

**REPORT MP1: NETWORK INFORMATION**

(Separate report required for each Non-Contiguous Network)

ref		Electricity Distribution Business:	Waipa Networks	
6			For Year Ended: 2012	
7	Network Name:	Total Business (enter "Total Business" or name of network)		
	Disclosure:	Annual Disclosure - Requirement 6(1)		
9	<b>Circuit Length by Operating Line Voltage (at year end)</b>			
10		Overhead (km)	Underground (km)	Total (km)
11				
12	> 66kV			-
13	50kV & 66kV			-
14	33kV			-
15	SWER (all SWER voltages)			-
16	22kV (other than SWER)			-
17	6.6kV to 11kV (inclusive - other than SWER)	1,226	111	1,337
18	Low Voltage (< 1kV)	509	241	750
19	<b>Total circuit length (for Supply)</b>	<b>1,735</b>	<b>352</b>	<b>2,087</b>
20				to MP2
21	<b>Dedicated Street Lighting Circuit Length</b>	68	59	126
22				
23	<b>Overhead Circuit Length by Terrain (at year end)</b>			
24		(km)	(%)	
25	Urban (only)	216	12%	
26	Rural (only)	1,438	83%	
27	Remote (only)		0%	
28	Rugged (only)		0%	
29	Rural & rugged (only)	81	5%	
30	Remote & rugged (only)		0%	
31	Unallocated overhead lines		0%	
32	<b>Total overhead length</b>	<b>1,735</b>	<b>100%</b>	
33				
34	<b>Transformer capacity (at year end)</b>			<b>Previous Year</b>
35	Distribution Transformer Capacity (EDB Owned)	216	MVA	209
36	Distribution Transformer Capacity (Non-EDB Owned, Estimated)	49	MVA	49
37	<b>Total Distribution Transformer Capacity</b>	264	MVA (to MP2)	258
38				
39	Zone Substation Transformer Capacity	-	MVA	
40				
41	<b>System Fixed Assets age (at year end)</b>			
42	Average Age of System Fixed Assets	21	Years	
43	Average Expected Total Life of System Fixed Assets	49	Years	
44	Average Age as a Proportion of Average Expected Total Life	43%	%	
45				
46	Estimated Proportion of Assets (by Replacement Cost) within 10 years of Total Life	14%	%	
47				
48				
49				
50				
51	<b>Electricity demand</b>			
52		Maximum coincident system demand (MW)	Non-coincident Sum of maximum demands (MW)	
53	<b>GXP Demand</b>	70	70	
54	plus Embedded Generation Output at HV and Above	-		
55	<b>Maximum System Demand</b>	70		
56	less Net Transfers to (from) Other EDBs at HV and Above	1		
57	<b>Demand on system for supply to customers' Connection Points</b>	69		
58	less Subtransmission Customers' Connection Point Demand	-		
59	<b>Maximum Distribution Transformer Demand</b>	69		to MP2
60				
61	GXP Demand not Supplied at Subtransmission Level	-		
62	Embedded Generation Output - Connected to Subtransmission System	-	-	
63	Net Transfers to (from) Other EDBs at Subtransmission Level Only	-	-	
64				
65	<b>Estimated Controlled Load Shed at Time of Maximum System Demand (MW)</b>	11		
66				
67	<b>Five-Year System Maximum Demand Growth Forecast</b>	2.0	% p.a.	
68				
69	<b>Electricity volumes carried</b>			
70		(GWh)		
71	Electricity Supplied from GXPs	370		
72	less Electricity Exports to GXPs	-		
73	plus Electricity Supplied from Embedded Generators	2		
74	less Net Electricity Supplied to (from) Other EDBs	2		
75	<b>Electricity entering system for supply to customers' Connection Points</b>	370		
76	less Electricity Supplied to Customers' Connection Points	347		to MP2
77	<b>Electricity Losses (loss ratio)</b>	23	6.3%	
78				
79	Electricity Supplied to Customers' Connection Points	347		
80	less Electricity Supplied to Largest 5 Connection Points	75		
81	<b>Electricity supplied other than to Largest 5 Connection Points</b>	272	78%	

82	<b>Load Factor</b>	61%	%
83			
84	<b>Number of Connection Points (at year end)</b>	23,759	ICPs to MP2
85			
86	<b>Intensity of service requirements</b>		
87	Demand Density (Maximum Distribution Transformer Demand / Total circuit length)	33	kW/km
88	Volume Density (Electricity Supplied to Customers' Connection Points / Total circuit length)	166	MWh/km
89	Connection Point Density (ICPs / Total circuit length)	11	ICP/km
90	Energy Intensity (Electricity Supplied to Customers' Connection Points / ICP)	14,601	kWh/ICP