

# *Top Energy Limited*

## **THRESHOLD COMPLIANCE STATEMENT**

**FOR THE ASSESSMENT DATE: 31 MARCH 2010**

*Pursuant to the Commerce Act (Electricity Lines Thresholds) Notice  
2004 and the Amendment Notice 2006*

21 May 2010

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

Top Energy Limited does not comply with the requirements of Clauses 5 (1) (a) & (b) of the Price Path Threshold at the Assessment Date 31 March 2010, as specified in the Commerce Act (Electricity Distribution Thresholds) Notice 2004 and Amendment Notice 2006.

Clause 5 (1) (a) The Notional Revenue of a distribution business at each Assessment Date (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):

<b>Test:</b>	$\frac{NR_{2010}}{R_{2010}}$	$\leq 1$
<b>Result:</b>	\$22,107,882 / \$16,731,335	> 1
<b>Result:</b>	1.3213	> 1
<b>Result:</b>	Threshold is breached by \$5,376,547	

Supporting evidence is presented in Appendix A.

Top Energy undertook to pass the excess revenue that was attributed to over-recovery of transmission charges to its consumers. It did so on 12 May 2010 in the amount of \$1,457,051 plus GST. The balance of the breach amounts to \$3,919,496 (\$5,376,547 less \$1,457,051). Of this balance, \$678,459 can be attributed to additional line revenue received in relation to the period 1 February 2010 to 31 March 2010. The remaining \$3,241,037 of the balance relates to notional additional line revenue that would have been received if prices had been increased with effect from 1 April 2009, rather than from the actual effective date of the price increase of 1 February 2010.

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 Allowable Notional Revenue of the distribution business at the Assessment date on which that assessment period ends and the Allowable 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).

□		□
<b>Test:</b>	$\frac{NR_{Max}}{Max(R_{2009}, R_{2010})}$	≤ 1
<b>Result:</b>	\$22,107,882 / \$16,731,335	> 1
<b>Result:</b>	1.3213	> 1
<b>Result:</b>	Threshold is breached by	\$5,376,547

As stated previously, prices were increased with effect from 1 February 2010. Supporting evidence is presented in Appendix B.

**Notional Revenue:**

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

- Network line charges to retailers
- Network line charges to end customers

**Excluded Services:**

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

- Non Conveyance items such as
  - Rents
  - Interest
  - General Contracting services
  - Customers' interest in network assets.
- Connection services such as:
  - Metering
  - Disconnections and reconnections.

These services are competitive and have not altered from previous years.

**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
- Voltage support charges
- New investment charges
- EVA adjustments
- Avoided transmission charges

Other costs that have been passed through in accordance with the Gazette Notice are:

- Local body rates applying to system fixed assets: lines, cables, equipment, sub-station land and substation buildings.
- Electricity Commission levy costs.

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

Top Energy Limited complies with all requirements of the quality threshold at the assessment date 31 March 2010, as specified in the Commerce Act (Electricity Distribution Thresholds) Notice 2004 and the Amendment Notice 2006.

### Clause 6 (1) (a) Interruption Duration (Class B&C)

<b>Test:</b>	$SAIDI_{2010} \leq \left( \frac{SAIDI_{1999} + SAIDI_{2000} + SAIDI_{2001} + SAIDI_{2002} + SAIDI_{2003}}{5} \right)$		
<b>Result:</b>	463.03	<	464.60
<b>Result:</b>	SAIDI does not breach the threshold		

