



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

<b>Company Name</b>	Waipa Networks Limited
<b>Disclosure Date</b>	26 August 2014
<b>Disclosure Year (year ended)</b>	31 March 2014

Templates for Schedules 1–10  
Template Version 3.0. Prepared 14 April 2014

**Table of Contents**

Schedule	Description
1	<u>Analytical Ratios</u>
2	<u>Report on Return on Investment</u>
3	<u>Report on Regulatory Profit</u>
4	<u>Report on Value of the Regulatory Asset Base (Rolled Forward)</u>
5a	<u>Report on Regulatory Tax Allowance</u>
5b	<u>Report on Related Party Transactions</u>
5c	<u>Report on Term Credit Spread Differential Allowance</u>
5d	<u>Report on Cost Allocations</u>
5e	<u>Report on Asset Allocations</u>
6a	<u>Report on Capital Expenditure for the Disclosure Year</u>
6b	<u>Report on Operational Expenditure for the Disclosure Year</u>
7	<u>Comparison of Forecasts to Actual Expenditure</u>
8	<u>Report on Billed Quantities and Line Charge Revenues (by Price Component)</u>
9a	<u>Asset Register</u>
9b	<u>Asset Age Profile</u>
9c	<u>Report on Overhead Lines</u>
9d	<u>Report on Embedded Networks</u>
9e	<u>Report on Demand</u>
10	<u>Report on Network Reliability</u>

Company Name	<b>Waipa Networks Limited</b>
For Year Ended	<b>31 March 2014</b>

**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.

sch ref

<b>1(i): Expenditure metrics</b>		Expenditure per GWh energy delivered to ICPs (\$/GWh)	Expenditure per average no. of ICPs (\$/ICP)	Expenditure per MW maximum coincident system demand (\$/MW)	Expenditure per km circuit length (\$/km)	Expenditure per MVA of capacity from EDB-owned distribution transformers (\$/MVA)
7						
8						
9	<b>Operational expenditure</b>	13,094	188	66,702	2,166	20,234
10	Network	5,617	81	28,614	929	8,680
11	Non-network	7,477	107	38,088	1,237	11,554
12						
13	<b>Expenditure on assets</b>	22,447	322	114,350	3,713	34,688
14	Network	22,188	318	113,030	3,671	34,288
15	Non-network	259	4	1,320	43	400

<b>1(ii): Revenue metrics</b>		Revenue per GWh energy delivered to ICPs (\$/GWh)	Revenue per average no. of ICPs (\$/ICP)
18			
19	<b>Total consumer line charge revenue</b>	63,493	911
20	Standard consumer line charge revenue	73,317	870
21	Non-standard consumer line charge revenue	16,553	497,500

<b>1(iii): Service intensity measures</b>			
23			
24			
25	Demand density	32	Maximum coincident system demand per km circuit length (for supply) (kW/km)
26	Volume density	165	Total energy delivered to ICPs per km circuit length (for supply) (MWh/km)
27	Connection point density	12	Average number of ICPs per km circuit length (for supply) (ICPs/km)
28	Energy intensity	14,351	Total energy delivered to ICPs per Average number of ICPs (kWh/ICP)

<b>1(iv): Composition of regulatory income</b>		(\$000)	% of revenue
31			
32			
33	Operational expenditure	4,548	20.67%
34	Pass-through and recoverable costs	7,556	34.34%
35	Total depreciation	3,301	15.00%
36	Total revaluation	1,374	6.24%
37	Regulatory tax allowance	1,059	4.81%
38	Regulatory profit/loss	6,917	31.43%
39	<b>Total regulatory income</b>	22,006	

<b>1(v): Reliability</b>		Interruptions per 100 circuit km
41		
42		
43	Interruption rate	10.24

Company Name	<b>Waipa Networks Limited</b>
For Year Ended	<b>31 March 2014</b>

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

This schedule requires information on the Return on Investment (ROI) for the EDB relative to the Commerce Commission's estimates of post tax WACC and vanilla WACC. EDBs must calculate their ROI based on a monthly basis if required by clause 2.3.3 of the ID Determination or if they elect to. If an EDB makes this election, information supporting this calculation must be provided in 2(iii). EDBs must provide explanatory comment on their ROI in Schedule 14 (Mandatory Explanatory Notes). 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
		31 Mar 12	31 Mar 13	31 Mar 14
		%	%	%
7	<b>2(i): Return on Investment</b>			
8				
9	<b>Post tax WACC</b>			
10	ROI—comparable to a post tax WACC	6.62%	6.06%	6.90%
11				
12	<b>Mid-point estimate of post tax WACC</b>	6.40%	5.85%	5.43%
13	25th percentile estimate	5.68%	5.13%	4.71%
14	75th percentile estimate	7.11%	6.56%	6.14%
15				
16				
17	<b>Vanilla WACC</b>			
18	ROI—comparable to a vanilla WACC	7.44%	6.84%	7.58%
19				
20	<b>Mid-point estimate of vanilla WACC</b>	7.22%	6.62%	6.11%
21	25th percentile estimate	6.51%	5.91%	5.39%
22	75th percentile estimate	7.94%	7.34%	6.83%
23				
24	<b>2(ii): Information Supporting the ROI</b>			
25				
26	Total opening RAB value	89,783		
27	plus Opening deferred tax	(1,724)		
28	Opening RIV		88,059	
29				
30	Operating surplus / (deficit)	9,902		
31	less Regulatory tax allowance	1,059		
32	less Assets commissioned	3,650		
33	plus Asset disposals	175		
34	<b>Notional net cash flows</b>		5,369	
35				
36	Total closing RAB value	91,331		
37	less Adjustment resulting from asset allocation	(0)		
38	less Lost and found assets adjustment	-		
39	plus Closing deferred tax	(2,162)		
40	<b>Closing RIV</b>		89,169	
41				
42	ROI—comparable to a vanilla WACC		7.58%	
43				
44	Leverage (%)		44%	
45	Cost of debt assumption (%)		5.56%	
46	Corporate tax rate (%)		28%	
47				
48	ROI—comparable to a post tax WACC		6.90%	

Company Name	<b>Waipa Networks Limited</b>
For Year Ended	<b>31 March 2014</b>

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

This schedule requires information on the Return on Investment (ROI) for the EDB relative to the Commerce Commission's estimates of post tax WACC and vanilla WACC. EDBs must calculate their ROI based on a monthly basis if required by clause 2.3.3 of the ID Determination or if they elect to. If an EDB makes this election, information supporting this calculation must be provided in 2(iii). EDBs must provide explanatory comment on their ROI in Schedule 14 (Mandatory Explanatory Notes).

