



Commerce Act (Electricity Distribution Thresholds) Notice 2004

Threshold Compliance Statement

20 May 2010

Threshold assessment as at 31 March 2010

Contents

INTRODUCTION	3
STATEMENT OF COMPLIANCE	3
Public disclosure	4
Disclaimer	4
1 PRICE PATH THRESHOLD	5
1.1 Introduction.....	5
Sale of the Wellington network	5
Exclusions	6
1.2 Price path threshold requirement (s5(1)(a) of the Notice)	7
1.3 Second price path threshold requirement (s5(1)(b) of the Notice)	9
1.4 Specified Services.....	9
1.5 Pass-Through Costs	10
1.6 Excluded Services.....	10
2 QUALITY THRESHOLD	14
2.1 Introduction.....	14
2.2 Vector's Commitment to Quality	14
2.3 Reliability Criteria	15
2.4 Extreme Event Identification using the 2.5 Beta Method.....	15
2.5 Consumer engagement criterion	16
APPENDICES	17
Appendix 1: (AKL1) Auckland residential and small commercial notional revenue ...	17
Appendix 2: (AKL2) Northern residential and commercial notional revenue	18
Appendix 3: (AKL3) Northern small industrial and non-standard notional revenue ..	20
Appendix 4: (AKL4) Auckland non standard notional revenue	21
Appendix 5: (AKL5) Auckland commercial and industrial notional revenue (excluding on-peak)	22
Appendix 6: (AKL7) Auckland and Northern on-peak notional revenue.....	23
Appendix 7: Calculation of SAIDI and SAIFI figures for the purposes of s6(1)(A) and 6(1)(B)	24

INTRODUCTION

This threshold compliance statement ("the Statement") is submitted by Vector Limited ("Vector") pursuant to s7(1)(a) of the Commerce Act (Electricity Distribution Thresholds) Notice 2004 ("the Notice").

The Notice relates to the performance of electricity lines businesses as part of the Commerce Commission's ("the Commission") development and operation of a regulatory regime for such businesses, pursuant to Part 4A of the Commerce Act 1986.

The Notice requires lines businesses to publicly disclose information relevant to the assessment of their performance against the thresholds.

STATEMENT OF COMPLIANCE

As required by s7(1)(a) of the Notice, the Statement:

- (a) confirms Vector's compliance with the price path threshold, and includes evidence to this effect in the form of revenues, notional revenues, prices, base quantities, pass-through costs, units of measurement associated with all numeric data, list of excluded services (and the reasons and supporting evidence for excluding these services) and other data, information, and calculations, that fully supports and explains the confirmation; and
- (b) confirms Vector's compliance with the quality threshold, and includes evidence to this effect in the form of SAIDI and SAIFI statistics, relevant information from asset management plans, and other data, information, and calculations that fully supports and explains the confirmation; and
- (c) describes policies and procedures which Vector has used for recording the SAIDI and SAIFI statistics; and
- (d) includes such other information as is sufficient to enable the Commission to properly determine whether or not the thresholds have been breached.

Public disclosure

As required by s7(1), Vector has disclosed and published the Statement on the Internet, including:

(a) a report on the Statement signed by Vector's auditor (KPMG), as required by s7(1)(b) of the Notice ("the Auditor's Report"); and

(b) a certificate duly signed by two Directors of Vector, as required by s7(1)(c) of the Notice ("the Certificate").

As required by s7(8), Vector hereby advises the Uniform Resource Locator ("URL") for accessing the Statement, the Auditor's Report and the Certificate to be;

<http://www.vector.co.nz/corporate/disclosures/electricity>

Copies of the Statement (containing the Auditor's Report and the Certificate) are available from 101 Carlton Gore Road, Newmarket, Auckland.

Disclaimer

The information contained in this Statement has been prepared for the express purpose of complying with the requirements of the Notice. This statement has not been prepared for any other purpose. Vector Limited expressly disclaims any liability to any other party who may rely on this statement for any other purpose.

1 PRICE PATH THRESHOLD

1.1 Introduction

- 1.1.1 This section of the Statement pertains to the requirements of the Commission's price path threshold for the 31 March 2010 assessment date.
- 1.1.2 Vector, along with other lines businesses, is required to demonstrate that notional revenue calculated in accordance with the Notice has not increased by more than CPI-X (Vector has an X factor of zero) and changes in pass through costs, for the period from 1 April 2009 to 31 March 2010.
- 1.1.3 In this Statement Vector demonstrates that it has complied with the price path threshold requirements.
- 1.1.4 Tables contained in the Statement are aggregates of the attached appendices that reflect the price multiplied by the appropriate quantity for each pricing category.
- 1.1.5 For presentation purposes some numbers in this document have been rounded. In most cases calculations are based on more detailed numbers (i.e. to more decimal places than shown in this document). This may cause small discrepancies or rounding inconsistencies when aggregating some of the information presented in this document. These discrepancies do not affect the overall compliance calculations which are based on the more detailed information.

