

HORIZON ENERGY DISTRIBUTION LIMITED

THRESHOLD COMPLIANCE STATEMENT

FOR THE ASSESSMENT DATE, 31 MARCH 2005

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

16 May 2005

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

Horizon Energy Distribution Limited (“Horizon”) complied with all requirements of the price path threshold at 31 March 2005, as specified in the Commerce Act (Electricity Distribution Thresholds) Gazette Notice (“Gazette Notice”).

Clause 5 (1) (a) Notional Revenue (“NR₂₀₀₅”) at 31 March 2005 should not exceed Allowable Notional Revenue (“R₂₀₀₅”) at 31 March 2005.

Test:	$\frac{NR_{2005}}{R_{2005}}$	≤ 1
Derivation:	$\frac{14,789,146}{15,037,766}$	≤ 1
Result:	0.9835	< 1
Result:	Threshold is not breached	

Notional Revenue at 31 March 2005 does not exceed the allowable Notional Revenue under the CPI-X price path at 31 March 2005. Supporting evidence is presented in Appendices A and B.

Clause 5 (1) (b) Notional Revenue at any time during the assessment period 1 April 2004 to 31 March 2005 should not exceed the greater of Notional Revenue at 31 March 2004 and 31 March 2005.

Test:	$\frac{RMax_{01/04/04 - 31/03/05}}{Max(R_{2004}, NR_{2005})} \leq 1$
Derivation:	$\frac{14,789,146}{14,849,570} \leq 1$
Result:	0.9959 < 1
Result:	Threshold is not breached

Revenue at anytime during the assessment period ending 31 March 2005 did not exceed the greater of Notional Revenue at 31 March 2004 and 31 March 2005. Supporting evidence is presented in Appendices A and B.

Notional Revenue:

In accordance with the Gazette Notice, the following source of revenue has been included in the calculation of Notional Revenue:

- The sale of electricity conveyance services to electricity retailers and customers.

Excluded Services:

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

- Rent and interest income because this revenue has not been derived from electricity conveyance services.
- Warehouse sales income because all items sold from the warehouse are readily available from multiple electrical sales outlets operating within close proximity.
- The sale of electricity conveyance services to two major customers because there was effective competition for the provision of these services at the time the sales were agreed. Explanation and supporting evidence for excluding revenue from these customers was presented in Appendix F of the Threshold Compliance Statement (“Compliance Statement”) at the first assessment date (6 September 2003). We would be happy to provide this information again on request.

All excluded services are the same as disclosed in the previous Compliance Statements at 6 September 2003 and 31 March 2004. There has been no change to the provision of these services from previous Compliance Statements, and accordingly, previous evidence presented remains relevant.

Pass Through Costs – Transmission Charges

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

- connection charges
- interconnection charges
- notional embedding charges
- loss constraint excess payments (rental rebates)
- provision of system operator services

- avoided transmission charges
- rental rebate remissions

Pass Through Costs – Local Body Rates

Local body rates applying to system fixed assets (electricity lines, cables, equipment, substation land and substation buildings) have been passed through in accordance with the Gazette Notice.

Pass Through Costs – Electricity Commission Levies

Electricity Commission levies incurred during the year ending 31 March 2005 have been passed through in accordance with the Gazette Notice.

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

This section contains Horizon's performance against the quality thresholds as specified in Gazette Notice.

Clause 6 (1) (a) Interruption Duration

Test: $SAIDI_{2005} \leq \left(\frac{SAIDI_{1999} + SAIDI_{2000} + SAIDI_{2001} + SAIDI_{2002} + SAIDI_{2003}}{5} \right)$

Result: 353 > 161

Result: SAIDI breaches the threshold by 192 minutes

Clause 6 (1) (b) Interruption Frequency

Test: $SAIFI_{2005} \leq \left(\frac{SAIFI_{1999} + SAIFI_{2000} + SAIFI_{2001} + SAIFI_{2002} + SAIFI_{2003}}{5} \right)$

Result: 2.46 > 1.87

Result: SAIFI breaches the threshold by 0.59 interruptions

Supporting evidence underpinning the derivation of SAIDI and SAIFI is presented in Appendix C.

SAIDI and SAIFI Quality Breaches – Extreme Weather Events

For the year ended 31 March 2005, Horizon breached its 1999 to 2003 five-year average SAIDI and SAIFI thresholds. However these breaches are a result of three extreme weather events:

- 20 June 2004 Storm
- 15 July 2004 Flooding
- 25 March 2005 Tornadoes.

