

*MARLBOROUGH LINES LIMITED*

**THRESHOLD COMPLIANCE STATEMENT**

**AT THE ASSESSMENT DATE, 31 MARCH 2005**

*Pursuant to the Commerce Act (Electricity Distribution Thresholds) Notice  
2004*

20 May 2005

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## 1. Disclosure of Information Required (Clause 7(1)(a)(i) – The Price Path Threshold)

Marlborough Lines Limited does not comply with all requirements of the price path threshold at the assessment date 31 March 2005, as specified in the Commerce Act (Electricity Distribution Thresholds) Notice 2004.

Clause 5 (1) (a) Notional Revenue of a distribution business at each assessment (calculated in accordance with the numerator of the left-hand side of the following expression) is not to exceed the allowable Notional Revenue of the distribution business under the CPI-X price path at that assessment date (calculated in accordance with the denominator of the left-hand side of the following expression):

Test:	$\frac{NR_{2005}}{R_{2005}}$	$\leq 1$
Result:	\$14,930,889/\$13,193,950	$=>1$
Result:	1.1316	$>1$
Result:	Threshold is breached by \$1,736,939	

Clause 5 (1) (b) The notional revenue of a distribution business at any time during an assessment period is not to exceed the greater of the notional revenue of the distribution business at the assessment date on which that assessment period ends and the notional revenue of the distribution business at the previous assessment date under this clause (or, if the previous assessment date is the reference date, under Clause 5 of the initial notice).

Test:	$\frac{RMax_{01/04/04-31/03/05}}{Max(R_{2004}, NR_{2005})}$	$\leq 1$
Result:	\$14,930,889/\$14,930,889	$=1$
Result:	1.000	$=1$
Result:	NR is equal. Threshold is not breached	

Supporting evidence is presented in Appendices A and B.

### Notional Revenue:

In accordance with the Gazette Notice, the following sources of revenue have been included in the calculation of notional revenue:

Revenue from line charges  
Revenue for load control fees paid by Retailers

### **Excluded Services:**

In accordance with the Gazette Notice the following sources of revenue have been excluded from the calculation of notional revenue:

#### ***Connection of New Installations***

This service is fully contestable. There are at least three other organisations offering this service to electricity Retailers on a district wide basis, and others offering the service in specific areas, eg. Marlborough Sounds. Based on ICP's connected during 2004/05, Marlborough Lines market share is approximately 90%, compared to a market share of 100% in 1999/2000.

Marlborough Lines does most of this type of work for the incumbent Retailer, TrustPower, under the terms of a negotiated Retail Services Agreement. TrustPower have advised they use Marlborough Lines contractors primarily for this work in the Marlborough area "because they have in the past provided a reasonable service at a competitive price".

#### ***Disconnection and Reconnection***

Where consumers request disconnection and reconnection for safety reasons, eg. house painting in vicinity of service main entry point, this service is provided free of charge by the network, provided reasonable notice is given.

Disconnections and reconnections at the request of a Retailer because of non-payment of electricity accounts is carried out almost exclusively by Marlborough Lines, for both the incumbent Retailer, TrustPower, and the other major Retailer, Meridian. The conditions and prices for this service to TrustPower is part of the negotiated Retail Services Agreement with them. These two Retailers supply the vast majority of consumers in the Marlborough area.

The main reason for Marlborough Lines doing the majority of this type of work is that other Contractors operating in Marlborough seem uninterested in offering to perform this service, primarily we believe because of the abuse the Contractor regularly receives from effected consumers when disconnecting supply in such instances.

If the price charged for this service were required to be reduced, Marlborough Lines would cease to offer this service to Retailers, who would then have to find alternative contractors willing to carry out this work. Approximately 550 such disconnections were carried out in the 2004/05 financial year.

#### ***Inspection Services***

Inspection services are fully contestable and effective competition from at least three other organisations offering this service is available to consumers. Marlborough Lines' market share has fallen from close to 100% in 1999 to 92% in 2004/05.

### ***Meter and Control Relay Installation***

There are at least eight other organisations offering a service to electricity Retailers for the installation of new and replacement of existing meters and ripple control relays.

It is estimated that Marlborough Lines' market share for this service is approximately 10%. However it is impossible to accurately establish this market share since Retailers do not provide information on the quantum of any meter and relay replacement programmes in effect.

### ***Other Miscellaneous Income***

Miscellaneous revenue such as rent, interest on temporary investments, gain on sale of surplus assets, purchasing discounts from suppliers and sale of scrap are excluded as they are Non Conveyance revenue.

### **Pass Through Costs:**

In accordance with the Gazette Notice, the following components of transmission charges have been included in pass through costs:

- Connection charges
- Interconnection charges
- New investment charges
- Loss Rental Rebates
- Avoided Transmission charges

Local body rates applying to system fixed assets: lines, cables, equipment, substation land and substation buildings, have also been passed through in accordance with the Gazette Notice, as have Electricity Commission levies.

## 2. Disclosure of Information Required (Clause 7(1)(a)(ii) and (iii)– The Quality Threshold)

Marlborough Lines Limited does not comply with all requirements of the quality threshold at the assessment date 31 March 2005, as specified in the Commerce Act (Electricity Distribution Thresholds) Notice 2004.

### Clause 6 (1) (a) Interruption Duration

$$\text{Test: } SAIDI_{2004} \leq \left( \frac{SAIDI_{1999} + SAIDI_{2000} + SAIDI_{2001} + SAIDI_{2002} + SAIDI_{2003}}{5} \right)$$

$$213.2 > 196.3$$

Result: SAIDI breaches the threshold by 16.9 minutes.

Supporting evidence is presented in Appendix C.

### Clause 6 (1) (b) Interruption Frequency

$$\text{Test: } SAIFI_{2004} \leq \left( \frac{SAIFI_{1999} + SAIFI_{2000} + SAIFI_{2001} + SAIFI_{2002} + SAIFI_{2003}}{5} \right)$$

$$1.89 \leq 1.93$$

Result: SAIFI does not breach the threshold.

Supporting evidence is presented in Appendix C.

### **Policies & Procedures**

Marlborough Lines maintains a “connectivity model” from the grid exit point to each individual ICP. ICP’s are “attached” to distribution transformers, and these transformers segmented into line sections between network switching points. In this way, it is possible to establish the number of ICP’s whose supply is interrupted when a network switch is opened.

Marlborough Lines operates a quality management system which meets the requirements of ISO9001:2000. Various ISO policies detail the procedures to be followed in establishing both the number of consumers affected, and the time length of any interruption to supply. Copies of relevant ISO documents are attached in Appendix D.