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

sch ref

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

**Cash flows**

		(\$000)				
		Total regulatory income	Expenses	Tax payments	Assets commissioned	Notional net cash flows
					Asset disposals	
59	April					-
60	May					-
61	June					-
62	July					-
63	August					-
64	September					-
65	October					-
66	November					-
67	December					-
68	January					-
69	February					-
70	March					-
71	<b>Total</b>	-	-	-	-	-

		Opening / closing RAB	Adjustment resulting from asset allocation	Lost and found assets adjustment	Opening / closing deferred tax	Revenue related working capital	Total
74	Monthly ROI - opening RIV	89,783			(1,724)		88,059
75	Monthly ROI -closing RIV	91,331	(0)	-	(2,162)	-	89,169
76	Monthly ROI -closing RIV less term credit spread differential allowance						89,169
77	<b>Monthly ROI—comparable to a vanilla WACC</b>						N/A
78	<b>Monthly ROI—comparable to a post-tax WACC</b>						N/A

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

84	<b>Year-end ROI—comparable to a vanilla WACC</b>	7.69%
85	<b>Year-end ROI—comparable to a post-tax WACC</b>	7.01%

\* 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.

Company Name	<b>Waipa Networks Limited</b>
For Year Ended	<b>31 March 2014</b>

**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 3(i), 3(iv) and 3(v) and must provide explanatory comment on their regulatory profit in Schedule 14 (Mandatory Explanatory Notes).

Non-exempt EDBs must also complete sections 3(ii) and 3(iii).

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

sch ref

7	<b>3(i): Regulatory Profit</b>		<b>(\$000)</b>
8	<b>Income</b>		
9	Line charge revenue		22,054
10	plus Gains / (losses) on asset disposals		(139)
11	plus Other regulated income (other than gains / (losses) on asset disposals)		91
12			
13	<b>Total regulatory income</b>		<b>22,006</b>
14	<b>Expenses</b>		
15	less Operational expenditure		4,548
17	less Pass-through and recoverable costs		7,556
18			
19	<b>Operating surplus / (deficit)</b>		<b>9,902</b>
20			
21	less Total depreciation		3,301
22			
23	plus Total revaluation		1,374
24			
25	<b>Regulatory profit / (loss) before tax &amp; term credit spread differential allowance</b>		<b>7,975</b>
26			
27	less Term credit spread differential allowance		-
28			
29	<b>Regulatory profit / (loss) before tax</b>		<b>7,975</b>
30			
31	less Regulatory tax allowance		1,059
32			
33	<b>Regulatory profit / (loss)</b>		<b>6,917</b>
34			
35	<b>3(ii): Pass-Through and Recoverable Costs</b>		<b>(\$000)</b>
36	<b>Pass-through costs</b>		
37	Rates		83
38	Commerce Act levies		6
39	Electricity Authority levies		45
40	Other specified pass-through costs		
41	<b>Recoverable costs</b>		
42	Net recoverable costs allowed under incremental rolling incentive scheme		
43	Non-exempt EDB electricity lines service charge payable to Transpower		7,379
44	Transpower new investment contract charges		45
45	System operator services		
46	Avoided transmission charge		
47	Input Methodology claw-back		
48	Recoverable customised price-quality path costs		
49	<b>Pass-through and recoverable costs</b>		<b>7,556</b>

Company Name	<b>Waipa Networks Limited</b>
For Year Ended	<b>31 March 2014</b>

**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 3(i), 3(iv) and 3(v) and must provide explanatory comment on their regulatory profit in Schedule 14 (Mandatory Explanatory Notes).

Non-exempt EDBs must also complete sections 3(ii) and 3(iii).

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

*sch ref*

		(\$000)	
		CY-1	CY
		31 March 2013	31 March 2014
57	<b>3(iii): Incremental Rolling Incentive Scheme</b>		
58			
59			
60	Allowed controllable opex		
61	Actual controllable opex		
62			
63	Incremental change in year		
64			
65		<b>Previous years' incremental change</b>	<b>Previous years' incremental change adjusted for inflation</b>
66	CY-5 31 Mar 09		
67	CY-4 31 Mar 10		
68	CY-3 31 Mar 11		
69	CY-2 31 Mar 12		
70	CY-1 31 Mar 13		
71	<b>Net incremental rolling incentive scheme</b>		-
72			
73	<b>Net recoverable costs allowed under incremental rolling incentive scheme</b>		-
74	<b>3(iv): Merger and Acquisition Expenditure</b>		
75	Merger and acquisition expenses		-
76			
77	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)		
78	<b>3(v): Other Disclosures</b>		
79	Self-insurance allowance		

Company Name **Waipa Networks Limited**  
 For Year Ended **31 March 2014**

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

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

sch ref

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

	for year ended				
	RAB 31 Mar 10 (\$000)	RAB 31 Mar 11 (\$000)	RAB 31 Mar 12 (\$000)	RAB 31 Mar 13 (\$000)	RAB 31 Mar 14 (\$000)
Total opening RAB value	80,931	81,668	85,852	88,086	89,783
less Total depreciation	2,946	3,011	3,127	3,220	3,301
plus Total revaluations	1,632	1,966	1,345	755	1,374
plus Assets commissioned	3,170	5,414	4,228	4,392	3,650
less Asset disposals	1,119	186	211	230	175
plus Lost and found assets adjustment	-	-	-	-	-
plus Adjustment resulting from asset allocation				0	(0)
<b>Total closing RAB value</b>	<b>81,668</b>	<b>85,852</b>	<b>88,086</b>	<b>89,783</b>	<b>91,331</b>

**4(ii): Unallocated Regulatory Asset Base**

	Unallocated RAB *		RAB	
	(\$000)	(\$000)	(\$000)	(\$000)
Total opening RAB value		95,109		89,783
less Total depreciation		3,539		3,301
plus Total revaluations		1,455		1,374
plus Assets commissioned (other than below)	3,651		3,650	
Assets acquired from a regulated supplier	-		-	
Assets acquired from a related party	-		-	
<b>Assets commissioned</b>		<b>3,651</b>		<b>3,650</b>
less Asset disposals (other than below)	175		175	
Asset disposals to a regulated supplier	-		-	
Asset disposals to a related party	-		-	
<b>Asset disposals</b>		<b>175</b>		<b>175</b>
plus Lost and found assets adjustment		-		-
plus Adjustment resulting from asset allocation				(0)
<b>Total closing RAB value</b>		<b>96,502</b>		<b>91,331</b>

\* The 'unallocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services without any allowance being made for the allocation of costs to non-regulated services. The RAB value represents the value of these assets after applying this cost allocation. Neither value includes works under construction.



