

Vector Limited
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# EXPLANATORY NOTE FOR INFORMATION DISCLOSURES1

# 2010 INFORMATION DISCLOSURES

We have prepared, published and publicly disclosed the 2010 disclosure information in respect of its financial statements, asset valuations, financial and efficiency performance measures and asset management information. This information has been prepared in accordance with the Electricity Distribution (Information Disclosure) Requirements 2008 (requirements).

#### BASIS OF PREPARATION

The regulatory environment is undergoing a process of change and there is an ongoing period of uncertainty. Input methodologies are currently being developed by the Commerce Commission (Commission) and consulted on with interested parties, including electricity distribution businesses. These input methodologies will, when finally determined prior to 31 December 2010, provide a more certain basis for the operation of the regulatory regime and for regulatory decision making.

However, until these input methodologies are finalised and the mechanics of processes such as setting default price paths or customised price paths are clarified, it is very difficult to evaluate what the impact will be, particularly on the electricity distribution businesses covered by the price quality control framework. Indications from the Commission's draft determinations are that there will be a number of changes.

### The Commission's proposals include:

- Changes to the calculation of the regulatory asset base;
- Changes to the regulatory treatment of tax;
- Changes to the determination of the allowable cost of capital; and
- Changes to the basis for allocating costs between businesses.

Where these changes end up will have a material impact on the future measurement of the return on investment (ROI) values. This means that ROIs disclosed historically, and in the 2010 disclosures, are not likely to be indicative of the ROIs that will be calculated in the future under the new regulatory regime.

Please note that this explanatory note does not form part of the audited information disclosures set out below.

Furthermore, it is unclear how the Commission will use these ROIs for the purposes of setting default price paths as the process to do this is also currently under consultation.

We expect reported ROIs to be volatile because the calculation includes an allowance for revaluation gains, determined by applying CPI inflation to the regulated asset base. The CPI, driving the revaluation gain adjustment to ROI, was 3.37% in 2008, 2.97% in 2009 and 2.05% in 2010. Removing the effect of the indexation of the regulatory asset base in 2010 would reduce the reported ROI to 8.4%.

The Commission will be setting starting prices for the default price path from 1 April 2012. This will follow the final determination of the relevant input methodologies and processes. The five year regulatory period for electricity distribution businesses commenced on 1 April 2010 and the Commission may apply clawback to that date when setting the prices to apply from 1 April 2012.<sup>2</sup>

Under clawback, the Commission may require the electricity distribution to lower its prices on a temporary basis in order to compensate consumers for some or all of any over recovery that occurred under the prices previously charged by the business, or to increase its prices to recover any shortfall.



# **Independent Assurance Report**

#### To the Directors of Vector Limited

REPORT ON VECTOR LIMITED'S COMPLIANCE WITH THE ELECTRICITY DISTRIBUTION (INFORMATION DISCLOSURE) REQUIREMENTS 2008 FOR THE FINANCIAL YEAR ENDED 31 MARCH 2010

KPMG is the auditor of Vector Limited (the company) engaged to provide an opinion on the compliance of the attached reports on pages 2 to 26 prepared by Vector Limited with the Commerce Commission's Electricity Distribution (Information Disclosure) Requirements 2008 (the Requirements) for the financial year ended 31 March 2010. In this independent assurance report the attached reports are called the 'disclosure information'.

#### Respective Responsibilities

The Board of Directors is responsible for preparing disclosure information which complies with the Requirements.

Clause 10 of the Requirements requires KPMG to provide an opinion that the disclosure information prepared by Vector Limited has complied in all material respects with the Requirements for the financial year ended 31 March 2010.

#### Use of this Independent Assurance Report

This independent assurance report has been prepared solely to provide assurance that the disclosure information prepared by Vector Limited complies with the Requirements for the financial year ended 31 March 2010. This independent assurance report is not intended to be used for any purposes, other than that for which it was prepared.

#### Scope and Limitations of the Engagement

We conducted the engagement in accordance with the International Standard on Assurance Engagements (New Zealand) 3000: Assurance Engagements Other than Audits or Reviews of Historical Financial Information issued by the New Zealand Institute of Chartered Accountants.

This independent assurance report provides assurance that the disclosure information prepared by Vector Limited complies with the Requirements. Vector Limited's Threshold Compliance Statement prepared pursuant to the Commerce Act (Electricity Lines Thresholds) Notice 2004 for the year ended 31 March 2010 has been subject to audit. The audit opinions on the financial statements of the company for the year ended 30 June 2010 and Threshold Compliance Statements of Vector Limited for the year ended 31 March 2010 were unqualified and were dated 27 August 2010 and 20 May 2010 respectively.

Our work has been planned and performed to obtain all the information and explanations we considered necessary in order to obtain reasonable assurance that the disclosure information has been presented in all material respects in accordance with the Requirements. Material misstatements, whether caused by fraud or error, are differences or omissions of amounts and disclosures that



would affect a user's overall understanding of the disclosure information prepared by Vector Limited.

Because of the inherent limitations in evidence gathering procedures, it is possible that fraud, error or non-compliance may occur and not be detected. As the procedures performed for this engagement are not performed continuously throughout the financial year and the procedures performed in respect of Vector Limited's compliance with the Requirements are undertaken on a test basis, our engagement cannot be relied on to detect all instances where Vector Limited may not have complied with the Requirements. Our opinion has been formed on the above basis.

#### **Basis of Opinion**

Our work in respect of any historical financial and non-financial amounts and disclosures that were audited under the financial statement and Threshold Compliance Statement audits has been limited to agreeing the amounts and disclosures to the underlying records and audited financial statements or Threshold Compliance Statements of Vector Limited.

Our work in respect of historical financial and non-financial amounts and disclosures that were not audited under the financial statement and Threshold Compliance Statement audits, has been planned and performed to obtain all the information and explanations we considered necessary in order to obtain reasonable assurance that the disclosure information complies in all material respects with the Requirements.

In the case of prospective financial and non-financial information our work has been limited to assessing whether the information has been presented on a basis consistent with the regulatory accounting or technical measurement requirements used for disclosures for the financial year ended 31 March 2010 and the immediately preceding financial year, and that the prospective financial and non-financial information has been calculated based on unaudited source data provided by Vector Limited, whilst acknowledging it is likely that actual results will vary from those forecasted, since anticipated events frequently do not occur as expected (and these variations may be significant). We have not performed audit procedures on the source data.

#### Independence

When carrying out the engagement we followed the independence requirements of the New Zealand Institute of Chartered Accountants. We also complied with the Independent auditor provisions on independence, as specified in clause 2(1) of the Requirements.

Our firm has also undertaken the annual audit of Vector Limited's financial statements and Threshold Compliance Statements and the regulatory audits of Vector Limited's gas businesses. Our firm has also provided other services to the company in relation to general accounting services. The firm has no other relationship with or interest in Vector Limited.



#### **Unqualified Opinions**

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

In our opinion, Vector Limited has:

- Kept proper records to enable the compilation of the disclosure information, as far as appears from our examination of those records;
- Prepared disclosure information for the financial year ended 31 March 2010 that complies with the Requirements;
- Presented the historical financial information included in reports FS1, FS2, FS3, AV1, AV2, AV3, MP2 and MP3 for the financial year ended 31 March 2010 that complies with the Requirements, in all material respects;
- Compiled the historical non-financial information included in reports MP1, MP2 and MP3
  in accordance with the guidance issued pursuant to the Requirements, and has calculated
  the historical non-financial information based on unaudited source data; and
- Presented the prospective financial and non-financial information in reports AM1 and MP3 on a basis consistent with the regulatory accounting or technical measurement requirements used for disclosures for the financial year ended 31 March 2010 and the immediately preceding financial year, and has calculated the prospective financial and non-financial information based on unaudited source data.

Our audit was completed on 27 August 2010 and our opinion is expressed as at that date.

Auckland



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# SCHEDULE 13 FORM 1 - CERTIFICATE FOR DISCLOSED INFORMATION

Pursuant to Requirement 11(1)

Vector Comm	JAMES MILLER and AUSON PATERSON, ors of Vector Limited, certify that, having made all reasonable enquiry, to the of our knowledge, the following attached audited information of Limited prepared for the purposes of requirement 3, 4, 6 and 7(5) of the purpose Commission's Electricity Distribution (Information Disclosure) rements 2008 complies with those Requirements:
(i)	Report FS1: Regulatory Profit Report;
(ii)	Report FS2: Regulatory Asset and Financing Report;
(iii)	Report FS3: Regulatory Tax Allowance Report;
(iv)	Report AV1: Annual Regulatory Valuation Roll-Forward Report;
(v)	Report AV2: Valuation Disclosure by Asset Class (for System Fixed Assets);
(vi)	Report AV3: System Fixed Assets Replacement cost Roll-Forward Report;
(vii)	Report AV4: Merger or Acquisition Regulatory Asset Base Disclosure;
(viii)	Report MP1: Network Information Report;
(ix)	Report MP2: Performance Measures Report;
(x)	Report MP3: Price and Quality Report; and
(xi)	Report AM1: Expenditure Forecasts and Reconciliation.
C: 1	- A Division of Di
Signati	ure of Directors:

Date: 26 August 2010

# **Commerce Commission**

Electricity Distribution (Information Disclosure) Requirements Report Schedules

Schedules 2 to 13

31 March 2010



#### **Table of Contents**

#### Instructions

- FS1 Regulatory Profit Statement
- FS2 Regulatory Asset & Financing Statement
- FS3 Regulatory Tax Allowance Calculation
- AV1 Annual Regulatory Valuation Roll-forward Report
- AV2 Regulatory Valuation Disclosure by Asset Class
- AV3 System Fixed Assets Replacement Cost Roll-forward Report
- AV4 Business Merger, Acquisition or Sale Regulatory Asset Base Disclosure
- MP1 Network Information
- MP2 Performance Measures
- MP3 Price & Quality Measures
- AM1 Expenditure Forecasts and Reconciliation