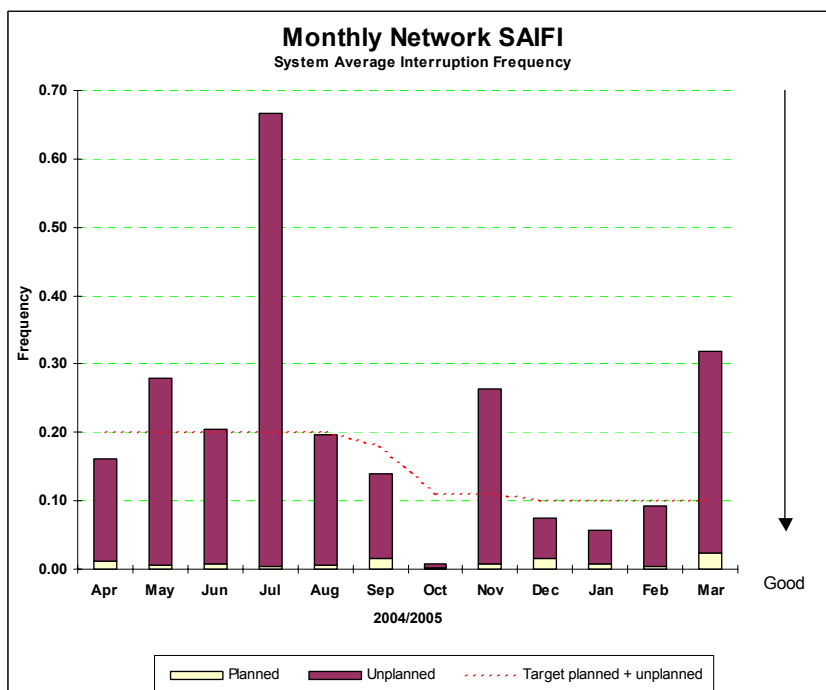
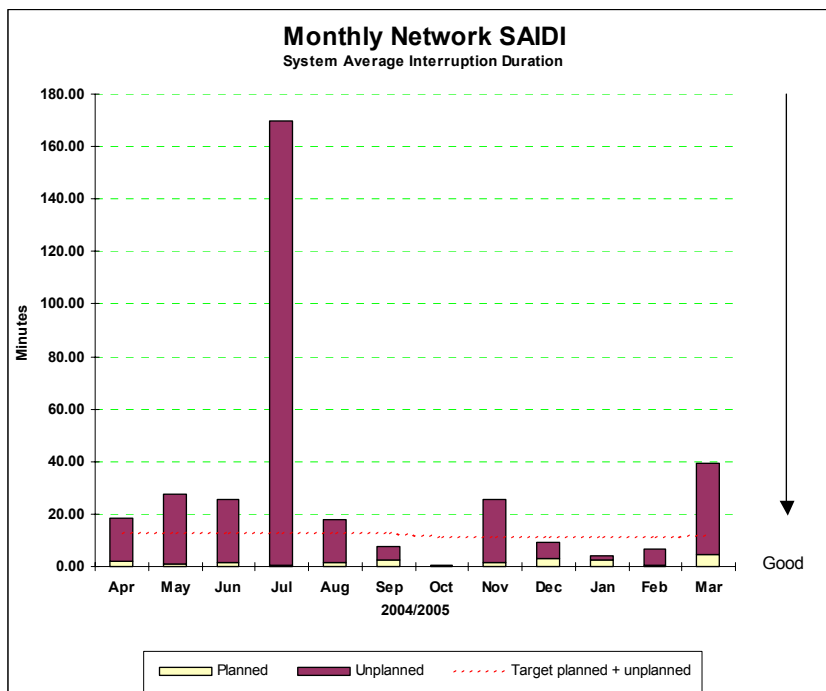
The impact of these three events on SAIDI and SAIFI were:

Cause	SAIDI	SAIFI
June 2004 Storm	14	0.01
July 2004 Floods	163	0.62
March 2005 Tornadoes	19	0.07
Total	196	0.70

Had these extreme weather events not occurred, Horizon would have achieved its SAIDI and SAIFI threshold targets as set out below:

Threshold	1999 – 2003 5-Year Average	Excluding Extreme Weather Events	As Reported
SAIDI	161	157	353
SAIFI	1.87	1.76	2.46

The impact of these three events on SAIDI and SAIFI, particularly the July 2004 floods and March 2005 tornado, are evident in the following graphs:



A description of each extreme weather event is set out below:

Storm – Te Urewera National Park (20 June 2004)

Extreme Weather Event

Horizon owns the 11 kV line supplying customers in the remote villages of Ruatahuna and Minginui in the Te Urewera National Park. The line route, approximately 46km in length, traverses dense native bush and is made up of very large spans, much of it accessible only by helicopter. A photograph showing the remoteness and ruggedness of the area is contained in Appendix D.

As a result of a severe storm and high winds on 20 June 2004, a large native tree was blown over severing the line and resulting in the felling of three long spans of conductor. Supply was lost to the remote villages around dusk.

Impact of Storm

Due to the severe weather conditions that were localised in the National Park, a helicopter could not be dispatched and a slip across the access road prevented repair crews from examining the line and prevented mobilisation of the Horizon mobile generator. As a result power was not restored to 292 customers for over 19 hours until the weather improved, the slip cleared and the mobile generator moved into place the following day. In addition, with sufficient light and easing of weather conditions on the following day, a helicopter patrol was able to locate the fault. Restoration of the line took three days, during which time the generator supplied the area. A photograph of the impact of the storm is also included in Appendix D.

Tree Clearance Limitations

Horizon is limited from clearing all trees that pose a risk to the network running through the Te Urewera National Park. Under the Electricity (Hazards from Trees) Regulations 2003

- Horizon is prohibited from issuing the Department Of Conservation (“DOC”) with a cut or trim notice
- DOC is under no obligation to cut or trim trees
- Horizon may only trim or cut trees that encroach the growth limit zone¹.

Whilst DOC tolerates the line through the National Park and allows the undertaking of corridor maintenance it does not allow the removal of all trees capable of damaging the line if they fall. Further evidence regarding this limitation is provided in Appendix D. The combination of the extreme weather event and the limitations on tree clearance in the National Park resulted in 14 SAIDI Minutes and SAIFI interruptions of 0.01.

Future Mitigation

Given the remoteness, difficult access and limitations on tree clearance, Horizon is currently looking at funding for a permanent generator set at the end of the line or storing a mobile generator closer to the area. This will allow Horizon to minimise the extent of future outages.

Horizon is also embarking on a project to replace all insulators through the inaccessible area with higher Basic Insulation Level (BIL) insulators, and the installation of extra 11kV line isolators and fault indicators in a bid to mitigate the outage length due to lightning strikes and improve fault locating capabilities.

¹ Electricity (Hazards from Trees) Regulations 2003, Part 1 r 7, Clause 4 (a), (b) and (c).