Marlborough Lines also has 56 phone-in devices located at strategic points on the network. These devices place a telephone call to a central processor every time the power supply state changes, ie from on to off, and off to on. The daily log of calls from

these devices are checked against fault reports to ensure all outages are recorded in the outage data base.

Similarly, telephone or other messages direct from consumers regarding supply outages are recorded and checked against the outage database.

### ***Breach of SAIDI Threshold in 2005***

The SAIDI threshold, based on the average SAIDI over the five years to March 2003, was breached by 16.9 minutes in the year to March 2005.

Some significant storm events during August 2004 contributed to this threshold breach. The weather conditions which caused a number of these faults were extremely bad, to the extent that staff reported they were “unable to stand because of the high winds”. However since no documented evidence of wind speeds at these times are available, it is impossible to say whether these events were “extreme” in terms of the thresholds notice. Unplanned outages during August accounted for 33.6 SAIDI minutes, 28% of the total unplanned SAIDI for the year.

### ***Future Planned Outages***

Marlborough Lines has approximately 500 Larch poles in the rural and remote sections of the network, including sections of the Marlborough Sounds, installed in the 1960’s and 1970’s. These Larch poles have proved to be reaching the end of their useful life and hence a five year program to replace these poles is in place.

The Marlborough Sounds area has a large number of holiday home installations, generally unoccupied for many months of the year. Hence while the number of ICP’s effected by a planned outage to replace Larch poles may be significant, between 500 and 1000, the actual number of consumers affected by a planned outage is likely to be less than 20% of this total. For this reason, much of the Larch pole replacements will be during planned outages, rather than the more expensive use of live line techniques. Hence it is probable the company’s SAIDI Class B interruption will be higher over the next five years than in the five years to March 2003 on which the threshold is based.

### ***Clause 6 (1) (c) – Customer Communication***

Clause 6 (1) (c) requires consultation with consumers over the price/quality trade-off at least once during the two year period ending 31 March 2006. Marlborough Lines intends to report on this process in the next Compliance Statement.

### ***Disclaimer***

*The information presented in this Threshold Compliance Statement has been prepared solely for the purpose of complying with the requirements of the Commerce Act (Electricity Distribution Thresholds) Notice 2004. This statement has not been prepared for any other purpose and Marlborough Lines expressly disclaims any liability to any other party who may rely on this statement for any other purpose.*

### 3. Auditor's Report on the Threshold Compliance Statement



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#### AUDITORS' REPORT ON THRESHOLD COMPLIANCE STATEMENT

To the readers of the threshold compliance statement of Marlborough Lines Limited for the assessment period ended on 31 March 2005.

We have examined the attached statement, which is a threshold compliance statement in respect of the price path threshold and the quality threshold prepared by Marlborough Lines Limited for assessment as at 31 March 2005 and dated 20 May 2005 for the purposes of information requirements set out in clause 7 of the Commerce Act (Electricity Lines Thresholds) Notice 2004 ("the Notice"). In this report the attached statement is called "the threshold compliance statement".

#### Directors' Responsibilities

Clause 7 of the Notice requires the Directors of Marlborough Lines Limited to prepare certificates that confirm the compliance, or otherwise, of Marlborough Lines Limited with the thresholds set out in clauses 4, 5 and 6 of that Notice.

#### Auditors' Responsibilities

It is our responsibility to express an independent opinion (in the form prescribed in the Notice) on the threshold compliance statement and report our opinion to you.

We conducted our audit in accordance with the Auditing Standards issued by the Institute of Chartered Accountants of New Zealand.

#### Basis of Opinion – Price Path Threshold; Quality Threshold: SAIDI and SAIFI Statistics for the Assessment Period ended 31 March 2005.

Our audit included examination, on a test basis, of evidence relevant to the amounts and disclosures contained on pages 2 to 6 and Appendices A to D of the threshold compliance statement and which relate to:

- The price path threshold set out in clause 5 of the Notice;
- The SAIDI and SAIFI statistics for the assessment period ended on 31 March 2005 which are relevant to those parts of the quality threshold that are set out in clauses 6(1)(a) and 6(1)(b) of the Notice.

It also included an assessment of the significant estimates and judgements, if any, made by Marlborough Lines Limited in the preparation of the threshold compliance statement and an assessment of whether the basis of preparation has been adequately disclosed.

We planned and performed our audit of the threshold compliance statement so as to obtain all the information and explanation which we considered necessary, including for the purpose of obtaining sufficient evidence to give reasonable assurance that the threshold compliance statement is free from material misstatements (whether caused by fraud or error), except that our work was limited in respect of the quality threshold: SAIDI and SAIFI statistics as explained below. In forming our opinion we also evaluated the overall adequacy of the presentation of information in the threshold compliance statement.

**Basis of Opinion –Quality Threshold: SAIDI and SAIFI Statistics for the Years Ended 31 March 1999, 2000, 2001, 2002 and 2003.**

In relation to the SAIDI and SAIFI statistics for the years ended 31 March 1999, 2000, 2001, 2002 and 2003 which are relevant to those parts of the quality threshold that are set out in clauses 6(1)(a) and 6(1)(b) of the Notice. We have undertaken procedures to provide reasonable assurance that:

- The amounts and disclosures in the threshold compliance statement relating to those statistics have been correctly taken from the information disclosed by Marlborough Lines Limited in accordance with the Electricity (Information Disclosure) Regulations 1999; and
- Those statistics have been calculated based on the source data provided to us. We have not performed audit procedures on the source data.

**Relationship and Interests**

We have no relationship with or interests in Marlborough Lines Limited other than in our capacities as auditors of the threshold compliance statements and in the provision of other professional advisory services. We are not aware of any relationships between our firm and Marlborough Lines Limited that, in our professional judgment, may reasonably be thought to impair our independence.

**Opinions**

**Unqualified Opinion**

We have obtained all the information and explanations we have required.

***Price Path Threshold***

In our opinion, having made all reasonable enquiry, to the best of our knowledge the amounts or details set out in the threshold compliance statement relating to the price path threshold set out in clause 5 of the Notice and related information have been prepared in accordance with the Notice, and give a true and fair view of the performance of Marlborough Lines Limited against that threshold for the assessment period ended on 31 March 2005.

