to the difference being material in dollar terms).

Asset replacement and renewal

Asset replacement and renewal opex expenditure was $1.1m (13%) less than forecast, noting that this volume was more than offset by increased replacement and renewal capex expenditure. It is the nature of replacement and renewal that natural variances occur between opex and capex depending on the particular mix of work completed in any given year.

Non-network opex

Powerco’s total non-network operational expenditure in this disclosure period is very close (within 1%) of our forecast in the 2014 AMP, noting some variances at a subcategory level. (System Operation and Network support category is $2.5m below forecast, whilst expenditure in the business support category is $2.0m above that forecast)

The new IDD reporting definitions, introduced for the first time as part of the 2014 disclosure had required two of Powerco’s business units to change their regulatory classification in the 2014 disclosure statements. The forecast provided in the 2014 AMP recognised the changed classifications but over-estimated the effect on the movement of costs from Business Support to System operations and Network Support. This resulted in the forecast for Business Support expenditure being understated in the 2014 AMP and the expenditure expected in the System Operation and Network Support category being overstated.

21.13 Information relating to revenue and quantities for the disclosure year

Commentary should be provided that gives:

a) 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) against total billed line charge revenue for the disclosure year, as disclosed in Schedule 8; and

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

Powerco's revenue for FY15 was $367,197k compared to the targeted revenue of $369,098k. This lower revenue than forecast reflects the lower than forecast electricity supplied to consumers for the period. In the FY14 AMP, Powerco estimated 4,596GW of energy would be delivered to consumers, this compared to the 4,473GW actually delivered in FY15.

While Powerco had strong growth on its network during FY15 as explained in the capital expenditure note above [refer to section 21.12] average household electricity demand has flattened and peak energy needs have risen. This is due to consumers investing more in energy efficient technologies and deciding how to better use energy in their homes.

21.14 Network reliability for the disclosure year (Schedule 10)

The box below contains commentary on network reliability for the disclosure year, as disclosed in Schedule 10.

In 2015 Powerco exceeded the regulatory SAIDI reliability limit by 7.51 minutes (3.5%). This is the first time Powerco has exceeded the SAIDI limit since 2011. Our 2015 Electricity Default Price-Quality Path Disclosure provides detailed commentary on the reasons for this outcome.

The final SAIDI result for the disclosure period was 277.79 minutes. The normalised SAIDI result, after adjusting for major event days, was 217.65 minutes. This is above the SAIDI limit under the DPP of 210.13 minutes.

The normalised results

Schedule 10 reports the reliability limits established under the DPP for Powerco Limited and the normalised SAIDI and SAIFI results for Powerco Limited and each of the company'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 (refer #231). 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 wide network boundary value to the sub-networks.

21.15 Insurance cover

Details of insurance cover for the assets used to provide electricity distribution services are given below, including—

a) the EDB's approaches and practices in regard to the insurance of assets used to provide electricity distribution services, including the level of insurance;
b) in respect of any self-insurance, the level of reserves, details of how reserves are managed and invested, and details of any reinsurance.

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's insurance strategy strikes a balance between providing the benefit to its customers of accessing material damage insurance cover that is available, and the practical imperative of managing the associated cost burden to customers. Cover for poles, wires and pipes (commonly referred to as transmission and distribution cover) is for all practical purposes unavailable in NZ. Where it may be available in small amounts in our geographic region the cost is uneconomic to our customers, as there is a restricted retained limit and a premium cost of 10-15% of the sum insured.

To manage Powerco's exposure to a catastrophic event affecting its 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 partly based 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.

The cost of maintaining this debt facility headroom equates to approximately $260,000 per annum.

Powerco's regulatory framework under Part 4 of the Commerce Act also allows for the recovery, subject to Commission approval, of prudent, unforeseen costs associated with a catastrophic event, via the Customised Price Quality Path ("CPP") provisions contained within Part 4 of the Commerce Act.

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

21.16 Amendments to previously disclosed information

This section provides information about amendments to previously disclosed information disclosed in accordance with clause 2.12.1 in the last 7 years, including:

a) a description of each error; and

b) for each error, reference to the web address where the disclosure made in accordance with clause 2.12.1 is publicly disclosed.

