HORIZON ENERGY DISTRIBUTION LIMITED

THRESHOLD COMPLIANCE STATEMENT

FOR THE ASSESSMENT DATE, 31 MARCH 2010

Pursuant to the Commerce Act (Electricity Distribution Thresholds)

Notice 2004 and Amendment Notice 2006

21 May 2010

Contents

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

Horizon Energy Distribution Limited ("Horizon Energy") has not complied with the requirements of the price path threshold at 31 March 2010, as specified in the Commerce Act (Electricity Distribution Thresholds) Gazette Notice 2004 and 2006 Amendment ("Gazette Notices").

1.1 Clause 5 (1) (a) Notional Revenue Test

Clause 5 (1) (a) Notional Revenue ("NR_{2010}") at 31 March 2010 should not exceed Allowable Notional Revenue ("R_{2010}") at 31 March 2010.

Test:	$\frac{NR_{2010}}{R_{2010}}$	≤ 1
Result:	$18,117,229 / $16,540,302	> 1
Result:	1.0953	> 1
Result:	Threshold is breached by $1,576,927	

Notional Revenue at 31 March 2010 exceeds allowable Notional Revenue under the CPI-X price path at 31 March 2010.

Supporting evidence is presented in Appendices A and B.

Explanation of Unintentional Price Path Breach 2009/10

Horizon Energy has breached its price path for the year ending 31 March 2010. The breach is largely due to three reasons as highlighted below.

1. **A part plant closure and subsequent load reduction of one of Horizon Energy's major customers.**
   The reason stated above has caused Horizon Energy's actual volumes to be less than the 2002-03 base volumes. Because of the anomaly in the price path formula, this has caused Horizon Energy to technically breach by $1,227,811. This is explained more fully in Appendix E.

2. **Lower than anticipated Transmission costs**
   Due to the finalisation of a commercial contract with an embedded generator after setting the 2009/10 electricity prices Horizon Energy incurred lower Transmission charges ($102,569) for the year than originally budgeted. It is Horizon's firm view that any savings resulting due to timing differences in negotiating commercial contracts needs to remain with Horizon in the year that it is incurred, as the business incurs significant costs in negotiating such contracts with no recompense.

3. **Lower than anticipated CPI factor**
   A lower CPI factor of 2.12% versus the budgeted value of 3.10% resulted in a lower Allowable Notional Revenue ($166,684) being below the level forecast when setting the 2009/10 prices. This technical breach was unavoidable based on data on hand when forecasting the ANR.

In addition Horizon Energy advises that it will be passing all Loss Constraint Payments received during the reporting period ($94,520) to Electricity Retail and Major user customers as publicly announced on the Horizon web page.

Consistent with this approach rebates received under embedded generation Committed Supply Agreements totalling $382,137 for the period have been passed back to consumers as reduced Transmission pass through costs within Horizon Energy's 2010/11 Distribution charges published 2 March 2010.

As these credits are committed to be refunded Horizon Energy has excluded these items from the 31 March 2010 Price Path calculations.

This position is summarised in the following table:

2010 Price Path Assessment	Budget ($)	Actual ($)
PxQ	25,525,549	25,614,095
Pass Through Costs	7,601,054	7,496,866
Notional Revenue	**17,924,494**	**18,117,229**
Adjusted ANR 2010	16,646,986	16,540,302
Unadjusted Breach	**1,277,508**	**1,576,928**
Anomaly Calculation	**1,286,208**	**1,227,811**
Breach/(Compliance) after Anomaly Adjustment	**(8,699)**	**349,116**
Residual Breach as % ANR2010		2.1%

The preceding explanation highlights the degree of difficulty that EDB's such as Horizon Energy face when setting its ANR given the dominance and loss of a major load on its pass through costs. Notwithstanding this, the above table clearly demonstrates that the level of breach is well within a commonly acceptable threshold of "materiality" and as such we urge the Commission to consider this when assessing the breach.

1.2 Clause 5 (1) (b) Notional Revenue Test

Clause 5 (1) (b) Notional Revenue at any time during the assessment period 1 April 2009 to 31 March 2010 should not exceed the greater of Allowable Notional Revenue at 31 March 2009 and 31 March 2010.

Test:	$\frac{NR_{Max}}{Max(R_{2009}, R_{2010})}$	≤ 1
Result:	$18,117,229 / $16,540,302	> 1
Result:	1.0953	> 1
Result:	Threshold is breached by $1,576,927	

Revenue at any time during the assessment period ending 31 March 2010 exceeded the greater of Allowable Notional Revenue at 31 March 2009 and 31 March 2010.

1.3 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.

1.4 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.
- The sale of electricity conveyance services to three 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). In addition a further customer was supplied as detailed in the 2008/09 Compliance Statement. There have been no changes to these services during the current assessment period. We would be happy to provide this information again on request.

1.5 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 and associated costs

1.6 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.

1.7 Pass Through Costs – Electricity Commission Levies

Electricity Commission levies incurred during the year ending 31 March 2010 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 Energy's performance against the quality thresholds as specified in Gazette Notice.