Company Name **Waipa Networks Limited**  
 For Year Ended **31 March 2014**

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

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

*sch ref*

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

58			
59			
60	CPI <sub>4</sub>		1,192
61	CPI <sub>4</sub> <sup>-4</sup>		1,174
62	Revaluation rate (%)		1.53%

	Unallocated RAB *		RAB	
	(\$000)	(\$000)	(\$000)	(\$000)
66	Total opening RAB value	95,109	89,783	
67	<i>less</i> Opening RAB value of fully depreciated, disposed and lost assets	190	190	
68				
69	Total opening RAB value subject to revaluation	94,919	89,593	
70	<b>Total revaluations</b>		1,455	1,374

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

	Unallocated works under construction		Allocated works under construction	
73				
74	<b>Works under construction—preceding disclosure year</b>	1,206	1,206	
75	<i>plus</i> Capital expenditure	5,335	5,334	
76	<i>less</i> Assets commissioned	3,651	3,650	
77	<i>plus</i> Adjustment resulting from asset allocation		-	
78	<b>Works under construction - current disclosure year</b>	2,890	2,890	
79				
80	Highest rate of capitalised finance applied			

Company Name **Waipa Networks Limited**  
 For Year Ended **31 March 2014**

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

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

sch ref

88 **4(v): Regulatory Depreciation**

89  
90  
91  
92  
93  
94  
95  
96

Depreciation - standard  
 Depreciation - no standard life assets  
 Depreciation - modified life assets  
 Depreciation - alternative depreciation in accordance with CPP  
**Total depreciation**

Unallocated RAB *		RAB	
(\$000)	(\$000)	(\$000)	(\$000)
3,103		3,103	
436		198	
-		-	
-		-	
	3,539		3,301

97 **4(vi): Disclosure of Changes to Depreciation Profiles**

98  
99  
100  
101  
102  
103  
104  
105  
106

Asset or assets with changes to depreciation\*


(5000 unless otherwise specified)

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

107 **4(vii): Disclosure by Asset Category**

108  
109  
110  
111  
112  
113  
114  
115  
116  
117  
118  
119  
120  
121  
122

(5000 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
<b>Total opening RAB value</b>	-	-	-	31,194	18,492	22,323	11,028	4,589	2,157	89,783
less Total depreciation	-	-	-	1,070	595	760	428	250	198	3,301
plus Total revaluations	-	-	-	478	284	340	169	70	33	1,374
plus Assets commissioned	-	-	-	295	493	1,571	938	262	90	3,650
less Asset disposals	-	-	-	-	-	175	-	-	-	175
plus Lost and found assets adjustment	-	-	-	-	-	-	-	-	-	-
plus Adjustment resulting from asset allocation	-	-	-	-	-	-	-	-	-	-
plus Asset category transfers	-	-	-	-	-	-	-	-	-	-
<b>Total closing RAB value</b>	-	-	-	30,897	18,674	23,299	11,707	4,671	2,082	91,331
<b>Asset Life</b>										
Weighted average remaining asset life	-	-	-	31.7	28.5	26.0	21.1	19.9	42.6	(years)
Weighted average expected total asset life	-	-	-	59.9	45.1	44.1	37.4	40.4	53.2	(years)

Company Name **Waipa Networks Limited**  
 For Year Ended **31 March 2014**

**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

		(\$000)
7	<b>5a(i): Regulatory Tax Allowance</b>	
8	<b>Regulatory profit / (loss) before tax</b>	7,975
9		
10	<i>plus</i> Income not included in regulatory profit / (loss) before tax but taxable	7 *
11	Expenditure or loss in regulatory profit / (loss) before tax but not deductible	*
12	Amortisation of initial differences in asset values	1,609
13	Amortisation of revaluations	204
14		1,819
15		
16	<i>less</i> Income included in regulatory profit / (loss) before tax but not taxable	1,374 *
17	Discretionary discounts and consumer rebates	2,486
18	Expenditure or loss deductible but not in regulatory profit / (loss) before tax**	*
19	Notional deductible interest	2,154
20		6,014
21		
22	<b>Regulatory taxable income</b>	<b>3,781</b>
23		
24	<i>less</i> Utilised tax losses	-
25	Regulatory net taxable income	<b>3,781</b>
26		
27	Corporate tax rate (%)	28%
28	<b>Regulatory tax allowance</b>	<b>1,059</b>

\* Workings to be provided in Schedule 14  
 \*\* Excluding discretionary discounts and consumer rebates

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

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

		(\$000)
34	<b>5a(iii): Amortisation of Initial Difference in Asset Values</b>	
35		
36	Opening unamortised initial differences in asset values	51,474
37	Amortisation of initial differences in asset values	1,609
38	Adjustment for unamortised initial differences in assets acquired	
39	Adjustment for unamortised initial differences in assets disposed	(163)
40	Closing unamortised initial differences in asset values	50,029
41		
42	Opening weighted average remaining asset life (years)	32

		(\$000)
43	<b>5a(iv): Amortisation of Revaluations</b>	
44		
45	Opening Sum of RAB values without revaluations	84,505
46		
47	Adjusted depreciation	3,097
48	Total depreciation	3,301
49	Amortisation of revaluations	204

Company Name **Waipa Networks Limited**  
 For Year Ended **31 March 2014**

**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

57	<b>5a(v): Reconciliation of Tax Losses</b>		(\$000)
58			
59	Opening tax losses	-	
60	plus Current period tax losses	-	
61	less Utilised tax losses	-	
62	Closing tax losses	-	