Bay of Plenty Flooding – July 2004

Extreme Weather Event

Heavy rain began falling in the Bay of Plenty on Thursday 15 July 2004 and continued unabated for a further three days with constant rain continuing until 29 July. This event resulted in July 2004 rainfall being 345% higher than average² and caused major widespread flooding and land slips in the Whakatane and surrounding districts. A map of the affected areas is contained in Appendix E. The resultant flooding was considered a one in 100 year event. The Whakatane River flow peaked at 2820 cubic metres per second, significantly exceeding a one in 100 year flood flow and the Rangitaiki River peaked at almost exactly a one in 100 year flood size.³ The severity of the flooding and land slips resulted in:

- Civil Defence Emergencies being declared in the Opotiki and Whakatane Districts at 5.00pm and 9.47pm on 17 July 2004 respectively. The Opotiki District Civil Defence Emergency was terminated on the 23 July 2004 whilst the Whakatane Civil Defence Emergency continued until 4.00pm on 30 July 2004⁴.
- 3068 people registered at evacuation centres.
- Approximately 700 houses were damaged by flooding with 220 houses condemned or could not be occupied without significant works.
- In addition to the closure of many local roads, lanes of State Highway 2 were closed while complete sections of State Highways 35 and 38 were closed.

² NIWA, National Climate Centre, “National Climate Summary – July 2004”, <http://www.niwa.co.nz/ncc/cs/0407sum.pdf>.

³ Environment Bay of Plenty Website, “July Flood Update”, http://www.envbop.govt.nz/media/doc/july_flood_updates.doc

⁴ Ministry of Civil Defence & Emergency Management Website, [www.civildefence.govt.nz/memwebsite.nsf/Files/CD%20Declarations%20Since%201963%20v3/\\$file/CD%20Declarations%20Since%201963%20v3.pdf](http://www.civildefence.govt.nz/memwebsite.nsf/Files/CD%20Declarations%20Since%201963%20v3/$file/CD%20Declarations%20Since%201963%20v3.pdf)

The flooding impacted on the network in a variety of ways:

- electricity poles swept away with flood waters
- electricity poles brought down by slips
- slips bringing trees into lines
- water ingress to switches and equipment
- vehicle accidents as a result of road conditions and flooding, bringing down poles.

Most areas were completely cut off from land access and restoration was not possible until flood waters had receded. Whilst the civil defence emergencies were declared quite late on Saturday 17 July, Horizon was aware that the situation was unusual and was deteriorating rapidly well before any emergency was declared. For example SAIDI and SAIFI were affected before the civil emergency was declared:

- a dual circuit 11/33kV pole had been swept away (04:01am – 17 July)
- a tree had slipped through the Ohope 33kV supply (9:47am – 17 July)
- a pole had washed away at Waimana, another pole had washed away in Galatea (1.00pm – 17 July)
- Contractor crews were reporting roads closed and gaining access to reported faults was becoming harder.

Photographs depicting the severity of the flooding are set out in Appendix E.

Impact of Flooding

As a result power was disrupted to many customers resulting in 157 direct SAIDI Minute lost. Much of the work performed during and immediately following the

flood was temporary and accordingly restoration and repair work was undertaken over following months resulting in a total of 163 SAIDI minutes (which is greater than Horizon's five year average) and a SAIFI of 0.62 interruptions from the incident.

Future Mitigation

Despite the severity and rarity of the event, Horizon has commissioned a report to look at future flood mitigation. In addition Horizon is currently working with Environment Bay Of Plenty and Transpower with regard to installation of stop banks at the Plains/Edgecumbe substations and raising water clearance levels of crucial equipment. Budgeted provision has been made to install a new 33kV circuit that would improve the bypass capability around the Edgecumbe Transpower substation.

Bay of Plenty Tornados – 25 March 2005

A series of tornados (coupled with lightning) caused considerable damage in the region on Good Friday. The impact of the tornados was severe with trees uprooted, and lines and poles were blown over including two Transpower towers.

Impact of Extreme Event

The damage to Horizon's network was widespread and even with the employment of extra contractors, some supplies were unable to be restored for several days.

Some of the effects on Horizon's network were:

- lines brought down in Onepu, Symons Road, Johnstones Road and Park Road
- poles brought down on Rotorua Road and Braemar Road
- lightning destroyed insulators on the Whakatane Board Mills 33 kV South line

- outages on large sections of the Manawahe Feeder due to poles and conductors being brought down by trees.

A photograph of the impact of the tornados is included in Appendix F.

Future Mitigation

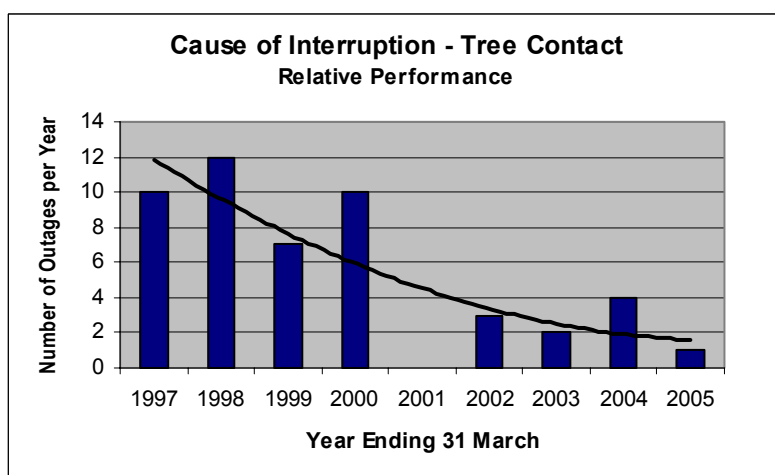
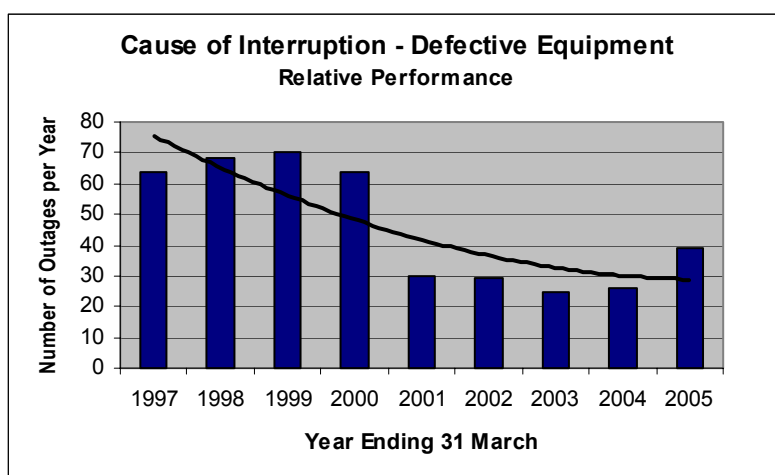
Horizon designs and builds overhead lines in accordance with industry regulations and standards. The majority of damage sustained resulted from trees being carried some distance into the lines and in the majority of instances these trees were not adjacent to or within falling distance of the lines. As a result of the random route and rarity of tornados, there is very little that can be done to mitigate against future damage.