### Clause 6 (1) (b) Interruption Frequency (Class B&C)

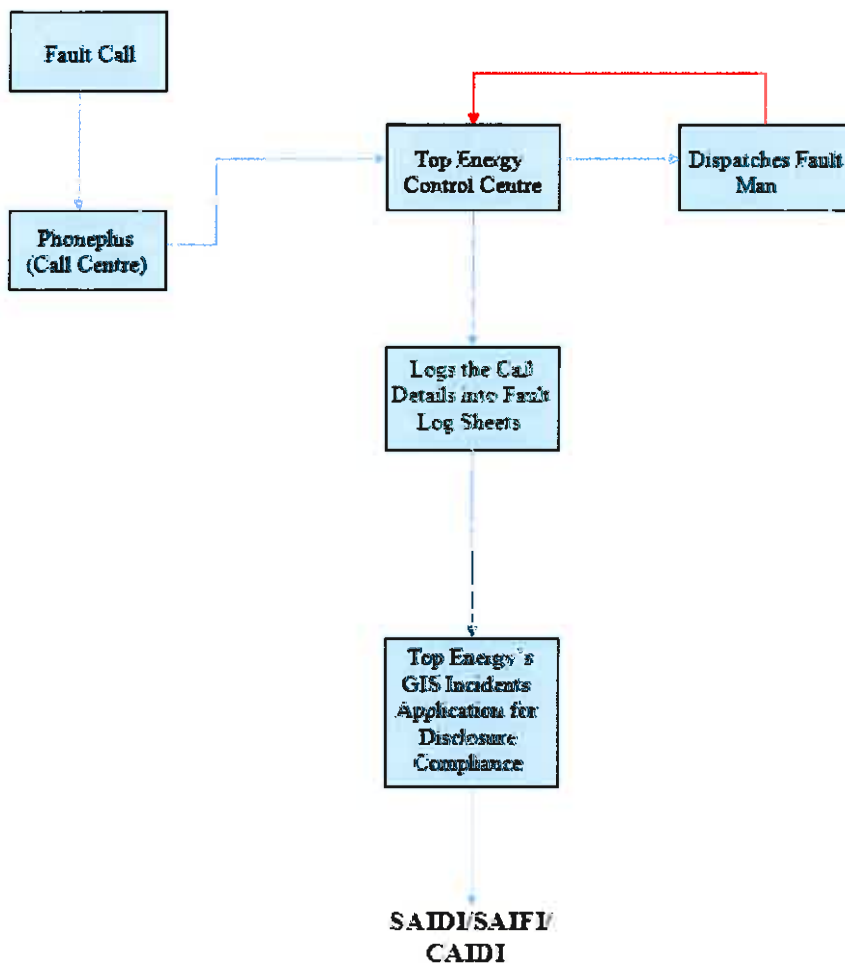
<b>Test:</b>	$SAIFI_{2010} \leq \left( \frac{SAIFI_{1999} + SAIFI_{2000} + SAIFI_{2001} + SAIFI_{2002} + SAIFI_{2003}}{5} \right)$		
<b>Result:</b>	4.19	<	6.48
<b>Result:</b>	SAIFI does not breach the threshold		

Supporting evidence is presented in Appendix C.

On 11-12 July 2009, the Far North region suffered a major storm that would have qualified as a Major Event Day (MED) period if Top Energy's SAIDI performance threshold had been breached. It has been calculated that the storm's contribution to the 2010 SAIDI performance result of 463.03 minutes was 140.38 minutes.

Clause 7 (a) (iii) Procedures used for recording SAIDI and SAIFI statistics

Top Energy Limited records data for network performance at its network control centre. The following flow diagram outlines the business process that results in the recording and production of quality performance statistics.



**Top Energy Faults Management Process**

## Recording Interruptions:

All interruptions in electricity supply on the network are recorded by the control centre operators:

- Planned outages – are managed by the control centre operators who: (1) schedule the work with field staff and; (2) conduct and coordinate the related switching on the network. These details are recorded by action, date and time on a 'Switching Procedure Sheet'.
- Unplanned outage records - are initiated either by a telephone call of a fault being received by our in-house call centre (PHONEplus), or by receiving a protection equipment alarm generated directly from the SCADA (Supervisory Control & Data Acquisition) system. A detailed record of each telephone call about a fault, known as a 'CMS' \*, is completed by the call centre operator, who identifies key information about the interruption such as: time, fault description, name & contact details of the caller. Subsequently the control centre operator will despatch the fault response team, log the fault, and conduct any switching that is required. All extra-high voltage and high-voltage faults are recorded electronically via the SCADA system, which provides an accurate record of the extent, time of occurrence and duration of the outages.

\*CMS - Call Management Service. These are electronic records that the call centre staff use to record customer-reported fault information that are then forwarded to the control centre operators.

For either type of outage, the control centre operator records the following information:

- Substation reference number
- Feeders affected
- Interruption class type – A,B,C or D
- Cause code – where this is known

As a part of managing the restoration of supply, the control centre operator records the devices that are operated and the times at which they are operated. When this information is loaded into the GIS (Geographic Information System) incidents application software, the time the customers are without power (SAIDI minutes) is calculated by the application.