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

Test: $$SAIDI_{2010} \leq \left(\frac{SAIDI_{1999} + SAIDI_{2000} + SAIDI_{2001} + SAIDI_{2002} + SAIDI_{2003}}{5} \right)$$

Result: 139.90 < 160.60

Result: SAIDI does not breach the threshold

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

Test: $$SAIFI_{2010} \leq \left(\frac{SAIFI_{1999} + SAIFI_{2000} + SAIFI_{2001} + SAIFI_{2002} + SAIFI_{2003}}{5} \right)$$

Result: 2.36 > 1.87

Result: SAIFI breaches the threshold by 0.49 interruptions

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

Explanation of the SAIFI Breach 2009/10

A review of the 2009/10 outage data has been undertaken to assess the reason for the SAIFI breach.

Two key contributing factors have been identified as part of the review.

1. The first is a single human error event resulting in the loss of supply to 8,646 customers (a SAIFI figure of 0.35), which was the major contributing factor to the breach. This outage occurred as a result of works being undertaken which required one of two main 33kV feeders being removed from service. While the load on one Zone Substation was being monitored an additional load on the remaining circuit was overlooked. Toward the end of the outage the loads increased and the second circuit tripped on overload. As a result of this incident a number of new measures have been put in place to ensure this type of event does not occur again.

2. The second contributing factor is an area of the network with over 1700 customers which is supplied by a backup 33kV circuit that adds 50km to the circuit length. This situation is due to a fault with the embedded generators normal bulk supply point. In the time we have been forced to use the backup supply there have been 3 faults on this additional section of 33kV circuit. The impact on SAIFI as a result of these 3 faults was 0.20. It is anticipated that the bulk supply will be available in the near future as the company involved is currently undertaking repairs to the defected transformer.

While the above are key contributory factors in the breach they are not due to any degradation in actual network performance with remedial measures put in place to address the single largest incident.

Horizon Energy has instigated several major projects to improve the reliability of supply. These projects are detailed in the 2010-2020 Asset Management Plan and in summary include:

- The construction of a new 33kV switching station (cost $1.5M),
- The installation of sectionalisation and remote operated switches over 5 years (cost $4.1M),
- Upgrading the network communications network to improve coverage and communications to field staff and equipment (cost $1.8M)
- The continuation of a complete network wide asset inspection & condition assessment program to enable targeted spending on asset maintenance/replacement (cost $ 925 k).

These initiatives including the continued focus on process and system improvements are expected to result in improved supply reliability on the network.

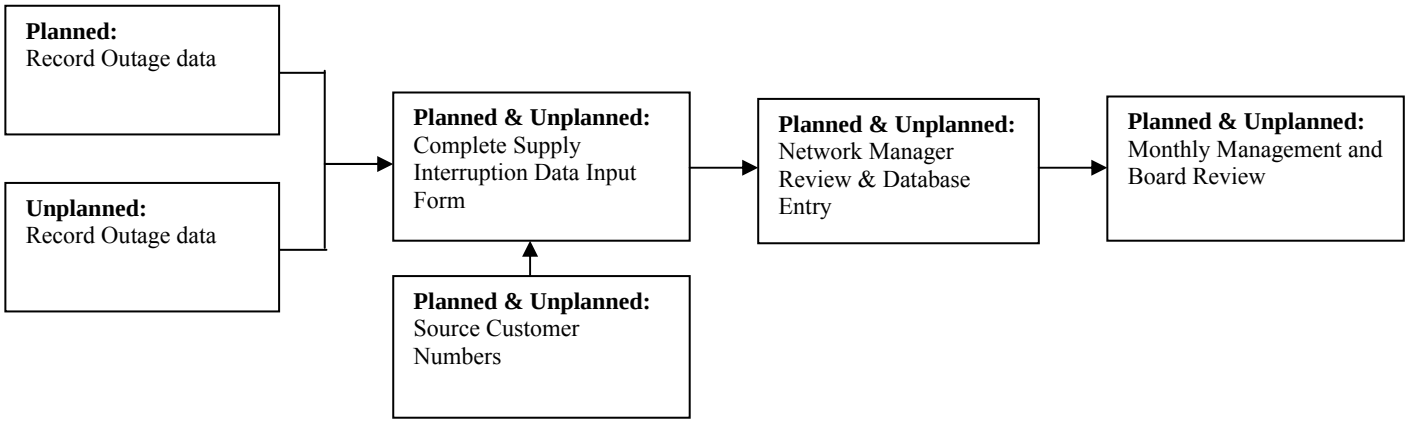
3. Disclosure of Information Required (Clause 7(1) (a) (iii) – Policies & Procedures for recording SAIFI & SAIDI statistics)

Policies And Procedures Used To Record SAIDI And SAIFI Statistics

Horizon Energy does not have an automated system for the capture of outage data. Control Room staff by means of a written procedure record network outage data.

Capture of Statistical Information

The procedures followed to capture statistical information for planned outages and unplanned outages (less than 24 hours 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 E).

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 D).

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 Network Manager. The Network Manager reviews the form for accuracy and completeness and the data is entered into the Horizon Energy 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 statistics for year to date (including SAIDI and SAIFI) 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 and Amendment Notice 2006. 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.