***Quality Threshold: SAIDI and SAIFI statistics***

In our opinion, having made all reasonable enquiry, to the best of our knowledge:

- a) The SAIDI and SAIFI statistics for the assessment period ended on 31 March 2005 which are relevant to those parts of the quality threshold that are set out in clauses 6(1)(a) and 6(1)(b) of the Notice and related information have been calculated or prepared in accordance with Marlborough Lines Limited's policies and procedures for recording SAIDI and SAIFI statistics as disclosed in the threshold compliance statement, and fairly represent the performance of Marlborough Lines Limited for the assessment period ended on 31 March 2005;
- b) The SAIDI and SAIFI statistics for the years ended 31 March 1999, 2000, 2001, 2002 and 2003, which are relevant to those parts of the quality threshold that are set out in clauses 6(1)(a) and 6(1)(b) of the Notice are in accordance with the Electricity (Information Disclosure) Regulations 1999. Those statistics have been properly calculated based on the unaudited source data provided to us by Marlborough Lines Limited. The SAIDI and SAIFI statistics in the threshold compliance statement differ in certain instances from the previously disclosed statistics as a result of the correction of immaterial errors in the calculation of those statistics.

**Qualified Opinion**

Our opinion is qualified as follows:

***Quality Threshold: SAIDI and SAIFI statistics***

The scope of our audit was subject to the following limitations:

- There is no independent evidence available for the period to support the completeness and accuracy of recorded faults; and
- Control over the completeness and accuracy of ICP data included in the SAIDI and SAIFI calculations is limited throughout the period.

Because of these limitations, there are no practical audit procedures that we could adopt to confirm independently that all outage and ICP data was properly recorded for the purposes of inclusion in the amounts or details set out in the quality threshold: SAIDI and SAIFI statistics.

In these respects alone we have not obtained all the information and explanations that we have required.

Because of the potential effect of the limitations in the evidence available to us, we are unable to form an opinion as to whether the amounts or details set out in the quality threshold: SAIDI and SAIFI statistics for the assessment period ended on 31 March 2005, together with the SAIDI and SAIFI statistics for the years ended 31 March 1999, 2000, 2001, 2002 and 2003, give a true and fair view of the performance of Marlborough Lines Limited against those parts of the quality threshold that are set out in clauses 6(1)(a) and 6(1)(b) of the Notice for the assessment period ended on 31 March 2005.

Our audit was completed on 20 May 2005 and our qualified and unqualified opinions are expressed as at that date.



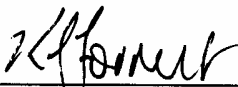
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Christchurch  
20 May 2005

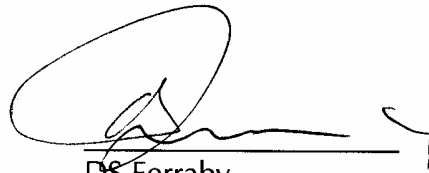
#### 4. Certification of Threshold Compliance Statement

We, David Scott Ferraby and Kenneth John Forrest, being directors of Marlborough Lines Ltd certify that, having made all reasonable enquiry, to the best of our knowledge and belief, the attached threshold compliance statement of Marlborough Lines Ltd, and related information, prepared for the purposes of the Commerce Act (Electricity Distribution Thresholds) Notice 2004 complies with the requirements of that notice, except in the following respects:

Clause 5 (1) (a) is breached by \$1,736,939

Clause 6 (1) (a) is breached by 16.9 minutes

  
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KJ Forrest

  
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DS Ferraby

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20 May 2005

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20 May 2005

## Appendix A

Marlborough Lines increased line charge prices on 1 April 2002, 1 April 2003, and 1 June 2004. Prices effective 1 June 2004 are those in effect on 31 March 2005, the assessment date 31 March 2005. These price increases followed an overall 24% reduction in prices effective 1 April 2001.

The table below summarises the net notional revenue at the assessment date 31 March 2005:

		<b>Year to 31 March 2005</b>
Line charge revenue		18,130,985
Less transmission charges		(3,360,260)
Less avoided transmission charges		(52,916)
Plus transmission loss rental rebates		281,579
Less local authority rates on system assets		(33,334)
Less Electricity Commission levies		(35,154)
<b>Net Notional Revenue</b>		<b>14,930,889</b>

Notional Revenue for the year ended 31 March 2005

Notional Revenue for the year ending 31 March 2005		
Term	Description	(\$)
$\sum P_{2005} Q_i$	Prices at 31 March 2005 multiplied by 31 March 2003 base quantities	18,130,985
$K_{2005}$	Transmission Charges for year ending 31 March 2005	3,131,597
	Rates for year ending 31 March 2005	33,344
	Electricity Commission levies for year ending 31 March 2005	35,154
$NR_{2005} = \sum P_{2005} Q_i - K_{2005}$	Notional Revenue for the year ending 31 March 2005	14,930,889

### R2004

Maximum Notional Revenue at the reference date which would not have caused the distribution business to breach the price path under the initial notice		
Term	Description	(\$)
$\sum P_{i,0} \times Q_{i,0}$	Prices at 6 September 2003 multiplied by 31 March base quantities	16,231,631
$C_{T2003}$	Budget Transmission Charges for year ending 31 March 2004	3,036,854
$C_{R2003}$	Budget Rates for year ending 31 March 2004	33,000
$R_{2004}$	Maximum Revenue at 31 March 2004 that would not have caused a breach under the initial notice	13,161,777

Note: all notation in the table above except  $R_{2004}$  comes from the initial notice.