	Electricity Distribution I	Business: Vector Group	
		For Year Ended 2010	
Incom	•		
		(\$000)	
	Net Line Charge Revenue Received	532.349	
plus	Discretionary Discounts and Customer Rebates  Gross Line Charge Income	532,349	F
	Gross Line original income	332,349	
		22.22	
ntue	Capital Contributions Net Value of Vested Assets	20.361	
pius	Total Capital Contributions and Vested Assets	20,361	
topp	AC Loss Rental Rebates Received AC Loss Rental Rebates Passed On	8.418 8.418	
1033	Net AC loss rental income (deficit)	-	
	Other Income	16.316	
	Other Resemb	16,316	
Harris	Total regulatory income	569,026	
Expen	ses		
plus	Transmission Charges - Payments to Transpower  Avoided Transmission Charges - payments to parties other than Transpower	131,597 13,129	
1	Total Transmission Costs	144,726	
	Operational Expenditure: General Management. Administration and Overheads	37,806	
	System Management and Operations	2.091	
	Routine and Preventative Maintenance	14,321	to
	Refurbishment and Renewal Maintenance Fault and Emergency Maintenance	10,840 15,831	to to
	Pass-through Costs	5,186	
	Other	4,048	
	Total Operational Expenditure •	90.122	to
Opera	tional earnings	334,177	
	Regulatory Depreciation of System Fixed Assets (incl. value of assets decommissioned)	75,223	from.
plus	Depreciation of Non-System Fixed Assets (incl. value of assets decommissioned)	3,768	from .
	Total Regulatory Depreciation	78,991	to
LED YES			
Earnin	gs before interest and tax (EBIT)	255,187	to.
1			
less	Regulatory Tax Allowance	56,520	from
		42,033	from.
plus	Indexed Revaluation (of System Fixed Assets)		



	PORT FS1: REGULATORY PROFIT STATEMENT (cont) s to Regulatory Profit Statement		
69	FS1a: Discretionary Discounts: Customer Rebates and other line charge adjustments		(\$000)
70 71	Customer Rebates Line Charge Holidays and other Discretionary Discounts	-	
2	Total Discretionary Discounts and Customer Rebates		-
5	FS1b: Related party expenditure - summary		(\$000)
0	Avoided Transmission Charges	-	(4000)
77	Operational Expenditure	6.70	
78 79	Subvention Payment Other related party expenditure	-	
80	Total Related Party Expenditure		6.700
81			6,700
82	ALR: The additional Related Residence in the state of the		
	N.B.: The additional Related Party information that is required to be disclosed in accordance with Section 3 of the Information Disclosure Handbook is to be disclosed by way of a separate note to this Schedule and		
83	forms part of this Schedule		
94			
37	FS1c: Operational Expenditure notes	(\$000)	
B			
39	Merger and Acquisition Expenses		
90	Merger and Acquisition Expenses (not to be included in Operational Expenditure)		
21			
2	Material items (if greater than 10% of the Operational Expenditure line item)		
13	Material item amount 1		Notes to be provided separately
14	within expenditure category:	Select one	
5	Maharal Barrana da		
18	Material item amount 2	-	Notes to be provided separately
77	within expenditure category:	Select ons	
18	Material item amount 3		
00	within expenditure category;	-	Notes to be provided experately
01		Select one	
23	(further dividuence to b	a provided on sepa	rate page if required)
36	FS1d: Vested Assets		(\$000)
77	Consideration Paid for Vested Assets		(\$000)
	FS1e: Reclassified items in Operational Expenditure		
			(\$000)
1	Value of Items which have been reclassified since previous disclosure (if greater than 10% of any affected it	ine item)	(\$000)
1 2	Value of Items which have been reclassified since previous disclosure (if greater than 10% of any affected I Previous classification:	Select one	(\$000)
2	Value of Items which have been reclassified since previous disclosure (if greater than 10% of any affected it		(\$000)
1 2 3 4	Value of Items which have been reclassified since previous disclosure (if greater than 10% of any affected I Previous classification:	Select one	-
1 2 3 4 5	Value of items which have been reclassified since previous disclosure (if greater than 10% of any affected I Previous classification: New classification:	Select one Select one	(\$000)
7 2 3 4 5	Value of items which have been reclassified since previous disclosure (if greater than 10% of any affected I Previous classification:  New classification:  Value of items which have been reclassified since previous disclosure (if greater than 10% of any affected I	Select one Select one	-
2 3 4 5 6 7	Value of items which have been reclassified since previous disclosure (if greater than 10% of any affected in Previous classification:  New classification:  Value of items which have been reclassified since previous disclosure (if greater than 10% of any affected in Previous classification:	Select one Select one ine item) Select one	-
1 2 3 4 5 6 7 8	Value of items which have been reclassified since previous disclosure (if greater than 10% of any affected I Previous classification:  New classification:  Value of items which have been reclassified since previous disclosure (if greater than 10% of any affected I	Select one Select one	-
1 2 3 4 5 6 7 8	Value of items which have been reclassified since previous disclosure (if greater than 10% of any affected in Previous classification:  New classification:  Value of items which have been reclassified since previous disclosure (if greater than 10% of any affected in Previous classification:	Select one Select one ine item) Select one	(\$000)
1 2 3 4 5 5 6 7 7 8 9 9 9	Value of Items which have been reclassified since previous disclosure (if greater than 10% of any affected I Previous classification:  New classification:  Value of items which have been reclassified since previous disclosure (if greater than 10% of any affected I Previous classification:  New classification:	Select one Select one  ine item) Select one Select one	-
11 2 3 4 5 6 7 7 8 9 0 0 11	Value of items which have been reclassified since previous disclosure (if greater than 10% of any affected in Previous classification:  New classification:  Value of items which have been reclassified since previous disclosure (if greater than 10% of any affected in Previous classification:	Select one Select one ine item) Select one Select one	(\$000)
111 12 13 14 15 16 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Value of Items which have been reclassified since previous disclosure (if greater than 10% of any affected I Previous classification:  New classification:  Value of items which have been reclassified since previous disclosure (if greater than 10% of any affected I Previous classification:  New classification:  Value of Items which have been reclassified since previous disclosure (if greater than 10% of any affected I	Select one Select one  ine item) Select one Select one	(\$000)
1 2 3 4 5 6 7 7 8 9 9 9 1 1 2	Value of items which have been reclassified since previous disclosure (if greater than 10% of any affected items value of items which have been reclassified since previous disclosure (if greater than 10% of any affected items value of items which have been reclassified since previous disclosure (if greater than 10% of any affected items value of items which have been reclassified since previous disclosure (if greater than 10% of any affected items value of items which have been reclassified since previous disclosure (if greater than 10% of any affected items value of items value).	Select one Select one ine item) Select one Select one Select one Select one	(\$000)

### Vector Group Electricity Distribution Business

#### **Supplementary Note:**

#### FS1 Expenses

Avoided Transmission Charges - payments to parties other than Transpower (Row 31) include payments of \$6.5 million made to MCo for voltage support.

#### FS1 b Additional Related Party Information

The electricity distribution business has purchased vegetation management services of \$4.6 million (31 March 2009: \$5.1 million) from Tree Scape Limited, which is an associate company of the Vector group.

The electricity distribution business has purchased telecommunications services of \$2.1 million (31 March 2009: \$1.9 million) from Vector Communications Limited.



4

ref	Electricity Distribution Business:	Vector G	roup	
5	F	or Year Ended	2010	
6	Capital Expenditure on System Fixed Assets (by primary purpose)			
8	Customer Connection		(\$000)	
9	System Growth	16,765		to AM:
0	Reliability, Safety and Environment	31,671		to AM
11	Asset Replacement and Renewal	1,721		to AMI
12	Asset Relocations	42.517		to AMI
13		21,342		to AM1
14	Total Capital Expenditure on System Fixed Assets		114,016	to AM1
15				
16	Capital Expenditure on Non-System Fixed Assets		4.040	
17			1,646	from AV1
18				
19	Capital works roll-forward (for System Fixed Assets)			
0	Works Under Construction at Beginning of Year	68,780		
1	plus Total Capital Expenditure on System Fixed Assets	114.016		
22	less Assets Commissioned in Year			
23	Works under construction at year end	135,256		from AV1
4	Transa dilati portoti delloti di yedi elio		47,540	
25				
6	Regulatory Investment Value calculation			
27	System Fixed Assets: regulatory value at end of Previous Year	2,053,888		
8	Non-System Fixed Assets: regulatory value at end of Previous Year	13.862		from AV1
9	Finance During Construction Allowance (on System Fixed assets)	50.320		from AV1
10	Total Regulatory Asset Base value at beginning of Current Financial Year	00,320	2,118,070	2.45%
1			2,110,070	
2	plus System Fixed Assets Commissioned in Year	135,256		
3	System Fixed Assets Acquired From (Sold to) a Non-EDB in Year	133,230		from AV1
4	Non-System Fixed Assets: Asset Additions	1.646		from AV1
5	Regulatory Asset Base investment in Current Financial Year - total	136.902		from AV1
6	Regulatory Asset Base investment in Current Financial Year - average	130,902	60.454	
7			68,451	
8	plus (minus) where a merger or acquisition has taken place within the year			
19	Adjustment for merger, acquisition or sale to another EDB			
0	2-1 and to district the		-	from AV4
1	Regulatory Investment Value		2,186,521	to MP2

#### Note:

Works Under Construction at Beginning of year is excluding the portion of Wellington Works Under Construction included in 2009 closing balance disclosure. The 2009 Capital Works roll forward (for system Fixed Assets) did not provide for sale of Wellington Works Under Construction, hence opening balance is not equal to last years closing balance.