The control centre operates continuously on a roster basis, with 3 operators being present from 7 am to 9pm, Monday to Friday. Outside these hours, a standby roster is used to provide continuous coverage.

## **Consumer Numbers:**

To determine the total number of consumers on its network, Top Energy maintains an ICP database. This is based on the electricity industry's registry. The ICP database has been consistently kept in compliance with relevant rules and regulations. The number of ICPs is used for internal reporting and performance management purposes throughout the year.

Using a fully integrated GIS & ICP (Installation Control Point) database for its entire network, the company is able to use its information systems to calculate the number of customers beyond every isolation device on the network, at any time. The required customer counts can be extracted from the GIS system, which is linked to the ICP database. From the beginning of the assessment period to 31 March 2010, Top Energy has used the customer count as at 31 March 2009. The average of the network ICP counts at the beginning and the end of the year was calculated as follows:

ICP count at 31 March 2009 was 30,453

ICP count at 31 March 2010 was 30,825

Average ICP count for 2010 was therefore 30,639  $((30,453+30,825)/2)$

## **GIS Incident Application**

Top Energy Limited has used its GIS incident application since 1 April 2009. This software is used to record network interruptions and to generate network performance indices, such as SAIDI and SAIFI. The results are reported to and reviewed for reasonableness by the Operations Manager on a monthly basis. After the data have been reviewed, network quality performance graphs, together with a summary report of reliability statistics, form part of the Network General Manager's report to the Board of Directors. On a six monthly basis, the related statistics are summarised and reported as part of the company's financial reporting procedure. This provides comparisons with targets set out in the company's Statement of Corporate Intent.

The GIS incidents system automatically calculates customer outage minutes from the network outage data input. This is accomplished by recording the time stamped operation of each switchable device, and combining it with the GIS calculated number of ICPs connected beyond the device concerned. A report on the SAIDI and SAIFI effects is then generated. For disclosure purposes, the average network total ICP count, calculated as previously described, is used.



The equation used by the GIS incidents application to calculate customer outage minutes is:

$$\Sigma (\text{Outage Duration}_1 \times \text{ICP Count}_1) + (\text{Outage Duration}_2 \times \text{ICP Count}_2) + \dots$$

(and so on for each outage duration)

## REPORT OF THE AUDITOR-GENERAL

To the readers of the threshold compliance statement of Top Energy Limited for the assessment period ended on 31 March 2010

We have audited the attached statement, prepared by Top Energy Limited for assessment as at 31 March 2010 and dated 19 May 2010. The attached statement is a threshold compliance statement in respect of the price path threshold and the quality threshold, for the purposes of information requirements set out in clause 7 of the Commerce Act (Electricity Distribution Thresholds) Notice 2004 ("the Notice"). In this report the attached statement is called "the threshold compliance statement".

### Directors' Responsibilities

Directors of Top Energy Limited are responsible for the certification of the threshold compliance statement in accordance with the Notice.

### Auditor's Responsibilities

Section 15 of the Public Audit Act 2001 and clause 7(1)(b) of the Notice require the Auditor-General to audit the threshold compliance statement. It is the responsibility of the Auditor-General to express an independent opinion on the threshold compliance statement and report the opinion to you.

The Auditor-General has appointed Jonathan Freeman of PricewaterhouseCoopers to undertake the audit.

### Basis of Opinion - Price Path Threshold and Quality Threshold: SAIDI and SAIFI Statistics for the Assessment Period ended 31 March 2010

We conducted the audit in accordance with the Auditor-General's Auditing Standards which include the Auditing Standards issued by the Institute of Chartered Accountants of New Zealand.

The audit included examining, on a test basis, evidence relevant to the amounts and disclosures contained on pages 2 to 9 and Appendices A to C of the threshold compliance statement and which relate to:

- the price path threshold set out in clause 5 of the Notice; and
- the SAIDI and SAIFI statistics for the assessment period ended on 31 March 2010 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 Top Energy 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 the 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.