# Calculation of NR<sub>2005</sub>

	Line price from 1 June 2004	Base Quantities for year ended 31-Mar-03	Revenue at 31-Mar-05 Prices
<b>VARIABLE ENERGY BASED CHARGES</b>			
Domestic - General	4.4500	85,750,629	3,815,903
Domestic Uncontrolled with GL Fixed Charge	7.7880	748,012	58,255
- 13hr Water & Space Heat	2.5410	45,198,063	1,148,483
- 8hr Water & Space Heat	1.0180	9,000,968	91,630
Cashpower - CP3	4.4500	605,530	26,946
Domestic Pre-payment With Controlled Loads	3.6860	374,665	13,810
Non-Domestic - General	4.4500	30,287,087	1,347,775
- General 3PH 61-100amp	3.5170	16,313,097	573,732
- General Medium	3.1560	18,082,732	570,691
- 13hr Water & Space Heat	2.5410	2,936,024	74,604
- 8hr Water & Space Heat	1.0180	772,289	7,862
20hr All Year - General	3.5170	420,359	14,784
- Large	3.1560	120,109	3,791
20hr Summer only - 24hr Energy D6	1.4080	8,384,674	118,056
- Dryers at C10	3.5170	105,991	3,728
- Dryers at C1	4.4500	117,317	5,221
- Winter Energy	12.7560	692,484	88,333
Bulk Supply LV - Winter Day	1.2920	17,855,172	230,689
Bulk Supply LV - Winter Night	0.0810	6,760,042	5,476
Bulk Supply LV - Summer Day	0.8740	25,646,357	224,149
Bulk Supply LV - Summer Night	0.0810	9,192,582	7,446
Bulk Supply HV by Consumer - Winter Day	1.2460	3,482,249	43,389
Bulk Supply HV by Consumer - Winter Night	0.0760	1,261,480	959
Bulk Supply HV by Consumer - Summer Day	0.8390	4,094,648	34,354
Bulk Supply HV by Consumer - Summer Night	0.0760	1,341,555	1,020
Bulk Supply HV MLL Owned - Winter Day	1.2460	2,692,454	33,548
Bulk Supply HV MLL Owned - Winter Night	0.0760	1,146,842	872
Bulk Supply HV MLL Owned - Summer Day	0.8390	5,467,633	45,873
Bulk Supply HV MLL Owned - Summer Night	0.0760	2,458,866	1,869
Unmetered Supplies	-	253,973	-
Street Lighting MDC Winter Day	1.2920	364,861	4,714
Street Lighting MDC Winter Night	0.0810	477,020	386
Street Lighting MDC Summer Day	0.8740	313,824	2,743
Street Lighting MDC Summer Night	0.0810	579,167	469
Street Lighting Private	4.4500	68,859	3,064
<b>Total Energy</b>		<b>303,367,614</b>	<b>8,604,623</b>
<b>DEMAND CHARGES</b>			
Bulk Supply LV - Winter Demand	16.9360	86,683.56	1,468,073
Bulk Supply LV - Anytime Demand	3.0930	24,922.00	925,005
Bulk Supply HV by Consumer - Winter Demand	15.5280	12,926.74	200,726
Bulk Supply HV by Consumer - Anytime Demand	2.8360	3,165.00	107,711
Bulk Supply HV MLL Owned- Winter Demand	16.3460	9,882.80	161,544
Bulk Supply HV MLL Owned- Anytime Demand	2.9860	2,900.00	103,913
<b>Total Demand Charges</b>		<b>140,480.10</b>	<b>2,966,972</b>
<b>FIXED CHARGES</b>			
T&D - Domestic 1 phase 60 Amp	0.5890	17,325	3,724,615
Domestic Low Fixed Charge Option	0.1500	235	12,866
Cashpower pre-payment Supplies	0.5890	15	3,225
-Domestic 3 phase	1.1620	431	182,800
-Combined Dom & Non-Dom 1ph	-	-	-
-Combined Dom & Non-Dom 3ph	-	-	-
-Non-Dom 1 phase 60 Amp	0.8720	1,242	395,304
-Non-Dom 1 phase 100 Amp	1.1620	10	4,241
-Non-Dom 3 phase	1.7430	1,338	851,229
-60-100 Amp	4.7910	238	416,194
-101 to 150 Amp	8.5240	65	202,232
-151 to 200 Amp	11.3660	40	165,944
-201 to 300 Amp 1 phase	8.5240	1	3,111
Irrigation Capacity Charge - Customer Numbers		116	
Irrigation Capacity Charge - Connected kW	0.0640	7,281	170,084
Irrigation Capacity Charge Minimum	1.4700	141	75,654
L A Streetlight Network Charge Per Month	245.1020	1	89,462
Fixed Charge Non Domestic above 140kVA	3.8210	78	108,784
Unmetered Supplies up to 8kWh per day	1.2280	25	11,206
Unmetered Supplies above 8kWh per day	1.8960	25	17,301
Kaikoura Unmetered Supplies up to 8kWh per day	1.5200	2	1,110
Kaikoura Unmetered Supplies above 8kWh per day	2.1880	1	799
Kaikoura Domestic up to 20kVA	0.7370	82	22,058
Kaikoura Domestic Above 20kVA	1.4510	3	1,589
Kaikoura Non-Domestic up to 15kVA	1.1640	22	9,347
Kaikoura Non-Domestic 31 to 46kVA	2.1770	10	7,946
Kaikoura Non-Domestic 47 to 70kVA	5.9830	1	2,184
Kaikoura Irrigation Minimum Charge	1.8360	-	-
Kaikoura Irrigation Capacity Charge - Customer Numbers		1	
Kaikoura Irrigation Capacity Charge - Connected kW	0.0800	55	1,606
Load Control Fees - Fixed Fee	1,200.00	4	4,800
Load Control Fees - Variable Fee	1.20	18,385	22,062
Waihopai Generation Line Charge		1	51,638
<b>Total Fixed Charges</b>		<b>21,448</b>	<b>6,559,389</b>
<b>Total Fixed, Variable &amp; Demand</b>			<b>18,130,985</b>
Less Transmission Costs			3,131,597
Less Local Authority Rates			33,344
Less Electricity Commission Levies			35,154
<b>Net Revenue</b>			<b>14,930,889</b>