There have been no amendments to previously disclosed information.

22 SCHEDULE 15 VOLUNTARY EXPLANATORY NOTES

This section includes notes, which supplement the mandatory notes set out in Schedule 14 and provide additional information to aid understanding of the required disclosure schedules.

22.1 Financial Schedules

Debt Issuance Costs

Debt issuance costs have been included when calculating the assumed cost of debt in Schedule 2.

Other recoverable costs excluding financial incentives and wash-up's

Other recoverable costs included in pricing in FY15 include—

- Transmission costs avoided as a result of Powerco having purchased transmission assets at Moturoa from Transpower; and
- Claw-back as prescribed in schedule 1E of the 2012 Default Price Quality Path and reflects an under-recovery of allowable revenue in prior years.

Weighted average remaining useful lives (Schedule 4)

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

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.

22.2 Billed Quantities and Revenues (schedule 8)

Billed quantities

Powerco operates an ICP (individual connection point) pricing methodology for the Eastern network and a GXP (grid exit point) pricing methodology for the Western region. Schedule 8 requires the reporting of energy delivered to ICPs and also the billed quantities by price component.

Under the GXP pricing methodology, the actual energy delivered to ICPs differs from the chargeable kWh quantities detailed in the billed quantities section of Schedule 8, which are based on GXP quantities delivered.

Powerco's Western Region uses volumes reconciled at each GXP to determine billable charges. Consequently, Powerco does not hold information on the energy delivered to ICPs for the Western Region. Powerco has obtained retailer submission data from the Reconciliation Manager to complete this metric.

Consumer types

The IDD permits Powerco to define the appropriate consumer types that are typical of the consumers connected to our network.

Powerco has three major types of consumer groups:

1. residential/ small commercial;
2. commercial; and
3. Industrial.

The Industrial consumer group is further separated into those on standard and non-standard contracts

Table Two illustrates the application of these consumer groups to our pricing groups for the 2015 disclosure.

Table 2: Price groups assigned to consumer types.

Consumer type	Eastern Region price categories	Western Region price categories
Residential/Small Commercial	0 – 69 kVA (V01, V02, V05, V06, T01, T02, T05 and T06)	0 – 100 kVA (E1)
Commercial	69 – 299 kVA (V24, V28, T22, T24, T41)	100 – 299 kVA (E100)
Large commercial / Industrial (standard)	≥300 kVA (T43)	≥300 kVA (E300)
Large commercial / Industrial (non-standard)	≥300 kVA (T50, T60, V40, V60)	≥300 kVA (SPECIAL)

ICP numbers

When reporting Powerco's ICPs, Powerco has included ready, inactive and active ICPs in the disclosed number.

22.3 Asset Information (Schedules 9a-9c)

Sources of information

Powerco's network is made up of fifteen discrete, legacy lines networks that have been amalgamated over time. This diversity of networks has created on-going data and systems integration and improvement challenges for Powerco.

Powerco has invested in both systems and data cleansing programmes over the past decade to help align and cleanse the data, resulting material improvements in the quality and completeness of our asset related data sets over time.

Whilst we believe that the quality of our data is now adequate for business purposes, and in line with the levels of quality available by other electricity distributors, there are some limitations to our current data set as set out in Schedule 9a; key points are noted as follows:

- The underlying GIS 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.
- The asset age profile (Schedule 9b) includes some default ages in each asset class. For some asset classes (particularly poles and switches), an installation date estimate has been made at some time after the initial data capture. While based on the best information available, these estimates are bound to contain some inaccuracies.
- Ongoing programmes of work are underway to improve the quality of installation date information. In 2015, unknown conductor dates were reviewed and where necessary, the commissioning dates were inferred from associated poles or adjacent conductor

Network Asset Classification

The programmes we have put in place to ensure on-going 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.