**REPORT OF THE AUDITOR-GENERAL**

Top Energy Limited

**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 Top Energy 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**

In addition to the audit of the threshold compliance statement we have carried out other audit assignments for Top Energy Limited. This involved issuing an audit opinion on the annual financial statements for the year ended 31 March 2010 on behalf of the Auditor-General as well as an assurance opinion pursuant to the Electricity Distribution (Information Disclosure) Requirements 2008. We have also carried out other professional advisory services. Other than these assignments we have no relationship with or interests in Top Energy Limited.

**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 Top Energy Limited against that threshold for the assessment period ended on 31 March 2010.

***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 2010 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 Top Energy Limited's policies and procedures for recording SAIDI and SAIFI statistics as disclosed in the threshold compliance statement;
- 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 Top Energy 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 Top Energy Limited.

**REPORT OF THE AUDITOR-GENERAL**

Top Energy 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 historical periods to support the completeness and accuracy of recorded faults;
- 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 2010, 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 Top Energy 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 2010.

Our audit was completed on 21 May 2010 and our qualified and unqualified opinions are expressed as at that date.



Jonathan Freeman  
On behalf of the Auditor-General

21 May 2010



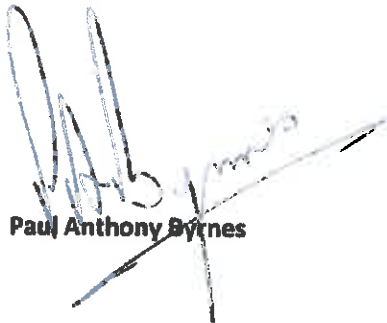
PricewaterhouseCoopers  
Auckland, New Zealand

## SCHEDULE 3

*Clause 7 (1)(c)*

### **DIRECTORS' CERTIFICATE ON THRESHOLD COMPLIANCE STATEMENT**

We, Paul Anthony Byrnes and Andrew Martin Kelleher, being directors of Top Energy Limited certify that, having made all reasonable enquiry, to the best of our knowledge and belief, the attached threshold compliance statement of Top Energy Limited, and related information, prepared for the purposes of the Commerce Act (Electricity Distribution Thresholds) Notice 2004 complies with the requirements of that notice.



**Paul Anthony Byrnes**



**Andrew Martin Kelleher**

Dated this 19 day of May 2010.

Note: Section 103(2) of the Commerce Act 1986 provides that no person shall attempt to deceive or knowingly mislead the Commission in relation to any matter before it. It is an offence to contravene section 103(2) and any person who does so is liable on summary conviction to a fine not exceeding \$10,000 in the case of an individual or \$30,000 in the case of a body corporate.

**APPENDIX A: Notional Revenue & Allowable Notional Revenue at 31.3.2010**

<b>Clause 5 (1) (a)</b>		
<b>NR<sub>2010</sub></b>		
Notional Revenue for the year ending 31 March 2010		
Term	Description	(\$)
$\sum P_{i,2010} Q_i$	Prices at 31 March 2010 multiplied by 31 March 2003 Base Quantities	28,290,626
$K_{2010}$	Transmission Charges for year ending 31 March 2010	6,112,093
	Rates for year ending 31 March 2010	17,430
	Electricity Commission Levies for year ending 31 March 2010	53,220
$NR_{2010} = \sum P_{i,2010} Q_i - K_{2010}$	Notional Revenue for the year ending 31 March 2010	22,107,882
<b>R<sub>2004</sub></b>		
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	(\$)
$\sum P_{i,0} x Q_{i,0}$	Prices at 6 September 2003 multiplied by 31 March 2003 Base Quantities	18,898,123
$C_{T2003}$	Budget Transmission Charges for year ending 31 March 2004	4,756,358
$C_{R2003}$	Budget Rates for year ending 31 March 2004	10,700
$R_{2004}$	Maximum Revenue at 31 March 2004 that would not have caused a breach under the Initial Notice	14,131,065
Note: All notation in the table above except R <sub>2004</sub> comes from the Initial Notice.		
<b>Test for 5 (1) (a) - (NR<sub>2010</sub> / R<sub>2010</sub> ≤ 1)</b>		
Allowable Notional Revenue under CPI -X price path		
Term	Description	(\$)
$X$	X Factor	0%
$R_{2004}$	Maximum Revenue at 31 March 2004 that would not have caused a breach under the Initial Notice	14,131,065
$(1 + \Delta CPI_{2005})$	Average change in Consumer Price Index over 2004	1.0229
$(1-X)$	1-X Factor	1.00