Sale of the Wellington network

- 1.1.6 On 24 July 2008, Vector completed the sale of the Wellington electricity distribution network (Wellington Electricity Lines Limited, (WELL)) to Hong Kong Electric Holdings Limited and Cheung Kong Infrastructure Holdings Limited (CKI). Vector continues to own and operate the Auckland and Northern (Waitemata) electricity distribution networks (referred to collectively in this document as the Auckland Regional networks).
- 1.1.7 As a result of the sale, Vector and WELL adopted an approach to enable Vector and WELL to jointly demonstrate their compliance with the price path threshold and separately demonstrate compliance with the quality threshold for the year ended 31 March 2009. For the year ended 31 March 2010 Vector and WELL have

separately demonstrated compliance with the price and quality thresholds. The approach adopted has been further detailed in the relevant sections of this compliance statement.

- 1.1.8 Some sections of this threshold compliance statement differ from previous years as calculations no longer include the Wellington electricity distribution network.

Exclusions

- 1.1.9 Only a subset of Vector's services are relevant to the Commission's consideration under the Notice; namely electricity distribution goods or services or services directly related to electricity distribution.

- 1.1.10 Accordingly, as provided for in the Notice (definition of 'specified services'), Vector has excluded a range of services from this Statement. Where services related to electricity distribution are excluded, Vector has complied with the regulations by demonstrating that there is workable or effective competition for the provision of those services.

- 1.1.11 Without prejudice to future compliance statements, Vector has taken a conservative approach to service exclusions. For example some services provided to large consumers and charter payments that could be considered for exclusion have not been excluded. We reserve our right to justify further service exclusions to the Commission in the future.

1.2 Price path threshold requirement (s5(1)(a) of the Notice)

1.2.1 As required by s5(1)(a), in order to demonstrate compliance with the price path threshold, lines businesses are required to demonstrate that their notional revenue at the assessment date has not exceeded the allowable notional revenue under the CPI-X price path at that assessment date.

1.2.2 As outlined in the calculation below, Vector complies with the price path threshold.

Notice Requirement	Notional revenue divided by allowable notional revenue at the assessment date	Is not to exceed	One
Notice expression	$\frac{NR_{2010}}{R_{2010}}$	\leq	1
Vector Result	$\frac{\$331,147,417}{\$334,833,985} = 0.9888$	\leq	1

1.2.3 As described in the joint compliance statement for Vector and WELL prepared on 20 May 2009, Vector's share of allowable notional revenue for the Auckland Regional networks has been determined by apportioning the combined allowable notional revenue for the Auckland Regional networks and the Wellington network as at 31 March 2009 between Vector and WELL in proportion to their respective notional revenues at 31 March 2009.

$$R_{2009,AKL} = \left(R_{2009} \times \frac{NR_{2009,AKL}}{NR_{2009,AKL} + NR_{2009,WGN}} \right)$$

$$R_{2009,AKL} = \left(\$410,550,479 \times \frac{\$318,815,872}{\$318,815,872 + \$80,364,609} \right)$$

$$R_{2009,AKL} = \$327,896,817$$

1.2.4 The summary calculation of NR_{2010} and R_{2010} is provided below.

Vector's Allowable Notional Revenue, $R_{2010} = R_{2009}(1 + \Delta CPI_{2010})(1 - X)$	
Calculation Components	Amount
R_{2009} – is the allowable notional revenue under the CPI-X price path at 31 March 2009	\$327,896,817
ΔCPI_{2010} – the average change in the consumer price index over the calendar year that ends during the assessment period (calculated in accordance with the following expression): $\Delta CPI_{2010} = \frac{CPI_{Q1,2009} + CPI_{Q2,2009} + CPI_{Q3,2009} + CPI_{Q4,2009}}{CPI_{Q1,2008} + CPI_{Q2,2008} + CPI_{Q3,2008} + CPI_{Q4,2008}} - 1$ <p>Where $CPI_{Qj,y}$ is the consumer price All Groups Index SE9A figure published by Statistics New Zealand for the quarter j in the calendar year y</p>	(4344/4254)-1 = 2.12%
X – is the “X factor” value specified in Schedule 1 of the Notice for the distribution business, subject to <i>clause 5(3)</i>	0%
Total Allowable Notional Revenue as at 31 March 2010	
\$334,833,985	

Vector's Notional revenue, $NR_{2010} = \sum P_{i,2010} Q_i - K_{2010}$	
Calculation Components	Amount
$\sum P_{i,2010} Q_i$ – the sum of the prices as at 31 March 2010 multiplied by the corresponding base quantities for the year ending 31 March 2003	\$467,551,801
K_{2010} – the sum of all pass-through costs for the assessment period	(\$136,404,383)
Total Notional Revenue as at 31 March 2010	
\$331,147,417	

1.3 Second price path threshold requirement (s5(1)(b) of the Notice)

1.3.1 Under s5(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.

1.3.2 Vector complies with s5(1)(b) of the Notice as Vector's notional revenue throughout the assessment period does not exceed the allowable notional revenue of \$334,833,985 at the assessment date.