Horizon's Continued Quality Focus

Horizon has an ongoing program to develop and implement cost effective quality related projects to maintain and improve supply quality in line with prudent network management and customer requirements (as determined from our customer consultation processes). Examples of these initiatives include:

- Live line techniques employed.
- Continued investment in mobile generator sets.
- Investigating the installation of surge arrestors on pole mounted transformers to reduce lightning problems.
- A new SCADA system was commissioned in December 2004 enabling greater data capture and network system analysis.

Horizon's ongoing focus on quality is clearly evident with declining fault levels for fault types within Horizon's direct influence. For example:



In addition, due to the impact of the three extreme events, Horizon, for the 2004–05 year, approximately halved its SAIDI minutes relating to planned outages (45 minutes budgeted compared with 22 actual) to minimise the overall impact on customers. This has been achieved by reducing the duration of planned outages (for example, live line techniques) and the number of planned outages (for example, mobile generation).

Clause 6 (1) (c) Customer Communications

Under clause 6 (1) (c) of Gazette Notice, Horizon is required to report on customer communications once during the two year period ending 31 March 2006. Horizon reported on customer communication in its 31 March 2004 Compliance Statement and will again report on customer communications in its 31 March 2006

Compliance Statement in order to meet the requirements of clause 6 (1) (c) of Gazette Notice. Accordingly this Compliance Statement does not include a report on customer communications.

3. Disclosure of Information Required (Clause 7(1)(a)(iii) – Policies & Procedures for recording SAIFI & SAIDI statistics)

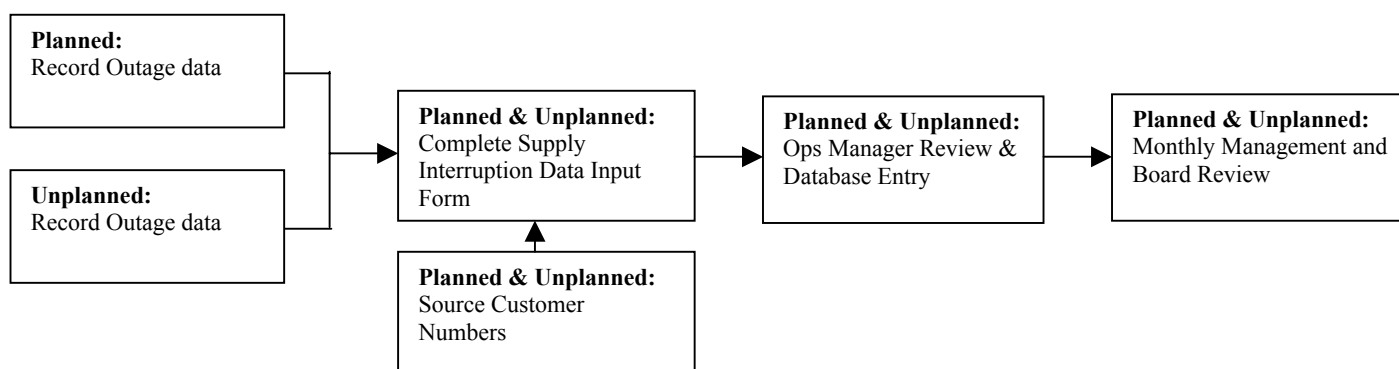
Policies And Procedures Used To Record SAIDI And SAIFI Statistics

Horizon does not have an automated system for the capture of outage data.

Network outage data is recorded by Control Room staff by means of a written procedure.

Capture Of Statistical Information

The procedures followed to capture statistical information for planned outages and unplanned outages (less than 24 hour notice) are the same except for the initial recording of outage data. The following diagram sets out the procedural flow for the recording of planned and unplanned outage data. Each flow is also discussed in detail below.



Planned Outages – Initial Recording of Outage Data

All planned outage data must be recorded on the Network Switching Schedule (refer Appendix G).

This schedule records:

- outage dates
- outage location and equipment
- outage type
- switching instructions
- mechanism for notification of outages
- issuing of permits
- the exact time of each operation from the SCADA screen

Unplanned Outages – Initial Recording of Outage Data

For initial data capture and recording of unplanned outages, similar details as above are recorded on the reverse side of the Supply Interruption Data Input Form (refer Appendix G).

Planned and Unplanned Outages – Supply Interruption Data Input Form

Following the initial recording of planned or unplanned outage data, information is transferred to a Supply Interruption Data Input Form. Individual line switching operations are completed, including customer numbers (discussed below) and length of time before restoration. This data enables the calculation of SAIDI and SAIFI impacts. The impact of each operation is summed to generate the outage statistics.

Planned and Unplanned Outages – Customer Numbers

Customer numbers for both unplanned and planned outages are sourced from the NMS database. Customer numbers can be sourced between nodes or at an individual transformer level. The database is continually updated (with new and disconnected customers).