# Calculation of R<sub>2004</sub>

	Quantity 2002.03	Price effective 01-Apr-03	Revenue First Assessment Date
<b>VARIABLE ENERGY BASED CHARGES</b>			
Standard Domestic Uncontrolled	85,750,629	3.663	3,141,046
Low User Domestic Uncontrolled	748,012	6.826	51,059
Domestic Controlled Water & Space Heating	45,198,063	2.275	1,028,256
Domestic Controlled Water & Space Heating Night Only	9,000,968	0.964	86,769
Pre-Payment All Inclusive Energy	605,530	10.425	63,127
Domestic Pre-payment With Controlled Loads	374,665	3.108	11,645
Standard Non-Domestic Uncontrolled	30,287,087	4.450	1,347,775
Medium Non-Domestic Uncontrolled	16,313,097	3.115	508,153
Large Non-Domestic Uncontrolled	18,082,732	2.804	507,040
Non-Domestic Controlled Water & Space Heating	2,936,024	2.275	66,795
Non-Domestic Controlled Water & Space Heating Night Only	772,289	0.964	7,445
Controlled Small Non-Domestic 20 hour Non-Storage	420,359	3.115	13,094
Controlled Large Non-Domestic 20 hour Non-Storage	120,109	2.804	3,368
Irrigation Summer only	8,384,674	1.300	109,001
Dryers May & September	105,991	3.115	3,302
Dryers June to August	117,317	4.450	5,221
Irrigation Winter Consumption	692,484	11.066	76,630
Group 4 Non-Domestic LV Supply - Winter Day	17,855,172	1.200	214,262
Group 4 Non-Domestic LV Supply - Winter Night	6,760,042	0.158	10,681
Group 4 Non-Domestic LV Supply - Summer Day	25,646,357	0.840	215,429
Group 4 Non-Domestic LV Supply - Summer Night	9,192,582	0.158	14,524
Group 4 Non-Domestic HV Supply by Consumer - Winter Day	3,482,249	1.160	40,394
Group 4 Non-Domestic HV Supply by Consumer - Winter Night	1,261,480	0.153	1,930
Group 4 Non-Domestic HV Supply by Consumer - Summer Day	4,094,648	0.810	33,167
Group 4 Non-Domestic HV Supply by Consumer - Summer Night	1,341,555	0.153	2,053
Group 4 Non-Domestic HV Supply MLL Owned - Winter Day	2,692,454	1.160	31,232
Group 4 Non-Domestic HV Supply MLL Owned - Winter Night	1,146,842	0.153	1,755
Group 4 Non-Domestic HV Supply MLL Owned - Summer Day	5,467,633	0.810	44,288
Group 4 Non-Domestic HV Supply MLL Owned - Summer Night	2,458,866	0.153	3,762
Unmetered Supplies	253,973	-	-
Street Lighting Territorial Local Authority Winter Day	364,861	1.200	4,378
Street Lighting Territorial Local Authority Winter Night	477,020	0.158	754
Street Lighting Territorial Local Authority Summer Day	313,824	0.840	2,636
Street Lighting Territorial Local Authority Summer Night	579,167	0.158	915
Street Lighting Private	68,859	3.663	2,522
<b>Total Energy</b>	<b>303,367,614</b>		<b>7,654,407</b>
<b>DEMAND CHARGES</b>			
Group 4 Non-Domestic LV Supply - Winter Demand	86,683.56	14.575	1,263,413
Group 4 Non-Domestic LV Supply - Anytime Demand	24,922.00	31.944	796,108
Group 4 Non-Domestic HV Supply by Consumer - Winter Demand	12,926.74	13.363	172,740
Group 4 Non-Domestic HV Supply by Consumer - Anytime Demand	3,165.00	29.292	92,709
Group 4 Non-Domestic HV Supply MLL Owned - Winter Demand	9,882.80	14.067	139,021
Group 4 Non-Domestic HV Supply MLL Owned - Anytime Demand	2,900.00	30.840	89,436
<b>Total Demand Charges</b>			<b>2,553,428</b>
<b>FIXED CHARGES</b>			
Standard Domestic up to 20kVA	17,325	0.566	3,579,172
Low User Domestic up to 20kVA	235	0.150	12,866
Cashpower pre-payment Supplies	15	0.566	3,099
Domestic Above 20kVA	431	1.000	157,315
Combined Domestic & Non-Domestic Up to 15kVA	-	-	-
Combined Domestic & Non-Domestic Above 15kVA	-	-	-
Non-Domestic up to 15kVA	1,242	0.750	339,998
Non-Domestic 16 to 30kVA	10	1.000	3,650
Non-Domestic 31 to 46kVA	1,338	1.500	732,555
Non-Domestic 47 to 70kVA	238	4.123	358,165
Non-Domestic 71 to 105kVA	65	7.336	174,047
Non-Domestic 106 to 140kVA	40	9.781	142,803
Non-Domestic 1phase to 140kVA	1	7.336	2,678
Irrigation Capacity Charge - Customer Numbers	116	-	-
Irrigation Capacity Charge - Connected kW	7,281	0.055	146,166
Irrigation Capacity Charge Minimum	141	1.265	65,103
L A Streetlight	1	210.931	76,990
Non-Domestic Above 140kVA	78	3.288	93,609
Unmetered Supplies up to 8kWh per day	25	1.106	10,092
Unmetered Supplies above 8kWh per day	25	1.774	16,188
Kaikoura Unmetered Supplies up to 8kWh per day	2	1.358	991
Kaikoura Unmetered Supplies above 8kWh per day	1	2.026	739
Kaikoura Domestic up to 20kVA	82	0.720	21,550
Kaikoura Domestic Above 20kVA	3	1.218	1,334
Kaikoura Non-Domestic up to 15kVA	22	1.002	8,046
Kaikoura Non-Domestic 31 to 46kVA	10	1.778	6,490
Kaikoura Non-Domestic 47 to 70kVA	1	5.163	1,885
Kaikoura Irrigation Minimum Charge	-	1.610	-
Kaikoura Irrigation Capacity Charge - Customer Numbers	1	-	-
Kaikoura Irrigation Capacity Charge - Connected kW	55	0.070	1,405
Load Control Fees - Fixed Fee	4	1,200.000	4,800
Load Control Fees - Variable Fee	18,385	1.200	22,062
Waihopai Generation Line Charge	1	40,000.000	40,000
<b>Total Fixed Charges</b>			<b>6,023,796</b>
<b>Total Fixed, Variable &amp; Demand</b>	<b>303,367,614</b>		<b>16,231,631</b>
Less Transmission Costs			3,036,854
Less Local Authority Rates			33,000
<b>NET NOTIONAL REVENUE</b>			<b>13,161,777</b>

## R2005

Allowable Notional Revenue under CPI-X price path		
Term	Description	(\$)
$X$	X Factor assigned to MLL	2%
$R_{2004}$	Maximum Revenue at 31 March 2004 that would not have caused a breach under the initial notice	13,161,777
$(1 = \Delta CPI_{2005})$	Average change in Consumer Price Index over 2004	1.0229
$(1-X)$	1-X Factor assigned	0.98
$R_{2005}$	Allowable notional revenue under the CPI-X price path for the year ended 31 March 2005	13,193,950
$NR_{2005}/R_{2005}$	Expression must be less than or equal to 1 to avoid breaching 5(1)(a)	1.1316

For presentation purposes, the CIP has been presented to four decimal places, although for the calculation  $R_{2005}$  the full index (with no rounding) has been applied.