5. 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 2010

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 2010 and dated 21 May 2010 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

Directors of Horizon Energy Distribution Limited are responsible for the certification, confirming the compliance or otherwise, of the threshold compliance statement in accordance with the 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 2010

Our audit included examination, on a test basis, of evidence relevant to the amounts and disclosures contained on pages 2 to 12 and Appendices A to E 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 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.

PRICEWATERHOUSECOOPERS

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 2010

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, auditors pursuant to the Electricity Distribution (Information Disclosure) Requirements 2008 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 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 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 2010; and
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.

PRICEWATERHOUSECOOPERS

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 2010

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 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 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 2010.

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

PricewaterhouseCoopers
Auckland
21 May 2010

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

We, Robert Tait and John McDonald, 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 this notice except for clauses 5(1)(a), 5(1)(b) and 6(1)(b).

Robert Tait

John McDonald

21 May 2010

Appendix A – Notional Revenue at 31 March 2010 – Assessment Date

This appendix details the calculations underpinning the compliance with the Price Path Threshold at 31 March 2010. Details of prices and quantities are contained in Appendix B.

Clause 5 (1) (a)

- **Notional Revenue at 31 March 2010 (NR_{2010})**

Notional Revenue for the year ending 31 March 2010		
Term	Description	($)
$\Sigma P_{i,2010} Q_i$	Prices at 31 March 2010 multiplied by 31 March 2003 Base Quantities	25,614,095
K_{2010}	Transmission Charges for year ending 31 March 2010	7,330,216
	Rates for year ending 31 March 2010	103,918
	Electricity Commission Levies for year ending 31 March 2010	62,731
$NR_{2010} = \Sigma P_{i,2010} Q_i - K_{2010}$	Notional Revenue for the year ending 31 March 2010	18,117,229

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

Allowable Notional Revenue at 31 March 2010 (R_{2010}) and Performance Against the Threshold

Allowable Notional Revenue under CPI -X price path		
Term	Description	($)
X	X Factor	1%
R_{2004}	Maximum Revenue at 31 March 2004 that would not have caused a breach under the Initial Notice	14,849,670
$(1+\Delta CPI_{2005})$	Average change in Consumer Price Index over 2004	1.0229
$(1-X)$	1-X Factor	0.99
R_{2005}	Allowable Notional Revenue under the CPI-X Price Path for the year ended 31 March 2005	15,037,756
$(1+\Delta CPI_{2006})$	Average change in Consumer Price Index over 2005	1.0304
$(1-X)$	1-X Factor	0.99
R_{2006}	Allowable Notional Revenue under the CPI-X Price Path for the year ended 31 March 2006	15,339,521
$(1+\Delta CPI_{2007})$	Average change in Consumer Price Index over 2006	1.0337
$(1-X)$	1-X Factor	0.99
R_{2007}	Allowable Notional Revenue under the CPI-X Price Path for the year ended 31 March 2007	15,697,200
$(1+\Delta CPI_{2008})$	Average change in Consumer Price Index over 2007	1.0238
$(1-X)$	1-X Factor	0.99
$R_{2008\ (unadjusted)}$	Allowable Notional Revenue under the CPI-X Price Path for the year ended 31 March 2008 prior to adjustments	15,909,486
Revenue Adjustment	Allowable Notional Revenue reduction associated with removal of load control function from distribution services and prices at 1/04/07	(70,019)
R_{2008}	Allowable Notional Revenue under the CPI-X Price Path for the year ended 31 March 2008	15,839,467
$(1+\Delta CPI_{2009})$	Average change in Consumer Price Index over 2008	1.0396
$(1-X)$	1-X Factor	0.99
R_{2009}	Allowable Notional Revenue under the CPI-X Price Path for the year ended 31 March 2009	16,301,878
$(1+\Delta CPI_{2010})$	Average change in Consumer Price Index over 2009	1.0212
$(1-X)$	1-X Factor	0.99
$R_{2010\ (unadjusted)}$	Allowable Notional Revenue under the CPI-X Price Path for the year ended 31 March 2010	16,480,302
Revenue Adjustment	Allowable Notional Revenue increase associated with the introduction of two new lines charges for TG1 and TG2 effective 01/04/2009	60,000
R_{2010}	Allowable Notional Revenue under the CPI-X Price Path for the year ended 31 March 2010	16,540,302
NR_{2010} / R_{2010}	Expression must be less than or equal to 1 to avoid breaching 5(1)(a)	1.0963
$R_{2010} - NR_{2010\ (unadjusted)}$	Value of Compliance or (Breach) prior to adjustments	(1,576,927)
Adjustment	Transmission shortfall due to reduction in demand of major customer and changes in the Transpower pricing methodology.	1,227,811
$R_{2010} - NR_{2010}$	Value of Compliance or (Breach)	(349,116)

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.