63	<b>5a(vi): Calculation of Deferred Tax Balance</b>		(\$000)
64			
65	Opening deferred tax	(1,724)	
66			
67	plus Tax effect of adjusted depreciation	867	
68			
69	less Tax effect of total tax depreciation	806	
70			
71	plus Tax effect of other temporary differences*	(3)	
72			
73	less Tax effect of amortisation of initial differences in asset values	450	
74			
75	plus Deferred tax balance relating to assets acquired in the disclosure year	-	
76			
77	less Deferred tax balance relating to assets disposed in the disclosure year	46	
78			
79	plus Deferred tax cost allocation adjustment	-	
80			
81	Closing deferred tax		(2,162)

83 **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).  
 84  
 85

86	<b>5a(viii): Regulatory Tax Asset Base Roll-Forward</b>		(\$000)
87			
88	Opening sum of regulatory tax asset values	26,471	
89	less Tax depreciation	2,877	
90	plus Regulatory tax asset value of assets commissioned	3,839	
91	less Regulatory tax asset value of asset disposals	12	
92	plus Lost and found assets adjustment	-	
93	plus Other adjustments to the RAB tax value	-	
94	Closing sum of regulatory tax asset values		27,421

Company Name	<b>Waipa Networks Limited</b>
For Year Ended	<b>31 March 2014</b>

**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  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37

**5b(i): Summary—Related Party Transactions**

	(\$000)
Total regulatory income	-
Operational expenditure	2,216
Capital expenditure	6,159
Market value of asset disposals	-
Other related party transactions	-

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

Name of related party	Related party relationship
Waikato Tree Services	Trading Name of Waipa Networks Limited
Waipa Networks - Contracting	Trading Department of Waipa Networks Limited

*\* include additional rows if needed*

**5b(iii): Related Party Transactions**

Name of related party	Related party transaction type	Description of transaction	Value of transaction (\$000)	Basis for determining value
Waikato Tree Services	Opex	Vegetation management	449	2.3.6(1)
Waipa Networks - Contracting	Opex	Service interruptions and emergencies	650	2.3.6(1)
Waipa Networks - Contracting	Opex	Routine and corrective maintenance	618	2.3.6(1)
Waipa Networks - Contracting	Opex	Asset replacement and renewal	234	2.3.6(1)
Waipa Networks - Contracting	Opex	System operations and network support	265	2.3.6(1)
Waipa Networks - Contracting	Capex	Electrical Contracting Services	6,159	2.3.6(1)

*\* include additional rows if needed*

Company Name **Waipa Networks Limited**  
 For Year Ended **31 March 2014**

**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  
9

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

Issuing party	Issue date	Pricing date	Original tenor (in years)	Coupon rate (%)	Book value at issue date (NZD)	Book value at date of financial statements (NZD)	Term Credit Spread Difference	Cost of executing an interest rate swap	Debt issue cost readjustment
* include additional rows if needed							-	-	-

10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27

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

<b>Gross term credit spread differential</b>								
Total book value of interest bearing debt								
Leverage			44%					
Average opening and closing RAB values								
<b>Attribution Rate (%)</b>								
<b>Term credit spread differential allowance</b>								

Company Name **Waipa Networks Limited**  
 For Year Ended **31 March 2014**

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

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

sch ref

**5d(i): Operating Cost Allocations**

		Value allocated (\$000s)			OVABAA
		Arm's length deduction	Electricity distribution services	Non-electricity distribution services	allocation increase (\$000s)
				Total	
10	<b>Service interruptions and emergencies</b>				
11	Directly attributable		650		
12	Not directly attributable	-	-	-	-
13	<b>Total attributable to regulated service</b>		650		
14	<b>Vegetation management</b>				
15	Directly attributable		449		
16	Not directly attributable	-	-	-	-
17	<b>Total attributable to regulated service</b>		449		
18	<b>Routine and corrective maintenance and inspection</b>				
19	Directly attributable		618		
20	Not directly attributable	-	-	-	-
21	<b>Total attributable to regulated service</b>		618		
22	<b>Asset replacement and renewal</b>				
23	Directly attributable		234		
24	Not directly attributable	-	-	-	-
25	<b>Total attributable to regulated service</b>		234		
26	<b>System operations and network support</b>				
27	Directly attributable		823		
28	Not directly attributable	-	78	162	240
29	<b>Total attributable to regulated service</b>		901		
30	<b>Business support</b>				
31	Directly attributable		1,369		
32	Not directly attributable	-	327	186	513
33	<b>Total attributable to regulated service</b>		1,696		
35	<b>Operating costs directly attributable</b>		4,143		
36	<b>Operating costs not directly attributable</b>	-	405	348	753
37	<b>Operating expenditure</b>		4,548		

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

46	<b>Pass through and recoverable costs</b>	
47	<b>Pass through costs</b>	
48	Directly attributable	133
49	Not directly attributable	-
50	<b>Total attributable to regulated service</b>	133
51	<b>Recoverable costs</b>	
52	Directly attributable	7,423
53	Not directly attributable	-
54	<b>Total attributable to regulated service</b>	7,423

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

		(\$000)	
		CY-1	Current Year (CY)
		31 Mar 13	31 Mar 14
58	<b>Change in cost allocation 1</b>		
59	Cost category		
60	Original allocator or line items	Original allocation	
61	New allocator or line items	New allocation	
62		Difference	-
63	Rationale for change		
66	<b>Change in cost allocation 2</b>		
67	Cost category		
68	Original allocator or line items	Original allocation	
69	New allocator or line items	New allocation	
70		Difference	-
71	Rationale for change		
74	<b>Change in cost allocation 3</b>		
75	Cost category		
76	Original allocator or line items	Original allocation	
77	New allocator or line items	New allocation	
78		Difference	-
79	Rationale for change		