$\Delta CPI_{2005}$			
Numerator		Denominator	
$CPI_{Q1,2004}$	1115	$CPI_{Q1,2003}$	1098
$CPI_{Q2,2004}$	1124	$CPI_{Q2,2003}$	1098
$CPI_{Q3,2004}$	1131	$CPI_{Q3,2003}$	1103
$CPI_{Q4,2004}$	1141	$CPI_{Q4,2003}$	1111
Total	4511	Total	4410
$\Delta CPI_{2005}$	2.29%		

## Appendix B

### Clause 5(1)(b)

$R_{MAX}$

Maximum Notional Revenue for the period 1 April 2004 to 31 March 2005.		
Term	Description	(\$)
$\sum P_{2005} Q_i$	Maximum price between 1 April 2004 and 31 March 2005 multiplied by 31 March 2003 base quantities	18,130,985
$K_{2005}$	Transmission Charges for year ending 31 March 2005	3,131,597
	Rates for year ending 31 March 2005	33,344
	Electricity Commission levies for year ending 31 March 2005	35,154
$R_{MAX}$	Maximum Notional Revenue for 1 April 2004 to 31 March 2005	14,930,889

Notional Revenue during the period is not to exceed the maximum of the starting and ending Notional Revenue for the period		
Term	Description	(\$)
$R_{MAX}$	Maximum Notional Revenue for 1 April 2004 to 31 March 2005	14,930,889
$Max(R_{2004}, NR_{2005})$	Maximum of the Notional Revenue that would not breach the initial notice and the Notional Revenue for the year ended 31 March 2005	14,930,889
$R_{MAX}/Max(R_{2004}, NR_{2005})$	If expression is greater than 1, Clause 5(1)(b) is breached	1.0000

## Appendix C

SAIDI and SAIFI (Class B and Class C) for Years Ended 31 March 1999 - 2005

Year Ended 31 March	SAIDI (Interruption Duration)		
	Class B	Class C	Total
1999	72.30	171.41	243.71
2000	69.83	103.56	173.39
2001	57.71	121.03	178.74
2002	37.88	148.01	185.89
2003	74.11	125.66	199.77
<b>Five Year Average SAIDI</b>			<b>196.30</b>
2004	52.5	141.2	193.7
2005	93.4	119.8	213.2

Year Ended 31 March	SAIFI (Interruption Frequency)		
	Class B	Class C	Total
1999	0.42	1.83	2.25
2000	0.31	1.22	1.53
2001	0.35	1.82	2.17
2002	0.24	1.63	1.87
2003	0.32	1.51	1.83
<b>Five Year Average SAIFI</b>			<b>1.93</b>
2004	0.34	1.39	1.73
2005	0.37	1.52	1.89

The historic 1999 to 2003 data in the above table differs from that publicly gazetted by Marlborough Lines during those years. The Electricity (Information Disclosure) Regulations 1999 repealed the Electricity (Information Disclosure) Regulations 1994. The 1994 Regulations defined total consumers as average number of consumers at the start and end of the year. However the 1999 Regulations merely defined “total consumers” as the number of network connection points, and were silent as to the time at which the total consumers was to be established.

For Information Disclosure for the 1999 to 2003 years, Marlborough Lines based total consumers on the total number at the end of each financial year, on the basis that had the legislature intent to retain the averaging process used in the 1994 Regulations, that same requirement would have been included in the 1999 Regulations.

However, the Commerce Act (Electricity Distribution Threshold) Notice 2004 requires the use of historic data based on average consumer numbers at the start and end of each financial year. Since the information disclosed in those years was inconsistent with the requirement, the figures in the above table have been recalculated to reflect average consumer numbers.

## **Appendix D – Policies and Procedures for Recording Outage Statistics**

### **Appendix D1 - Power Restoration & Network Switching Control**

#### **Objectives**

Scheduled switching of Network Equipment to ensure compliance to Electrical Industry Safety Rules and the Company's safety requirements.

#### **Scope**

This procedure covers the following:

- Approved Personnel for switching
- Switching Procedures
- Switching Modification Control
- Abnormal and Emergency Switching.

#### **Referenced Documents**

PR406: Drawing Control and Change Procedure

PR819: Network Statistical Analysis Procedure

#### **Responsibilities**

Operations Manager - approving all scheduled shutdowns, except power station equipment and Transpower equipment.

Contracts Manager - controlling all power station equipment and controlling of scheduled switching.

Transpower (or designated contractors) - directly control all switching and operating Trans Power equipment.

Approved Persons - planning and directing switching.

Designated Switching Controller - controlling switching procedures in accordance with this document.

Job Foreperson - communicating with Designated Switching Controller in accordance with this procedure.

Faultperson - carrying out emergency procedures, issuing abnormal switching positions list and filing switching sheets.

Contracting Technical Clerk – issuing Works Authorities, listing ICP's (installation connection points) affected by shutdown to be advised to the Energy Retailers, and updating the switch location description database.

Draughtsperson - updating and signing switching schematics.

Wordprocessor Operator - preparing internal shutdown notice.

Contracting Technical Clerk - re-issuing updated switching schematic and updated switch location lists. Issuing number plats for numbered equipment

Network Technical Assistant - Compiling data for Network Statistical Analysis

External Contractors – Following these procedures to initiate network shutdowns to allow them to work on the network.

## **Procedure**

### **APPROVED PERSONS**

#### All Personnel

1. The personnel listed are approved to write out scheduled switching procedures for power restoration and control. Refer to Table 1 - Staff Approved to Write Scheduled Switching Procedures.

#### Operations Manager/Contracts Manager

2. The Operations Manager is to be advised by e-mail or hard copy of all planned shutdowns, prior to the event, for his approval. Approval or comments to be passed back to the Contracting Technical Clerk with a copy being sent to other staff as considered necessary.
3. Approve other staff, namely Contracting Forepersons and individual Lines Mechanics for switching control authority where necessary:
  - Operations Manager - for Network Equipment switching and (in the absence of Contracts Manager) Power Station Equipment switching
  - Contracts Manager - Power Station Equipment Switching

### **SWITCHING PROCEDURES**

Approved persons are to prepare and have approved all requests for switching prior to them being carried out (except as provided for in emergencies)

All switching instructions to Marlborough Lines staff by the designated switching controller shall be by means of the normal Marlborough Lines voice radio channel unless problems or lack of coverage prevents this.

For instructions to Independent Approved Contractors communication can be by cellphone where coverage exists or by site visit.

Independent Approved Contractors will be limited normally to

- low voltage customer pole fuses

- 11,000volt customer transformer fuses
- 11,000 volt spur line fuses where limited transformers are affected

Authorisations to Independent Approved Contractors are to be issued in accord with this document but may be issued via cellphone if practicable. Requirements for practical restoration also apply to Independent Approved Contractors.

The designation Switching Controller is to notify toe town office reception of planned shutdowns prior to the shutdown of customers cables.