- **Changes in CPI**

CPI_{2005}			
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
CPI_{2005}	2.29%		

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)

CPI_{2006}			
Numerator		Denominator	
$CPI_{Q1,2005}$	953	$CPI_{Q1,2004}$	928
$CPI_{Q2,2005}$	962	$CPI_{Q2,2004}$	935
$CPI_{Q3,2005}$	973	$CPI_{Q3,2004}$	941
$CPI_{Q4,2005}$	979	$CPI_{Q4,2004}$	949
Total	3867	Total	3753
CPI_{2006}	3.04%		

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)

CPI_{2007}			
Numerator		Denominator	
$CPI_{Q1,2006}$	985	$CPI_{Q1,2005}$	953
$CPI_{Q2,2006}$	1000	$CPI_{Q2,2005}$	962
$CPI_{Q3,2006}$	1007	$CPI_{Q3,2005}$	973
$CPI_{Q4,2006}$	1005	$CPI_{Q4,2005}$	979
Total	3997	Total	3867
CPI_{2007}	3.37%		

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)

CPI_{2008}			
Numerator		Denominator	
$CPI_{Q1,2007}$	1010	$CPI_{Q1,2006}$	985
$CPI_{Q2,2007}$	1020	$CPI_{Q2,2006}$	1000
$CPI_{Q3,2007}$	1025	$CPI_{Q3,2006}$	1007
$CPI_{Q4,2007}$	1037	$CPI_{Q4,2006}$	1005
Total	4092	Total	3997
CPI_{2008}	2.38%		

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)

CPI_{2009}			
Numerator		Denominator	
$CPI_{Q1,2008}$	1044	$CPI_{Q1,2007}$	1010
$CPI_{Q2,2008}$	1061	$CPI_{Q2,2007}$	1020
$CPI_{Q3,2008}$	1077	$CPI_{Q3,2007}$	1025
$CPI_{Q4,2008}$	1072	$CPI_{Q4,2007}$	1037
Total	4254	Total	4092
CPI_{2009}	3.96%		

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)

CPI_{2010}			
Numerator		Denominator	
$CPI_{Q1,2009}$	1075	$CPI_{Q1,2008}$	1044
$CPI_{Q2,2009}$	1081	$CPI_{Q2,2008}$	1061
$CPI_{Q3,2009}$	1095	$CPI_{Q3,2008}$	1077
$CPI_{Q4,2009}$	1093	$CPI_{Q4,2008}$	1072
Total	4344	Total	4254
CPI_{2010}	2.12%		

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)

Clause 5 (1) (b)

- **Maximum Notional Revenue during the period 1 April 2009 to 31 March 2010 (R_{max})**

Maximum Notional Revenue for the period 1 April 2009 to 31 March 2010. P x Q using 31 March 2009 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	($)
$\Sigma P_{Max}\ Q_i$	Maximum Price Between 1 April 2009 and 31 March 2010 multiplied by 31 March 2003 Base Quantities	25,614,095
K_{2010}	Transmission Charges for year ending 31 March 2010	7,330,216
	Rates Charges for year ending 31 March 2010.	103,918
	Electricity Commission Levies for year ending 31 March 2010.	62,731
NR_{Max}	Maximum Notional Revenue for 1 April 2009 to 31 March 2010	18,117,229

- **Clause 5 (1) (b) Compliance Summary**

Notional Reveue 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	18,117,229
R_{2009}	Allowable Notional Revenue at 31 March 2009	16,301,878
R_{2010}	Allowable Notional Revenue at 31 March 2010	16,540,302
$Max(R_{2009},R_{2010})$	Maximum of the Allowable Notional Revenue at 31 March 2009 and the Allowable Notional Revenue at 31 March 2010	16,540,302
$NR_{Max} / Max(R_{2009},R_{2010})$	If expression is greater than 1, Clause 5 (1) (b) is breached	1.0953
$Max(R_{2009},R_{2010}) - NR_{Max\ (unadjusted)}$	Value of Compliance or (Breach) prior to adjustments	(1,576,927)
Adjustment	Transmission shortfall due to reduction in demand of major customer and changes in the Transpower pricing methodology.	1,227,811
$Max(R_{2009},R_{2010}) - NR_{Max}$	Value of Compliance or (Breach)	(349,116)

Appendix B, Table 1 – Schedule of Prices and Quantities 5(1) (a) and 5(1) (b)

Horizon Line Revenue Budget
For the Financial Year Yended 31 March 2009
Period: Annual
365 Days

