

**REPORT MP1: NETWORK INFORMATION**

(Separate report required for each Non-Contiguous Network)

ref	Electricity Distribution Business:	Waipa Networks
6		
7	Network Name:	Total Business (enter "Total Business" or name of network)
	Disclosure:	Annual Disclosure - Requirement 6(1)
9		For Year Ended: 2010
10	<b>Circuit Length by Operating Line Voltage (at year end)</b>	
11		Overhead (km)    Underground (km)    Total (km)
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)	1,224    106    1,330
18	Low Voltage (< 1kV)	509    234    743
19	<b>Total circuit length (for Supply)</b>	<b>1,732    340    2,072</b> <span style="float:right">to MP2</span>
20		
21	<b>Dedicated Street Lighting Circuit Length</b>	68    55    124
22		
23	<b>Overhead Circuit Length by Terrain (at year end)</b>	(km)    (%)
24	Urban (only)	218    13%
25	Rural (only)	1,433    83%
26	Remote (only)	-    0%
27	Rugged (only)	-    0%
28	Rural & rugged (only)	81    5%
29	Remote & rugged (only)	-    0%
30	Unallocated overhead lines	-    0%
31	<b>Total overhead length</b>	<b>1,732    100%</b>
32		
33		
34	<b>Transformer capacity (at year end)</b>	
35	Distribution Transformer Capacity (EDB Owned)	206 MVA
36	Distribution Transformer Capacity (Non-EDB Owned, Estimated)	49 MVA
37	<b>Total Distribution Transformer Capacity</b>	<b>255 MVA (to MP2)</b> <span style="float:right">Previous Year 200</span>
38		
39	Zone Substation Transformer Capacity	- MVA <span style="float:right">49</span>
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	42% %
45		
46		
47		
48	Estimated Proportion of Assets (by Replacement Cost) within 10 years of Total Life	14% %
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>	67    76
54	plus Embedded Generation Output at HV and Above	0
55	<b>Maximum System Demand</b>	67
56	less Net Transfers to (from) Other EDBs at HV and Above	0
57	<b>Demand on system for supply to customers' Connection Points</b>	67
58	less Subtransmission Customers' Connection Point Demand	-
59	<b>Maximum Distribution Transformer Demand</b>	<b>67</b> <span style="float:right">to MP2</span>
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>	(GWh)
70	Electricity Supplied from GXPs	361
71	less Electricity Exports to GXPs	-
72	plus Electricity Supplied from Embedded Generators	1
73	less Net Electricity Supplied to (from) Other EDBs	2
74	<b>Electricity entering system for supply to customers' Connection Points</b>	361
75	less Electricity Supplied to Customers' Connection Points	338
76	<b>Electricity Losses (loss ratio)</b>	<b>23    6.4% %</b> <span style="float:right">to MP2</span>
77		
78	Electricity Supplied to Customers' Connection Points	338
79	less Electricity Supplied to Largest 5 Connection Points	73
80	<b>Electricity supplied other than to Largest 5 Connection Points</b>	<b>265    78% %</b>
81		
82	<b>Load Factor</b>	62% %
83		
84	<b>Number of Connection Points (at year end)</b>	23,176 ICPs <span style="float:right">to MP2</span>
85		
86	<b>Intensity of service requirements</b>	
87	Demand Density (Maximum Distribution Transformer Demand / Total circuit length)	32 kW/km
88	Volume Density (Electricity Supplied to Customers' Connection Points / Total circuit length)	163 MWh/km
89	Connection Point Density (ICPs / Total circuit length)	11 ICP/km
90	Energy Intensity (Electricity Supplied to Customers' Connection Points / ICP)	14,592 kWh/ICP