1.4 Specified Services

1.4.1 The tables below summarise Vector's notional revenue for specified services at the assessment date. For each source of revenue, more detail is provided in the appendix listing each price and base quantity.

Description		Appendix	Year ended 31 March 2010
5.3	Auckland residential and small commercial notional revenue.	1	\$208,150,142
5.4	Northern residential and commercial notional revenue.	2	\$150,800,677
5.5	Northern small industrial and non-standard notional revenue.	3	\$8,251,311
5.6	Auckland non-standard notional revenue.	4	\$11,073,132
5.7	Auckland commercial and industrial notional revenue (excluding on-peak).	5	\$57,099,751
5.8	Auckland and Northern on-peak notional revenue.	6	\$32,176,787
5.9	Total Specified Services		\$467,551,801

1.5 Pass-Through Costs

1.5.1 The table below provides the breakdown of pass-through costs incurred by Vector over the assessment period.

Description	Year to 31 March 2010 (million) Actual
Transmission	\$131.603
Utility Rates Summary	\$3.750
EC Levy Summary	\$1.051
Total	\$136.404

1.5.2 The transmission quantities are the sum of actual charges paid or payable for the year ending 31 March 2010.

1.5.3 The total cost of utility rates charged to Vector applicable to the electricity business for the year ending 31 March 2010 are the total expensed in the year to 31 March 2010.

1.5.4 The EC Levies include all applicable components (Common Quality, Registry and Consumer, Transmission, Other Activities and MACQS Reform invoice lines) paid or payable for the year ending 31 March 2010.

1.6 Excluded Services

1.6.1 Vector operates in the under frequency reserves market. Vector has excluded the under frequency reserves market as the market is fully contestable and income is derived as a result of a competitive tendering process and is not associated with the conveyance of electricity.

1.6.2 The following activities are excluded services in accordance with paragraph (e) of the definition of specified services s3(1) as these income sources are not related to electricity distribution and/or are non conveyance activities:

- (a) Vector Gas: Vector's Gas Business, which is a separate business that includes Vector's gas distribution network in Auckland and the gas distribution and transmission networks formerly operating as NGC.

- (b) Vector Communications: Vector's telecommunication network, which is a separate business operating high bandwidth fibre optic communication networks.
- (c) Vector's electricity, telecommunications and gas training institute Utilitech, which offers technical and safety training across a wide range of markets (and in competition to other training providers).
- (d) Vector's energy metering services NGC and the wholly owned subsidiary AMS which are both energy (gas and electricity) metering service providers.
- (e) Stream: 70% owned by Vector, providing time-of-use metering and metering information services to commercial and industrial organisations for the purposes of improved energy management opportunities for businesses.
- (f) Treescape: 50% owned by Vector, providing vegetation management and tree trimming services to third parties, including territorial authorities.
- (g) Advertising revenue generated through the ownership of billboards, where Vector provides public display space to advertising companies at selected properties.
- (h) Electrical work carried out at the request of consumers on their property.
- (i) Use of network poles by third parties e.g. Telecommunication companies (noting that there are options available to network operators other than use of Vector's poles).
- (j) Miscellaneous other revenue, for example, rentals received from properties, profit on sale of assets and interest received.

1.6.3 The following activities are excluded services in accordance with paragraph (d) of the definition of specified services s3(1) as these income sources are derived from clearly contestable activities for the provision of which there is workable or effective competition:

- (a) Management services to other companies, such as the provision of Linelogix, a product used to provide proactive outage notification by retailers to their customers;
- (b) Rental income from generator hire, where Vector sources and provides stand-by generation;
- (c) Where requested by consumers, any income from sourcing power quality equipment;
- (d) Call centre management of fault calls for some retailers;
- (e) MARIA registry management service for embedded network operators; and
- (f) Miscellaneous other revenue, for example, value added services from products like MIDEL transformer fluid.

1.6.4 The following activities are excluded services in accordance with paragraph (i) of the definition of specified services s3(1) as they are contestable activities for the provision of which there is workable or effective competition:

- (a) Connections services;
- (b) Disconnection services; and
- (c) Reconnection services.

Vector allows other suitably trained and authorised service providers to undertake connection, disconnection and reconnection services.

1.6.5 Vector receives income from parties requiring network extensions or alterations, reflecting the level of investment undertaken by Vector. This has been excluded from the price path threshold compliance calculation because;

- (a) Vector contributes to the total cost of the extension. Assets are vested in Vector on behalf of consumers, but consumers can also elect to own the works or vest them in a third party. Examples of such situations include shopping malls, retirement villages, and residential subdivisions. Additionally, third parties can select the contractors to construct the works; and

- (b) Consumers may choose to contract with a third party to construct and maintain such assets, rather than providing Vector with a contribution. Therefore, workable or effective competition exists for such services and customer contributions are appropriately excluded. (Refer also to the Commerce Commission Investigation Ref J5131, which is publicly available).

