

**REPORT MP1: NETWORK INFORMATION**  
 (Separate report required for each Non-Contiguous Network)

Electricity Distribution Business: **Waipa Networks**  
 For Year Ended: **2011**

ref. 6  
 7 Network Name: **Total Business** (enter "Total Business" or name of network)  
 9 Disclosure: **Annual Disclosure - Requirement 6(1)**

**Circuit Length by Operating Line Voltage (at year end)**

	Overhead (km)	Underground (km)	Total (km)
> 66kV			-
50kV & 66kV			-
33kV			-
SWER (all SWER voltages)			-
22kV (other than SWER)			-
6.6kV to 11kV (inclusive - other than SWER)	1,227	109	1,336
Low Voltage (< 1kV)	509	239	748
<b>Total circuit length (for Supply)</b>	<b>1,735</b>	<b>349</b>	<b>2,084</b>

to MP2

**Dedicated Street Lighting Circuit Length**

	68	59	127
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**Overhead Circuit Length by Terrain (at year end)**

	(km)	(%)
Urban (only)	218	13%
Rural (only)	1,437	83%
Remote (only)		0%
Rugged (only)		0%
Rural & rugged (only)	81	5%
Remote & rugged (only)		0%
Unallocated overhead lines		0%
<b>Total overhead length</b>	<b>1,735</b>	<b>100%</b>

**Transformer capacity (at year end)**

		Previous Year
Distribution Transformer Capacity (EDB Owned)	209 MVA	206
Distribution Transformer Capacity (Non-EDB Owned, Estimated)	49 MVA	49
<b>Total Distribution Transformer Capacity</b>	<b>258 MVA (to MP2)</b>	<b>255</b>
Zone Substation Transformer Capacity	- MVA	-

**System Fixed Assets age (at year end)**

Average Age of System Fixed Assets	21 Years
Average Expected Total Life of System Fixed Assets	49 Years
Average Age as a Proportion of Average Expected Total Life	43% %
Estimated Proportion of Assets (by Replacement Cost) within 10 years of Total Life	14% %

**Electricity demand**

	Maximum coincident system demand (MW)	Non-coincident Sum of maximum demands (MW)
GXP Demand	72	72
plus Embedded Generation Output at HV and Above	- 0	
Maximum System Demand	72	
less Net Transfers to (from) Other EDBs at HV and Above	0	
<b>Demand on system for supply to customers' Connection Points</b>	<b>71</b>	
less Subtransmission Customers' Connection Point Demand	-	
Maximum Distribution Transformer Demand	71	
GXP Demand not Supplied at Subtransmission Level	-	
Embedded Generation Output - Connected to Subtransmission System	-	
Net Transfers to (from) Other EDBs at Subtransmission Level Only	-	

to MP2

**Estimated Controlled Load Shed at Time of Maximum System Demand (MW)**

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**Five-Year System Maximum Demand Growth Forecast**

2.0 % p.a.

**Electricity volumes carried**

	(GWh)	
Electricity Supplied from GXPs	357	
less Electricity Exports to GXPs	-	
plus Electricity Supplied from Embedded Generators	1	
less Net Electricity Supplied to (from) Other EDBs	1	
<b>Electricity entering system for supply to customers' Connection Points</b>	<b>356</b>	
less Electricity Supplied to Customers' Connection Points	334	
<b>Electricity Losses (loss ratio)</b>	<b>22</b>	<b>6.1% %</b>
Electricity Supplied to Customers' Connection Points	334	
less Electricity Supplied to Largest 5 Connection Points	68	
<b>Electricity supplied other than to Largest 5 Connection Points</b>	<b>266</b>	<b>80% %</b>

to MP2

**Load Factor**

57% %

**Number of Connection Points (at year end)**

23,510 ICPs

to MP2

**Intensity of service requirements**

Demand Density (Maximum Distribution Transformer Demand / Total circuit length)	34 kW/km
Volume Density (Electricity Supplied to Customers' Connection Points / Total circuit length)	160 MWh/km
Connection Point Density (ICPs / Total circuit length)	11 ICP/km
Energy Intensity (Electricity Supplied to Customers' Connection Points / ICP)	14,218 kWh/ICP