Planned and Unplanned Outages – Collation of Data

On completion of the Supply Interruption Data Input form, it is delivered (within two working days) to the Operations Manager. The Operations Manager reviews the form for accuracy and completeness and enters the data into the Horizon Support Systems Database. The form is then stamped as processed and filed. This database contains the data for all outages during the year (and historical data).

Planned and Unplanned Outages – Management and Board Review

From the database, a monthly report is generated containing rolling 12-monthly outage statistics (including outage type, duration and impact on SAIDI and SAIFI statistics) and is provided to management and the Board of Directors for review and discussion.

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 Horizon Energy Distribution Limited expressly disclaims any liability to any other party who may rely on this statement for any other purpose.

4. 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 Horizon Energy Distribution 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 Horizon Energy Distribution Limited for assessment as at 31 March 2005 and dated 16 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 Horizon Energy Distribution Limited to prepare certificates that confirm the compliance, or otherwise, of Horizon Energy Distribution 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 19 and Appendices A to G 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 Horizon Energy Distribution 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 Horizon Energy Distribution 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 Horizon Energy Distribution Limited other than in our capacities as auditors of the threshold compliance statements and under the Companies Act 1993, and in the provision of other professional advisory services. We are not aware of any relationships between our firm and Horizon Energy Distribution 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 Horizon Energy Distribution 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 Horizon Energy Distribution Limited's policies and procedures for recording SAIDI and SAIFI statistics as disclosed in the threshold compliance statement, and fairly represent the performance of Horizon Energy Distribution 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, have been correctly taken from the information disclosed by Horizon Energy Distribution Limited 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 Horizon Energy Distribution Limited.

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:

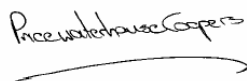
- There is no independent evidence available for the period to support the completeness and accuracy of recorded faults; and
- Control over the completeness and accuracy of ICP data included in the SAIDI and SAIFI calculations is limited throughout the period.

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 Horizon Energy Distribution 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 16 May 2005 and our qualified and unqualified opinions are expressed as at that date.



PricewaterhouseCoopers
Auckland
16 May 2005

5. Directors' Certificate on Threshold Compliance Statement (Clause 7(1)(c))

We, Colin George Houston Holmes and Graeme Scott Hawkins, being directors of Horizon Energy Distribution Limited certify that, having made all reasonable enquiry, to the best of our knowledge and belief, the attached Threshold Compliance Statement of Horizon Energy Distribution Limited, 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 respect:

- Clause 6(1)(a) and Clause 6(1)(b): Horizon Energy Distribution Limited has, for the year ending 31 March 2005, breached its five year average SAIDI and SAIFI thresholds. The extenuating circumstances leading to these breaches are detailed in the attached Threshold Compliance Statement.



C.G.H. Holmes



G.S. Hawkins

16 May 2005

Appendix A

This appendix details the calculations underpinning the compliance with the Price Path Threshold at 31 March 2005. Details of prices and quantities are contained in Appendix B.

Clause 5 (1) (a)

- Notional Revenue at 31 March 2005 (NR_{2005})

Notional Revenue for the year ending 31 March 2005		
Term	Description	(\$)
$\Sigma P_{i,2005} Q_i$	Prices at 31 March 2005 multiplied by 31 March 2003 Base Quantities	22,724,855
K_{2005}	Transmission Charges for year ending 31 March 2005	7,772,076
	Rates for year ending 31 March 2005	110,249
	Electricity Commission Levies for year ending 31 March 2005	53,385
$NR_{2005} = \Sigma P_{2005} Q_i - K_{2005}$	Notional Revenue for the year ending 31 March 2005	14,789,146

Refer Table 1, Appendix B for details of prices and quantities.

- Maximum Notional Revenue at 31 March 2004 (R_{2004})

Maximum Notional Revenue at the reference date which would not have caused a breach of the price path under the Initial Notice		
Term	Description	(\$)
$\Sigma P_{i,0} \times Q_{i,0}$	Prices at 6 September 2003 multiplied by 31 March 2003 Base Quantities	22,007,456
C_{T2003}	Budget Transmission Charges for year ending 31 March 2004	7,137,886
C_{R2003}	Budget Rates for year ending 31 March 2004	20,000
R_{2004}	Maximum Revenue at 31 March 2004 that would not have caused a breach under the initial Notice	14,849,570

Refer Table 2, Appendix B for details of prices and quantities.

- Allowable Maximum Notional Revenue at 31 March 2005 (R_{2005})

Allowable Notional Revenue under CPI -X price path		
Term	Description	(\$)
X	X Factor Assigned to Horizon	1%
R_{2004}	Maximum Revenue at 31 March 2004 that would not have caused a breach under the initial Notice	14,849,570
$(1 + \Delta CPI_{2005})$	Average change in Consumer Price Index over 2004	1.0229
$(1-X)$	1-X Factor Assigned	0.99
R_{2005}	Allowable Notional Revenue under the CPI-X Price Path for the year ended 31 March 2005	15,037,766

For presentation purposes, the CPI index has been presented to four decimal places, however for the calculation of R_{2005} , the full index (with no rounding) has been applied

- Change in CPI

ΔCPI_{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
ΔCPI_{2005}	2.29%		

Clause 5 (1) (b)

- Maximum Notional Revenue during the period 1 April 2004 to 31 March 2005 (R_{max})

Maximum Notional Revenue for the period 1 April 2004 to 31 March 2005.		
Term	Description	(\$)
$\Sigma P_{MAX} Q_i$	Maximum Price Between 1 April 2004 and 31 March 2005 multiplied by 31 March 2003 Base Quantities	22,724,855
K_{2005}	Transmission Charges for year ending 31 March 2005	7,772,076
	Rates Charges for year ending 31 March 2005	110,249
	Electricity Commission Levies for year ending 31 March 2005	53,385
R_{MAX}	Maximum Notional Revenue for 01/04/04 to 31/03/05	14,789,146

There was no change to tariffs between 1 April 2004 and 31 March 2005, refer Table 1, Appendix B.