$R_{2005}$	Allowable Notional Revenue under the CPI-X Price Path for the year ended 31 March 2005	14,454,702	
$(I+\Delta CPI_{2006})$	Average change in Consumer Price Index over 2005	1.0304	
$(I-X)$	1-X Factor	1.00	
$R_{2006}$	Allowable Notional Revenue under the CPI-X Price Path for the year ended 31 March 2006	14,893,694	
$(I+\Delta CPI_{2007})$	Average change in Consumer Price Index over 2006	1.0337	
$(I-X)$	1-X Factor	1.00	
$R_{2007}$	Allowable Notional Revenue under the CPI-X Price Path for the year ended 31 March 2007	15,394,927	
$(I+\Delta CPI_{2008})$	Average change in Consumer Price Index over 2007	1.0238	
$(I-X)$	1-X Factor	1.00	
$R_{2008}$	Allowable Notional Revenue under the CPI-X Price Path for the year ended 31 March 2008	15,760,732	
$(I+\Delta CPI_{2009})$	Average change in Consumer Price Index over 2008	1.0396	
$(I-X)$	1-X Factor	1.00	
$R_{2009}$	Allowable Notional Revenue under the CPI-X Price Path for the year ended 31 March 2009	16,384,691	
$(I+\Delta CPI_{2010})$	Average change in Consumer Price Index over 2009	1.0212	
$(I-X)$	1-X Factor	1.00	
$R_{2010}$	Allowable Notional Revenue under the CPI-X Price Path for the year ended 31 March 2010	16,731,335	
$NR_{2010} / R_{2010}$	Expression must be less than or equal to 1 to avoid breaching 5(1)(a)	1.3213	
$R_{2010} - NR_{2010}$	Value of Compliance or (Breach)	(5,376,547)	
For presentation purposes, the CPI Index has been presented to four decimal places, however, for the calculation of $R_{2010}$ , the full index (with no rounding) has been applied.			
<b><math>\Delta CPI_{2005}</math></b>			
Numerator		Denominator	
$CPI_{Q1,2004}$	928	$CPI_{Q1,2003}$	913
$CPI_{Q2,2004}$	935	$CPI_{Q2,2003}$	913
$CPI_{Q3,2004}$	941	$CPI_{Q3,2003}$	918
$CPI_{Q4,2004}$	949	$CPI_{Q4,2003}$	924
Total	3753	Total	3669