Linked Document: PR715PowerRestorationandNetworkSwitching ControlFlowcharts.files

## **PARTIAL RESTORATION**

### Designated Switching Controller

4. Contact the Job Foreperson if any switching is to be carried out in a section of line where a test permit or access permit was held, and which will liven lines to any of the new designated isolation points.
5. Request that all workers stay clear while switching is carried out.
  - Earths and equipment may remain on lines other than the areas to be re-livened
6. Apply the following if on-site personnel (or contractors) working in the area beyond the designated isolation points listed on relevant access or test permits cannot be contacted by any reasonable means prior to the partial restoration time:
  - Confirm the designated isolation points listed on the relevant access or test permits are open and undamaged, and either-
    - Create one additional isolation point between the contractor/staff members and each designated isolation point, or
    - Install a set of 35mm<sup>2</sup> earths prior to re-livening at each designated isolation point on the lines between the contractor/personnel members and the new isolation point, or
    - Create a reduced area of re-livening by making an additional isolation point in the network on the customer side of each of the original designated isolation points
7. Allow work to resume under the original access or test point once switching is complete.

## **LIVE LINE WORK**

### **RECLOSE BLOCKS**

Not all requirements within this area of the document apply to Independent Approved Contractors but they are not permitted to apply or remove the reclose block. Communication to be as listed in Switching Procedures.

### Designated Switching Controller

8. Issue reclose blocks for live line and close worker zone tree cutting using the

Linked Image/Flowchart: Network Permit Issue

Linked Image/Flowchart: Recipient logs.

9. Record all details in the Issue Log Book and convey the information to the Job Foreperson. Convey the information in person, by radio, or if not possible by cell phone.

#### Job Foreperson

10. Repeat the details back to the Designated Switching Controller for confirmation.

11. Record the details in writing in a Network Permit Recipient Log. Keep the log at the work site at all times.

#### Designated Switching Controller

12. Write the details on the white plastic tag "Live Line work party reclose block" and attach the tag to the OCB providing the reclose block.

### **MULTIPLE RECLOSE BLOCKS**

#### Designated Switching Controller

13. Issue the same reclose block number to two or more separate work parties in the same area, if necessary, provided both recipients are recorded on the Issuers Permit Log.

14. Carry out combination Live Line Tree Work and Hot Stick Work under one permit, if appropriate.

### **EMERGENCY PROCEDURE**

#### Faultperson

15. Retrieve the "Live Line Work Party reclose block" tag from the OCB, if a tripping occurs on the OCB supplying the work area.

16. Contact all work parties holding an authorisation prior to any attempt to reclose, and confirm that no incident has taken place at the work site.

17. Attempt a trial reclosing after work parties have been contacted and confirmed OK, providing that:

- Live line work party remains clear of line and has given approval to liven - following industry guidelines.

#### Live Line Mechanics

18. Return Reclose block permit and obtain an authorisation to complete work under de-energised, earthed line rules in the event of major damage in the area that will require lengthy repairs.

## **SELF ISSUE**

### Live Line Mechanics

19. Carry out own switching and record details in writing in a Network Permit Recipient Log . Record the permit number provided by the Designated Switching Controller. Write the details on the white plastic tag "Live Line Work Reclose Block" and attach the tag to the OCB providing the reclose block.

## **ABNORMAL SWITCHING**

### First Call Faultperson

20. Ensure that when switching is to be left more than 24 hours in a state that is not 'normal', all changes from 'normal' state are recorded on the Abnormal Switch Positions list. All abnormal switch position are to be listed when duty rosters change. Refer to

Linked Image/Flowchart: Abnormal Switch Positions

21. Have the list checked by another approved person, and then forward to the Operations Manager by email.

22. Issue the Abnormal Switching Position list to personnel named on the list on the day the abnormal occurs.

23. Issue to list holders an updated Abnormal Switch Positions list as and when "abnormal" switching is changed back to normal.

### Operations Manager

24. Require changes to the Abnormal Switch Positions list if not considered appropriate.

Note:

25. Switching Schematics assume that all switches are closed other than those indicated by 'NO' (Normally Open). Refer to

Linked Image/Flowchart: Switching Schematics

26. New equipment installed but not yet issued on the switches added or deleted and not yet on the switching plans is listed on the new equipment list and then removed from the list when the updated information is issued on the switching plans Refer to

Linked Image/Flowchart: Abnormal Switch Positions Added and Deleted list

## **TIMING AND FILING REQUIREMENTS**

### Contracting Technical Clerk

27. Issue a job number for all jobs requiring switching, and use this number for the Switch number Sheet.

28. Send a list of ICP's to the Energy Retailer(s) giving a minimum of ten working days notice of the shutdown.

- 15 days notice shall be given for shutdowns in the Marlborough Sounds, Upper Awatere Valley and "the Rock" area at Ward due to reduced frequency of mail deliveries.

### Contracting Technical Assistant

28a. Issue a number as required for switching equipment and issue the switch number sheet. Refer to:

Linked Image/Flowchart: Switch Number Sheet

### External Contractor

- Make application to network via Network Customer Manager three days prior to shutdown date where notification to retailers is not required.
- Make application to Network via Network Customer Manager 13 days prior to shutdown date where notification via retailers is required and 18 days prior to shutdowns for the Sounds, Upper Awatere Valley and Ward areas.

### Network Customer Manager

- Pass external contractors requests to contracting estimators within one day of receiving request.

### Approved Person

29. Prepare switching for planned outages and reclose block requests at least one working day before the first shutdown date.

30. Prepare copies for each Faultperson carrying out switching and for each Foreperson/ Supervisor who is to receive a permit.

### First Call Faultperson

31. File the original of the switching sheet used for each switching operation in the fault room until after the shutdown. File in a monthly file, keeping only the last 12 months files.

32. Provide shutdown request form showing actual start and completion times and any partial restoration sequences to the Network at the end of each week.

### Designated Switching Controller

33. Return the Controller’s copy of the switching schedule which will now have times etc added by the Controller to the fault room to replace the original and be kept on file for 12 months. Refer to

Linked Image/Flowchart: switching schedule

34. If during the switching a change is required to the planned switching due to an equipment failure or other cause, the Controller's copy is to be checked by another Faultman to ensure all stages of the switching have been carried out appropriately.

## EMERGENCY SWITCHING

### GENERAL

35. Emergency isolation will be directed by an approved person and written procedure recorded.

#### Approved Person

36. Confine emergency switching to two categories only:

- Emergency - life endangerment or serious equipment/ property damage
- After Hours Faults

37. De-energise the area associated with the emergency or fault by opening the isolation switch at the nearest appropriate switching device.

38. Apply the normal switching procedure after isolation with the following exception:

- The approved person is to double-check the procedure prior to switching, where a second approved person is unavailable after hours to countersign the switching plan.