- Clause 5 (1) (b) Compliance Summary

Notional Reveue 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 01/04/04 to 31/03/05	14,789,146
$Max(R_{2004}, NR_{2005})$	Maximum of the Notional Revenue that would not breach the Initial Notice and the Notional Revenue for the year ended 31 March 2005	14,849,570
$R_{MAX} / Max(R_{2004}, NR_{2005})$	If expression is greater than 1, Clause 5 (1) (b) is breached	0.9959

Appendix B – Table 1

Schedule of Prices and Quantities – Base Quantities with 31 March 2005 Prices

HORIZON ENERGY DISTRIBUTION LIMITED											
2002/2003 SALES DATA			Number of ICP's	Line Charges		Transpower Charge	Year kWh	Line Charges Revenue		Transpower Revenue (\$)	Total Revenue (\$)
31 March 2005 Prices				Fixed	Variable			Fixed (\$)	Variable (\$)		
Days in the Year				365	\$ per day	c/kWh	c/kWh				
DOMESTIC											
Urban			11,550	\$0.150	5.96	1.77	75,134,823	632,363	4,478,035	1,329,886	6,440,284
Urban - Concession			5	\$0.150				274			274
Rural			7,029	\$0.150	5.96	1.77	51,312,821	384,838	3,058,244	908,237	4,351,319
Rural - Concession			74	\$0.150				4,052			4,052
Total Domestic			18,658				126,447,644	1,021,526	7,536,280	2,238,123	10,795,928
NON DOMESTIC											
Specials											
U/Verandah Lights			126	\$0.085		\$0.03 / day	45,990	3,909		1,380	5,289
Electric Fence			33	\$0.1911		\$0.068 / day	24,090	2,302		819	3,121
SPEC			1	\$260 /mth		(\$303.42) /mth		3,120		(3,641)	(521)
Street Lights			27		6.68	1.77	1,969,726		131,578	34,864	166,442
Telecom - PCM 24 hour			78	\$26.75 /mth		\$6.50 /mth	341,640	25,038		6,084	31,122
Telecom - controlled			18	\$10.30 /mth		\$2.70 /mth	32,850	2,225		583	2,808
Total Specials			283				2,414,296	36,594	131,578	40,089	208,261
Capacity Groups											
N1U	1ø 60A (0 - 14 kVA)		417	\$1.10	3.90 /c/kWh	1.77 /c/kWh	2,556,081	167,426	99,687	45,243	312,355
N1R	1ø 60A (0 - 14 kVA)		684	\$1.15	4.01 /c/kWh	1.77 /c/kWh	3,035,034	287,109	121,705	53,720	462,534
N2U	3ø 60A (15 - 42 kVA)		695	\$1.30	3.48 /c/kWh	1.77 /c/kWh	11,343,042	329,778	394,738	200,772	925,287
N2R	3ø 60A (15 - 42 kVA)		1,810	\$1.40	3.71 /c/kWh	1.77 /c/kWh	24,464,191	924,910	907,621	433,016	2,265,548
N3U	3ø 100A (43 - 70 kVA)		237	\$1.70	3.48 /c/kWh	1.77 /c/kWh	7,173,788	147,059	249,648	126,976	523,682
N3R	3ø 100A (43 - 70 kVA)		196	\$1.90	3.71 /c/kWh	1.77 /c/kWh	7,071,497	135,926	262,353	125,165	523,444
N4U	3ø 150A (70 - 100 kVA)		66	\$2.20	3.48 /c/kWh	1.77 /c/kWh	3,299,002	52,998	114,805	58,392	226,196
N4R	3ø 150A (70 - 100 kVA)		45	\$2.50	3.71 /c/kWh	1.77 /c/kWh	2,508,399	41,063	93,062	44,399	178,523
N5U	> 3ø 150A (> 100 kVA)		48	1.63 c/kVA/day	3.30 /c/kWh	1.77 /c/kWh	3,521,012	45,073	116,193	62,322	223,589
N5R	> 3ø 150A (> 100 kVA)		42	1.76 c/kVA/day	3.59 /c/kWh	1.77 /c/kWh	1,996,191	37,664	71,663	35,333	144,660
CC	Capacity Concession (U)		13	-\$0.65				(3,084)			(3,084)
CC	Capacity Concession (R)		137	-\$0.70				(35,004)			(35,004)
Total Capacity Groups			4,390				66,968,238	2,130,917	2,431,475	1,185,338	5,747,730
TOU											
Cap	23,985 kVA		99		0.89	1.77	34,785,794		309,594	615,709	925,302
MD	13,121 kW			\$0.60 /kVA/mth				172,692			172,692
Total TOU			99	\$5.90 /kW/mth			34,785,794	1,101,659	309,594	615,709	2,026,961
MAJORS											
SPEC					Demand	0.3612 /c/kWh	36,428,890			131,581	131,581
SPEC			1	\$10,016.63 /mth	22,497 kW	\$50.62 /kW/yr	154,878,840	120,200		1,408,752	1,528,952
SPEC			1	\$13,912.57 /mth	20,000 kW	\$50.62 /kW/yr	107,800,385	166,951		1,558,096	1,725,047
SPEC			2		1,030 kW	\$50.62 /kW/yr	6,041,474			82,229	82,229
SPEC			1	\$5,826.30 /mth	3,342 kW	\$50.62 /kW/yr	19,306,030	69,916		211,663	281,578
SPEC			1	\$3,123.95 /mth	2,259 kW	\$50.62 /kW/yr	21,240,699	37,487		150,341	187,828
SPEC			1	\$730.00 /mth			3,168,825	8,760			8,760
Total Major Customers			7				348,865,144	403,313	0	3,542,662	3,945,976
Grand Total			23,437				579,481,116	4,694,008	10,408,926	7,621,921	22,724,855

Note - Fixed charges and Transpower charges were recalibrated after the 6 September 2003 assessment. However, there was no impact on total prices.