<b><math>\Delta CPI_{2005}</math></b>		<b>2.29%</b>	
Source: Statistics New Zealand All Groups SE9A Index (Note this index was rebased to June 2006 -Consumers Price Index Review information paper published on 28 September 2006. The 2006 September quarter CPI was the first index published using the new base)			
<b><math>\Delta CPI_{2006}</math></b>			
<b>Numerator</b>		<b>Denominator</b>	
<i>CPI<sub>Q1,2005</sub></i>	953	<i>CPI<sub>Q1,2004</sub></i>	928
<i>CPI<sub>Q2,2005</sub></i>	962	<i>CPI<sub>Q2,2004</sub></i>	935
<i>CPI<sub>Q3,2005</sub></i>	973	<i>CPI<sub>Q3,2004</sub></i>	941
<i>CPI<sub>Q4,2005</sub></i>	979	<i>CPI<sub>Q4,2004</sub></i>	949
<b>Total</b>	<b>3867</b>	<b>Total</b>	<b>3753</b>
<b><math>\Delta CPI_{2006}</math></b>		<b>3.04%</b>	
Source: Statistics New Zealand All Groups SE9A Index (Note this index was rebased to June 2006 -Consumers Price Index Review information paper published on 28 September 2006. The 2006 September quarter CPI was the first index published using the new base)			
<b><math>\Delta CPI_{2007}</math></b>			
<b>Numerator</b>		<b>Denominator</b>	
<i>CPI<sub>Q1,2006</sub></i>	985	<i>CPI<sub>Q1,2005</sub></i>	953
<i>CPI<sub>Q2,2006</sub></i>	1000	<i>CPI<sub>Q2,2005</sub></i>	962
<i>CPI<sub>Q3,2006</sub></i>	1007	<i>CPI<sub>Q3,2005</sub></i>	973
<i>CPI<sub>Q4,2006</sub></i>	1005	<i>CPI<sub>Q4,2005</sub></i>	979
<b>Total</b>	<b>3997</b>	<b>Total</b>	<b>3867</b>
<b><math>\Delta CPI_{2007}</math></b>		<b>3.37%</b>	
Source: Statistics New Zealand All Groups SE9A Index (Note this index was rebased to June 2006 -Consumers Price Index Review information paper published on 28 September 2006. The 2006 September quarter CPI was the first index published using the new base)			
<b><math>\Delta CPI_{2008}</math></b>			
<b>Numerator</b>		<b>Denominator</b>	
<i>CPI<sub>Q1,2007</sub></i>	1010	<i>CPI<sub>Q1,2006</sub></i>	985
<i>CPI<sub>Q2,2007</sub></i>	1020	<i>CPI<sub>Q2,2006</sub></i>	1000
<i>CPI<sub>Q3,2007</sub></i>	1025	<i>CPI<sub>Q3,2006</sub></i>	1007
<i>CPI<sub>Q4,2007</sub></i>	1037	<i>CPI<sub>Q4,2006</sub></i>	1005
<b>Total</b>	<b>4092</b>	<b>Total</b>	<b>3997</b>
<b><math>\Delta CPI_{2008}</math></b>		<b>2.38%</b>	
Source: Statistics New Zealand All Groups SE9A Index (Note this index was rebased to June 2006 -Consumers Price Index Review information paper published on 28 September 2006. The 2006 September quarter CPI was the first index published using the new base)			
<b><math>\Delta CPI_{2009}</math></b>			
<b>Numerator</b>		<b>Denominator</b>	
<i>CPI<sub>Q1,2008</sub></i>	1044	<i>CPI<sub>Q1,2007</sub></i>	1010
<i>CPI<sub>Q2,2008</sub></i>	1061	<i>CPI<sub>Q2,2007</sub></i>	1020
<i>CPI<sub>Q3,2008</sub></i>	1077	<i>CPI<sub>Q3,2007</sub></i>	1025
<i>CPI<sub>Q4,2008</sub></i>	1072	<i>CPI<sub>Q4,2007</sub></i>	1037
<b>Total</b>	<b>4254</b>	<b>Total</b>	<b>4092</b>
<b><math>\Delta CPI_{2009}</math></b>		<b>3.96%</b>	
Source: Statistics New Zealand All Groups SE9A Index (Note this index was rebased to June 2006 -Consumers Price Index Review information paper published on 28 September 2006. The 2006 September quarter CPI was the first index published using the new base)			
<b><math>\Delta CPI_{2010}</math></b>			
<b>Numerator</b>		<b>Denominator</b>	
<i>CPI<sub>Q1,2009</sub></i>	1075	<i>CPI<sub>Q1,2008</sub></i>	1044
<i>CPI<sub>Q2,2009</sub></i>	1081	<i>CPI<sub>Q2,2008</sub></i>	1061
<i>CPI<sub>Q3,2009</sub></i>	1095	<i>CPI<sub>Q3,2008</sub></i>	1077
<i>CPI<sub>Q4,2009</sub></i>	1093	<i>CPI<sub>Q4,2008</sub></i>	1072
<b>Total</b>	<b>4344</b>	<b>Total</b>	<b>4254</b>
<b><math>\Delta CPI_{2010}</math></b>		<b>2.12%</b>	
Source: Statistics New Zealand All Groups SE9A Index (Note this index was rebased to June 2006 -Consumers Price Index Review information paper published on 28 September 2006. The 2006 September quarter CPI was the first index published using the new base)			