2 QUALITY THRESHOLD

2.1 Introduction

- 2.1.1 This section of the Statement pertains to the requirements of the Commission's Quality threshold for the 31 March 2010 assessment date.
- 2.1.2 In this section of the Statement Vector demonstrates that it has complied with the quality threshold requirements.

2.2 Vector's Commitment to Quality

- 2.2.1 Vector continually strives to meet the quality threshold target as determined by the Commerce Commission. To do this, Vector has developed and implemented industry leading business systems and practices such as:
- (a) ensuring a company wide focus on driving improvement in quality of service by linking staff bonuses to company performance, as well as ensuring all staff have access to up-to-date detailed quality-related information on the intranet.
 - (b) ensuring Vector's maintenance business partners focus on quality by linking the payments received from Vector directly to specific zone-based quality targets.
 - (c) ensuring world-class health and safety processes are in place by providing training to all staff; having zero tolerance for working unsafely and work place accidents; ensuring a company-wide focus on safety through assessing staff and service provider performance with respect to specific Key Performance Indicators (KPIs) related to safety.
 - (d) Vector has invested significantly in cutting edge technology to ensure that its assets are managed efficiently (continuously improving both quality and cost efficiency), to make better business decisions and create business solutions tailored specifically to Vector's staff, service provider and customer needs.
 - (e) Vector's Asset Performance & Information Team – a dedicated team undertaking data collection, data quality management, information analysis, data visualisation and spatial analysis in a way that facilitates

better understanding of Vector's quality performance, which enhances Vector's ability to better plan and manage its network.

- (f) For more detailed information on Vector's quality systems, policies and procedures refer to Section 7 of Vector's 2010 AMP
<http://www.vector.co.nz/sites/vector.co.nz/files/Vector%20Electricity%20Disclosure%20AMP%202010%20-%202020.pdf>

2.3 Reliability Criteria

- 2.3.1 Lines businesses are required to demonstrate that their system average interruption duration index (SAIDI) and system average interruption frequency index (SAIFI) for the assessment year do not exceed the five year average to 31 March 2003 for those respective reliability measures. Vector complies with both reliability thresholds, as summarised in the table below.

Notice Requirement	Result for assessment year	Target	Outcome	Target achieved by	Target achieved by (%)
6(1)(a) - SAIDI	66.8	104.0	Complied	37.2	35.8
6(1)(b) - SAIFI	1.018	1.598	Complied	0.580	36.3

- 2.3.2 The calculation of historical SAIDI and SAIFI figures are shown in Appendix 7.

2.4 Extreme Event Identification using the 2.5 Beta Method

- 2.4.1 Vector's 2.5 Beta Method calculations were performed in accordance with the steps laid out in 'Appendix 1: Application of the Beta Method' from the Commerce Commission's Supplementary Guidelines document dated 2 November 2007.
- 2.4.2 Vector has comprehensive reliability data available from 1998. This has been used to calculate historical Major Event Day (MED) values and exclude them from the 5 years preceding the 2009/10 regulation year (the period 1/4/2004-31/3/2009). With the exclusion of these historic storms, regulation year TMED values were calculated to be:

	SAIDI	SAIFI
T _{MED}	7.99	0.169

- 2.4.3 No MED's were identified in the 2009/10 regulation year.

2.5 Consumer engagement criterion

- 2.5.1 Correspondence from the Commission on 5 February 2010 confirmed that electricity distribution businesses are not required to demonstrate compliance with clause 6 (1)(c) – customer communication – for the two year period ending 31 March 2010. Vector has consequently chosen not to demonstrate compliance for the 31 March 2010 assessment date. However, Vector continues to engage with customers at all levels.

APPENDICES

Appendix 1: (AKL1) Auckland residential and small commercial notional revenue

- For the assessment period ending 31 March 2010 there have been no structural changes to the charges in this appendix and notional revenue has been determined consistent with the 2009 threshold compliance statement.
- Prices have been taken from Vector's published price schedules.
- Base quantities were multiplied by the applicable price to determine the notional revenue for the assessment period.
- Residential embedded networks in the Auckland Vector network previously owned by UnitedNetworks now charged at Vector Auckland rates are incorporated into the Vector base quantities below (refer to the 2007 Threshold Compliance Statement for more detail on the background to this issue).
- Commercial and Industrial embedded networks in the Auckland Vector network previously owned by UnitedNetworks are shown separately in Appendix AKL5.