#### REPORT FS3: REGULATORY TAX ALLOWANCE CALCULATION ref Electricity Distribution Business Vector Group 5 For Year Ended 2010 6 (\$000) Earnings before interest and tax (EBIT) 8 255,187 from FS1 9 **Total Regulatory Depreciation** add 78,991 10 from FS1 Other Permanent Differences - not deductible 11 185 Other Temporary Adjustments - Current Period 10,039 12 13 89,214 Non Taxable Capital Contributions and Vested Assets less 20,361 15 16 Tax Depreciation 82.782 Deductible Discretionary Discounts and Customer Rebates 17 18 Deductible Interest 48,280 from row 53 Other Permanent Differences - Non Taxable 117 19 Other Temporary Adjustments - Prior Period 4,461 20 21 156,001 22 23 Regulatory taxable income for Year 188,400 24 Tax Losses Available at Start of Year less 25 Net taxable income 26 188,400 27 28 Statutory Tax Rate **Regulatory Tax Allowance** 29 56,520 to FS1 **Notes to Regulatory Tax Allowance Calculation**

FS3a: Description of adjustments classified as "other"
The Electricity Distribution Business is to provide descriptions of items recorded in the four "other" categories above (explanatory
notes can be provided in a separate note if necessary).
See separate note disclosure

	3b: Financing assumptions (for Deductible Interest and Interest Tax 5	Shield calculation)		
19	Standard Debt Leverage Assumption (debt/total assets)	40%	15	
12	Standard Cost of Debt Assumption	5.52%	%	
3	Deductible Interest	48,280	0000	to row 18
6	Interest Tax Shield Adjustment	14,484	0000	to MP2



# Vector Group Electricity Distribution Business

FS3a: Description of adjustments classified as "other"	
	31-Mar-10 \$000
Other Permanent Differences - Not Deductible	4000
Non deductible entertainment expenses  Non deductible legal and professional expenses	91 94
The state of the s	185
Other Temporary Adjustments - Current Period	
Provision for doubtful debts Provision for employee entitlements and bonuses Other provisions and accruals	4,521 2,404 3,114 10,039
Other Temporary Adjustments - Prior Period	
Provision for doubtful debts Provision for employee entitlements and bonuses Other provisions and accruals Prior years' adjustments	1,215 2,804 2,878 (2,436) <b>4,461</b>
Other Permanent Adjustment - Non Taxable	
Non deductible other capital expenses	(117) (117)
	KPMG

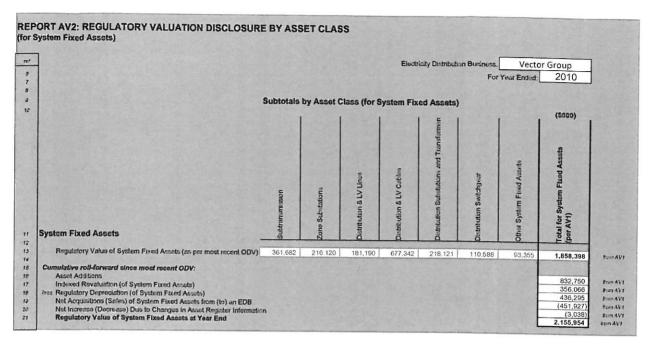
		Electricity Distribution Business: Vector G					Group	
П					For	Year Ended:	2010	
н					Year of mos	st recent ODV	2004	
		ODV Year +	ODV Year +	ODV Year +	ODV Year +	ODV Year +	(\$000) ODV Year +	
1	For Year Ending:	2005	2006	2007	2008	2009	2010	1
	System Fixed Assets			EN INCHES				
1	Regulatory Value at End of Previous Year*	1,858,398	1,963,660	2,098,037	2,195,934	2,386,398	2,053,888	10
1	plus							
	Assets Commissioned	116,374	139,398	114,973	204,271	122,480	135,256	to
1	Gross Value of Vested Assets							to
1	Assets Acquired from (Sold to) a Non-EDB	MEGHE BE	PRINCE COM	ELICINE VICES	TO THE SHADE			to
1	Asset Additions	116,374	139,396	114,973	204,271	122,480	135,256	
	plus							
1	Indexed Revaluation	50,065	65,936	53,250	73,923	70,860	42,033	to
1	less Depreciation of System Fixed Assets	68,943	63.323	65.083	70.011	67.635	07.000	
	Regulatory Value of Assets Decommissioned	234	7.632	5,242	14,691	6.289	67.208 8.015	
	Regulatory Depreciation (Incl. value of assets decommissioned)	61,177	70,955	70,325	84,692	73.924	75,223	to
						, , , ,	10,220	,
	plus (minus)							
	Acquisition of System Fixed Assets from another EDB	-		•			-	from
	less Sale of System Fixed Assets to another EDB	-			-	451,927	-	font
	Net Acquisitions (Sales) of System Fixed Assets from (to) an EDB					(451,927)	-	
	plus (minus)							
	Net Increase (Decrease) Due to Changes in Asset Register Information				(3.038)		-	
1	Regulatory Value of System Fixed Assets at Year End	1,963,660	2,098,037	2,195,934	2,386,393	2,053,888	2,155,954	
			Walling to the last		O LANGE OF THE PARTY OF			
1	Non-System Fixed Assets							
	Regulatory value at end of previous year	33,498	29,467	23,538	12,023	15,347	13.862	
1								
1	plus Asset Additions	397	(1,520)	(8,477)	7,798	3,739	1,646	tol
1	plus Revaluations	•						to
	less Depreciation (incl. value of assets decommissioned) plus Net Acquisitions (Sales) of Non-System Fixed Assets from (to) an EDB	4,428	4,409	3,038	4,474	4,536 (680)	3.768	tol
	Regulatory Value of Non-System Fixed Assets at Year end	29,467	23.538	12,023	15.347	13,862	11,740	from
		20,701	20,000	12,023	13,341	13,602	11,740	- 30
1								
1	Total Regulatory Asset Base Value (excluding FDC)	1,993,127	2,121,575	2,207,957	2,401,745	2,067,750	2,167,694	1000
1	rotal regulatory reservation value (attended by 100)	1,000,121	2,121,073	2,207,037	2,401,745	2,007,730	2,107,094	0.00

#### Notes to Annual Regulatory Valuation Roll-forward Report

67	AV1a: Calculation of Revaluation Rate and Indexed Revaluation of S		l Assets					
50	CPI as at date of ODV	928						
519								
60	For Year Ended	2005	2006	2007	2008	2009	2010	
61	CPI at CPI reference date	953	985	1010	1044	1075	1097	
32	Revaluation Rate	2.69%	3.36%	2.54%	3.37%	2.97%	2.05%	
13								
24	System Fixed Assets: Regulatory Value at End of Previous Year	1,858,398	1,963,660	2,098,037	2,195,934	2,386,398	2,053,888	111111111111111111111111111111111111111
65	Indexed Revaluation of System Fixed Assets	50,065	65,936	53.250	73,923	70.860	42,033	FS1 4

AV1b: Input for prior year Acquisitions (Sales) of Assets to (from) and	ther ELB					(\$000)
For Year Ended	2005	2006	2007	2008	2009	2010
Acquisition of System Fixed Assets from another EDB						
Sale of System Fixed Assets to another EDB					451,927	
Net Acquisitions (Sales) of Non-System Fixed Assets from (to) an EDB					(680)	







#### REPORT AV3: SYSTEM FIXED ASSETS REPLACEMENT COST ROLL-FORWARD REPORT Electricity Distribution Business: Vector Group For Year Ended: 2010 5 System Fixed Assets - Replacement Cost (\$000) Replacement cost at end of previous year 3,473,258 10 Asset Additions 135,256 AV3a 11 Indexed Revaluation (of System Fixed Assets) 71,081 12 Replacement Cost of Assets Decommissioned 16.029 Net Acquisitions (Sales) of System Fixed Assets from (to) an EDB 13 from AV4 Net Increase (Decrease) Due to Changes in Asset Register Information 15 Replacement cost of System Fixed Assets at year end 3,663,565 17 System Fixed Assets - Depreciated Replacement Cost 18 19 Depreciated Replacement Cost at end of previous year 2,127,055 20 21 Asset Additions 135.256 22 AV3a Indexed Revaluation (of System Fixed Assets) 23 43,530 Depreciation of Replacement Cost 64.507 24

#### REPORT AV3: SYSTEM FIXED ASSETS REPLACEMENT COST ROLL-FORWARD REPORT (cont)

Depreciated Replacement Cost of Assets Decommissioned

Net Acquisitions (Sales) of System Fixed Assets from (to) an EDB

Net Increase (Decrease) Due to Changes in Asset Register Information

Depreciated replacement cost of System Fixed Assets at year end

**Notes to Price and Quality Measures** 

25

26

27

28

36	AV3a: New Asset Additions		
37			
38	Asset Additions - Depreciated Replacement Cost	135,256	from AV1
39	plus Difference in Replacement Cost and Depreciated Replacment Cost values of Asset Additions	-	
10			
11	Asset Additions - Replacement Cost	135,256	
12			