The key refinements for 2015 are set out below:

Table Two: changes in asset classification

Asset Category	Asset Class	Reason for change
Zone substation switchgear	33kV Switch (Ground Mounted)	Some assets previously classified as individual ground mounted switches have been reclassified as ring main units as rules defining RMU composition have been refined in the AMT.
Zone substation switchgear	33kV RMU	
Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	
Distribution switchgear	3.3/6.6/11/22kV RMU	
Distribution Transformer	Voltage regulators	Powerco asset information systems record voltage regulator tanks as separate assets, and this is how voltage regulators have previously been reported. The approach has changed this year in response to the Commission's issues register item #357 published in April 2014, which suggests that for the purposes of completing schedules 9a, 9b and 12a EDBs should disclose one voltage regulator asset regardless of the tanks associated with that regulator. Spare tanks not installed on the network are reported individually.

Asset Categorisation

Powerco operates network assets that are not specifically noted for inclusion within disclosure asset categories age profile schedules. These assets have been included in the category that most closely relates to the asset type and function. Table three indicates the assets which do not clearly fit in to a specified category and the category to which they have been assigned.

Table Three: asset categorisation

Asset type	Included in	
	Asset category	Asset class
Ground mounted 33/66kV fuses	Zone substation switchgear	33kV switch (ground mounted)
Pole mounted 33/66kV fuses	Zone substation switchgear	33kV switch (pole mounted)
33kV reclosers	Zone substation switchgear	22/33kV CB(outdoor)
Reclosers in zone substations	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)
Ground mounted 3.3/6.6/11/22kV fuses	Distribution switchgear	3.3/6.6/11/22kV switch(ground mounted) except RMU
Distribution conversion and SWER isolation transformers	Distribution transformer	Pole mounted transformer
Distribution conversion and SWER isolation transformers	Distribution transformer	Ground mounted transformer
Ground mounted subtransmission switchgear (not in zone substations)	Zone substation switchgear	33kV switch (ground Mounted)
Pole mounted subtransmission switchgear (not in zone substations)	Zone substation switchgear	33kV switch (pole Mounted)
Protection system pilots	Not included[1]	Not included

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[1] Refer to the information disclosure determination issues register published by the Commerce Commission

Service Connections

Service connections are calculated for Schedules 9a and 9b based on the guidance provided by the Commerce Commission in their issues register for electricity and gas businesses. Clarifications provided have enabled our analysis to be refined, resulting in inclusion of a higher number of assets than previously accounted for.

For completeness we note that streetlight connections are not considered a service connection.

SCADA and Communications equipment operating as a single system

During 2015, migration of Western network SCADA to the OSI system was completed. The entire Powerco network now operates from a single SCADA and communications system.

An average installation date has been calculated in response to Commission's issues register item #443.

Circuit length by voltage

The use of more sophisticated calculation tools in support of this disclosure has enabled improved granularity and accuracy of the underlying calculations of circuit length. In particular, it has been possible to define more accurately service lines and service line lengths on Powerco's networks, and exclude them from the calculation of total circuit length as required by the disclosure definition.

Powerco notes that total circuit length has been calculated in accordance with updated disclosure information provided by the Commission. This definition requires low voltage service lines in transport corridors (other than road crossings) to be excluded from the calculation. 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. Therefore no circuit length is reported for this criterion.

Circuit length under vegetation management

Powerco's vegetation management policy covers the full overhead electricity network. This strategy involves an intensive trimming period in high criticality areas within existing budgets until the areas are under control and then a reduction to a sustainable level of vegetation management to maintain clearance from the lines.

22.4 Transformer capacity (Schedule 9e)

Distribution transformer capacity

The disclosed Powerco owned distribution transformer capacity includes transformers that are recorded in the GIS as network connected. In accordance with Powerco's operational approach to ownership, transformers with no clear owner (where the GIS ownership field is null or unknown) are included as Powerco owned for disclosure purposes.

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^{o}C.

22.5 Amendments to formulae in the schedules

There have been no amendments to the templates provided by the Commerce Commission for the 2015 Information Disclosure.

CERTIFICATE FOR YEAR END DISCLOSURES

CERTIFICATE FOR YEAR-END DISCLOSURES

Pursuant to clause 2.9.2 of Section 2.9

We, JOHN LOUGHLIN, and MURRAY BAIN, 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 Determination 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 Powerco's accounting and other records sourced from its financial and non-financial systems, and that sufficient appropriate records have been retained.