Appendix AKL1
Auckland residential and small commercial notional revenue
THRESH1.0 a-9 A,W.xls

Sum (\$)							208,150,142
Network	2002/2003 Charge Type	2002/2003 Tariff Code	Base Quantity (Q)	Base Q Unit	2009/2010 Price (P)	Price Unit	P*Q Notional Revenue (\$)
VEC	Variable	RR-V	1,704,627,536	kWh	0.0768	\$/kWh	130,915,395
VEC	Variable	RE-V	132,024,682	kWh	0.0897	\$/kWh	11,842,614
VEC	Variable	SS-V	147,839,855	kWh	0.0710	\$/kWh	10,496,630
VEC	Variable	SM-V	569,828,744	kWh	0.0623	\$/kWh	35,500,331
VEC	Fixed	RR-F	223,061	ICPs	0.1500	\$/day	12,212,590
VEC	Fixed	RE-F	34,259	ICPs	0.1500	\$/day	1,875,680
VEC	Fixed	SS-F	16,640	ICPs	0.2500	\$/day	1,518,400
VEC	Fixed	SM-F	13,307	ICPs	0.7800	\$/day	3,788,503

Appendix 2: (AKL2) Northern residential and commercial notional revenue

- For the assessment period ending 31 March 2010 there have been no structural changes to the charges in this appendix and notional revenue has been determined consistent with the 2009 threshold compliance statement.
- Prices have been taken from Vector's published price schedules.
- Base quantities were multiplied by the applicable price to determine the notional revenue for the assessment period.
- On 1 April 2008 Vector restructured price structures in the Northern network for commercial ICPs. Please see the 2009 threshold compliance statement for details on the mapping of prices and base quantities to the restructured price plans.

Appendix AKL2

Northern residential and commercial notional revenue

THRESH2.2 a-9 W.mdb/q2010,1 P*Q

Sum (\$)							150,800,677
Network	Charge Type	2002/2003 Tariff Code	Base Quantity	Base Q Unit	2009/2010 Price	Price Unit	Notional Revenue
UNW	Fixed	08W	938	ICPs	0.4800	\$/day	164,338
UNW	Fixed	09W	2	ICPs	1.2800	\$/day	934
UNW	Fixed	20W	9	ICPs	1.2800	\$/day	4,205
UNW	Fixed	21W	1	ICPs	1.2800	\$/day	467
UNW	Fixed	22W	3	ICPs	5.6400	\$/day	6,176
UNW	Fixed	23W	8,372	ICPs	1.2800	\$/day	3,911,398
UNW	Fixed	24W	1,340	ICPs	1.2800	\$/day	626,048
UNW	Fixed	25W	309	ICPs	5.6400	\$/day	636,107
UNW	Fixed	26W	272	ICPs	5.6400	\$/day	559,939
UNW	Fixed	W01	16	ICPs	0.0000	\$/day	0
UNW	Fixed	W02	119	ICPs	0.0000	\$/day	0
UNW	Fixed	W11	54,132	ICPs	0.1500	\$/day	2,963,727
UNW	Fixed	W12	113,880	ICPs	0.1500	\$/day	6,234,930
UNW	Fixed	W13	123	ICPs	0.1500	\$/day	6,734
UNW	Fixed	W14	5	ICPs	0.1500	\$/day	274
UNW	Fixed	W15	5,199	ICPs	0.4800	\$/day	910,865
UNW	Fixed	W16	4,253	ICPs	0.4800	\$/day	745,126
UNW	Fixed	W17	19	ICPs	0.4800	\$/day	3,329
UNW	Fixed	W27	26	ICPs	1.2800	\$/day	12,147
UNW	Fixed	W28	77	ICPs	10.4800	\$/day	294,540
UNW	Fixed	W29	19	ICPs	10.4800	\$/day	72,679