	BASE QUANTITIES 31 March 2003			2009/10 Tariffs			2009/10 Line Revenue			
				Line Charges		Pass Through	Line Charges		Pass Through	Total
Consumer Groups	ICPs	Ave Capacity/ MD per ICP	kWh	Fixed	Variable	Charge	Fixed	Variable	Revenue	Revenue
RETAIL				$ per day	c/kWh	c/kWh	($)	($)	($)	($)
DOMESTIC (Low Fixed Charge)										
DU	11,550	-	75,134,823	0.1500	6.7760	2.0780	632,363	5,091,136	1,561,302	7,284,800
DU C	5		-	0.1500	6.7760	2.0780	274	-	-	274
DR	7,029	-	51,312,821	0.1500	6.7760	2.0780	384,838	3,476,957	1,066,280	4,928,075
DR C	74		-	0.1500	6.7760	2.0780	4,052	-	-	4,052
TOTAL DOMESTIC	**18,658**		**126,447,644**				**1,021,526**	**8,568,092**	**2,627,582**	**12,217,200**
GENERAL										
Specials										
U/Verandah Lights	126		45,990	$0.0896/day	-	$0.0357/day	4,121	-	1,640	5,761
Electric Fence	33		24,090	$0.2021/day	-	$0.0839/day	2,434	-	1,011	3,445
Lanark	1		-	$293.8300/day	-	($302.47)/mth	3,526	-	(3,630)	(104)
Street Lights	27		1,969,726	$0.0000/day	7.592	2.0780	-	149,542	40,931	190,473
Telecom - PCM 24 hour	78		341,640	$28.81/mth	-	$7.631/mth	26,966	-	7,143	34,109
Telecom - controlled	18		32,850	$11.098/mth	-	$3.169/mth	2,397	-	685	3,082
Total Specials	**283**		**2,414,296**				**39,444**	**149,542**	**47,780**	**236,766**
Capacity Groups										
N1U	417	-	2,556,081	1.1640	4.3360	2.0780	177,167	110,832	53,115	341,114
N1R	684	-	3,035,034	1.2160	4.4580	2.0780	303,587	135,302	63,068	501,956
N2U	695	-	11,343,042	1.3750	3.8690	2.0780	348,803	438,862	235,708	1,023,374
N2R	1,810	-	24,464,191	1.4800	4.1240	2.0780	977,762	1,008,903	508,366	2,495,031
N3U	237	-	7,173,788	1.7980	3.8690	2.0780	155,536	277,554	149,071	582,161
N3R	196	-	7,071,497	2.0100	4.1240	2.0780	143,795	291,629	146,946	582,370
N4U	66	-	3,299,002	2.3260	3.8690	2.0780	56,033	127,638	68,553	252,225
N4R	45	-	2,508,399	2.6440	4.1240	2.0780	43,428	103,446	52,125	198,999
N5U	48	158 kVA	3,521,012	1.7240	3.6690	2.0780	47,723	129,186	73,167	250,076
N5R	42	140 kVA	1,996,191	1.8620	3.9910	2.0780	39,962	79,668	41,481	161,111
UCC	13	-	-	(0.6770)	-	-	(3,212)	-	-	(3,212)
RCC	137	-	-	(0.7290)	-	-	(36,454)	-	-	(36,454)
Total Capacity Groups	**4,390**		**66,968,238**				**2,254,130**	**2,703,020**	**1,391,600**	**6,348,750**
Network Maximum Demand (NMD)										
NMD- Variable	99	-	34,785,794	-	0.9710	2.0780	-	337,770	722,849	1,060,619
NMD - Capacity	99	242 kVA	-	$0.635/kVA/mth	-	-	182,560	-	-	182,560
NMD - Maximum Demand	99	133 kW	-	$6.240/kW/mth	-	-	985,945	-	-	985,945
Total NMD	**99**		**34,785,794**				**1,168,505**	**337,770**	**722,849**	**2,229,124**
TOTAL GENERAL	**4,772**		**104,168,328**				**3,462,079**	**3,190,332**	**2,162,229**	**8,814,640**
TOTAL RETAIL	**23,430**		**230,615,972**				**4,483,605**	**11,758,424**	**4,789,811**	**21,031,840**
MAJORS - REGULATED		**Total MD**								
		$70.94 kW								
Customers										
Fonterra (BoPE)		-	36,428,890	$0.00/mth		0.3242	-	-	118,099	118,099
SCA Hygiene (TP)	1	22,497	154,878,840	$4,249.64/mth	-	0.1407	50,996	-	1,813,785	1,864,781
CHH Whakatane (TP)	1	20,000	107,800,385	$16,904.42/mth	-	0.1915	202,853	-	1,625,283	1,828,136
Kaingaroa Timberlands (TP)	2	1,030	6,041,474	$0.00/mth	-	0.2438	-	-	87,794	87,794
CHH - Kawerau (TP)	1	3,342	19,306,030	$3,246.46/mth	-	0.2400	38,958	-	283,418	322,376
Norske Skog Oxidation Ponds (TP)	1	2,259	21,240,699	$6,950.76/mth	-	0.2290	83,409	-	208,900	292,309
TG2 (BoPE)	1	-	3,168,825	$730.00/mth	-	-	8,760	-	-	8,760
TG2 Connection Charges				$3,333.33/mth			40,000			40,000
TG1 Connection Charges				$1,666.66/mth			20,000			20,000
TOTAL MAJORS - REGULATED	**7**	**49,128**	**348,865,144**				**444,975**	**-**	**4,137,280**	**4,582,256**
GRAND TOTAL	**23,438**		**579,481,116**				**4,928,580**	**11,758,424**	**8,927,091**	**25,614,095**

Appendix C – SAIDI and SAIFI Statistics

SAIDI and SAIFI (Class B and Class C) for Years Ended 31 March 1999 – 2003 and the Year Ended 31 March 2010