**TABLE 1 - STAFF APPROVED TO WRITE SCHEDULED SWITCHING PROCEDURES**

Network Equipment	Power Station Equipment	Trans Power Equipment
Operations Manager	Contracts Manager	Designated AHC Holders only
Contracts Manager	Operations Manager	
Supervisor	Engineer Manager	
Full Time Faultperson	Power Station Operator	
Engineering Manager		

Staff under training supervision if one of the above are limited to writing out simple planned switching.		
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Linked Image/Flowchart: Refer to Application for Switching

Linked Image/Flowchart: Refer to Shutdown Checklist

Linked Image/Flowchart: Refer to Shutdown Notice (Internal)

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## **Rules Common to Authorisation (from SREI Section 4)**

An authorisation is required before work commences on equipment which has been removed from service, except as provided in Rule 402.

As far as electrical equipment is concerned, the authorisation system applies to HV equipment only, except as provided in Rule 402b. These rules do not deal with work control systems which asset owners may have put into place for work outside the scope for the authorisation system, e.g. for work on LV equipment or for work not involving equipment as defined in these rules.

There are two industry wide types of authorisation for work.

- a) Access Permits
- b) Test Permits

A test permit cannot be held on equipment for which an access permit has been issued but not returned.

### **When an Authorisation is required**

An authorisation is required before commencing work on the following:

- i. Equipment which has been moved from service.  
There is no exception to this. An authorisation is not required where work is to be carried out on equipment from which all energy sources and control signal inputs etc, have been removed and which has been taken away from its service position.
- ii. Equipment being erected, from immediately prior to the making of the connection that would enable the equipment by any operating procedure.
- iii. Equipment being dismantled, until sufficient connections have been removed to make it possible to energise the equipment by any operating procedure.

The authorisation system does not apply to LV equipment unless an authorisation system has been implemented for such equipment by the asset owner.

While work on live HV lines does not require an authorisation, it shall be carried out utilising reclose blocks.

## Appendix D2 - Network Statistical Analysis

### Objectives

Analysing statistics compiled for the purposes of ascertaining customer reliability performance and complying with Electricity Disclosure Regulations.

### Scope

This procedure covers the monthly and six monthly compilations and statistical analysis of Business Plan performance data applying to:

- Network Customer Reliability
- Fault Restoration and Types
- Contracts Performance Analysis

### Responsibilities

Operations Manager - setting the requirements for information required, and ensuring analysis and preventative action is implemented to maintain Business Plan performance requirements.

Network Technical Assistant - compiling data from Network Fault reports and other pertinent documentation and developing the statistical analysis and associated graphs required for Company Network performance.

Contracts Manager - ensuring the information required by this procedure is provided by contracting staff and meets the required timeframes.

Contracting Technical Assistant - compiling data from various contracting sources as they relate to performance of the Contracting staff working on the Network.

### Procedure

1. Information on faults, confirmation of planned outages and events/incidents are to be forwarded to Network at the end of each fault duty week.

### NETWORK DEPARTMENT STATISTICS (MONTHLY)

Fault Restoration	Network	Compare restoration time with targets
Network Fault Attendances	Contracting	Provide information on all faults attended using forms provided by Network
System Reliability	Network	Compare System reliability with required targets
Accidents	Contracting	Produce annual and year to date statistics of work

		related accidents broken down into injury type, man days lost, number of accidents and days lost per employee for staff working on the Network
Customer Hours Lost	Network	Compare customer hours lost with annual target
Live Line Hours Saved	Network and Contracting Staff	Calculate how many customer hours would have been lost without live line procedures.
Service Mains connected to Network	Contracting	Keep record of type of mains being connected
Network works Authority Summary	Network	Analyse estimates against actual costs for maintenance, capital expenditure, company job times and costs as compared with Business Plan targets
Network Events and Incidents	Contracting	Prepare written report on form provided to advise Operations Manager of details of cut trees touching or damaging the network, Vehicles or boats contacting live lines near boat ramp, Vehicles or boats contacting 5.0m protection wire at boat launching ramps, Plant or vehicles contacting live overhead lines, Plant, people contacting live buried cables, Aircraft contacting overhead lines or vehicles contacting power poles or underground equipment mounted on the ground or vandalism

## FAULT ANALYSIS (MONTHLY)

### Network Technical Assistant

2. Collate fault data from "Network Fault reports" completed by Faultpersons for all unplanned outages detailing.

- Location of fault
- Time fault reported
- Zone (Parent Number location on Network)
- Class (Transpower, rural, urban)
- Substation and feeder
- Restoration time (including progressive restoration details where applicable)
- Cause of fault including type of failed equipment where applicable
- Information relevant to exceeding target times

- Protection that operated (where applicable)

Refer to:

Linked Image/Flowchart: Network Fault Reports

3. Generate statistics from this data to analyse customer hours lost and system reliability.
4. Generate a "Customer Hours Lost Analysis" by dividing total customer hours lost by the number of customers and comparing the resultant average lost time per customer with the Business Plan target and previous year's losses. Refer to

Linked Image/Flowchart: Customer Hours Lost Analysis

- Note: Main Frame computer lists all customers to transformers that supply them.
5. Produce the "System Faults" and "Shutdown Summary" identifying each network parent number with faults, customers (and hours effected) and target restoration time for unplanned outages. Note faults resulting in power restoration times exceeding targets. Refer to

Linked Image/Flowchart: System Faults

Linked Image/Flowchart: Shutdown Summary

6. Produce a Planned Shutdown Analysis, with a Summary Sheet including both planned and unplanned shutdowns/faults. Compare reported planned shutdowns with the approved shutdown advice received from the Operations Manager. Inquire about all those that do not correlate.
7. Produce a "Fault Restoration Analysis" to show monthly restoration data within and outside of target times. Refer to

Linked Image/Flowchart: Fault Restoration Analysis

8. Produce graphs (within ten working days of the months end) for all target responses and present these to the Operations Manager.

### Operations Manager

9. Analyse the network statistics against Business Plan targets, looking for trends or fault situations that might indicate need for intervention and corrective/preventative action.
  - e.g. High incidence of lightning strikes causing high per customer power losses
  - Option: Accept losses or evaluate possible added lightning arrestors in that zone
10. Compile reports and statistical data (within fifteen working days of the months end) analysed into a monthly report format for the Operations Managers' monthly Business Plan analysis and report to the Managing Director (if required)
11. Produce a six monthly analysis (accompanied by supporting graphs) for the Managing Director to:

- Indicate year to date performance against target
- Adjust (if necessary) the Business Plan to meet annual performance targets
- Provide disclosure data required by the regulations

12. Produce End of Year Review reports showing the year's actual response against target.