Director	Director
26/8/2015.	26/8/15.
Date	Date

Deloitte.

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

Report on the Disclosure Information

We have been engaged by the Board of Directors of Powerco Limited ('the Company') to conduct a reasonable assurance engagement to provide an opinion on whether Schedules 1 to 4, 5a to 5g, 6a and 6b, 7, Schedule 10 sub-schedules (i) to (iv), the explanatory notes disclosed in boxes 1 to 12 of Schedule 14 ('the audited Disclosure Information') of the Company for the disclosure year ended 31 March 2015 have been prepared, in all material respects, in accordance with the Electricity Distribution Information Disclosure Determination 2012 ('the Determination').

Responsibilities of the Board of Directors for the Disclosure Report

The Board of Directors is responsible for the preparation of the Disclosure Information in accordance with the Determination, and for such internal control as the Board of Directors determine is necessary to enable the preparation of the Disclosure information that is free from material misstatement, whether due to fraud or error.

Auditor's responsibility

Our responsibility is to express an opinion on whether the Disclosure Information has been prepared, in all material respects, in accordance with the Determination.

We conducted our engagement in accordance with the International Standard on Assurance Engagements (New Zealand) 3000: *Assurance Engagements Other Than Audits or Reviews of Historical Financial Information* and the Standard on Assurance Engagements 3100: *Compliance Engagements* issued by the External Reporting Board.

These standards require that we comply with ethical requirements and plan and perform our audit to provide reasonable assurance about whether the Disclosure Information has been prepared in all material respects in accordance with the Determination.

An audit involves performing procedures to obtain evidence about the amounts and disclosures in the Disclosure Information. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the Disclosure Information, whether due to fraud or error or non-compliance with the Determination. In making those risk assessments, the auditor considers internal control relevant to the Company's preparation of the Disclosure Information in order to design audit 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.

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

Inherent limitations

Because of the inherent limitations in evidence gathering procedures, it is possible that fraud, error or non-compliance may occur and not be detected. As the procedures performed for this engagement are not performed continuously throughout the year and the procedures performed in respect of the Company's compliance with the Determination are undertaken on a test basis, our engagement cannot be relied on to detect all instances where the Company may not have complied with the Determination.

Our opinion has been formed on the above basis.

Independence

Other than in our capacity as auditor, we have no relationship with or interests in the Company. We have complied with the Independent Auditor provisions specified in clause 1.4.3 of the Determination.

Opinion

We have obtained all the information and explanations we have required.

In our opinion;

- As far as appears from an examination of them, proper records to enable the complete and accurate compilation of the audited Disclosure Information for the year ended 31 March 2015 have been kept by the Company;
- The information used in the preparation of the audited Disclosure Information for the year ended 31 March 2015 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; and
- The Company has complied with the Determination, in all material respects, in preparing the audited Disclosure Information for the year ended 31 March 2015.

Restriction on Distribution and Use

This report has been prepared for the Directors of the Company and the Commerce Commission in accordance with the reporting requirements of clause 2.8 of the Determination. We accept or assume no duty, responsibility or liability to any other party, other than you, in connection with the report or this engagement including without limitation, liability for negligence in relation to the opinion expressed in our report.

Deloitte

Chartered Accountants
26 August 2015
Wellington, New Zealand

This audit report relates to the Disclosure Information of Powerco Limited for the disclosure year ended 31 Match 2015 included on Powerco Limited's website. The Board of Directors is responsible for the maintenance and integrity of Powerco Limited's website. We have not been engaged to report on the integrity of the entity's website. We accept no responsibility for any changes that may have occurred to the Disclosure Information since it was initially presented on the website. The audit report refers only to the Disclosure Information named above. It does not provide an opinion on any other information which may have been hyperlinked to/from the Disclosure Information. If readers of this report are concerned with the inherent risks arising from electronic data communication they should refer to the published hard copy of the Disclosure Information and related audit report dated 26 August 2015 to confirm the information included in the audited Disclosure Information presented on this website. Legislation in New Zealand governing the preparation and dissemination of Disclosure Information may differ from legislation in other jurisdictions.

POWERCO