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

† include additional rows if needed

Company Name	<b>Waipa Networks Limited</b>
For Year Ended	<b>31 March 2014</b>

**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

**7 5e(i): Regulated Service Asset Values**

	Value allocated (\$000s) Electricity distribution services
<b>Subtransmission lines</b>	
Directly attributable	0
Not directly attributable	0
<b>Total attributable to regulated service</b>	-
<b>Subtransmission cables</b>	
Directly attributable	0
Not directly attributable	0
<b>Total attributable to regulated service</b>	-
<b>Zone substations</b>	
Directly attributable	0
Not directly attributable	0
<b>Total attributable to regulated service</b>	-
<b>Distribution and LV lines</b>	
Directly attributable	30,897
Not directly attributable	
<b>Total attributable to regulated service</b>	30,897
<b>Distribution and LV cables</b>	
Directly attributable	18,674
Not directly attributable	
<b>Total attributable to regulated service</b>	18,674
<b>Distribution substations and transformers</b>	
Directly attributable	23,299
Not directly attributable	
<b>Total attributable to regulated service</b>	23,299
<b>Distribution switchgear</b>	
Directly attributable	11,707
Not directly attributable	
<b>Total attributable to regulated service</b>	11,707
<b>Other network assets</b>	
Directly attributable	4,671
Not directly attributable	
<b>Total attributable to regulated service</b>	4,671
<b>Non-network assets</b>	
Directly attributable	481
Not directly attributable	1,601
<b>Total attributable to regulated service</b>	2,082
<b>Regulated service asset value directly attributable</b>	<b>89,730</b>
<b>Regulated service asset value not directly attributable</b>	<b>1,601</b>
<b>Total closing RAB value</b>	<b>91,331</b>

**57 5e(ii): Changes in Asset Allocations\* †**

			(\$000)	
			CY-1	Current Year (CY)
			31 Mar 13	31 Mar 14
<b>Change in asset value allocation 1</b>				
Asset category		Original allocation		
Original allocator or line items		New allocation		
New allocator or line items		Difference	-	-
Rationale for change				
<b>Change in asset value allocation 2</b>				
Asset category		Original allocation		
Original allocator or line items		New allocation		
New allocator or line items		Difference	-	-
Rationale for change				
<b>Change in asset value allocation 3</b>				
Asset category		Original allocation		
Original allocator or line items		New allocation		
New allocator or line items		Difference	-	-
Rationale for change				

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

† include additional rows if needed



Company Name	<b>Waipa Networks Limited</b>
For Year Ended	<b>31 March 2014</b>

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

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

sch ref

7	<b>6a(i): Expenditure on Assets</b>		<b>(\$000)</b>	<b>(\$000)</b>
8	Consumer connection			2,662
9	System growth			54
10	Asset replacement and renewal			473
11	Asset relocations			1,795
12	Reliability, safety and environment:			
13	Quality of supply	2,190		
14	Legislative and regulatory	-		
15	Other reliability, safety and environment	533		
16	<b>Total reliability, safety and environment</b>			<b>2,723</b>
17	<b>Expenditure on network assets</b>			<b>7,707</b>
18	Non-network assets			90
19				
20	<b>Expenditure on assets</b>			<b>7,797</b>
21	plus Cost of financing			
22	less Value of capital contributions			2,463
23	plus Value of vested assets			
24				
25	<b>Capital expenditure</b>			<b>5,334</b>
26	<b>6a(ii): Subcomponents of Expenditure on Assets (where known)</b>			<b>(\$000)</b>
27	Energy efficiency and demand side management, reduction of energy losses			-
28	Overhead to underground conversion			222
29	Research and development			-
30	<b>6a(iii): Consumer Connection</b>		<b>(\$000)</b>	<b>(\$000)</b>
31	<i>Consumer types defined by EDB*</i>			
32	Residential		2,168	
33	Commercial		494	
34				
35				
36				
37	<i>* include additional rows if needed</i>			
38	<b>Consumer connection expenditure</b>			<b>2,662</b>
39				
40	less Capital contributions funding consumer connection expenditure	1,150		
41	<b>Consumer connection less capital contributions</b>			<b>1,511</b>
42	<b>6a(iv): System Growth and Asset Replacement and Renewal</b>		<b>System Growth</b>	<b>Asset Replacement and Renewal</b>
43			<b>(\$000)</b>	<b>(\$000)</b>
44				
45	Subtransmission	-	-	-
46	Zone substations	-	-	-
47	Distribution and LV lines	45		61
48	Distribution and LV cables	3		49
49	Distribution substations and transformers	-		-
50	Distribution switchgear	5		116
51	Other network assets	-		247
52	<b>System growth and asset replacement and renewal expenditure</b>	<b>54</b>		<b>473</b>
53	less Capital contributions funding system growth and asset replacement and renewal	-		-
54	<b>System growth and asset replacement and renewal less capital contributions</b>	<b>54</b>		<b>473</b>
55				
56	<b>6a(v): Asset Relocations</b>		<b>(\$000)</b>	<b>(\$000)</b>
57	<i>Project or programme*</i>			
58	Waikato Expressway		1,530	
59	Cambridge Switchboard Replacement		196	
60				
61				
62				
63	<i>* include additional rows if needed</i>			
64	All other asset relocations projects or programmes		69	
65	<b>Asset relocations expenditure</b>			<b>1,795</b>
66	less Capital contributions funding asset relocations	1,276		
67	<b>Asset relocations less capital contributions</b>			<b>519</b>

Company Name	<b>Waipa Networks Limited</b>
For Year Ended	<b>31 March 2014</b>

**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

75	<b>6a(vi): Quality of Supply</b>		
76	Project or programme*	(\$000)	(\$000)
77	Install 11kV Dropout fuses spurs & services	108	
78	Replace Disconnectors	125	
79	Install remote control switches	359	
80	Install TMU-HTI 110kV line	1,548	
81			
82	* include additional rows if needed		
83	All other quality of supply projects or programmes	51	
84	<b>Quality of supply expenditure</b>		<b>2,190</b>
85	less Capital contributions funding quality of supply	12	
86	<b>Quality of supply less capital contributions</b>		<b>2,178</b>
87	<b>6a(vii): Legislative and Regulatory</b>		
88	Project or programme*	(\$000)	(\$000)
89			
90			
91			
92			
93			
94	* include additional rows if needed		
95	All other legislative and regulatory projects or programmes	-	
96	<b>Legislative and regulatory expenditure</b>		<b>-</b>
97	less Capital contributions funding legislative and regulatory	-	
98	<b>Legislative and regulatory less capital contributions</b>		<b>-</b>
99	<b>6a(viii): Other Reliability, Safety and Environment</b>		
100	Project or programme*	(\$000)	(\$000)
101	Replace two pole sub structures	367	
102	Replace Ring Main Units	113	
103			
104			
105			
106	* include additional rows if needed		
107	All other reliability, safety and environment projects or programmes	53	
108	<b>Other reliability, safety and environment expenditure</b>		<b>533</b>
109	less Capital contributions funding other reliability, safety and environment	24	
110	<b>Other reliability, safety and environment less capital contributions</b>		<b>509</b>
111			
112	<b>6a(ix): Non-Network Assets</b>		
113	<b>Routine expenditure</b>		
114	Project or programme*	(\$000)	(\$000)
115			
116			
117			
118			
119			
120	* include additional rows if needed		
121	All other routine expenditure projects or programmes	90	
122	<b>Routine expenditure</b>		<b>90</b>
123	<b>Atypical expenditure</b>		
124	Project or programme*	(\$000)	(\$000)
125			
126			
127			
128			
129			
130	* include additional rows if needed		
131	All other atypical expenditure projects or programmes	-	
132	<b>Atypical expenditure</b>		<b>-</b>
133			
134	<b>Non-network assets expenditure</b>		<b>90</b>