Year	SAIDI (Interruption Duration)			SAIFI (Interruption Frequency)		
	Class B	Class C	Total	Class B	Class C	Total
1999	81.00	172.00	253.00	0.50	2.71	3.21
2000	49.00	72.00	121.00	0.36	1.54	1.90
2001	41.00	77.00	118.00	0.31	1.24	1.55
2002	35.00	179.00	214.00	0.22	1.43	1.65
2003	20.00	77.00	97.00	0.18	0.88	1.06
	Five Year Average SAIDI		**160.60**	**Five Year Average SAIFI**		**1.87**
2010	16.88	123.02	139.90	0.10	2.26	2.36

Appendix D – Outage Schedules

HORIZON ENERGY NETWORKS

Switching Schedule

Number

Day:		Date:		Times:	
Substation:		Feeder:		Network Req#:	
Reason for Switching:					
Area Affected:					
Customers Notified by:				Engineer Check	
Arranged by:		Checked By		Contractor Check	

Time req.	Time Comp.		SWITCHING SEQUENCE	
		1		
		2		
		3		
		4		
		5		
		6		
		7		
		8		
		9		
		10		
		11		
		12		
		13		
		14		
		15		
		16		
		17		
		18		
		19		
		20		

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

OH OR UG (circle one)

TRANSFORMER NUMBER

OUTAGE CLASS (refer a-g)

(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

AREA AFFECTED

MAJOR CUSTOMERS AFFECTED (tick)

CAXTON	
TASMAN PULP	
BMP	
TASMAN LUM	
NBM	
NBM	
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

FAULT TIME

TIME CALLED

CONTRACTOR

TIME CALLED

LIVE LINE AVOIDED CUSTOMER MINUTES

SYSTEM CONTROLLER

FAULT TYPE? EF OC (circle one)

FROM SW NO.	TO SW. NO.	NO. OF CUSTOMERS TOTAL	NO. OF CUSTOMERS SECTION	TIME OFF	TIME ON 100% RESTORED	TOTAL TIME OFF 100% (min)	CUST*MINS 100%
	TOTALS						

TO BE COMPLETED WHERE MAJOR CUSTOMERS ARE AFFECTED AND / OR SIGNIFICANT OUTAGES OCCUR (including all 33kV and above)

Major customer (include time)		Spoke to	
HEDL Staff (include time)			

DETAILS OF FAULT/SHUTDOWN:

SUPPLY INTERRUPTION DATA INPUT FORM

REPORT NUMBER: 0

ZONE SUBSTATION: 0

FEEDER NAME: 0

FEEDER NUMBER:

TRANSFORMER NUMBER:

AREA AFFECTED: 0

DATE: 0/01/1900

FILE ONLY? Yes / No

Planned / Unplanned

VOLTAGE: 110kv, 66kv, 33kv, 11kv, 400v

FAULT TYPE: EF, OC, Overhead, Underground

Rural / Urban

OUTAGE CLASS

(a) Transpower Planned Interruptions
(b) HEDL Planned Interruptions
(c) HEDL Unplanned Interruptions
(d) Transpower Unplanned Interruptions
(e) HEDL Generation Unplanned interruptions
(f) Other Generation Unplanned interruptions
(g) Other line owner Unplanned Interruption
(h) Other line owner planned Interruption
(i) Not in (a) to (h)

GENERATION AVOIDED CUSTOMER MINUTES

Cus #	Minutes Generated
	0

MAJOR CUSTOMERS AFFECTED (tick)

- CHHP Whk
- CHHP Whk Pumps
- SGA Hygiene F&P
- KPP Mill Kaingaroa
- Fonterra Edgecumbe
- Nuplex Soap Co Pumps
- CHH Sawmill Kawerau

Isolation Method:

Clearance Breaks:

LIVE LINE AVOIDED CUSTOMER MINUTES

Cus #	Minutes OFF Avoided	
0	0	0

TYPE OF INTERRUPTION

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

Equipment

- Pin Insulator
- Term Insulator
- Connector
- Conductor
- Sleeve
- Pole
- Cross arm
- DDO's / link
- Switch gear
- Cable

DETAILS OF EQUIPMENT:

CONTRACTOR:

FAULT MAN: Time Called:

DUTY CONTROLLER:

Planned Times: 0:00

From Iso No.	To Iso No.		GPS' Section	Time off	Time on	Time off (hrs)	Cust Mins
						00	00
						00	00
						00	00
						00	00
						00	00
						00	00
						00	00
						00	00
						00	00
						00	00
	Total # ICP's					100% min	00

TO BECOME FILLED WHEREMAJOR CUSTOMERS ARE AFFECTED AND/OR SIGNIFICANT OUTAGES OCCUR (including all 33kV and above)

Customers Contacted	Person Contacted	Time

Total Number Customers: 24,500 — ADMV02

SAIFI Impact: - — SAIDI Impact: 0.000

DETAILS:

Weather:

FOLLOW UP REQUIRED: No — LOCATION: — Checked by

Last Amended 23 Feb 2009 — Horizon Energy Standard Form CM1

Appendix E – Price Path Breach Anomaly

This Appendix firstly addresses the volume anomaly inherent in the price path threshold formula in principle, before explaining how this has adversely impacted Horizon Energy's ability to recover its costs, without breaching the price path threshold. Worked examples have been included where possible to illustrate our explanation, and assist readers in understanding the reasons for the breach.