**Appendix A2**

**$\Sigma P_{i,2010} Q_i$  Prices at 31 March 2010 multiplied by 31 March 2003 Base Quantities**

$\Sigma P_{i,2010} Q_i$		Prices at 31 March 2010 multiplied by 31 March 2003 Base Quantities							
Number of Months	12								Total Revenue (\$)
Number of Days:	365								
Tariff or Fee	Description	Number of ICPS at 31/03/03	kWh or kw or kvarh for 31/03/03	kVA for 31/03/03	Other Qty for 31/03/03	Line Tariff			$\Sigma P_{i,2010} Q_i$
						Fixed		Variable (c/kwh)	
						S/day	c/kVA/day		
<b>Non Time of Use</b>		25542				0.15			1,398,425
UC	Uncontrolled		55,175,747					14.5	8,000,483
PC	Partly Controlled		128,848,289					3.7	12,478,982
FC	Fully Controlled		9,217,653					4.0	368,706
Day	Partly Controlled Day		13,345,471					10.8	1,441,311
NGT	Night		6,165,165					1.7	104,808
CAP150	Capacity	89	5,348,561			6.30		8.8	618,642
<b>Time of Use</b>		55				18.45			369,823
00:00 - 04:00			1,887,795					0.2	3,776
04:00 - 08:00			3,088,718					0.31	9,575
08:00 - 12:00			4,795,011					8.89	330,376
12:00 - 16:00			4,857,661					8.16	398,385
16:00 - 20:00			4,143,808					11.75	486,897
20:00 - 24:00			2,822,827					3.84	108,397
<b>Industrial</b>									
0000984310TEBBE				11000				98.2	1,080,672
00009840000TE210						1,095.27			399,774
000984200TE817						905.28			330,427
<b>Street Lights</b>									
Group Lighting 11 Hours					198	0.1000			5,694
Intermittent					6	0.1500			350
Street Lights					1,976	0.3000			216,372
Unmetered Continuous - 500 Watts					134	0.2900			19,476
Pole mounted streetlight					338	0.3700			121,275
<b><math>\Sigma P_{i,2010} Q_i</math></b>									<b>28,290,626</b>

## APPENDIX B: Maximum Notional Revenue at Assessment date 31.3.2010

$NR_{Max}$

Maximum Notional Revenue for the period 1 April 2009 to 31 March 2010 P x Q using 31 March 2010 Prices and 31 March 2003 Base Quantities if there has been no change in prices over this period, otherwise the prices which generate the maximum notional revenue over the period when using 31 March 2003 quantities		
Term	Description	(\$)
$EP_{Max} \cdot Q_i$	Maximum Price Between 1 April 2009 and 31 March 2010 multiplied by 31 March 2003 Base Quantities	28,290,626
$K_{2010}$	Transmission Charges for year ending 31 March 2010	6,112,093
	Rates Charges for year ending 31 March 2010	17,430
	Electricity Commission Levies for year ending 31 March 2010	53,220
$NR_{Max}$	Maximum Notional Revenue for 1 April 2010 to 31 March 2010	22,107,882

Test for 5 (1) (b) -  $(NR_{Max} / \text{Max}(R_{2009}, R_{2010})) \leq 1$

Notional Revenue during the period is not to exceed the maximum of the Allowable Notional Revenue at the end of the assessment period and the Allowable Notional Revenue at the end of the previous assessment period		
Term	Description	(\$)
$NR_{Max}$	Maximum Notional Revenue for 1 April 2009 to 31 March 2010	22,107,882
$R_{2009}$	Allowable Notional Revenue at 31 March 2009	16,384,681
$R_{2010}$	Allowable Notional Revenue at 31 March 2010	16,731,335
$\text{Max}(R_{2009}, R_{2010})$	Maximum of the Allowable Notional Revenue at 31 March 2009 and the Allowable Notional Revenue at 31 March 2010	16,731,335
$NR_{Max} / \text{Max}(R_{2009}, R_{2010})$	If expression is greater than 1, Clause 5 (1) (b) is breached	1.3213
$\text{Max}(R_{2009}, R_{2010}) - NR_{Max}$	Value of Compliance or (Breach)	(5,376,547)

## APPENDIX C: SAIDI and SAIFI Statistics

Year	SAIDI (Interruption Duration)			SAIFI (Interruption Frequency)		
	Class B	Class C	Total	Class B	Class C	Total
1999	160.00	611.00	771.00	1.30	8.40	9.70
2000	181.00	295.00	476.00	1.30	5.50	6.80
2001	79.00	252.00	331.00	0.50	4.50	5.00
2002	44.00	286.00	330.00	0.30	4.40	4.70
2003	37.00	378.00	415.00	0.30	5.90	6.20
	<b>Five Year Average SAIDI</b>		<b>464.60</b>	<b>Five Year Average SAIFI</b>		<b>6.48</b>
2010	23.09	439.94	463.03	0.15	4.04	4.19