Company Name **Waipa Networks Limited**  
 For Year Ended **31 March 2014**

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

This schedule requires a breakdown of operating 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 operating expenditure and assets replaced or renewed as part of asset replacement and renewal operational expenditure, and additional information on insurance.

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

sch ref		(\$000)	(\$000)
7	<b>6b(i): Operational Expenditure</b>		
8	Service interruptions and emergencies	650	
9	Vegetation management	449	
10	Routine and corrective maintenance and inspection	618	
11	Asset replacement and renewal	234	
12	<b>Network opex</b>		1,951
13	System operations and network support	901	
14	Business support	1,696	
15	<b>Non-network opex</b>		2,597
16			
17	<b>Operational expenditure</b>		4,548
18	<b>6b(ii): Subcomponents of Operational Expenditure (where known)</b>		
19	Energy efficiency and demand side management, reduction of energy losses		99
20	Direct billing*		N/A
21	Research and development		N/A
22	Insurance		-
23	* Direct billing expenditure by suppliers that directly bill the majority of their consumers		

Company Name	<b>Waipa Networks Limited</b>
For Year Ended	<b>31 March 2014</b>

**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	<b>7(i): Revenue</b>	<b>Target (\$000) <sup>1</sup></b>	<b>Actual (\$000)</b>	<b>% variance</b>
8	Line charge revenue	23,192	22,054	(5%)

9	<b>7(ii): Expenditure on Assets</b>	<b>Forecast (\$000) <sup>2</sup></b>	<b>Actual (\$000)</b>	<b>% variance</b>
10	Consumer connection	1,643	2,662	62%
11	System growth	195	54	(72%)
12	Asset replacement and renewal	877	473	(46%)
13	Asset relocations	988	1,795	82%
14	Reliability, safety and environment:			
15	Quality of supply	3,475	2,190	(37%)
16	Legislative and regulatory	-	-	-
17	Other reliability, safety and environment	557	533	(4%)
18	<b>Total reliability, safety and environment</b>	<b>4,032</b>	<b>2,723</b>	<b>(32%)</b>
19	<b>Expenditure on network assets</b>	<b>7,735</b>	<b>7,707</b>	<b>(0%)</b>
20	Non-network capex	882	90	(90%)
21	<b>Expenditure on assets</b>	<b>8,617</b>	<b>7,797</b>	<b>(10%)</b>

22	<b>7(iii): Operational Expenditure</b>			
23	Service interruptions and emergencies	572	650	14%
24	Vegetation management	501	449	(10%)
25	Routine and corrective maintenance and inspection	711	618	(13%)
26	Asset replacement and renewal	319	234	(27%)
27	<b>Network opex</b>	<b>2,103</b>	<b>1,951</b>	<b>(7%)</b>
28	System operations and network support	1,107	901	(19%)
29	Business support	1,658	1,696	2%
30	<b>Non-network opex</b>	<b>2,765</b>	<b>2,597</b>	<b>(6%)</b>
31	<b>Operational expenditure</b>	<b>4,868</b>	<b>4,548</b>	<b>(7%)</b>

32	<b>7(iv): Subcomponents of Expenditure on Assets (where known)</b>			
33	Energy efficiency and demand side management, reduction of energy losses	-	-	-
34	Overhead to underground conversion	195	222	14%
35	Research and development	-	-	-

37	<b>7(v): Subcomponents of Operational Expenditure (where known)</b>			
38	Energy efficiency and demand side management, reduction of energy losses	-	99	-
39	Direct billing	-	N/A	-
40	Research and development	-	N/A	-
41	Insurance	-	-	-

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

2 From the nominal dollar expenditure forecast and disclosed in the second to last AMP as the year CY+1 forecast

Company Name	<b>Waipa Networks Limited</b>
For Year Ended	<b>31 March 2014</b>
Network / Sub-Network Name	<b>Waipa Networks</b>

**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

sch ref

8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

**8(i): Billed Quantities by Price Component**

Consumer group name or price category code	Consumer type or residential, commercial etc.)	Standard or non-standard consumer group (specify)	Average no. of ICPs in disclosure year	delivered to ICPs in disclosure year (MWh)	Unit charging basis (eg, days, kW of demand, kVA of capacity, etc.)	Billed quantities by price component												
						Price component	Combined kWh	Uncontrolled kWh	Controlled kWh	Controlled 8 kWh	Day kWh	Night kWh	StreetLights kWh	Fixed Daily Charge Days	Capacity charges kVA of capacity	Monthly Charge	Transformer	
Domestic	Residential	Standard	18,842	144,144		43,199,762	77,393,764	22,584,330	683,783	170,246	111,847							
Non Domestic	Commercial	Standard	5,241	107,950			85,643,115	14,001,512	875,077	3,938,771	1,655,256	1,835,855						
Unmetered	Commercial	Standard	89	-														
400V Capacity Contract	Commercial	Standard	25	20,576			20,378,223			133,267	64,241							
11KV	Commercial	Standard	4	14,563						10,854,935	3,708,296							
11KV	Commercial	Non-standard	2	60,111			60,110,904											
<i>Add extra rows for additional consumer groups or price category codes as necessary</i>																		
Standard consumer totals			24,201	287,233		43,199,762	183,415,102	36,585,842	1,558,860	15,097,219	5,539,640	1,835,855	-	-	-	-	-	-
Non-standard consumer totals			2	60,111		-	60,110,904	-	-	-	-	-	-	-	-	-	-	-
Total for all consumers			24,203	347,344		43,199,762	243,526,006	36,585,842	1,558,860	15,097,219	5,539,640	1,835,855	-	-	-	-	-	-