Appendix B – Table 2

Schedule of Prices and Quantities - 6 September 2003 Prices

HORIZON ENERGY DISTRIBUTION LIMITED

2002/2003 SALES DATA September 2003 Prices		Number of ICP's	Line Charges		Transpower	Month kWh	Line Charges Revenue		Transpower Revenue (\$)	Total Revenue (\$)	
Days in the Year	365		Fixed	Variable	Charge		Fixed (\$)	Variable (\$)			
			\$ per day	c/kWh	c/kWh						
DOMESTIC											
Urban		11,550	\$0.150	5.67	1.74	75,134,823	632,363	4,260,144	1,307,346	6,199,853	
Urban - Concession		5	\$0.150				274			274	
Rural		7,029	\$0.150	5.67	1.74	51,312,821	384,838	2,909,437	892,843	4,187,118	
Rural - Concession		74	\$0.150				4,052			4,052	
Total Domestic		18,658				126,447,644	1,021,526	7,169,581	2,200,189	10,391,296	
NON DOMESTIC											
Specials											
U/Verandah Lights		126	\$0.085		\$0.03 / day	45,990	3,909		1,380	5,289	
Electric Fence		33	\$0.259			24,090	3,121			3,121	
Lanark		1	\$260 /mth		(\$13.60) /mth		3,120		(163)	2,957	
Street Lights		27		5.96	1.74	1,969,726		117,396	34,273	151,669	
Telecom - PCM 24 hour		78	\$33.25 /mth			341,640	31,122			31,122	
Telecom - controlled		18	\$13 /mth			32,850	2,808			2,808	
Total Specials		283				2,414,296	44,080	117,396	35,490	196,965	
Capacity Groups											
N1U 1ø 60A (0 - 14 kVA)		417	\$1.10	3.35	1.74	2,556,081	167,426	85,629	44,476	297,530	
N1R 1ø 60A (0 - 14 kVA)		684	\$1.15	3.45	1.74	3,035,034	287,109	104,709	52,810	444,627	
N2U 3ø 60A (15 - 42 kVA)		695	\$1.30	2.99	1.74	11,343,042	329,778	339,157	197,369	866,303	
N2R 3ø 60A (15 - 42 kVA)		1,810	\$1.40	3.19	1.74	24,464,191	924,910	780,408	425,677	2,130,995	
N3U 3ø 100A (43 - 70 kVA)		237	\$1.70	2.99	1.74	7,173,788	147,059	214,496	124,824	486,379	
N3R 3ø 100A (43 - 70 kVA)		196	\$1.90	3.19	1.74	7,071,497	135,926	225,581	123,044	484,551	
N4U 3ø 150A (70 - 100 kVA)		66	\$2.20	2.99	1.74	3,299,002	52,998	98,640	57,403	209,041	
N4R 3ø 150A (70 - 100 kVA)		45	\$2.50	3.19	1.74	2,508,399	41,063	80,018	43,646	164,727	Capacity
N5U > 3ø 150A (> 100 kVA)		48	1.63 c/kVA	2.84	1.74	3,521,012	45,073	99,997	61,266	206,336	7,576 kVA
N5R > 3ø 150A (> 100 kVA)		42	1.76 c/kVA	3.09	1.74	1,996,191	37,664	61,682	34,734	134,080	5,863 kVA
CC Capacity Concession (U)		13	-\$0.65				(3,084)			(3,084)	
CC Capacity Concession (R)		137	-\$0.70				(35,004)			(35,004)	
Total Capacity Groups		4,390				66,968,238	2,130,917	2,090,316	1,165,247	5,386,480	
TOU											
Cap 23,985 kVA		99	\$0.60 /kVA/mth	0.62	1.74	34,785,794	172,692	215,672	605,273	820,945	
MD 13,121 kW			\$5.90 /kW/mth				928,967			928,967	
Total TOU		99				34,785,794	1,101,659	215,672	605,273	1,922,604	
MAJORS											
Anchor Products	Alamin Plant			Demand	\$3,479.00 /mth	36,428,890			41,748	41,748	c/kWh
CHH consumer brand		1	\$8,119.83 /mth	22,497 kW	\$50.57 /kW/yr	154,878,840	97,438		1,473,760	1,571,198	0.21700
CHH Packaging		1	\$12,426.67 /mth	20,000 kW	\$50.57 /kW/yr	107,800,385	149,120		1,741,209	1,890,329	0.67700
FC Forests Kaingaroa		2		1,030 kW	\$50.57 /kW/yr	6,041,474			84,651	84,651	0.53900
FC Forests Kawerau		1	\$5,523.50 /mth	3,342 kW	\$50.57 /kW/yr	19,306,030	66,282		239,279	305,561	0.36400
Tasman Oxidation Ponds		1	\$2,863.75 /mth	2,259 kW	\$50.57 /kW/yr	21,240,699	34,365		173,499	207,864	0.27900
TG2		1	\$730.00 /mth			3,168,825	8,760			8,760	
Total Major Customers		7				348,865,144	355,965	0	3,754,146	4,110,111	
Grand Total		23,437				579,481,116	4,654,146	9,592,965	7,760,345	22,007,456	

Capacity
7,576 kVA
5,863 kVA

c/kWh
0.21700
0.67700
0.53900
0.36400
0.27900

Appendix C

SAIDI and SAIFI (Class B and Class C) for Years Ended 31 March 1999 – 2003 and the Year Ended 31 March 2005

Table B1 – SAIDI Statistics

Year Ended 31 March	SAIDI (Interruption Duration)		
	Class B	Class C	Total
1999	81	172	253
2000	49	72	121
2001	41	77	118
2002	35	179	214
2003	20	77	97
Five Year Average SAIDI			161
2005	22	331	353