8,015

2,233,319

from AV4

			Electricity Dist	ribution Business:	Vector Gro	oup
					For Year Ended:	201
	Network Name:	Vector Group		(enter "Total Business" or		201
	Disclosure:	Annual Disclosure - Requirem	ent 6(1)			
Circuit L	ength by Operating Li	ne Voltage (at year end)	Overhead	Underground	Total	
			(km)	(km)	(km)	
> 66 50k	V & 66kV		26	65	91	
33k	V ER (all SWER voltages)		376	390	766	
22k	V (other than SWER)		3	151	154	
	(V to 11kV (Inclusive - other V Voltage (< 1kV)	than SWER)	3,875 4,225	3.274 5,246	7,149	
	al circuit length (for Supply	1)	8,505	9,126	9,471	to
Dec	licated Street Lighting Circ	cult Length	17	316	334	
	d Circuit Length by Te	rrain (at year end)	(km)	(%)		
	an (only) al (only)		4.061	48% 52%		
Ren	note (only)		4,444	0%		
	ged (only) al & rugged (only)		- :	0%		
Ren	note & rugged (only)			0%		
	illocated overhead lines al overhead length		8,505	100%		
Transfo	rmer capacity (at year	end)				revious Y
	ribution Transformer Capacit			3.852 MV	A	3.8
	ribution Transformer Capacit	y (Non-EDB Owned, Estimated)		466 MV	CONTRACTOR AND ADDRESS OF THE PARTY OF THE P	4
				4,318 MV	(IO MP2)	4,2
Zoni	e Substation Transformer Ca	apacity		3,772 MV		3,7
System F	ixed Assets age (at ye	ear end)				
	rage Age of System Fixed As			22 Yes		
	rage Expected Total Life of S rage Age as a Proportion of a	System Fixed Assets Average Expected Total Life		56 Year 39% %	•	
			1116			
Lott	Table 1 Topolson of Assets (	by Replacement Cost) within 10 years of Total	ar Line	15% %		
				Maximum		
Electricit	y demand			coincident N	on-coincident	
					m of maximum emands (MW)	
	Demand edded Generation Output at	HV and Above		1,590 185	1,854	
Max	Imum System Demand			1,775		
Dem	Transfers to (from) Other ED land on system for supply	to customers' Connection Points		1.775		
less Subt	ransmission Customers' Cor Imum Distribution Transfo	nnection Point Demand		57	83	
				1,718		to M
Emb	Demand not Supplied at Su edded Generation Output - (	Connected to Subtransmission System		202 170	175	
Net 7	Transfers to (from) Other ED	Bs at Subtransmission Level Only		- 170	- 1/5	
Estir	mated Controlled Load She	ed at Time of Maximum System Demand (I	MW)	45		
Five	Year System Maximum De	emand Growth Forecast		2.1 %p.		
Electricity	y volumes carried			(GWh)		
Elect	ricity Supplied from GXPs			8,576		
plus Elect	ricity Exports to GXPs ricity Supplied from Embedd			106		
less Net E	Electricity Supplied to (from)			-		
less Elect	ricity Supplied to Customers'			8.681 8.311		to MI
Elect	tricity Losses (loss ratio)			370	4.3%	10.50
	ricity Supplied to Customers'			8,311		
	ricity Supplied to Largest 5 C tricity supplied other than t	to Largest 5 Connection Points		7,860	95%	
Load Fact					0070	
				56%		
Number o	f Connection Points (	at year end)		527,096 ICPs		to M
Intensity of	of service requirement	s				
				The state of the s		
Dema	and Density (Maximum Distri ne Density (Flectricity Suppl)	bution Transformer Demand / Total circuit let led to Customers' Connection Points / Total of	ngth)	97 kW/s 471 MWF		
Dema	and Density (Maximum Distri	bution Transformer Demand / Total circuit let	ngth)			



#### REPORT MP1: NETWORK INFORMATION (Separate report required for each Non-Contiguous Network) Vector Group Electricity Distribution Business: ref For Year Ended: 2010 6 Vector Group - Auckland 7 Network Name Annual Disclosure - Requirement 6(1) Disclosure: Circuit Length by Operating Line Voltage (at year end) Overhead 10 Underground Total 11 (km) (km) 12 > ARKV 65 65 50kV & 66kV 13 14 33kV 46 256 303 SWER (all SWER voltages) 15 22kV (other than SWER) 154 151 16 2.015 2,948 5.386 17 6.6kV to 11kV (inclusive - other than SWER) Low Voltage (< 1kV) 18 19 Total circuit length (for Supply) 3,041 5,815 8,856 to MP2 20 **Dedicated Street Lighting Circuit Length** 210 21 215 22 23 Overhead Circuit Length by Terrain (at year end) (%) 83% 17% 24 25 26 27 Urban (cntv) 2,530 Rural (only) Remote (only) Rugged (only) 0% 0% Rural & rugged (only) Remote & rugged (only) 28 0% 29 0% 30 Unallocated overhead lines 3.041 31 Total overhead length 33 Transformer capacity (at year end) 34 Previous Year 35 Distribution Transformer Capacity (EDB Owned) 2.474 MVA 2,458 38 Distribution Transformer Capacity (Non-EDB Owned, Estimated) 400 385 **Total Distribution Transformer Capacity** 2,874 MVA (to MP2) 37 2.843 38 Zone Substation Transformer Capacity 39 2.516 MVA 2.476 40 System Fixed Assets age (at year end) 41 Average Age of System Fixed Assets 22 Years 42 Average Expected Total Life of System Fixed Assets 43 44 58 Years Average Age as a Proportion of Average Expected Total Life 38% % 45 Estimated Proportion of Assets (by Replacement Cost) within 10 years of Total Life 12% 48 47 48 49 50 **Maximum** coincident Non-coincident **Electricity demand** 51 system Sum of maximum 52 mand (MW) demands (MW) **987** 175 53 54 55 56 57 GXP Demand Embedded Generation Output at HV and Above Maximum System Demand Net Transfers to (from) Other EDBs at HV and Above 1,162 Demand on system for supply to customers' Connection Points Subtransmission Customers' Connection Point Demand 1,162 56 73 **Maximum Distribution Transformer Demand** 1,106 to MP2 60 GXP Demand not Supplied at Subtransmission Level 02 Embedded Generation Output - Connected to Subtransmission System Net Transfers to (from) Other EDBs at Subtransmission Level Only 175 63 65 Estimated Controlled Load Shed at Time of Maximum System Demand (MW) 2 67 68 Five-Year System Maximum Demand Growth Forecast 2.4 % p.u 63 **Electricity volumes carried** (GWh) Electricity Supplied from GXPs 70 Electricity Exports to GXPs 71 72 73 74 75 Electricity Supplied from Embedded Generators 34 Net Electricity Supplied to (from) Other EDBs Electricity entering system for supply to customers' Connection Points less 5,945 Electricity Supplied to Customers' Connection Points Electricity Losses (loss ratio) to MP2 76 77 232 3.9% % Electricity Supplied to Customers' Connection Points Electricity Supplied to Largest 5 Connection Points 78 79 5,713 30 Electricity supplied other than to Largest 5 Connection Points 5.352 94% 81 **Load Factor** 58% 82 63 Number of Connection Points (at year end) 319,078 ICPs 64 to MP2 35 85 Intensity of service requirements Demand Density (Maximum Distribution Transformer Demand / Total circuit length) Volume Density (Electricity Supplied to Customers' Connection Points / Total circuit length) 125 kW/km 645 MWh/km 87 88 Connection Point Density (ICPs / Total circuit length) Energy Intensity (Electricity Supplied to Customers' Connection Points / ICP) 36 ICP/km 17,904 kWh1CP 89 90



#### **REPORT MP1: NETWORK INFORMATION** (Separate report required for each Non-Contiguous Network) raf Electricity Distribution Business: Vector Group 6 For Year Ended: 2010 7 Network Name Vector Group -Northern & Lichfield r "Total Business" or name of natwork) Disclosure Annual Disclosure - Requirement 6(1) 0 Circuit Length by Operating Line Voltage (at year end) 10 Overhead Underground Total 11 (km) (km) (km) 12 > 66kV 26 26 50kV & 66kV 13 330 463 SWER (all SWER voltages) 22kV (other than SWER) 15 18 17 6.6kV to 11kV (inclusive - other than SWER) 2.942 1,259 4,201 18 Low Voltage (< 1kV) 4 085 Total circuit length (for Supply) 19 5.464 3,311 8.775 to MP2 20 21 **Dedicated Street Lighting Circuit Length** 12 106 118 22 Overhead Circuit Length by Terrain (at year end) 23 (km) (%) 24 Urban (only) 1,531 28% 25 Rural (only) 3,933 72% 26 27 Remote (only) 0% Rugged (only) Rural & rugged (only) 28 0% 29 Remote & rugged (only) 0% 0% Unallocated overhead lines 30 31 Total overhead length 5.464 32 33 Transformer capacity (at year end) 34 Previous Year 35 Distribution Transformer Capacity (EDB Owned) 1,379 MVA 1.365 36 Distribution Transformer Capacity (Non-EDB Owned, Estimated) 66 MVA 65 37 **Total Distribution Transformer Capacity** 1,445 MVA (to MP2) 1.430 33 39 Zone Substation Transformer Capacity 1.256 MVA 1.236 40 System Fixed Assets age (at year end) 41 42 Average Age of System Fixed Assets 21 Years 43 Average Expected Total Life of System Fixed Assets 52 Years 44 Average Age as a Proportion of Average Expected Total Life 41% 45 46 Estimated Proportion of Assets (by Replacement Cost) within 10 years of Total Life 19% % 47 48 49 Maximum 50 coincident Non-coincident **Electricity demand** 51 system Sum of maximum 52 emand (MW) demands (MW) 53 640 54 Embedded Generation Output at HV and Above **Maximum System Demand** 55 613 56 Net Transfers to (from) Other EDBs at HV and Above Demand on system for supply to customers' Connection Points Subtransmission Customers' Connection Point Demand Maximum Distribution Transformer Demand 57 613 3.8 10 59 613 to MP2 60 GXP Demand not Supplied at Subtransmission Level Embedded Generation Output - Connected to Subtransmission System 81 62 63 Net Transfers to (from) Other EDBs at Subtransmission Level Only 64 65 Estimated Controlled Load Shed at Time of Maximum System Demand (MW) 32 68 Five-Year System Maximum Demand Growth Forecast 1.5 % pa 08 69 Electricity volumes carried (GWh) Electricity Supplied from GXPs 70 2.665 Electricity Exports to GXPs Electricity Supplied from Embedded Generators 71 72 73 plus. Net Electricity Supplied to (from) Other EDBs Electricity entering system for supply to customers' Connection Points Electricity Supplied to Customers' Connection Points 74 75 78 2,737 less to MP2 **Electricity Losses (loss ratio)** 138 5.1% 77 78 79 Electricity Supplied to Customers' Connection Points 2,598 Electricity Supplied to Largest 5 Connection Points 80 Electricity supplied other than to Largest 5 Connection Points 2,508 97% 81 Load Factor 82 51% 63 Number of Connection Points (at year end) 84 208,018 ICPs to MPS 85 Intensity of service requirements 63 Demand Density (Maximum Distribution Transformer Demand / Total circuit length) 67 70 kW/km 296 MWh/km Volume Density (Electricity Supplied to Customers' Connection Points / Total circuit length) Connection Point Density (ICPs / Total circuit length) 219 80 90 24 ICPAm Energy Intensity (Electricity Supplied to Customers' Connection Points / ICP) 12,491 KWINCP



•		E	ectricity Distribu	tion Business:	Vector	Group		
					For Year Ended			
	Performance comparators							
			P	revious Years		Current Financial		
			Current Yr - 3	Current Yr - 2	Current Yr - 1	Year		
ı	Operational expenditure ratio							
	Total Operation			115	94	90	im from	mFS1
ı	Replacement Cost of System Fixed Assets	The state of the s		4 274	3,797	3,664		MAV
I		Ratio (%)	Not defined	2.70%	2.46%	2.46%		
ı	Capital expenditure ratio							
		- Frank 4		450	400			
	Total Capital Expenditure on System Replacement Cost of System Fixed Assets			159 4.274	139	3,664	-	mFS2
	requirement Cost of System Pixed Assets	Ratio (%)	Not defined	3.72%	3.797	3.664		mAV3
ı		retio ( 78)	NOT Genined	3.1276	3 00%	3.11%		
	Capital expenditure growth ratio							
	Cepital Expenditure: Customer Connection and S	system Growth				48	in the	mFS2
	Change in Total Distribution Transfo	The state of the s				44		n MP1
		\$fkVA	Not defined	Not defined	Not defined	1,094		
ı								
١	Renewal expenditure ratio							
	Capital & Operational Expenditure: Asset Replacement, Refurbishmen	t and Renewal		i		53	in funFi	3182
ı	Regulatory Depreciation of System			. 1		75	im for	"AVI
ı		Ratio (%)	Not defined	Not defined	Not defined	71%	•	
ı	District the Target Complete Hills Alexander							
ı	Distribution Transformer Capacity Utilisation							
ı	Maximum Distribution Transfe	A CONTRACTOR OF THE PROPERTY OF	2,216	2 176	1 656	1.718		n Afirm
ı	Total Distribution Transformer Capacity	Ratio (%)	5,578 39,7%	5.643 38.6%	4 672 35 4%	4,318		n MP1
ı		urano (26)	39.7%	38.6%	35.4%]	39.8%		
ı	Return on Investment							
ı	Regulatory Profit / Loss (pre-financing an	d distributions)	]	304	278	241		m FS1
	less Interest Tex Shir			25	22			m FS3
		egulatory Profit	-	279	257	226		11 23
	Regulatory Invi			2,368	2 212	2.187		mFS2
		Ratio (%)	Not defined	11.80%	11.60%	10,35%		34
ı				a Transfer with exact				
	Expenditure comparison table		Die yeer, Die clinon	tietive are unlocated	as this weighted a	exages.		
	Experience comparison table		Evene	liture metrics (\$	nert			
			Expend	umia manica (4	per).			
		Total circuit length (for Supply)	Electricity Supplied to Customers' Connection Points	Maximum coincident system demand	Connection Point	Distribution Transformer Cepacity (EDB- Owned)		
		(\$Am)	(\$/MWh)	(\$/MW)	(\$/ICP)	(S/MVA)		
ı	Capital Expenditure (\$) per	6,560	14	65,158	219	30.023	from FS2 8	S AFT
40	Operational Expenditure (\$) per	5.112	11	50,770	171	23.394		1



-		ectricity Distrib	ution Business:	Vector Gr	oup- Auckland	
				For Year Ende		
1	Performance comparators					
			revious Year		Current Financial Year	
	Operational expenditure ratio	Current Yr - 3	Current Yr - 2	Current Yr - 1	1 bai	
1	Total Operational Expenditure				1	
1	Replacement Cost of System Fixed Assets (at year end*)				- Sm	
1	Ratio (%)	Not defined	Not defined	Not defined	Not defined %	fia
1						
1	Capital expenditure ratio					
1	Total Capital Expenditure on System Fixed Assets				- sm	fro
1	Replacement Cost of System Fixed Assets (at year end*)	202010-00-00-00-0				fro
	Ratio (%)	Not defined	Not defined	Not defined	Not defined %	
1	Capital expenditure growth ratio					
1	Capital Expenditure: Customer Connection and System Growth					
1	Change in Total Distribution Transformer Capacity				- Sm	t/o
	\$AVA	Not defined	Not defined	Not defined	Not defined \$43	000
1					Not defined \$4.5	•
1	Renewal expenditure ratio					
1	Capital & Operational Expenditure: Asset Replacement, Refurbishment and Renewal				- \$m	from F.
	Regulatory Depreciation of System Fixed Assets				- \$m	from
	Ratio (%)	Not defined	Not defined	Not defined	Not defined %	
	Distribution Transformer Capacity Utilisation					
1	Maximum Distribution Transformer Demand	1,117	1,085	4.000		
1	Total Distribution Transformer Capacity (at year end*)	2.897	2,916	1,063 2,843	1,106 MW 2,874 kVA	
1	Ratio (%)	38.5%	37.2%	37.4%		tran
				07.470	30.378]18	
	Return on Investment					
	Regulatory Profit / Loss (pre-financing and distributions)				- Sm	tron
1	less Interest Tax Shield Adjustment				- \$m	from
	Adjusted Regulatory Profit	-	-		- \$m	
	Regulatory Investment Value				- \$m	tron
1	Ratio (%)	Not defined * If a Merger or Asse	Not defined			
		the year, the denom	inators are calcuste	d as time-weighted	rea into awing averages.	
1	Expenditure comparison table					
1		Expend	iture metrics (	per):		
	Total circuit	Electricity Supplied to Customers'	Maximum coincident		Distribution Transformer	
-	length (for Supply) (学/km)	Connection Points (S/MWh)	system demand (\$/MW)	Point (\$/ICP)	Capacity (EDB- Owned)	
1	Capital Expenditure (\$) per	(Garata)	(4 1104)	(Q/IGP)	(\$/MVA)	
400	outrai experientero (4) per					rom FS2 &



15 MP2 - Auckland

	Electricity Distribu	ition Business:		orthern & Lichfield	
Performance comparators			For Year Ended	2010	
	P	revious Years	:	Current	
	Current Yr - 3	Current Yr - 2	Current Yr - 1	Financial Year	
Operational expenditure ratio					
Total Operational Expenditure				\$m	fre
Replacement Cost of System Fixed Assets (at year end*)				3m	fre
Ratio (%	Not defined	Not defined	Not defined	Not defined %	
Capital expenditure ratio					
Total Capital Expenditure on System Fixed Assets	T T				
Replacement Cost of System Fixed Assets (at year end*)				\$m	fro fro
Ratio (%	1000 00 1000000 00	Not defined	Not defined	Not defined %	Tre .
		1014575156		Trot defined in	
Capital expenditure growth ratio					
Capital Expenditure: Customer Connection and System Growth	1			Sm	f
Change in Total Distribution Transformer Capacity				MV	i fre
\$/kV/	Not defined	Not defined	Not defined	Not defined \$40	'A
Renewal expenditure ratio					
Capital & Operational Expenditure: Asset Replacement, Refurbishment and Renewa Regulatory Depreciation of System Fixed Assets				- 5m	from .
Ratio (%		Not defined	Not defined	Not defined %	fr
			Trot dominal)	140t defined ja	
Distribution Transformer Capacity Utilisation					
Maximum Distribution Transformer Demand	609	594	598	613 MW	tre
Total Distribution Transformer Capacity (at year end*)		1,432	1,430	1,445 kVA	fre
Ratio (%	43.5%	41.5%	41.8%	42.4%	
Return on investment					
	(				
Regulatory Profit / Loss (pre-financing and distributions, less Interest Tax Shield Adjustmen				3m	#
Adjusted Regulatory Profi		-	-	5m	În
Regulatory Investment Value	-	-	-	- \$m	
Ratio (%	Not defined	Not defined	Not defined	Not defined %	In
			ther EDB was englere	d into during	
Expenditure comparison table	the year, the denom	instors are defouste	id as time-weighted a	verages	
experientale comparison table	Fynen	liture metrics (	S more).		
		mare medica (	o perj.		
	Electricity				
Translation in the state of the	Supplied to Customers'	Maximum		Distribution	
Total circuit length (for	Connection	coincident	Connection	Transformer Capacity (EDB-	
Supply)	Points	demand	Point	Owned)	
(\$/km)	(\$/MWh)	(\$/MW)	(\$/ICP)	(\$/MVA)	
Capital Expenditure (\$) per	1			4000	