Network	Charge Type	2002/2003 Tariff Code	Base Quantity	Base Q Unit	2009/2010 Price	Price Unit	Notional Revenue
UNW	Variable	08W_N/A	1,711,850	kWh	0.0610	\$/kWh	104,423
UNW	Variable	09W_N/A	27,010	kWh	0.0503	\$/kWh	1,359
UNW	Variable	11W/TAIC	37,865	kWh	0.0850	\$/kWh	3,219
UNW	Variable	12W/TAIC	200	kWh	0.0850	\$/kWh	17
UNW	Variable	13W/TAIC	20,152	kWh	0.0468	\$/kWh	943
UNW	Variable	20W/TAIC	76,944	kWh	0.0503	\$/kWh	3,870
UNW	Variable	21W/TAIC	364	kWh	0.0503	\$/kWh	18
UNW	Variable	22W/TAIC	6,766	kWh	0.0491	\$/kWh	332
UNW	Variable	23W/TAIC	181,474,819	kWh	0.0503	\$/kWh	9,128,183
UNW	Variable	24W/TAIC	71,963,289	kWh	0.0503	\$/kWh	3,619,753
UNW	Variable	25W/TAIC	24,208,991	kWh	0.0491	\$/kWh	1,188,661
UNW	Variable	26W/TAIC	24,358,179	kWh	0.0491	\$/kWh	1,195,987
UNW	Variable	DEFT/NTH	3,079	kWh	0.1685	\$/kWh	519
UNW	Variable	W01/24UC	81,854	kWh	0.1685	\$/kWh	13,792
UNW	Variable	W02/24UC	15,304,737	kWh	0.1685	\$/kWh	2,578,848
UNW	Variable	W11/AICO	301,115,912	kWh	0.0850	\$/kWh	25,594,853
UNW	Variable	W11/NITE	74,207	kWh	0.0198	\$/kWh	1,469
UNW	Variable	W12/AICO	1,006,462,690	kWh	0.0850	\$/kWh	85,549,329
UNW	Variable	W12/NITE	2,022,039	kWh	0.0198	\$/kWh	40,036
UNW	Variable	W13/24UC	1,133,614	kWh	0.1106	\$/kWh	125,378
UNW	Variable	W13/CTRL	85,084	kWh	0.0468	\$/kWh	3,982
UNW	Variable	W14/24UC	20,616	kWh	0.1106	\$/kWh	2,280
UNW	Variable	W14/CTRL	16,359	kWh	0.0468	\$/kWh	766
UNW	Variable	W15/AICO	16,295,728	kWh	0.0610	\$/kWh	994,039
UNW	Variable	W15/NITE	2,580	kWh	0.0610	\$/kWh	157
UNW	Variable	W16/AICO	47,553,080	kWh	0.0610	\$/kWh	2,900,738
UNW	Variable	W16/NITE	1,945	kWh	0.0610	\$/kWh	119
UNW	Variable	W17/24UC	242,390	kWh	0.0610	\$/kWh	14,786
UNW	Variable	W17/CTRL	1,988	kWh	0.0610	\$/kWh	121
UNW	Variable	W27/24UC	5,885,716	kWh	0.0503	\$/kWh	296,052
UNW	Variable	W27/CTRL	14,062	kWh	0.0503	\$/kWh	707
UNW	Variable	W28/24UC	10,170,726	kWh	0.0213	\$/kWh	216,636
UNW	Variable	W28/CTRL	146,087	kWh	0.0213	\$/kWh	3,112
UNW	Variable	W28TTAIC	752,251	kWh	0.0213	\$/kWh	16,023
UNW	Variable	W29/24UC	1,956,859	kWh	0.0213	\$/kWh	41,681
UNW	Variable	W29TTAIC	212,446	kWh	0.0213	\$/kWh	4,525

Appendix 3: (AKL3) Northern small industrial and non-standard notional revenue

- For the assessment period ending 31 March 2010 there have been no structural changes to the charges in this appendix and notional revenue has been determined consistent with the 2009 threshold compliance statement.
- Prices have been taken from Vector's published price schedules.
- Base quantities were multiplied by the applicable price to determine the notional revenue for the assessment period.
- On 1 April 2008 Vector restructured price structures in the Northern network for small industrial ICPs. Please see the 2009 threshold compliance statement for details on the mapping of prices and updating of base quantities.

Appendix AKL3
Northern small industrial and non-standard notional revenue
THRESH1.0 a-9 A,W.xls

Sum (\$)							8,251,311
Network	2002/2003 Charge Type	2002/2003 Tariff Code	Base Quantity (Q)	Base Q Unit	2009/2010 Price (P)	Price Unit	P*Q Notional Revenue (\$)
UNW		40W	298	ICPs			7,618,624
UNW		40W	298,243,811	kWh			
UNW		60W	3	ICPs			632,687
UNW		60W	25,608,491	kWh			

Appendix 4: (AKL4) Auckland non standard notional revenue

- For the assessment period ending 31 March 2010 there have been no structural changes to the charges in this appendix and notional revenue has been determined consistent with the 2009 threshold compliance statement.
- Base quantities were multiplied by the applicable price to determine the notional revenue for the assessment period.
- Vector's non-standard contracts fall into four categories:
 - Fixed Contract Charge
 - Standard Charges less Fixed Discount
 - Street lighting
 - Embedded generation