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 residential, commercial etc.)	Standard or non-standard consumer group (specify)	Total line charge revenue in disclosure year	Notional revenue foregone (if applicable)	Total distribution line charge revenue	Total transmission line charge revenue (if available)	Rate (eg, \$/day, \$/kWh, etc.)	Line charge revenues (\$000) by price component										
								Price component	Combined	Uncontrolled	Controlled	Controlled 8	Day	Night	StreetLights	Fixed Daily Charge	Capacity charges	Monthly Charge
Domestic	Residential	Standard	\$10,621		\$10,621			\$3,076	\$6,129	\$357	\$7	\$19	\$1		\$1,032			
Non Domestic	Commercial	Standard	\$8,175		\$8,175				\$6,770	\$221	\$9	\$448	\$16	\$138	\$573			
Unmetered	Commercial	Standard	\$33		\$33									\$33				
400V Capacity Contract	Commercial	Standard	\$1,374		\$1,374				\$976			\$9	\$1		\$388			
11KV	Commercial	Standard	\$856		\$856						\$495	\$55			\$270		\$2	\$34
11KV	Commercial	Non-standard	\$995		\$995												\$995	
<i>Add extra rows for additional consumer groups or price category codes as necessary</i>																		
Standard consumer totals			\$21,059	-	\$21,059	-		\$3,076	\$13,875	\$578	\$16	\$971	\$73	\$138	\$1,638	\$658	\$2	\$34
Non-standard consumer totals			\$995	-	\$995	-		-	-	-	-	-	-	-	-	-	\$995	-
Total for all consumers			\$22,054	-	\$22,054	-		\$3,076	\$13,875	\$578	\$16	\$971	\$73	\$138	\$1,638	\$658	\$997	\$34

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

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

Number of directly billed ICPs at year end

Check  OK

Company Name	<b>Waipa Networks Limited</b>
For Year Ended	<b>31 March 2014</b>
Network / Sub-network Name	<b>Waipa Networks</b>

**SCHEDULE 9a: ASSET REGISTER**

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

sch ref

sch ref	Voltage	Asset category	Asset class	Units	Items at start of	Items at end of	Net change	Data accuracy
					year (quantity)	year (quantity)		1-4
8	All	Overhead Line	Concrete poles / steel structure	No.	20,210	20,283	73	4
9	All	Overhead Line	Wood poles	No.	1,803	1,757	(46)	4
10	All	Overhead Line	Other pole types	No.	-	-	-	N/A
11	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	-	-	-	N/A
12	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	-	-	-	N/A
13	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	-	-	-	N/A
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	-	-	-	N/A
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	-	-	-	N/A
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	-	-	-	N/A
17	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	-	-	-	N/A
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	-	-	-	N/A
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	-	-	-	N/A
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	-	-	-	N/A
21	HV	Subtransmission Cable	Subtransmission submarine cable	km	-	-	-	N/A
22	HV	Zone substation Buildings	Zone substations up to 66kV	No.	-	-	-	N/A
23	HV	Zone substation Buildings	Zone substations 110kV+	No.	-	-	-	N/A
24	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	-	-	-	N/A
25	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	-	-	-	N/A
26	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	-	-	-	N/A
27	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	-	-	-	N/A
28	HV	Zone substation switchgear	33kV RMU	No.	-	-	-	N/A
29	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	-	-	-	N/A
30	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	-	-	-	N/A
31	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	-	-	-	N/A
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	-	-	-	N/A
33	HV	Zone Substation Transformer	Zone Substation Transformers	No.	-	-	-	N/A
34	HV	Distribution Line	Distribution OH Open Wire Conductor	km	1,225	1,229	3	4
35	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	-	-	-	N/A
36	HV	Distribution Line	SWER conductor	km	-	-	-	N/A
37	HV	Distribution Cable	Distribution UG XLPE or PVC	km	105	115	11	4
38	HV	Distribution Cable	Distribution UG PILC	km	1	1	(0)	4
39	HV	Distribution Cable	Distribution Submarine Cable	km	-	-	-	N/A
40	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	90	106	16	4
41	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	-	-	-	N/A
42	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	4,945	4,918	(27)	4
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	-	-	-	N/A
44	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	68	76	8	4
45	HV	Distribution Transformer	Pole Mounted Transformer	No.	2,713	2,714	1	4
46	HV	Distribution Transformer	Ground Mounted Transformer	No.	605	657	52	4
47	HV	Distribution Transformer	Voltage regulators	No.	46	47	1	4
48	HV	Distribution Substations	Ground Mounted Substation Housing	No.	-	-	-	N/A
49	LV	LV Line	LV OH Conductor	km	499	500	0	4
50	LV	LV Cable	LV UG Cable	km	241	254	13	4
51	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	127	130	4	4
52	LV	Connections	OH/UG consumer service connections	No.	23,969	24,388	419	4
53	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	-	-	-	N/A
54	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	1	1	-	4
55	All	Capacitor Banks	Capacitors including controls	No.	-	-	-	N/A
56	All	Load Control	Centralised plant	Lot	3	3	-	4
57	All	Load Control	Relays	No.	17,560	17,759	199	3
58	All	Civils	Cable Tunnels	km	-	-	-	N/A



Company Name

Waipa Networks Limited

For Year Ended

31 March 2014

Network / Sub-network Name

Waipa Networks

**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

		Overhead (km)	Underground (km)	Total circuit length (km)
10	<b>Circuit length by operating voltage (at year end)</b>			
11	> 66kV	-	-	-
12	50kV & 66kV	-	-	-
13	33kV	-	-	-
14	SWER (all SWER voltages)	-	-	-
15	22kV (other than SWER)	-	-	-
16	6.6kV to 11kV (inclusive—other than SWER)	1,229	116	1,345
17	Low voltage (< 1kV)	500	254	754
18	<b>Total circuit length (for supply)</b>	<b>1,729</b>	<b>371</b>	<b>2,100</b>
19				
20	Dedicated street lighting circuit length (km)	68	63	130
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)			
22				

		(% of total)	
		Circuit length (km)	overhead length
23	<b>Overhead circuit length by terrain (at year end)</b>		
24	Urban	216	12%
25	Rural	1,433	83%
26	Remote only	-	-
27	Rugged only	80	5%
28	Remote and rugged	-	-
29	Unallocated overhead lines	-	-
30	<b>Total overhead length</b>	<b>1,729</b>	<b>100%</b>
31			