Price Path Threshold Formula

1. The price path threshold measures movements in average prices and compares these to an allowable annual movement based on a CPI – X formula. In order to neutralise the impact of quantities (i.e. to focus on average prices not revenues), the price path threshold is set using base quantities (being the kWh, ICPs, kW, kVA etc relating to each tariff) for the year ended 31 March 2003. Each year Notional Revenues (calculated from actual current tariffs multiplied by base quantities) are compared with Allowable Notional Revenues (calculated from 31 March 2003 prices and quantities, escalated forward annually at CPI – X).

2. The price path threshold also recognises that transmission charges are a major cost of supply incurred by EDBs, over which they have little control. For this reason transmission charges are treated as a pass through cost, along with local body rates and Electricity Commission levies. The intention is that EDBs should be able to recover pass through costs in full. By far the most significant of these is transmission charges.

3. The implication of the pass through mechanism is that the price path threshold is assessed on a "net" basis, that is Notional Revenues and Allowable Notional Revenues are calculated after the deduction of pass through costs.

4. In demonstrating compliance or otherwise with the price path threshold, the compliance position uses actual pass through costs incurred in each year, and by implication the underlying actual volumes which impact on the level of transmission charges. This has led to an anomaly in the price path threshold whereby Notional Revenues and Allowable Notional Revenues reflect base quantities, but Net Notional Revenues reflect pass through costs derived from actual volumes.

5. If actual volumes were constant over the threshold period this would have no impact. For EDBs however which experience volume growth, all other things being equal, Net Notional Revenue will decline, because pass through costs increase. This creates an additional buffer (or implied price decrease) when compared to the threshold. For EDBs which experience declining volumes the opposite occurs, that is Net Notional Revenue increases because pass through costs decline. This creates a breach (or implied price increase).

6. Appendix E(1) includes a simple example which demonstrates the impact of declining or increasing volumes on Net Notional Revenue. Volume changes do not impact on Allowable Notional Revenue. For the purpose of this example CPI and X have been set to zero and all unit prices are maintained at 2004 levels, in order to better demonstrate the impact of changes in volumes on the compliance position. A summary of the example is set out below:

Summary	**2004**	**2005**	**2009**
Allowable Notional Revenue (ANR)	15,000,000	15,000,000	15,000,000
Base Case - Volume Static			
Notional Revenue (NR)	20,000,000	20,000,000	20,000,000
Pass Through Cost (Volume Static) (K)	5,000,000	5,000,000	5,000,000
Net Notional Revenue (Volume Static) (NNR)	15,000,000	15,000,000	15,000,000
Compliance: NNR=ANR		-	-
Scenario 1 - Volume Increasing			
Notional Revenue (NR)	20,000,000	20,000,000	20,000,000
Pass Through Cost (Volume Increasing) (K)	5,000,000	5,200,000	6,083,265
Net Notional Revenue (Volume Increasing) (NNR)	15,000,000	14,800,000	13,916,735
Compliance: NNR<ANR (headroom)		**200,000**	**1,083,265**
Scenario 2 - Volume Decreasing			
Notional Revenue (NR)	20,000,000	20,000,000	20,000,000
Pass Through Cost (Volume Decreasing) (K)	5,000,000	4,800,000	4,076,863
Net Notional Revenue (Volume Decreasing) (NNR)	15,000,000	15,200,000	15,923,137
Compliance: NNR>ANR (breach)		**- 200,000**	**- 923,137**

7. Thus, as illustrated above:

   - an EDB experiencing no change in volumes is able to fully recover actual pass through costs and maintain average distribution[1] prices without breaching the threshold;

   - an EDB experiencing an increase in volumes is able to fully recover its actual pass through costs, and increase average distribution prices without breaching the threshold; and

[1] For the purpose of this discussion the term 'distribution' refers distribution services exclusive of transmission and other pass through costs

- an EDB experiencing declining volumes however is unable to fully recover its actual pass through costs without either breaching the threshold or reducing average distribution prices.

8. This anomaly has been previously recognised by the Commerce Commission. For example in October 2005 the Commission issued an invitation for submissions on "*the anomaly in the price path formula that allows quantity growth (or reductions) on pass-through costs to be taken as a price increase (or decrease)*".[2] Despite a series of consultations on the issue through 2005, 2006 and 2007 no changes were made to the price path threshold to correct for the anomaly. The recent Default Price-Quality Path Determination however has addressed the issue by specifying the use of lagged quantities in the calculation of average prices.[3]

Impact on Horizon Energy

9. Horizon Energy has experienced little volume growth since 2003. This has been exacerbated by a partial plant closure at SCA Hygiene in 2007 resulting in a load reduction of about 10MW. Horizon Energy has chosen to pass on actual transmission charges in full to consumers, consistent with the intention of the price path threshold. However, as actual transmission charges have been passed on in full, Horizon Energy has been assessed as recovering more revenue than permitted under the price path. This arises because the transmission component of Notional Revenue is calculated using base quantities, but the deduction of pass through costs (to derive Net Notional Revenue) is calculated using (lower) actual quantities.