Appendix AKL4
Auckland non standard notional revenue
THRESH1.0 a-9 A,W.xls

Sum (\$)							11,073,132
Network	2002/2003 Charge Type	Contract No	Base Quantity (Q)	Base Q Unit	2009/2010 Price (P)	Price Unit	P*Q Notional Revenue [\$]
VEC	Fixed Contract	1005	12	months	18,920	\$/month	227,037
VEC	Fixed Contract	1006	12	months	90,759	\$/month	1,089,104
VEC	Fixed Contract	1007	12	months	163,920	\$/month	1,967,039
VEC	Fixed Contract	1004	12	months	20,620	\$/month	247,446
VEC	Fixed Contract	1004	12	months	16,981	\$/month	203,777
VEC	Fixed Contract	1027	12	months	265,020	\$/month	3,180,239
VEC	Fixed Contract	1027	12	months	11,007	\$/month	132,086
VEC	Fixed Contract	1002	12	months	44,703	\$/month	536,440
VEC	Fixed Contract	1012	12	months	58,020	\$/month	696,235
VEC	Discount on Standard	1031	12	months	-	\$/month	0
VEC	Discount on Standard	1032	12	months	-	\$/month	0
VEC	Discount on Standard	1032	12	months	-	\$/month	0
VEC	Discount on Standard	1032	12	months	-	\$/month	0
VEC	Streetlighting	1020B	12	months	16,444	\$/month	197,329
VEC	Streetlighting	1020B	12	months	16,444	\$/month	197,329
VEC	Streetlighting	1020B	12	months	16,444	\$/month	197,329
VEC	Streetlighting	1020B	12	months	16,444	\$/month	197,329
VEC	Streetlighting	1020B	12	months	16,444	\$/month	197,329
VEC	Streetlighting	1020B	12	months	16,444	\$/month	197,329
VEC	Streetlighting	1020B	12	months	16,444	\$/month	197,329
VEC	Streetlighting	1020B	12	months	16,444	\$/month	197,329
VEC	Streetlighting	1021A	12	months	95,858	\$/month	1,150,298
VEC	Streetlighting	1021A	12	months	-	\$/month	0
VEC	Streetlighting	1021A	12	months	-	\$/month	0
VEC	Streetlighting	1021A	12	months	-	\$/month	0
VEC	Streetlighting	1021A	12	months	-	\$/month	0
VEC	Embedded Generation	1034	12	months	5,400	\$/month	64,800

Appendix 5: (AKL5) Auckland commercial and industrial notional revenue (excluding on-peak)

- For the assessment period ending 31 March 2010 there have been no structural changes to the charges in this appendix and notional revenue has been determined consistent with the 2009 threshold compliance statement.
- Prices have been taken from Vector's published price schedules.
- Base quantities were multiplied by the applicable price to determine the notional revenue for the assessment period.
- As per Appendix AKL1, the calculations for commercial and industrial consumers on the ex-United Networks embedded networks are shown in this appendix.

Appendix AKL5
Auckland commercial and industrial notional revenue (excluding on-peak)
THRESH1.0 a-9 A,W.xls

Sum (\$)							57,099,751
Network	2002/2003 Charge Type	2002/2003 Tariff Code	Base Quantity (Q)	Base Q Unit	2009/2010 Price (P)	Price Unit	P*Q Notional Revenue (\$)
VEC	TX		763	ICP			
VEC	TX		4,834,947	kVA			2,935,487
VEC	TX		2,466,644	kVA			14,633,995
VEC	TX		890,951,454	kWh			11,436,190
VEC	TX Derived		90	ICP			
VEC	TX Derived		218,617	kVA			145,115
VEC	TX Derived		33,493	kVA			0
VEC	TX Derived		7,388,471	kWh			466,900
VEC	LV3		1939	ICP			
VEC	LV3		4,278,879	kVA			3,128,458
VEC	LV3		1,901,016	kVA			11,274,528
VEC	LV3		596,109,751	kWh			8,038,094
VEC	LV3 Derived		750	ICP			
VEC	LV3 Derived		1,085,320	kVA			956,057
VEC	LV3 Derived		305,081	kVA			0
VEC	LV3 Derived		61,373,806	kWh			3,715,659
VEC	Ex Embedded TX		18	ICP			
VEC	Ex Embedded TX		4,843	kVA			44,058
VEC	Ex Embedded TX		32,478	kVA			179,269
VEC	Ex Embedded TX		9,683,701	kWh			145,942

Appendix 6: (AKL7) Auckland and Northern on-peak notional revenue

- For the assessment period ending 31 March 2010 there have been no structural changes to the charges in this appendix and notional revenue has been determined consistent with the 2009 threshold compliance statement.
- Prices have been taken from Vector's published price schedules.
- Base quantities were multiplied by the applicable price to determine the notional revenue for the assessment period.
- On-peak pricing was introduced on 1 April 2006. Please refer to the 2007 threshold compliance statement for a synopsis on the issues associated with the introduction of new base quantities related to the new on-peak pricing structure.

Appendix AKL7
Auckland and Northern on-peak notional revenue
THRESH1.0 a-9 A,W.xls

Sum (\$)							32,176,787
Network	2002/2003 Charge Type	2002/2003 Tariff Code	Base Quantity (Q)	Base Q Unit	2009/2010 Price (P)	Price Unit	P*Q Notional Revenue (\$)
VEC	Variable	ALI60_24UC	656,579,705	kWh	0.0015	\$/kWh	984,870
VEC	Demand	ALI60_DOPC	1,009,028	kW	14.5704	\$/kW	14,701,943
VEC	Demand	ALI60_DOPU	497,554	kW	15.1002	\$/kW	7,513,164
VEC	Demand	ALI60_DOPR	146	kW	18.4117	\$/kW	2,696
VEC	Connection	ALI60_CAPH	2,285,686	kVA-month	0.0284	\$/kVA/day	1,979,827
VEC	Reactive	ALI60_PWRF	253,660	kVAr	7.0000	\$/kVAr	1,775,621
UNW	Variable	WLI60_24UC	168,187,577	kWh	0.0013	\$/kWh	218,644
UNW	Demand	WLI60_DOPC	213,370	kW	10.4239	\$/kW	2,224,150
UNW	Demand	WLI60_DOPU	130,743	kW	10.8338	\$/kW	1,416,443
UNW	Demand	WLI60_DOPR	34,343	kW	12.9211	\$/kW	443,755
UNW	Connection	WLI60_CAPH	252,000	kVA-month	0.0304	\$/kVA/day	233,016
UNW	Connection	WLI60_CAPT	444,000	kVA-month	0.0304	\$/kVA/day	410,552
UNW	Reactive	WLI60_PWRF	38,872	kVAr	7.0000	\$/kVAr	272,107