#### Vector Group Electricity Distribution Business

#### **Efficiency Performance Measures**

		<u>2010</u>	20091	2008	2007	2006	2005
а	Direct line cost per kilometre	\$2,443.53	\$2,670.03 ²	\$2,876.00	\$2,942.24	\$2,949.28	\$2,492.50
b	Indirect line cost per consumer	\$89.24	\$81.65 <sup>3</sup>	\$78.40	\$91.70	\$79.28	\$90.99

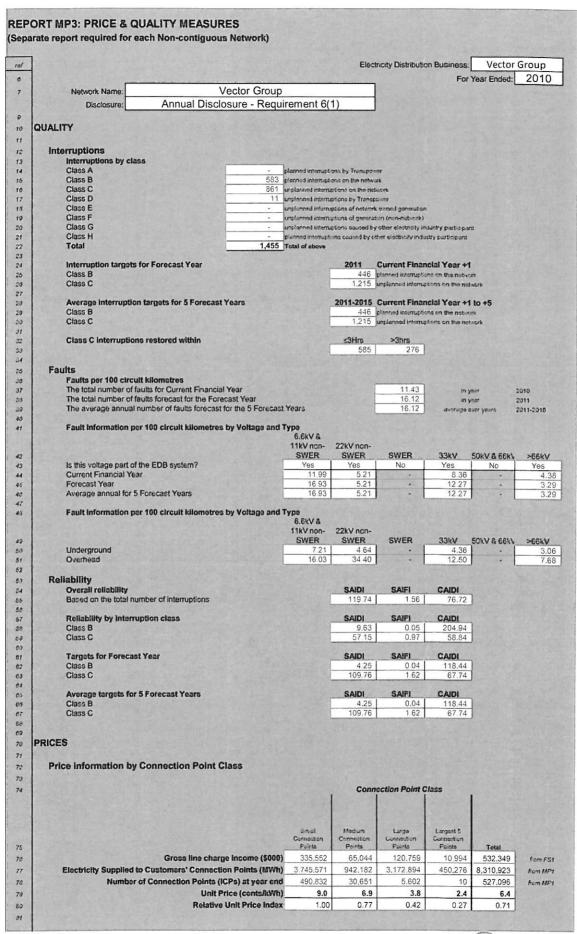
#### Note:

<sup>3.</sup> Indirect line cost per consumer would be \$89.41 if the number of consumers were not calculated as time-weighted averages.



Both direct line cost per kilometre and indirect line cost per consumer are calculated on the basis of time-weighted averages (due to sale of the Wellington network on 24 July 08).

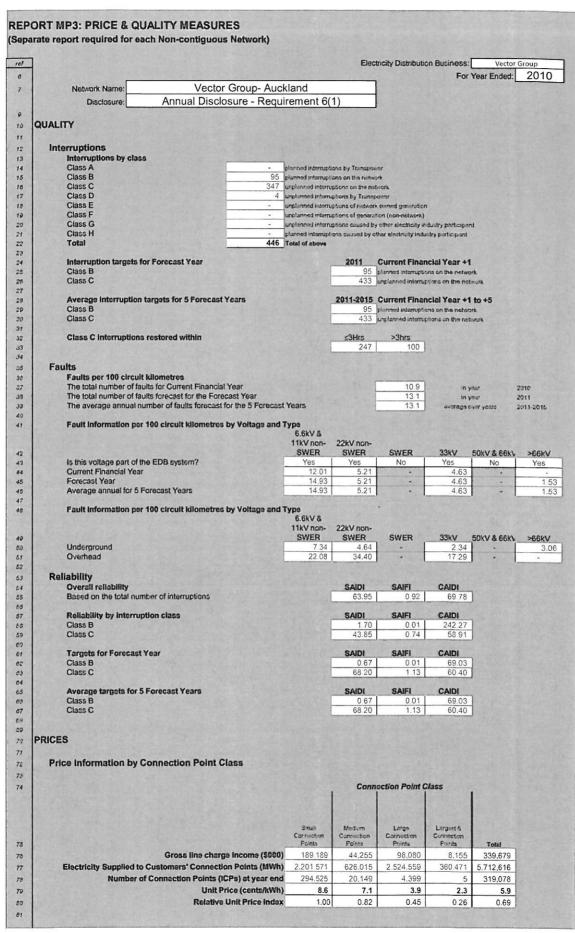
<sup>&</sup>lt;sup>2</sup> Direct line cost per kilometre would be \$2,885.73 if kilometres were not calculated as time-weighted averages.





# REPORT MP3: PRICE AND QUALITY (cont) Notes to Price and Quality Measures MP3a: Connection Point Class breakpoints Connection Point Class breakpoints methodology kVA based breakpoints kVA based breakpoints - additional disclosure Breakpoint between small and medium classes Breakpoint between large and medium classes Breakpoint between large and medium classes Breakpoint between large and medium classes

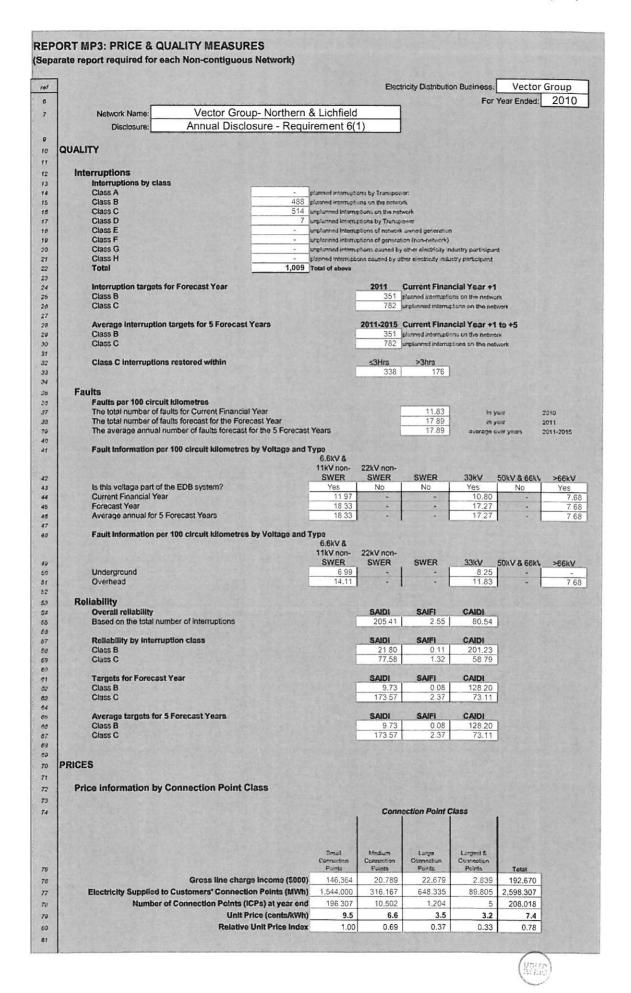






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# REPORT MP3: PRICE AND QUALITY (cont) Notes to Price and Quality Measures MP3a: Connection Point Class breakpoints Connection Point Class breakpoints methodology kVA based breakpoints kVA based breakpoints - additional disclosure Breakpoint between small and medium classes Breakpoint between large and medium classes Breakpoint between large and medium classes Breakpoint between large and medium classes



#### Subtransmission customers excluded from Distribution Transformer Capacity values

The distribution transformers of three subtransmission-supplied customers have been excluded from the Distribution Transformer Capacity fields (rows 35-36 of MP1) as per the requirements.

The excluded capacities include the following locations;

- the EBD-owned distribution transformers at the Lichfield Cheese Factory (20.45MVA) based in Vector's Lichfield region.
- the customer-owned distribution transformers at the Pacific Steel (80MVA) based in Vector's Auckland region.
- the customer-owned distribution transformers at Auckland International Airport Ltd (30MVA) based in Vector's Auckland region.

#### **Distribution Transformer Capacity Utilisation**

Clause 17(4) of the Information Disclosure Requirements requires a note explaining which approach to 'Distribution Transformer Capacity Utilisation' calculation has been adopted. Vector's methodology for all years disclosed is consistent with the Electricity Distribution (Information Disclosure) Requirements 2008.

#### Forecast methodology

Targets and forecasts submitted in the 'Annual disclosure' MP1 and MP3 documents are derived using the following methods (note that historical Wellington region statistics are excluded from these calculations);

- The interruption targets (rows 25-26 & 29-30 of MP3) are derived by listing the past 5 year's interruption frequency by network region and interruption class then taking the median of these values. To remain consistent, the 'Interruption targets for Forecast Year' (rows 25-26 of MP3) are equal to the 'Average interruption targets for 5 Forecast Years' (rows 29-30 of MP3).
- The forecast number of faults per 100 circuit kilometres (rows 38-39 of MP3) is derived by listing the network's fault frequency over the past 5 years, taking the median of these values and dividing by the total circuit length. For consistency, the forecast for the next reporting year (row 38 of MP3) is equal to the forecast for the next 5 years (row 39 of MP3).
- The forecast number of faults per 100 circuit kilometres by voltage type (rows 45-46 of MP3) are derived by listing the network's fault frequency by voltage level over the past 5 years, taking the median of these values and dividing by the circuit length of the appropriate voltage. For consistency, the forecast for the next reporting year (row 45 of MP3) is equal to the forecast for the next 5 years (row 46 of MP3).
- SAIDI and SAIFI forecasts (rows 62-63 & 66-67 of MP3) are consistent with Vector's Electricity Quality threshold targets. Specifically, they are the average SAIDI and SAIFI values for the Vector electricity network (excluding Transpower and the sold Wellington network) for the period from 1 April 2004 to 31 March 2009.