		(% of total circuit length)	
		Circuit length (km)	length
32			
33	Length of circuit within 10km of coastline or geothermal areas (where known)	160	8%

		(% of total)	
		Circuit length (km)	overhead length
34			
35	Overhead circuit requiring vegetation management	1,229	71%



Company Name **Waipa Networks Limited**  
 For Year Ended **31 March 2014**

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

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

*sch ref*

	Location *	Number of ICPs served	Line charge revenue (\$000)
8			
9	N/A		
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			

\* Extend embedded distribution networks table as necessary to disclose each embedded network owned by the EDB which is embedded in another EDB’s network or in another embedded network

Company Name	<b>Waipa Networks Limited</b>
For Year Ended	<b>31 March 2014</b>
Network / Sub-network Name	<b>Waipa Networks</b>

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

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

sch ref

8	<b>9e(i): Consumer Connections</b>		
9	Number of ICPs connected in year by consumer type		
10			<b>Number of connections (ICPs)</b>
11	Consumer types defined by EDB*		
12	Domestic		417
13	Non Domestic		99
14	Unmetered		6
15	11kV		-
16	* include additional rows if needed		
17	<b>Connections total</b>		<b>522</b>
18			
19	<b>Distributed generation</b>		
20	Number of connections made in year	17	connections
21	Capacity of distributed generation installed in year	-	MVA
22	<b>9e(ii): System Demand</b>		
23			
24			<b>Demand at time of maximum coincident demand (MW)</b>
25	<b>Maximum coincident system demand</b>		
26	GXP demand	68	
27	plus Distributed generation output at HV and above	-	
28	<b>Maximum coincident system demand</b>	<b>68</b>	
29	less Net transfers to (from) other EDBs at HV and above		
30	<b>Demand on system for supply to consumers' connection points</b>	<b>68</b>	
31	<b>Electricity volumes carried</b>		<b>Energy (GWh) Energy (GWh)</b>
32	Electricity supplied from GXPs	370	
33	less Electricity exports to GXPs	-	
34	plus Electricity supplied from distributed generation	1	
35	less Net electricity supplied to (from) other EDBs	1	
36	<b>Electricity entering system for supply to consumers' connection points</b>	<b>370</b>	
37	less Total energy delivered to ICPs	347	
38	<b>Electricity losses (loss ratio)</b>	<b>23</b>	<b>6.1%</b>
39			
40	<b>Load factor</b>	<b>0.62</b>	
41	<b>9e(iii): Transformer Capacity</b>		
42			<b>(MVA)</b>
43	Distribution transformer capacity (EDB owned)	225	
44	Distribution transformer capacity (Non-EDB owned)	49	
45	<b>Total distribution transformer capacity</b>	<b>273</b>	
46			
47	<b>Zone substation transformer capacity</b>	N/A	

Company Name	<b>Waipa Networks Limited</b>
For Year Ended	<b>31 March 2014</b>
Network / Sub-network Name	<b>Waipa Networks</b>

**SCHEDULE 10: REPORT ON NETWORK RELIABILITY**

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

sch ref

**10(i): Interruptions**

**Interruptions by class**

Number of interruptions	
Class A (planned interruptions by Transpower)	-
Class B (planned interruptions on the network)	78
Class C (unplanned interruptions on the network)	129
Class D (unplanned interruptions by Transpower)	2
Class E (unplanned interruptions of EDB owned generation)	-
Class F (unplanned interruptions of generation owned by others)	-
Class G (unplanned interruptions caused by another disclosing entity)	-
Class H (planned interruptions caused by another disclosing entity)	-
Class I (interruptions caused by parties not included above)	6
<b>Total</b>	<b>215</b>

**Interruption restoration**

Class C interruptions restored within	≤3Hrs	>3hrs
	95	34

**SAIFI and SAIDI by class**

	SAIFI	SAIDI
Class A (planned interruptions by Transpower)	-	-
Class B (planned interruptions on the network)	0.14	36.3
Class C (unplanned interruptions on the network)	1.73	87.1
Class D (unplanned interruptions by Transpower)	0.66	369.3
Class E (unplanned interruptions of EDB owned generation)	-	-
Class F (unplanned interruptions of generation owned by others)	-	-
Class G (unplanned interruptions caused by another disclosing entity)	-	-
Class H (planned interruptions caused by another disclosing entity)	-	-
Class I (interruptions caused by parties not included above)	0.05	1.8
<b>Total</b>	<b>2.59</b>	<b>494.4</b>

**Normalised SAIFI and SAIDI**

Classes B & C (interruptions on the network)	Normalised SAIFI	Normalised SAIDI
	1.87	123.40

**Quality path normalised reliability limit**

SAIFI and SAIDI limits applicable to disclosure year*	SAIFI reliability limit	SAIDI reliability limit
* not applicable to exempt EDBs	N/A	N/A

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

**Cause**

	SAIFI	SAIDI
Lightning	0.29	5.7
Vegetation	0.33	20.6
Adverse weather	0.04	0.5
Adverse environment	-	-
Third party interference	0.16	12.2
Wildlife	0.00	0.3
Human error	0.14	2.3
Defective equipment	0.38	27.8
Cause unknown	0.39	17.7

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

**Main equipment involved**

	SAIFI	SAIDI
Subtransmission lines	-	-
Subtransmission cables	-	-
Subtransmission other	-	-
Distribution lines (excluding LV)	0.10	26.0
Distribution cables (excluding LV)	0.00	0.3
Distribution other (excluding LV)	0.04	10.1

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

**Main equipment involved**

	SAIFI	SAIDI
Subtransmission lines	-	-
Subtransmission cables	-	-
Subtransmission other	-	-
Distribution lines (excluding LV)	1.39	65.6
Distribution cables (excluding LV)	0.00	0.1
Distribution other (excluding LV)	0.34	21.4

**10(v): Fault Rate**

**Main equipment involved**

	Number of Faults	Circuit length (km)	Fault rate (faults per 100km)
Subtransmission lines	-	-	-
Subtransmission cables	-	-	-
Subtransmission other	-	-	-
Distribution lines (excluding LV)	112	1,229	9.11
Distribution cables (excluding LV)	2	116	1.72
Distribution other (excluding LV)	15	-	-
<b>Total</b>	<b>129</b>		