Appendix 7: Calculation of SAIDI and SAIFI figures for the purposes of s6(1)(A) and 6(1)(B)

Regulation Year	Customer Minutes Lost ¹		
	Auckland	Northern	Vector
98/99	20,767,399	36,432,001	57,199,400
99/00	14,944,839	19,358,545	34,303,384
00/01	13,070,935	25,576,088	38,647,023
01/02	14,018,579	26,774,194	40,792,773
02/03	20,035,471	41,183,159	61,218,630
03/04	18,367,487	36,229,702	54,597,189
04/05	18,032,523	29,006,503	47,039,026
05/06	26,509,816	45,946,317	72,456,133
06/07	30,555,224	40,852,313	71,407,537
07/08	28,417,145	101,216,412	129,633,557
08/09	25,319,881	54,425,302	79,745,183
09/10	14,471,406	20,564,976	35,036,382

Regulation Year	Customers Impacted		
	Auckland	Northern	Vector
98/99	301,286	444,551	745,837
99/00	263,198	356,996	620,194
00/01	261,112	380,456	641,568
01/02	216,586	437,458	654,044
02/03	326,203	582,197	908,400
03/04	271,271	548,151	819,422
04/05	247,404	433,458	680,862
05/06	380,685	533,317	914,002
06/07	351,821	490,829	842,650
07/08	299,682	625,583	925,265
08/09	298,153	576,644	874,797
09/10	238,708	295,501	534,209

Regulation Year	SAIDI		
	Auckland	Northern	Vector
98/99	48.4	85.0	133.4
99/00	34.2	44.2	78.4
00/01	29.5	57.7	87.2
01/02	31.0	59.2	90.2
02/03	42.8	87.9	130.6
03/04	38.2	75.4	113.7
04/05	36.9	59.4	96.3
05/06	53.3	92.4	145.7
06/07	60.3	80.7	141.0
07/08	55.3	196.9	252.1
08/09	48.7	104.7	153.4
09/10	27.6	39.2	66.8

¹ Note that these figures differ slightly from values presented in previous year's compliance statements. The discrepancies primarily span the threshold years and are a result of changes to Vector's reliability reporting database in 2006. The magnitude of this variance is less than 0.2% so does not materially impact the accuracy of previous compliance statements.

Regulation Year	SAIFI		
	Auckland	Northern	Vector
98/99	0.703	1.037	1.740
99/00	0.601	0.816	1.417
00/01	0.589	0.858	1.447
01/02	0.479	0.968	1.447
02/03	0.696	1.242	1.939
03/04	0.565	1.141	1.706
04/05	0.506	0.887	1.393
05/06	0.766	1.073	1.838
06/07	0.695	0.969	1.664
07/08	0.583	1.217	1.800
08/09	0.574	1.110	1.683
09/10	0.455	0.563	1.018

Customer Numbers

YEAR	NORTHERN	AUCKLAND	VECTOR	Regulation Year	Regulation Customers
1-Apr-94	157,978	242,066	400,044		
1-Apr-95	157,978	243,104	401,082	94/95	400,563
1-Apr-96	160,313	249,622	409,935	95/96	405,509
1-Apr-97	164,587	251,490	416,077	96/97	413,006
1-Apr-98	173,802	252,361	426,163	97/98	421,120
1-Apr-99	173,802	257,478	431,280	98/99	428,722
1-Apr-00	175,285	268,621	443,906	99/00	437,593
1-Apr-01	181,266	261,500	442,766	00/01	443,336
1-Apr-02	185,918	275,329	461,247	01/02	452,007
1-Apr-03	190,074	285,850	475,924	02/03	468,586
1-Apr-04	192,075	292,739	484,814	03/04	480,369
1-Apr-05	196,828	295,763	492,591	04/05	488,703
1-Apr-06	198,309	303,391	501,700	05/06	497,146
1-Apr-07	201,334	309,742	511,076	06/07	506,388
1-Apr-08	204,268	312,996	517,264	07/08	514,170
1-Apr-09	205,796	316,350	522,146	08/09	519,705
1-Apr-10	208,016	319,080	527,096	09/10	524,621