#### **Maximum Demand Growth Forecast**

The maximum demand growth forecast values (row 67 of MP1) are based upon growth trends predicted by Vector's load forecast model. Inputs to this model include Council population growth predictions, historical trends and known future load centres. The load forecast is performed annually. A fuller description of Vector's forecast methodology is included within Vector's Asset Management Plan.

			Ele	ectricity Distribu	tion Business:	Vector (	Group	1
	A) Five year forecasts of expenditure				Fo	r Year Ended	2010	
	From most recent Asset Management Plan				orecast Years		(\$000)	
		Actual for Current			Crecast rears			
		Financial Year	year 1	year 2	year 3	year 4	year 5	
	for year ended	2010	2011	2012	2013	2014	2015	
	Capital Expenditure: Customer Connection	16,765	17.500	18,500	19.000	19,700	20,000	fre
	Capital Expenditure: System Growth	31,671	43,300	45,300	53,500	62.600	52.800	fo
	Capital Expenditure: Reliability, Safety and Environment	1,721	4,500	5.800	5.900	4.300	3,800	fre
	Capital Expenditure: Asset Replacement and Renewal Capital Expenditure: Asset Relocations	42.517	47,500	55.400	57.300	56,700	57,700	fro
	Subtotal - Capital Expenditure on asset management	21.342	23,300	22,300	20.100	19.400	19,000	fre
	Outrois - Outrois Experiente on asset management	114,016	136,100	147,300	155,800	162,700	153,300	
l	Operational Expenditure: Routine and Preventative Maintenance	14,321	13.700	13,700	13.700	13,700	40.700	1
i	Operational Expenditure: Refurbishment and Renewal Maintenance	10,840	11.800	11.800	11.800	11,800	13,700	fro
i	Operational Expenditure: Fault and Emergency Maintenance	15,831	14 900	14,900	14.900	14.900	14.900	fro
ı	Subtotal - Operational Expenditure on asset management	40,991	40,400	40,400	40,400	40,400	40,400	
	Total direct expenditure on distribution network	455.007 T	176.500	407.700				
	Total and approximate on distribution network	155,007	1/6,500	187,700	196,200	203,100	193,700	
	Overhead to Underground Conversion Expenditure	12,494	12.700	12.700	12.700	12.700	12,700	
	The Electricity Distriction Business is to provide the emount of Overhead to Underground	"Asset Relocations" cate	egory includes Ou	erhead to Undern	ound Conversion Ev			
	Conversion Expenditure included in each of the above Expenditure Categories (explanatory notes can be provided in a separate note if necessary).		20.7	or doing	Ourd Scriversion Ex	penditure		
	B) Variance between Previous Forecast for the Current Finar	ncial Year, and	Actual for	Previous forecast for				
		ocial Year, and	Actual for Current Financial Year	Previous forecast for Current Financial Year	% Variance			
	B) Variance between Previous Forecast for the Current Finar	ocial Year, and	Actual for Current Financial Year (a)	Previous forecast for Current Financial Year (b)	(a)/(b)-1			
	B) Variance between Previous Forecast for the Current Finar  Capital Expenditure: Customer Connection	ocial Year, and	Actual for Current Financial Year (a)	Previous forecast for Current Financial Year (b)	(a)/(b)-1 68.6%			tionsc
	B) Variance between Previous Forecast for the Current Finar  Capital Expenditure: Customer Connection  Capital Expenditure: System Growth	ocial Year, and	Actual for Current Financial Year (a) 16.765 31,671	Previous forecast for Current Financial Year (b) 9.944 38.683	(a)/(b)-1 68.6% -18.1%			from re
	B) Variance between Previous Forecast for the Current Finar  Capital Expenditure: Customer Connection Capital Expenditure: System Growth Capital Expenditure: Reliability, Safety and Environment	ocial Year, and	Actual for Current Financial Year (a) 16.765 31.671 1,721	Previous forecast for Current Financial Year (b) 9.944 38.683 5.680	68.6% -18.1% -69.7%			from ro
	B) Variance between Previous Forecast for the Current Finar  Capital Expenditure: Customer Connection  Capital Expenditure: System Growth	ocial Year, and	Actual for Current Financial Year (a) 16,765 31,671 1,721 42,517	Previous forecast for Current Financial Year (b) 9.944 38.683 5.680 42.089	(a)/(b)-1 68.6% -18.1% -69.7% 1.0%			from re-
	B) Variance between Previous Forecast for the Current Finar  Capital Expenditure: Customer Connection Capital Expenditure: System Growth Capital Expenditure: Reliability, Safety and Environment Capital Expenditure: Asset Replacement and Renewal	ocial Year, and	Actual for Current Financial Year (a) 16.765 31.671 1,721	Previous forecast for Current Financial Year (b) 9.944 38.683 5.680	68.6% -18.1% -69.7%			from ro
	B) Variance between Previous Forecast for the Current Finar  Capital Expenditure: Customer Connection Capital Expenditure: System Growth Capital Expenditure: Reliability, Safety and Environment Capital Expenditure: Asset Replacement and Renewal Capital Expenditure: Asset Relocations Subtotal - Capital Expenditure on asset management	ocial Year, and	Actual for Current Financial Year (a) 16.765 31.671 1.721 42.517 21.342 114,016	Previous forecast for Current Financial Year (b)  9.944 38.683 5.680 42.089 18.876 115,272	(a)/(b)-1 68.6% -18.1% -69.7% 1.0% 13.1% -1.1%			from re from ro from ro from ro
	B) Variance between Previous Forecast for the Current Finar  Capital Expenditure: Customer Connection Capital Expenditure: System Growth Capital Expenditure: Reliability, Safety and Environment Capital Expenditure: Asset Replacement and Renewal Capital Expenditure: Asset Relocations	ocial Year, and	Actual for Current Financial Year (a) 16.765 31.671 1.721 42.517 21.342 114,016	Previous forecast for Current Financial Year (b)  9.944 38.683 5.680 42.089 18.876 115,272	(a)/(b)-1 68.6% -18.1% -69.7% 1.0% 13.1% -1.1%			from re- from ro- from ro-
	B) Variance between Previous Forecast for the Current Finar  Capital Expenditure: Customer Connection Capital Expenditure: System Growth Capital Expenditure: Reliability, Safety and Environment Capital Expenditure: Asset Replacement and Renewal Capital Expenditure: Asset Relocations Subtotal - Capital Expenditure on asset management  Operational Expenditure: Routine and Preventative Maintenance	ocial Year, and	Actual for Current Financial Year (a) 16.765 31.671 1.721 42.517 21.342 114,016	Previous forecast for Current Financial Year (b)  9.944 38.683 5.680 42.089 18.876 115,272	(a)/(b)-1 68.6% -18.1% -69.7% 1.0% 13.1% -1.1% 32.7% -19.6%			from re- from re- from re- from re- from re-
	B) Variance between Previous Forecast for the Current Finar  Capital Expenditure: Customer Connection Capital Expenditure: System Growth Capital Expenditure: Reliability, Safety and Environment Capital Expenditure: Asset Replacement and Renewal Capital Expenditure: Asset Relocations Subtotal - Capital Expenditure on asset management  Operational Expenditure: Routine and Preventative Maintenance Operational Expenditure: Refurbishment and Renewal Maintenance	ncial Year, and	Actual for Current Financial Year (a) 16,765 31,671 1,721 42,517 21,342 114,016	Previous forecast for Current Financial Year (b)  9.944 38.683 5.680 42.089 18.876 115,272	(a)/(b)-1 68.6% -18.1% -69.7% 1.0% 13.1% -1.1%			from re- from ro- from ro-
	B) Variance between Previous Forecast for the Current Finar  Capital Expenditure: Customer Connection Capital Expenditure: System Growth Capital Expenditure: Reliability, Safety and Environment Capital Expenditure: Asset Replacement and Renewal Capital Expenditure: Asset Replacement and Renewal Capital Expenditure: Asset Relocations Subtotal - Capital Expenditure on asset management  Operational Expenditure: Refurbishment and Renewal Maintenance Operational Expenditure: Fauit and Emergency Maintenance Subtotal - Operational Expenditure on asset management	ncial Year, and	Actual for Current Financial Year (a) 16,765 31,671 1,721 42,517 21,342 114,016 14,321 10,840 15,831 40,991	Previous forecast for Current Financial Year (b)  9.944 38.683 5.680 42.089 18.876 115,272  10.793 13.477 19.974 44,244	(a)/(b)-1 68.6% -18.1% -69.7% 1.0% 13.1% -1.1% 32.7% -19.6% -20.7% -7.4%			from re- from re- from re- from re- from re-
	B) Variance between Previous Forecast for the Current Finar  Capital Expenditure: Customer Connection Capital Expenditure: System Growth Capital Expenditure: Reliability, Safety and Environment Capital Expenditure: Asset Replacement and Renewal Capital Expenditure: Asset Replacement and Renewal Capital Expenditure: Asset Relocations Subtotal - Capital Expenditure on asset management  Operational Expenditure: Routine and Preventative Maintenance Operational Expenditure: Refurbishment and Renewal Maintenance Operational Expenditure: Fauit and Emergency Maintenance	ocial Year, and	Actual for Current Financial Year (a) 16,765 31,671 1,721 42,517 21,342 114,016	Previous forecast for Current Financial Year (b)  9.944 38.683 5.680 42.089 18.876 115.272	(a)/(b)-1 68.6% -18.1% -69.7% 1.0% 13.1% -1.1% 32.7% -19.6% -20.7%			from re- from re- from re- from re- from re-
	Capital Expenditure: Customer Connection Capital Expenditure: System Growth Capital Expenditure: Reliability, Safety and Environment Capital Expenditure: Asset Replacement and Renewal Capital Expenditure: Asset Relocations Subtotal - Capital Expenditure on asset management  Operational Expenditure: Refurbishment and Renewal Maintenance Operational Expenditure: Refurbishment and Renewal Maintenance Operational Expenditure: Fault and Emergency Maintenance Subtotal - Operational Expenditure on asset management  Total direct expenditure on distribution network	ocial Year, and	Actual for Current Financial Year (a) 16,765 31,671 1,721 42,517 21,342 114,016 14,321 10,840 15,831 40,991	Previous forecast for Current Financial Year (b)  9.944 38.683 5.680 42.089 18.876 115,272  10.793 13.477 19.974 44,244	(a)/(b)-1 68.6% -18.1% -69.7% 1.0% 13.1% -1.1% 32.7% -19.6% -20.7% -7.4%			from re- from re- from re- from re- from re-
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	B) Variance between Previous Forecast for the Current Finar  Capital Expenditure: Customer Connection Capital Expenditure: System Growth Capital Expenditure: Reliability, Safety and Environment Capital Expenditure: Asset Replacement and Renewal Capital Expenditure: Asset Relocations Subtotal - Capital Expenditure on asset management  Operational Expenditure: Refurbishment and Renewal Maintenance Operational Expenditure: Fault and Emergency Maintenance Subtotal - Operational Expenditure on asset management  Total direct expenditure on distribution network  Explanation of variances	riance of more than	Actual for Current Financial Year (a) 16,765 31,671 1,721 42,517 21,342 114,016 14,321 10,840 15,831 40,991 155,007	Previous forecast for Current Financial Year (b)  9.944 38.683 5.680 42.089 18.876 115,272  10.793 13.477 19.974 44,244	(a)/(b)-1 68.6% -18.1% -69.7% 1.0% 13.1% -1.1% 32.7% -19.6% -20.7% -7.4%			from re- from re- from re- from re- from re-
	Capital Expenditure: Customer Connection Capital Expenditure: System Growth Capital Expenditure: Reliability, Safety and Environment Capital Expenditure: Asset Replacement and Renewal Capital Expenditure: Asset Replacement and Renewal Capital Expenditure: Asset Relocations Subtotal - Capital Expenditure on asset management  Operational Expenditure: Refurbishment and Renewal Maintenance Operational Expenditure: Refurbishment and Renewal Maintenance Operational Expenditure: Fauit and Emergency Maintenance Subtotal - Operational Expenditure on asset management  Total direct expenditure on distribution network  Explanation of variances Distribution Business must provide a brief explanation for any line item variances	riance of more than	Actual for Current Financial Year (a) 16,765 31,671 1,721 42,517 21,342 114,016 14,321 10,840 15,831 40,991 155,007	Previous forecast for Current Financial Year (b)  9.944 38.683 5.680 42.089 18.876 115,272  10.793 13.477 19.974 44,244	(a)/(b)-1 68.6% -18.1% -69.7% 1.0% 13.1% -1.1% 32.7% -19.6% -20.7% -7.4%			from re- from re- from re- from re- from re-
	Capital Expenditure: Customer Connection Capital Expenditure: System Growth Capital Expenditure: Reliability, Safety and Environment Capital Expenditure: Asset Replacement and Renewal Capital Expenditure: Asset Replacement and Renewal Capital Expenditure: Asset Relocations Subtotal - Capital Expenditure on asset management  Operational Expenditure: Refurbishment and Renewal Maintenance Operational Expenditure: Refurbishment and Renewal Maintenance Operational Expenditure: Fauit and Emergency Maintenance Subtotal - Operational Expenditure on asset management  Total direct expenditure on distribution network  Explanation of variances Distribution Business must provide a brief explanation for any line item variances	riance of more than	Actual for Current Financial Year (a) 16,765 31,671 1,721 42,517 21,342 114,016 14,321 10,840 15,831 40,991 155,007	Previous forecast for Current Financial Year (b)  9.944 38.683 5.680 42.089 18.876 115,272  10.793 13.477 19.974 44,244	(a)/(b)-1 68.6% -18.1% -69.7% 1.0% 13.1% -1.1% 32.7% -19.6% -20.7% -7.4%			from re- from re- from re- from re- from re-
	Capital Expenditure: Customer Connection Capital Expenditure: System Growth Capital Expenditure: Reliability, Safety and Environment Capital Expenditure: Asset Replacement and Renewal Capital Expenditure: Asset Replacement and Renewal Capital Expenditure: Asset Relocations Subtotal - Capital Expenditure on asset management  Operational Expenditure: Refurbishment and Renewal Maintenance Operational Expenditure: Refurbishment and Renewal Maintenance Operational Expenditure: Fauit and Emergency Maintenance Subtotal - Operational Expenditure on asset management  Total direct expenditure on distribution network  Explanation of variances Distribution Business must provide a brief explanation for any line item variances	riance of more than	Actual for Current Financial Year (a) 16,765 31,671 1,721 42,517 21,342 114,016 14,321 10,840 15,831 40,991 155,007	Previous forecast for Current Financial Year (b)  9.944 38.683 5.680 42.089 18.876 115,272  10.793 13.477 19.974 44,244	(a)/(b)-1 68.6% -18.1% -69.7% 1.0% 13.1% -1.1% 32.7% -19.6% -20.7% -7.4%			from re- from re- from re- from re- from re-
	Capital Expenditure: Customer Connection Capital Expenditure: System Growth Capital Expenditure: Reliability, Safety and Environment Capital Expenditure: Asset Replacement and Renewal Capital Expenditure: Asset Replacement and Renewal Capital Expenditure: Asset Relocations Subtotal - Capital Expenditure on asset management  Operational Expenditure: Refurbishment and Renewal Maintenance Operational Expenditure: Refurbishment and Renewal Maintenance Operational Expenditure: Fauit and Emergency Maintenance Subtotal - Operational Expenditure on asset management  Total direct expenditure on distribution network  Explanation of variances Distribution Business must provide a brief explanation for any line item variances	riance of more than	Actual for Current Financial Year (a) 16,765 31,671 1,721 42,517 21,342 114,016 14,321 10,840 15,831 40,991 155,007	Previous forecast for Current Financial Year (b)  9.944 38.683 5.680 42.089 18.876 115,272  10.793 13.477 19.974 44,244	(a)/(b)-1 68.6% -18.1% -69.7% 1.0% 13.1% -1.1% 32.7% -19.6% -20.7% -7.4%			from re- from re- from re- from re- from re-



Table B from report AM1 compares the Actual for Current Financial Year expenditure against the previous forecast for the year by capital and operating expenditure categories. An explanation for variances more than 10% is provided below.

- The higher than forecast expenditure in the "Customer Connection" category (\$6.8m) was mainly due to a lower forecast for the year developed in anticipation of an economic slowdown reflecting through the building sector to customer connections. In reality the numbers of connections continued at a similar rate to last year and actual expenditure was higher than forecasted in line with the numbers of connections achieved.
- The actual expenditure in the "System Growth" category was well below forecast by (\$7.0m) due to the near completion of a number of large multi-year projects (i.e. zone substations at Clendon, Greenhithe, St Johns, Otara, Pt Chevalier) under budget. Two customer driven network reinforcement projects (Highbrook Stage 3D and the Tank Farm reticulation) did not eventuate. Both of these projects and the Quay St switchboard extension project were postponed. Another project contributing to the under-spend in 2009/10, was the Ponsonby/Chevalier 6.6kV upgrade project. This project was delayed due to a necessary scope change arising from the replacement of additional 6.6kV cables, the 110kV Liverpool/Quay St cable project was delayed pending the outcome of Transpowers NAaN project while delays were experienced in the construction of Hillsborough substation due to consenting issues. All these factors contributed to an expenditure of \$31.7m against a forecast of \$38.7m.
- The budget for "Reliability, Safety and Environment" category was underspent by \$4.0m. The Reliability, Safety and Environment classification is applied to targeted expenditure outside of the normal asset replacement process to address specific reliability, safety and environment concerns. The lack of extreme events and the low SAIDI meant that there was little requirement for such asset performance improvements.
- The "Asset Relocations" category includes "Overhead to Underground Conversion" and "Asset Relocations" expenditure. The forecast for "Asset Relocations" was based on an anticipated downturn in the economy. To compensate for the anticipated commercial sector down-turn, the Government advanced a number of infrastructure projects. The resultant upswing of work accounted for the increase in relocations expenditure during the year. In particular expenditure on relocating network assets for the rail corridor (Ontrack \$2.5m) and motorway alterations (NZTA \$3.0m) was higher than forecast.
- Overall operational expenditure on asset maintenance was below forecast by \$3.3m due to cost efficiencies achieved and the settled weather. Part of the cost efficiency gains were due to new arrangements with suppliers and while these changes reduced overall costs they also led to some changes in allocation of costs between categories. The expenditure in the "Routine & Preventive Maintenance" category is \$3.5m above forecast, "Fault and Emergency" expenditure was \$4.1m below forecast and "Refurbishment and Renewal maintenance" was \$2.6m under forecast due to the above changes in cost and allocation.