10. When setting prices for 2009/10 Horizon Energy decided to retain distribution prices at the levels they would otherwise have been, and fully recover transmission costs despite knowing that due to the anomaly outlined above, and the reduction in demand from major customers, fully recovering transmission charges, and maintaining distribution prices would result in a breach.

[2] Commerce Commission, Invitation for Submissions, Proposed Changes to the Distribution Thresholds Gazette Notice, 25 October 2005
[3] Commerce Commission, Initial Reset of the Default Price-Quality Path for Electricity Distribution Businesses, Decisions Paper, 30 November 2009

Horizon Energy's Compliance Position

11. Horizon Energy has reviewed the compliance calculation for the assessment date 31 March 2010 and assessed the impact of the pass through volume anomaly on the 2010 breach position as $1,227,811.

12. The pass through anomaly of $1,227,811 has been derived by determining the variance between pass through revenue calculated using 2003 base quantities (which are applied to 2010 prices in order to determine notional revenue) and the pass through cost component which is derived from 2010 actual quantities. It is evident when comparing the two tables below that that both consumption (kWh) and demand (kW) for major customers has fallen significantly between 2003 and 2010. This has been partially offset by increased non-major customer consumption. The net quantity decrease however has adversely affected Horizon Energy's ability to fully recover pass through costs as demonstrated in the following tables.

2010 Threshold Pass Through Revenue			
	2003 Base Quantities	Corrected 2010 Price	PxQ Revenue
Major Customer Pass Through Revenue (Excluding Interconnection)			
Fonterra (BoPE)	36,428,890 kWh	$0.0032	$118,099
SCA Hygiene (TP)	154,878,840 kWh	$0.0014	$217,848
CHH Whakatane (TP)	107,800,385 kWh	$0.0019	$206,483
Kaingaroa Timberlands (TP)	6,041,474 kWh	$0.0024	$14,726
CHH - Kawerau (TP)	19,306,030 kWh	$0.0024	$46,337
Norske Skog Oxidation Ponds (TP)	21,240,699 kWh	$0.0023	$48,647
	345,696,318 kWh		$652,140
Major Customer Interconnection Revenue			
Fonterra (BoPE)	0 kW	$70.94	$0
SCA Hygiene (TP)	22,497 kW	$70.94	$1,595,937
CHH Whakatane (TP)	20,000 kW	$70.94	$1,418,800
Kaingaroa Timberlands (TP)	1,030 kW	$70.94	$73,068
CHH - Kawerau (TP)	3,342 kW	$70.94	$237,081
Norske Skog Oxidation Ponds (TP)	2,259 kW	$70.94	$160,253
	49,128 kW		$3,485,140
Major Customer Pass Through Revenue			$4,137,280
Non-Major Customer Pass Through Revenue	230,615,972 kWh	$0.02077	$4,789,799
Threshold (PxQ) Pass Through Revenue			**$8,927,080**

2010 Pass Through Revenue - Actual			
	Billed Quantities	2010 Price	Actual Revenue
Major Customer (Excluding Interconnection)			
Fonterra (BoPE)	35,666,564 kWh	$0.0032	$115,628
SCA Hygiene (TP)	77,231,380 kWh	$0.0014	$108,631
CHH Whakatane (TP)	128,403,687 kWh	$0.0019	$245,947
Kaingaroa Timberlands (TP)	6,432,365 kWh	$0.0024	$15,679
CHH - Kawerau (TP)	17,024,980 kWh	$0.0024	$40,862
Norske Skog Oxidation Ponds (TP)	16,137,429 kWh	$0.0023	$36,959
	280,896,405 kWh		$563,706
Major Customer Interconnection			
Fonterra (BoPE)	0 kW	$70.94	$0
SCA Hygiene (TP)	8,759 kW	$70.94	$621,364
CHH Whakatane (TP)	15,063 kW	$70.94	$1,068,570
Kaingaroa Timberlands (TP)	852 kW	$70.94	$60,422
CHH - Kawerau (TP)	2,028 kW	$70.94	$143,834
Norske Skog Oxidation Ponds (TP)	1,813 kW	$70.94	$128,624
	28,514 kW		$2,022,815
Major Customer Pass Through Revenue			$2,586,521
Non-Major Customer Pass Through Revenue	246,165,057 kWh	$0.02077	$5,112,747
Total Actual Pass Through Revenue			**$7,699,268**

2010 Quantity Anomaly - Billed 2010 Quantities vs. PxQ 2003 Base Quantities	
Major Customers	$1,550,759
Non - Major Customers	-$322,948
Net Quantity Anomaly	**$1,227,811**

13. In summary, the 2010 breach is comprised of three components, a technical breach resulting from the quantity anomaly in the price path formula arising from a reduction in major customer load since 2003 (which is partly offset by minor growth in non major customer consumption). This anomaly creates a technical breach of $1,227,811 in 2010 (as demonstrated above). After deducting the technical breach, a breach of $349,116 remains. These primarily reflect lower than anticipated transmission costs and lower Allowable Notional Revenue due to lower than forecast CPI.