

**REPORT MP1: NETWORK INFORMATION**

(Separate report required for each Non-Contiguous Network)

ref	Electricity Distribution Business:	Waipa Networks
6		
7	Network Name:	<b>Total Business</b> (enter "Total Business" or name of network)
8	Disclosure:	Annual Disclosure - Requirement 6(1)
9		
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)	1,226    99    1,325
18	Low Voltage (< 1kV)	509    223    732
19	<b>Total circuit length (for Supply)</b>	<b>1,735    323    2,058</b> <i>to MP2</i>
20		
21	<b>Dedicated Street Lighting Circuit Length</b>	73    53    125
22		
23	<b>Overhead Circuit Length by Terrain (at year end)</b>	(km)    (%)
24	Urban (only)	220    13%
25	Rural (only)	1,434    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>1,735    100%</b>
32		
33		
34	<b>Transformer capacity (at year end)</b>	
35	Distribution Transformer Capacity (EDB Owned)	200 MVA <i>Previous Year</i> 195
36	Distribution Transformer Capacity (Non-EDB Owned, Estimated)	49 MVA    50
37	<b>Total Distribution Transformer Capacity</b>	<b>249 MVA (to MP2)</b> <b>244</b>
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	42% %
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	GXP Demand	59    63
54	plus Embedded Generation Output at HV and Above	2
55	<b>Maximum System Demand</b>	<b>61</b>
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>	<b>61</b>
58	less Subtransmission Customers' Connection Point Demand	-
59	<b>Maximum Distribution Transformer Demand</b>	<b>61</b> <i>to MP2</i>
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	339
71	less Electricity Exports to GXPs	-
72	plus Electricity Supplied from Embedded Generators	3
73	less Net Electricity Supplied to (from) Other EDBs	1
74	<b>Electricity entering system for supply to customers' Connection Points</b>	<b>340</b>
75	less Electricity Supplied to Customers' Connection Points	318
76	<b>Electricity Losses (loss ratio)</b>	<b>22    6.5% %</b> <i>to MP2</i>
77		
78	Electricity Supplied to Customers' Connection Points	318
79	less Electricity Supplied to Largest 5 Connection Points	66
80	<b>Electricity supplied other than to Largest 5 Connection Points</b>	<b>252    79% %</b>
81		
82	<b>Load Factor</b>	64% %
83		
84	<b>Number of Connection Points (at year end)</b>	22,897 ICPs <i>to MP2</i>
85		
86	<b>Intensity of service requirements</b>	
87	Demand Density (Maximum Distribution Transformer Demand / Total circuit length)	30 kW/km
88	Volume Density (Electricity Supplied to Customers' Connection Points / Total circuit length)	155 MWh/km
89	Connection Point Density (ICPs / Total circuit length)	11 ICP/km
90	Energy Intensity (Electricity Supplied to Customers' Connection Points / ICP)	13,909 kWh/ICP