Table B2 – SAIFI Statistics

Year Ended 31 March	SAIFI (Interruption Frequency)		
	Class B	Class C	Total
1999	0.50	2.71	3.21
2000	0.36	1.54	1.90
2001	0.31	1.24	1.55
2002	0.22	1.43	1.65
2003	0.18	0.88	1.06
Five Year Average SAIFI			1.87
2005	0.11	2.35	2.46

Appendix D

Long Spans, Remoteness and Ruggedness of Te Urewera National Park



Impact of the Te Urewera National Park Storm



Conductor
brought down by
storm

From: jsutton@doc.govt.nz [mailto:jsutton@doc.govt.nz]
Sent: Friday, 29 April 2005 12:07 p.m.
To: Ian Robertson
Cc: gmittchell@doc.govt.nz
Subject: RE: Te Urewera

Ian

Thanks for the below, I agree fully with your understanding of our agreement for the management of the vegetation underneath and alongside 11,000 volt overhead lines for conservation land that I manage for the BOP Conservancy. The main piece of conservation land I am responsible for adjacent to SH38 and your 11,000 volt lines is the Whirinaki Forest Park.

However Te Urewera National Park is within the EastCoast/HawkesBay Conservancy and the Area Manager responsible for the part of TUNP adjacent to SH 38 is Glenn Mitchell of the Aniwhaniwa Area. The boundary between the two conservancies is the western boundary of TUNP.

Regards

John Sutton
Area Manager
Rangitaiki

VPN: 6553
DDI: 073661083
mobile: 0274395487

-----Original Message-----

From: Ian Robertson [mailto:IanR@hedl.co.nz]
Sent: Friday, 29 April 2005 11:38 a.m.
To: jsutton@doc.govt.nz
Subject: Te Urewera

Good morning John I have just been speaking with Jim Fogarty with regard to my request and he suggested that I email you direct. What I am after is a simple statement from DOC as to the understanding that exists between the Department and Horizon with regard our 11,000 volt overhead lines that run through the National Park. As I understand it the Department is willing to allow the felling of immediate and obvious threat trees, however we do not fell trees that are all within falling distance.

Regards
Ian Robertson
Operations Manager
Horizon Energy Distribution Ltd, PO Box 281, Whakatane
ianr@hedl.co.nz
ph ddi 07 922 8830, fax 07 922 8807

CAUTION: The information contained in this email message is confidential and may be legally privileged. If you are not the intended recipient you are notified that any use, dissemination, distribution or reproduction of this message is prohibited. If you have received this message in error please notify me immediately and erase all copies of this message.

Attention:

This e-mail (and attachments) is confidential and may be legally privileged.

Appendix E – July 2004 Flooding

a) Map of Flood Affected Regions



Source: Environment Bay of Plenty

b) Pictures of Flood Affected Areas

- Flooding around Awatapu, Whakatane



Source: Environment Bay of Plenty

- View of Edgecumbe with Fonterra in the foreground



Source: Environment Bay of Plenty

- Impact of Storm



Pole and cross-arm washed away by flood waters



Bridge, pole and cross-arm washed away by flood waters




Cross arm destroyed and relocated by flood waters

Appendix F – March 2005 Tornado

Tornado Impact



Appendix G – Outage Schedules

 HORIZON ENERGY DISTRIBUTION LIMITED				Switching Schedule Number		
Day:		Date:		Times:		
Substation:						
Feeder:						
Reason for Switching:						
Area Affected:						
Customers Notified by:					Network Req#	
Arranged by			Checked by			Controlled by
SWITCHING SEQUENCE						
	1					
	2					
	3					
	4					
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					

SUPPLY INTERRUPTION DATA INPUT FORM

REPORT NUMBER

UNSCHEDULED SCHEDULED (circle one)

FILE ONLY ? YES NO (circle one)

ZONE SUBSTATION

DATE

FEEDER NAME

VOLTAGE 400V 11KV 33KV 110KV (circle one)

FEEDER NUMBER

O/H OR U/G (circle one)

TRANSFORMER NUMBER

OUTAGE CLASS (letter a-g)

AREA AFFECTED

(a)	Transpower Planned Shutdowns
(b)	HEDL Planned Shutdowns
(c)	HEDL Unplanned Shutdowns
(d)	Transpower Unplanned Shutdowns
(e)	ECNZ Unplanned Shutdowns (Generation)
(f)	Other Generation Unplanned Shutdowns
(g)	Planned or Unplanned Any other cause

MAJOR CUSTOMERS AFFECTED (tick)

CAXTON	
TASMAN PULP	
BMP	
TASMAN LUM	
WBM	
WBM	
NZ DISTILLERY	

CAUSE OF INTERRUPTION

(number 0-9)

0 UNKNOWN
1 PLANNED SHUTDOWN
2 LOSS OF BULK SUPPLY
3 TREE CONTACTS
4 LIGHTNING
5 DEFECTIVE EQUIPMENT
6 ADVERSE WEATHER
7 ADVERSE ENVIRONMENT
8 HUMAN ELEMENT
9 FOREIGN INTERFERENCE

GENERATOR AVOIDED CUSTOMER MINUTES

FAULTMAN TIME CALLED

CONTRACTOR TIME CALLED

SYSTEM CONTROLLER

FAULT TYPE? EF OC (circle one)

LIVE LINE AVOIDED CUSTOMER MINUTES

FROM SW NO.	TO SW. NO.	NO. OF CUSTOMERS		TIME OFF	TIME ON 100% RESTORED	TOTAL TIME OFF 100% (mins)	CUST*MIN 100%	TO BE COMPLETED WHERE MAJOR CUSTOMERS ARE AFFECTED AND / OR SIGNIFICANT OUTAGES OCCUR (including all 33kV and above)	
		TOTAL	SECTION					Major customer (include time)	Spoke to
TOTALS									

DETAILS OF FAULT/SHUTDOWN: