# **EXPLANATORY NOTE FOR INFORMATION DISCLOSURES**



Vector Limited
101 Carlton Gore Road
PO Box 99882, Newmarket,
Auckland, New Zealand
www.vector.co.nz
Corporate Telephone
+64-9-978 7788

Corporate Facsimile +64-9-978 7799

## **2011 INFORMATION DISCLOSURES**

We have prepared, published and publicly disclosed the 2011 disclosure information in respect of Vector's electricity distribution business. This information has been prepared in accordance with the Electricity Distribution (Information Disclosure) Requirements 2008 ("the Requirements").

## **REGULATORY UNCERTAINTY**

The regulatory environment is undergoing a process of change and there is an ongoing period of regulatory uncertainty. As part of the change process the Commerce Commission ("the Commission") determined input methodologies in December 2010. While these input methodologies have effect until successfully challenged, they are currently subject to legal challenge by way of merits review applications to the High Court. The relevant hearings are not likely to be held until 2012.

The Commission has yet to develop and implement its approach to setting starting prices. It is our view that this mechanism should be defined as an input methodology, with the inherently greater certainty that process would provide. In addition, the approach to setting starting prices is, in our view, a critical and integral part of the regulatory package without which it is not possible to reasonably assess the impact of the other input methodologies on the business.

The five year regulatory period for electricity distribution businesses commenced on 1 April 2010. Starting prices for the default price path, when reset, will apply from 1 April 2012. The Commission has provisionally indicated that it does not intend to apply clawback in respect of the period from 1 April 2010 until prices are reset on 1 April 2012. $^2$ 

# **BASIS OF PREPARATION**

Input methodologies relevant to information disclosure have been developed in respect of:

- Cost allocation;
- Asset valuation;

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

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.

- Treatment of taxation; and
- Cost of capital.



However, the Commission has yet to develop revised information disclosure requirements that align with the input methodologies. In the interim, the 2011 information disclosures have been prepared under the existing requirements.

Given that these disclosures are not prepared on basis consistent with the input methodologies, they are of limited value in assessing the performance of the business. The disclosure reports have little relevance for the determination of starting prices that will apply from 1 April 2012, as this is determined with reference to 2010 results restated to align with the input methodologies and projected profitability that is also aligned with the input methodologies.

Disclosure under the input methodologies would include the following key differences, relative to the current information disclosure requirements:

- The treatment of capital contributions, affecting both revenue recognition and regulated asset base value;
- The definition of pass through and recoverable costs;
- The approach to accounting for tax, i.e the deferred tax approach rather than the cash tax approach;
- Use of the accounting based allocation approach, rather than the avoidable cost allocation method, for the allocation of non-directly attributable costs;
- Inclusion of adjustments to the opening regulated asset base value permitted under the input methodologies; and
- Different assumptions for leverage and different mechanisms for estimating the risk free rate and the value of the debt premium.

As we have previously noted, there is inherent volatility in the reported ROI measure due to the inclusion of the allowance for revaluation gains. This is determined by applying CPI inflation to the regulated asset base. The CPI value of 4.47% in 2011 compares with 2.05% in 2010. This flows directly into a 1.89% increase in reported ROI between the two years. The 2011 CPI value reflects a step change due to the change in GST rate introduced in 1 October 2010. Removing the effect of the GST increase from the CPI (which would be required if information disclosure was aligned with the input methodologies) would result in the reported ROI reducing to 10.32%, comparable to the ROI in 2010 of 10.35%. Removing the effect of the indexation of the regulatory asset base in 2011 would reduce the reported ROI to 8.05%.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> No adjustment has been made for the effect of historical revaluations.



# **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 2011

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 28 prepared by Vector Limited with the Commerce Commission's Electricity Distribution (Information Disclosure) Requirements 2008 (the Requirements) for the financial year ended 31 March 2011. 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 2011.

## 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 2011. 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 and the Standard on Assurance Engagements (New Zealand) 3100: Compliance Engagements 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 Annual Compliance Statement in respect of the default price-quality path prepared for the period 31 March 2011 for the purposes of clause 11 of the *Commerce Act (Electricity Distribution Default Price-Quality Path) Determination 2010* ("the Determination") has been subject to audit. The audit opinions on the financial statements of the company for the year ended 30 June 2011 and Annual Compliance Statement of Vector Limited for the year ended 31 March 2011 were unqualified and were dated 26 August 2011 and 30 June 2011 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 Annual Compliance Statement audit has been limited to agreeing the amounts and disclosures to the underlying records and audited financial statements or Annual Compliance Statement 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 Annual 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 2011 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 Annual 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 2011 that complies with the Requirements;
- Presented the historical financial information included in reports FS1, FS2, FS3, AV1, AV2, AV3, AV4, MP2 and MP3 for the financial year ended 31 March 2011 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 2011 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 26 August 2011 and our opinion is expressed as at that date.

Auckland

KPMG.



Vector Limited
101 Carlton Gore Road
PO Box 99882, Newmarket,
Auckland, New Zealand
www.vector.co.nz
Corporate Telephone
+64-9-978 7788
Corporate Facsimile
+64-9-978 7799

# SCHEDULE 13 FORM 1 - CERTIFICATE FOR DISCLOSED INFORMATION

Pursuant to Requirement 11(1)

best Vector Comm	mcmel Stasson and Alson Potesson , 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 erce 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.
Signat	cure of Directors:
	Amralusa

Date: 25 August 2011

# **Commerce Commission**

Electricity Distribution (Information Disclosure) Requirements Report Schedules

Schedules 2 to 13

31 March 2011



## **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 <u>Business Merger</u>, Acquisition or Sale Regulatory Asset Base Disclosure
- MP1 Network Information
- MP2 Performance Measures
- MP3 Price & Quality Measures
- AM1 Expenditure Forecasts and Reconciliation



	Electricity Distribution Business:	Vector 6	iroup	
		Year Ended	2011	
Income		Lindod	2011	
			(\$000)	
Net Line Charge Revenue Received		538,136		
plus Discretionary Discounts and Customer Rebates Gross Line Charge Income		-	500 400	
			538,136	
Capital Contributions		04.000		
plus Net Value of Vested Assets		24,683		
Total Capital Contributions and Vested Assets			24,683	
AC Loss Rental Rebates Received		11,688		
less AC Loss Rental Rebates Passed On		11,688		
Net AC loss rental income (deficit)			-	
Other Income				
Other, medine		13,987	13,987	
			13,867	
Total regulatory income			576,806	
Expenses				
Transmission Charges - Payments to Transpower		132.409		
plus Avoided Transmission Charges - payments to parties other than Transp	ower	10,099		
Total Transmission Costs			142,508	
Operational Expenditure:				
General Management, Administration and Overheads		42,398		
System Management and Operations Routine and Preventative Maintenance		3,898		
Refurbishment and Renewal Maintenance		15,159 10,315		to
Fault and Emergency Maintenance		13,148		to
Pass-through Costs		6,791		
Other Total Operational Expenditure		431	92,140	10
			92,140	10
Operational earnings			342,158	
Regulatory Depreciation of System Fixed Assets (incl. value of assets d	ecommissioned)	79,274		from
plus Depreciation of Non-System Fixed Assets (incl. value of assets decomn	nissioned)	7,954		from
Total Regulatory Depreciation			87,228	to
Earnings before interest and tax (EBIT)			254,930	to
less Regulatory Tax Allowance			51,895	from
plus Indexed Revaluation (of System Fixed Assets)			06 204	
plus Revaluations of Non-System Fixed Assets		-	96,301	from



### REPORT FS1: REGULATORY PROFIT STATEMENT (cont) Notes to Regulatory Profit Statement FS1a: Discretionary Discounts: Customer Rebates and other line charge adjustments (\$000) Line Charge Holidays and other Discretionary Discounts Total Discretionary Discounts and Customer Rebates FS1b: Related party expenditure - summary (\$000) Avoided Transmission Charges Operational Expenditure 7,549 Subvention Payment Other related party expenditure Total Related Party Expenditure 7,549 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 forms part of this Schedule. 83 84 FS1c: Operational Expenditure notes (\$000) Merger and Acquisition Expenses 90 Merger and Acquisition Expenses (not to be included in Operational Expenditure) 91 92 Material items (if greater than 10% of the Operational Expenditure line item) 93 Material item amount 1 94 within expenditure category 95 Material item amount 2 Notes to be provided separately 97 within expenditure category Select one 98 Material item amount 3 99 Notes to be provided separately within expenditure category 102 (further disclosures to be provided on separate page if required) 103 108 FS1d: Vested Assets Consideration Paid for Vested Assets (\$000) FS1e: Reclassified items in Operational Expenditure Value of items which have been reclassified since previous disclosure (if greater than 10% of any affected line item) 1,475 112 Previous classification: Other New classification: 113 115 (\$000) Value of items which have been reclassified since previous disclosure (if greater than 10% of any affected line item) 116 117 Select one 118 119 New classification: 120 (\$000) Value of items which have been reclassified since previous disclosure (if greater than 10% of any affected line item) 121 122 Previous classification: 123 Select one 124 to be repeated as required for multiple reclassifications



# Vector Group Electricity Distribution Business

# **Supplementary Note:**

# FS1 Expenses

Avoided Transmission Charges - payments to parties other than Transpower (Row 31) include payments of \$6.3 million made to the Energy Clearing House for voltage support.

# FS1 b Additional Related Party Information

The electricity distribution business has purchased vegetation management services of \$5.1 million (31 March 2010: \$4.6 million) from Treescape Limited, which is an associate company of the Vector group.

The electricity distribution business has purchased telecommunications services of \$2.4 million (31 March 2010: \$2.1 million) from Vector Comminications Limited.

4



FS1

ef	Electricity Distribution Business:	Vector G	roup	
5		For Year Ended	2011	
5	Control Funeralitation on Control Ft. 14 . 4 (1)			
	Capital Expenditure on System Fixed Assets (by primary purpose)		(\$000)	
3	Customer Connection	25,749		to AM1
,	System Growth	31,098		to AM1
0	Reliability, Safety and Environment	2,587		to AM1
1	Asset Replacement and Renewal	56,101		to AM1
2	Asset Relocations	17,057		to AM1
3	Total Capital Expenditure on System Fixed Assets	_	132,592	to AM1
5				
6	Capital Expenditure on Non-System Fixed Assets		17,040	from AV1
17				
8				
9	Capital works roll-forward (for System Fixed Assets)			
0	Works Under Construction at Beginning of Year	47,540		
11	plus Total Capital Expenditure on System Fixed Assets	132,592		
2	less Assets Commissioned in Year	134,464		from AV1
3	Works under construction at year end	THE PLAN	45,668	
4				
5				
6	Regulatory Investment Value calculation			
7	System Fixed Assets: regulatory value at end of Previous Year	2,155,954		from AV1
8	Non-System Fixed Assets: regulatory value at end of Previous Year	11,740		from AV1
9	Finance During Construction Allowance (on System Fixed assets)	52,821		2.45%
0	Total Regulatory Asset Base value at beginning of Current Financial Year		2,220,515	
1 2	plus   System Fixed Assets Commissioned in Year	134,464		from AV1
3	System Fixed Assets Acquired From (Sold to) a Non-EDB in Year	-		from AV1
14	Non-System Fixed Assets: Asset Additions	17,040		from AV1
5	Regulatory Asset Base investment in Current Financial Year - total	151,504		HOID MV7
0	Regulatory Asset Base investment in Current Financial Year - average	101,004	75,752	
7				
8	plus (minus) where a merger or acquisition has taken place within the year			
9	Adjustment for merger, acquisition or sale to another EDB			from AV4



#### REPORT FS3: REGULATORY TAX ALLOWANCE CALCULATION Electricity Distribution Business: Vector Group For Year Ended 2011 7 8 (\$000) Earnings before interest and tax (EBIT) 254,930 from FS1 9 Total Regulatory Depreciation 10 add 87,228 from FS1 11 Other Permanent Differences - not deductible 1,410 Other Temporary Adjustments - Current Period 12 13 81,734 15 less Non Taxable Capital Contributions and Vested Assets 3,745 Tax Depreciation 16 91,502 Deductible Discretionary Discounts and Customer Rebates Deductible Interest 18 60,530 from row 53 Other Permanent Differences - Non Taxable 19 Other Temporary Adjustments - Prior Period 20 21 163,680 22 23 Regulatory taxable income for Year 172,984 24 25 less Tax Losses Available at Start of Year 26 Net taxable income 172,984 27 28 Statutory Tax Rate 30% Regulatory Tax Allowance 29 51,895 to FS1 Note: In May 2010 the Government announced that capital contributions received on or after 21 May 2010 would be taxed. Vector received \$24.6m of capital contributions during the year. Non taxable contributions received prior to 21 May 2010 amounted to \$3.7m. Using the spreading method, the taxable capital contribution income in the current year is \$2.1m.

## Notes to Regulatory Tax Allowance Calculation

-53a	: 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.

52 F	S3b: Financing assumptions (for Deductible Interest and Interest Tax	Shield calculation)	
54 55	Standard Debt Leverage Assumption (debt/total assets)	40% %	
56 57	Standard Cost of Debt Assumption	6.59% %	
58 59	Deductible Interest	60,530 \$000	lo row 18
60	Interest Tax Shield Adjustment	18,159 \$000	to MP2



# Vector Group Electricity Distribution Business

# FS3a: Description of adjustments classified as "other"

Other Permanent Differences - Non Deductible	31-Mar-11 \$000
Non deductible entertainment expenses  Non deductible legal and professional expenses	90 1,320 <b>1,410</b>
Other Temporary Adjustments - Current Period	
Provision for doubtful debts Provision for employee entitlements and bonuses Other provisions and accruals Capital contributions	3,829 6,809 1,303 (18,845) (6,904)
Other Temporary Adjustments - Prior Period	
Provision for doubtful debts Provision for employee entitlements and bonuses Other provisions and accruals Prior years' adjustments	4,521 2,404 3,114 (2,136) <b>7,903</b>



FS

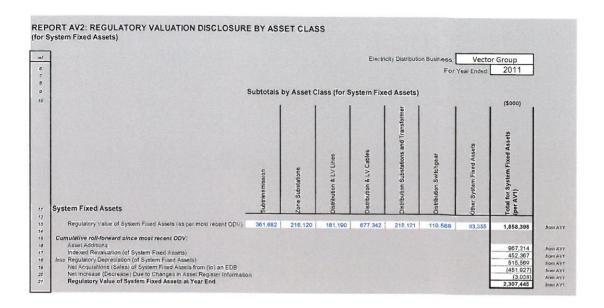
			Electri	city Distribution	on Business:	V	ector Grou	Jb.	
00000000						For Year of most	Year Ended: t recent ODV	2011 2004	
STATE		+1	+2	ODV Year + 3	+4	ODV Year +5	ODV Year + 6	(\$000) ODV Year +7	
	For Year Ending	2005	2006	2007	2008	2009	2010	2011	
ij	System Fixed Assets								
	Regulatory Value at End of Previous Year*	1,858,398	1,963,660	2,098,037	2,195,934	2,386,398	2,053,888	2,155,954	to
ı	Assets Commissioned	110.374	139.396	114,973	204.271	400 400	405.050	101 101	
i	Gross Value of Vested Assets	110,314	108,080	114,573	204,271	122,480	135.256	134,464	10
ı	Assets Acquired from (Sold to) a Non-EDB								10
3	Asset Additions	116,374	139 396	114,973	204,271	122.480	135.256	134,464	
ı	plus Indexed Revaluation								
1	less	50,065	65,936	53,250	73,923	70.860	42,033	96,301	10
ı	Depreciation of System Fixed Assets	60,943	63,323	65,083	70,011	67 635	67.208	70.988	
ı	Regulatory Value of Assets Decommissioned	234	7,632	5,242	14,681	6,289	8,015	8,286	
i	Regulatory Depreciation (incl. value of assets decommissioned)	61.177	70 955	70,325	84,692	73,924	75.223	79,274	to
ı	plus (minus)								
i	Acquisition of System Fixed Assets from another EDB					- 4 3 2 3		BOAL GOING	from
į	leas Sale of System Fixed Assets to another EDB		-		-	451,927		-	from.
	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)				
	Regulatory Value of System Fixed Assets at Year End	1,963,660	2,098,037	2,195,934	2,386,398	2.053.888	2.155.954	2.307.445	
		216 25 2010	70000			772			
	Non-System Fixed Assets								
	Regulatory value at end of previous year	33,498	29.467	23,538	12,023	15,347	13,862	11,740	
	plus Asset Additions	397	(1,520)	(8,477)	7.798	0.700			
	plus Revaluations	387	(1,520)	(0,4//)	1,798	3,730	1,640	17,040	10
	less Depreciation (incl. value of assets decommissioned)	4,428	4,409	3,038	4,474	4,536	3,768	7,954	10
ì	plus Net Acquisitions (Sales) of Non-System Fixed Assets from (to) an EDB Regulatory Value of Non-System Fixed Assets at Year end		-	-		(680)	-	-	from
	Regulatory value or Non-System rixed Assets at rear end	29,467	23,538	12,023	15,347	13,862	11,740	20,826	
	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	2,328,271	
					34,14,11,14	2,007,700	2,107,084	2,320,211	
	* The commencing figure for completing this schedule is the most recent ODV value	9							

# Notes to Annual Regulatory Valuation Roll-forward Report

10	CPI as at date of ODV	928							
1									
2	For Year Ended	2005	2006	2007	2008	2009	2010	2011	
1	CPI at CPI reference date	953	985	1010	1044	1075	1097	1146	A CONTRACTOR
1	Revaluation Rate	2.69%	3,36%	2.54%	3.37%	2.97%		4.47%	
	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	2.155.954	100000
	Indexed Revaluation of System Fixed Assets	50,065	65,936	53,250	73,923	70,860			10 FS1, AV
AV1b	: Input for prior year Acquisitions (Sales) of Assets to (from) as	nother ELE						(\$000)	
	For Year Ended	2005	2006	2007	2008	2009	2010	2011	
	Acquisition of System Fixed Assets from another EDB								1 - 1 - 3
	Sale of System Fixed Assets to another EDB					451,927			
4	Net Acquisitions (Sales) of Non-System Fixed Assets from (to) an EDB	100				(680)			



AV1 Reg val report





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

			r Group	
		For Year Ended:	2011	
	System	Fixed Assets - Replacement Cost		
•			(\$000)	
		Replacement cost at end of previous year	3,663,565	
)		Asset Additions	134.464	AV3
1		Indexed Revaluation (of System Fixed Assets)	163.641	
	less	The state of the s	16,641	
3		Net Acquisitions (Sales) of System Fixed Assets from (to) an EDB	-	from AV
ľ	THE REAL PROPERTY.	Net Increase (Decrease) Due to Changes in Asset Register Information	-	
		Replacement cost of System Fixed Assets at year end	3,945,029	
7				
3	System	Fixed Assets - Depreciated Replacement Cost		
,				
1		Depreciated Replacement Cost at end of previous year	2,233,319	
2		Assel Additions	134.464	AV3
		Indexed Revaluation (of System Fixed Assets)	99,756	
	less	Depreciation of Replacement Cost	68,225	
	less	Depreciated Replacement Cost of Assets Decommissioned	8.417	
		Net Acquisitions (Sales) of System Fixed Assets from (to) an EDB	-	from AV
,		Net Increase (Decrease) Due to Changes in Asset Register Information	-	
3		Depreciated replacement cost of System Fixed Assets at year end	2,390,897	
)				
)				

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

Notes to Price and Quality Measures

41 42	NV3a: New Asset Additions  Asset Additions - Depreciated Replacement Cost	134,464	from AV1
43 44	plus Difference in Replacement Cost and Depreciated Replacment Cost values of Asset Additions	-	
45 48	Asset Additions - Replacement Cost	134,464	



			Electric	ity Distributi	ion Business:			Vector Gro	ир	
Disclosure required? (YES or NIL DISCLOSURE):	N	O DISCL	OSURE R	EQUIRE	D					
								As at (date)		
					Propor	tion of year f	ollowing tra	nsfer of assets	0%	FER
PART 1: Most recent ODV valuation of System Fixed	Assets transfe	erred						(\$000)		
					formé			1		
					Distribution substations and transforms			sets		
			8	Ses	ns and	-	Assets	ed As		
	5	g	istribution & LV Lines	stribution & LV Cables	ostatio	Distribution switchgear	System Fixed Assets	otal for System Fixed Assets		
	ubtransmission	one substations	9 6	on & L	on sul	ws no	stem /	Syste		
	abtrans	ne su	stribut	stribut	tributi	tribut	Other Sy	I for		
Replacement Cost (RC)	- 15	Z°	ă	Ď	Ď	ă	6	- <del>-</del> -		
less Depreciation Depreciated Replacement Cost (DRC)							-			
less Optimisation adjustment			No.	No.	SECTION 1					
Optimised Depreciated Replacement Cost (ODRC)						-	1 Table			
less Economic Value Adjustment (EVA) Most recent ODV value	-		-			-	-	- :		
PART 2: Valuation disclosure for transferred assets b	y Asset Class	at transf	er date)							(\$00
PART 2: Valuation disclosure for transferred assets b	y Asset Class	s (at transf	er date)					ssets		
PART 2: Valuation disclosure for transferred assets b	by Asset Class	s (at transf	er date)					xed Assets	ssets	FDC)
PART 2: Valuation disclosure for transferred assets b	oy Asset Class	s (at transf	er date)					tem Fixed Assets	ixed Assets	FDC)
PART 2: Valuation disclosure for transferred assets b	oy Asset Class	s (at transf	er date)					r System Fixed Assets	siem Fixed Assets	FDC)
PART 2: Valuation disclosure for transferred assets b	y Asset Class	s (at transf	er date)					otal for System Fixed Assets	on-System Fixed Assets	RAB value (excl. FDC)
Regulatory Value of System Fixed Assets (as per most rece		s (at transf	er date)					Total for System Fixed Assets	Non-System Fixed Assets	FDC)
Regulatory Value of System Fixed Assets (as per most rece Cumulative roll-forward since most recent ODV: Asset Additions		s (at transf	er date)					Total for System Fixed Assets	Non-System Fixed Assets	RAB value (excl. FDC)
Regulatory Value of System Fixed Assets (as per most rece <b>Cumulative roll-forward since most recent ODV:</b> Asset Additions Indexed Revaluation (of System Fixed Assets) Jess Regulatory Depreciation (of System Fixed Assets)	ent ODV)	s (at transf	er date)					Total for System Fixed Assets	Non-System Fixed Assets	RAB value (excl. FDC)
Regulatory Value of System Fixed Assets (as per most rece Cumulative roll-forward since most recent CDV: Asset Additions Indexed Revaluation (of System Fixed Assets) Res Regulatory Depreciation (of System Fixed Assets) Net Acquisitions (Sales) of System Fixed Assets from (to) a Net Increase (Depressed due to Changes in Asset Register	ent ODIV)	s (at transf	er date)					Total	Non-System Fixed Assets	RAB value (excl. FDC)
Regulatory Value of System Fixed Assets (as per most rece Cumulative roll-floward since most recent ODV: Asset Additions Indexed Revaluation (of System Fixed Assets) Jess Regulatory Opercutation (of System Fixed Assets) Net Acquisitions (Sales) of System Fixed Assets from (to) a Net Increase (Devresse) due to Changes in Asset Register RAB Value of Transferred Assets at Transfer Date	ent ODIV)	s (at transf	er date)					Total for System Fixed Assets	Non-System Fixed Assets	RAB value (excl. FDC)
Regulatory Value of System Fixed Assets (as per most rece Cumulative roll-forward since most recent CDV: Asset Additions Indexed Revaluation (of System Fixed Assets) Nes Regulation (Descrision for System Fixed Assets) Net Acquisitions (Sales) of System Fixed Assets from (to) a Net Increase (Devices) due to Changes in Asset Register	ent ODIV)	s (at transf	er date)					Total	Non-System Fixed Assets	RAB value (excl.
Regulatory Value of System Fixed Assets (as per most rece  Cumulative roll-forward since most recent ODV;  Asset Adoltions Indexed Revaluation (of System Fixed Assets) Iries Regulatory Depreciation (of System Fixed Assets) Net Acquisitions (Sales) of System Fixed Assets from (to) a Net Increase (Decrease) due to Changes in Asset Register RAB Value of Transferred Assets at Transfer Date  Acquisition of Assets from Another EDB Sale of Assets to Another EDB  RAB Value of Transferred Assets at Transfer Date	ent ODIV)	s (at transf	er date)					Total	Non-System Fixed Assets	Total RAB value (excl. FDC)
Regulatory Value of System Fixed Assets (as per most rece Cumulative roll-forward since most recent ODV: Asset Additions Indexed Revaluation (of System Fixed Assets) Jess Regulatory Depreciation (of System Fixed Assets) Net Acquisitions (Sales) of System Fixed Assets Net Acquisitions (Sales) of System Fixed Assets Net Acquisitions (Sales) of System Fixed Assets Net Acquisition of Transferred Assets at Transfer Date Acquisition of Assets from Another EDB Sale of Assets to Another EDB	ent ODV) en EDB Information	s (at transf	er date)					Total	Non-System Fixed Assets	≥ ∈ Total RAB value (exct. FDC)
Regulatory Value of System Fixed Assets (as per most rece Comulative roll-forward since most recent ODV: Asset Additions Indexed Regulation (of System Fixed Assets) Net Acquisitions (Sales) of System Fixed Assets) Net Acquisitions (Sales) of System Fixed Assets from (to) a Net Increase (Decrease) due to Changes in Asset Regulater RAB Value of Transferred Assets at Transfer Date Acquisition of Assets from Another EDB Sale of Assets to Another EDB RAB Value of Transferred Assets at Transfer Date 19 factor (proportion of year following transfer of assets) Adjustment for merger, acquisition or sale to another E	ent ODV) en EDB Information							Total	Non-System Fixed Assets	≥ ∈ Total RAB value (exct. FDC)
Regulatory Value of System Fixed Assets (as per most rece  Cumulative roll-forward since most recent ODV: Asset Additions Indexed Revaluation (of System Fixed Assets) Net Acquisitions (Sales) of System Fixed Assets) Net Acquisitions (Sales) of System Fixed Assets from (to) a Net Increase (Decrease) due to Changes in Asset Register RAB Value of Transferred Assets at Transfer Date Acquisition of Assets from Another EDB Sale of Assets to Another EDB RAB Value of Transferred Assets at Transfer Date  "P factor (proportion of year following transfer of assets)	ent ODV) en EDB Information							Total	Non-System Fixed Assets	Total RAB value (excl. FDC)
Regulatory Value of System Fixed Assets (as per most rece Comulative roll-forward since most recent ODV: Asset Additions Indexed Regulation (of System Fixed Assets) Net Acquisitions (Sales) of System Fixed Assets) Net Acquisitions (Sales) of System Fixed Assets from (to) a Net Increase (Decrease) due to Changes in Asset Regulater RAB Value of Transferred Assets at Transfer Date Acquisition of Assets from Another EDB Sale of Assets to Another EDB RAB Value of Transferred Assets at Transfer Date 19 factor (proportion of year following transfer of assets) Adjustment for merger, acquisition or sale to another E	ent ODV) en EDB Information				System Fixe			05%	(\$000)	≥ ∈ Total RAB value (exct. FDC)
Regulatory Value of System Fixed Assets (as per most rece Comulative roll-forward since most recent ODV: Asset Additions Indexed Regulation (of System Fixed Assets) Net Acquisitions (Sales) of System Fixed Assets) Net Acquisitions (Sales) of System Fixed Assets from (to) a Net Increase (Decrease) due to Changes in Asset Regulater RBV Value of Transferred Assets at Transfer Date Acquisition of Assets from Another EDB Sale of Assets from Another EDB RAB Value of Transferred Assets at Transfer Date (p) factor (proportion of year following transfer of assets) Adjustment for merger, acquisition or sale to another E	ent ODV) en EDB Information EDB System Fixed en EDB - RC					d Assets at		- Total	(\$000)	≥ ∈ Total RAB value (exct. FDC)



11 AV4 MSA RAB report

			Electric	ity Distribution	on Business:			Vector Grou	ıp	
Disclosure required? (YES or NIL DISCLOSURE):	N	O DISCLO	OSURE R	EQUIRE	D					
					Proport	tion of year fo	llowing tran	As al (date) refer of assets	0%	
PART 1: Most recent ODV valuation of System Fixed A	Assets transf	erred						(\$000)		
Replacement Cost (RC)	Subtransmission	Zone substations	Distribution & LV Lines	Distribution & LV Cables	Distribution substations and transform	Distribution switchgear	Other System Fixed Assets	Total for System Fixed Assets		
loss Depreciation Depreciated Replacement Cost (DRC)							-			
less Optimisation adjustment Optimised Depreciated Replacement Cost (ODRC)		BALLS 3								
Journal of the Adjustment (EVA)  Most recent ODV Value							•			
PART 2: Valuation disclosure for transferred assets by										
								se fs		
Regulatory Value of System Fixed Assets (as per most recein Communitative roll-forward since most recent ODV: Asset Addition: Indexed Revaluation (of System Fixed Assets) Res Regulatory Depression (of System Fixed Assets of System Fixed Assets) Net Acquisitions (Sales) of System Fixed Assets from (to) at Net Increase (Decrease) Due to Changes in Asset Register I	n EDB							Total for System Fixed Assets	Non-System Fixed Assets	1503
Cumulative roll-forward since most recent ODV: Asset Additions Indexed Revaluation (of System Fixed Assets) iless: Regulatory Depreciation (of System Fixed Assets from (to) as Net Acquisitions (Sales) of System Fixed Assets from (to) as	n EDB							. Total for System Fixed Assets	Non-System Fixed Assets	COTT Investment and leave T
Cumulative roll-forward since most recent ODV: Asset Additions Indexed Revaluation (of System Fixed Assets) liess. Regulatory Depreciation (of System Fixed Assets) Net Acquisitions (Sales) of System Fixed Assets from (to) at Net Increase (Decrease) Due to Changes In: Asset Register I RAB Value of Transferred Assets at Transfer Date Acquisition of Assets from Another EDB	n EDB Information							Total for System Fixed Assets	Non-System Fixed Assets	todal fact A sultan divid have by
Cumulative roll-forward since most recent ODV: Asset Additions Indexed Revaluation (of System Fixed Assets) liess: Regulatory Deprecipation (of System Fixed Assets) Net Acquisitions (Seles) of System Fixed Assets rom (to) at Net Increase (Decrease) Die to Changes in Asset Register I RAB Value of Transferred Assets at Transfer Date Acquisition of Assets from Another EDB Sale of Assets to Another EDB  RAB Value of Transferred Assets at Transfer Date "p" factor (proportion of year following transfer of assets) Adjustment for merger; acquisition or sale to another Ele	n EDB Information	d Assets tr			RC & DRC System Fixe	values of			(\$000)	todal fact A sultan divid have by
Cumulative roll-forward since most recent ODV: Asset Additions Indexed Revaluation (of System Fixed Assets) less Regulatory Depreciation for System Fixed Assets) Net Acquisitions (Seles) of System Fixed Assets more too a Net Increase (Decrease) Due to Changes in Asset Register i RAB Value of Transferred Assets at Transfer Date Acquisition of Assets from Another EDB Sale of Assets to Another EDB RAB Value of Transferred Assets at Transfer Date "p" factor (proportion of year following transfer of assets)	n EDB  DB  System Fixed	d Assets tr			RC & DRC System Fixe transfe	d Assets at			(\$000)	Total BAR value (avel EDC) 6



AV4 M&A RAB report (2)

				Electric	ty Distributi	on Business			Vector Grou	р	
Di	sclosure required? (YES or NIL DISCLOSURE):	N	O DISCL	OSURE R	EQUIRE	D					
									As at (date)		
						Proport	ion of year fo	ollowing tra	nsfer of assets	0%	
P	ART 1: Most recent ODV valuation of System Fixed	Assate transfe	arrad								
300						E			(\$000)		
1000						transform			stes		
					us e	s and		ssets	rotal for System Fixed Assets		
			0	Distribution & LV Lines	Distribution & LV Cables	Distribution substations	listribution switchgear	ther System Fixed Assets	Fixe		
		Subtransmission	one substations	1361	18.11	egns (	switch	em Fi	ysten		
		ransm	sqns	progo	buttor	buttor	buttor	Syst	for 8		
	Contract Cont (EC)	Subi	Zone	Distr	Distr	Distr	Distr	офо			
	Replacement Cost (RC)  (ess Depreciation						0.80				
1	Depreciated Replacement Cost (DRC)	-			-	-		-	- :		
1	less Optimisation adjustment Optimised Depreciated Replacement Cost (ODRC)			-					-		
,	less Economic Value Adjustment (EVA)							No. 15			
	Most recent ODV Value	•						-	<u> </u>		
	ADT 2 Value of the form of the form of the first of the f										
1	ART 2: Valuation disclosure for transferred assets b	by Asset Class	at transi	er date)							(\$00
									. 1		
									seets		()(
The second									xed Assets	ssets	el. FDC)
									m Fixed Assets	red Assets	re (excl. FDC)
									System Fixed Assets	m Fixed Assets	3 value (excl. FDC)
									il for System Fixed Assets	-System Fixed Assets	I RAB value (excl. FDC)
	Regulatory Value of System Fixed Assets (as per most rece	ent ODV)							Total for System Fixed Assets	Non-System Fixed Assets	Total RAB value (excl. FDC)
	Regulatory Value of System Fixed Assets (as per most rec Cumulative roll-forward since most recent ODV.	ent ODV)							Total for System Fixed Assets	Non-System Fixed Assets	Total RAB value (excl. FDC)
	Cumulative roll-forward since most recent ODV: Assel Additions	ent ODV)							Total for System Fixed Assets	Non-System Fixed Assets	Total RAB value (excl. FDC)
1	Cumulative roll-forward since most recent ODV: Assel Additions Indexed Revaluation (of System Fixed Assets) (ess. Regulatory Depressions (of System Fixed Assets) Net Acquisitions (Sales) of System Fixed Assets from (to) a	an EDB							Total for System Fixed Assets	Non-System Fixed Assets	Total RAB value (excl. FDC)
	Cumulative roll-forward since most recent ODV: Asset Additions Asset Additions Asset Additions Asset Assets	an EDB							Total for System Fixed Assets	Non-System Fixed Assets	Total RAB value (excl. FDC)
	Comulative roll-forward since most recent ODV.  Asset Additions Indexed Remitation (of System Fixed Assets) less Regulatory Depreciation (of System Fixed Assets) Net Acquisitions (Sales) of System Fixed Assets from (to): Net Increase i Decreacy Obe to Changes in Asset Register RAB Value of Transferred Assets at Transfer Date	an EDB							Total for System Fixed Assets	Non-System Fixed Assets	-
	Cumulative roll-forward since most recent ODV: Asset Additions Asset Additions Asset Additions Asset Assets	an EDB							Total for System Fixed Assets	Non-System Fixed Assets	ल ल Total RAB value (excl. FDC)
	Comulative roll-forward since most recent ODV.  Asset Additions Indexed Revaluation (of System Fixed Assets) less. Regulatory Degresiation (of System Fixed Assets) Net Acquisitions (Sales) of System Fixed Assets from (to): Net Increase (Decreaso) Due to Changes in Asset Regulator RAB Value of Transferred Assets at Transfer Date Acquisition of Assets from another EDB Sale of Assets to another EDB	an EDB							Total for System Fixed Assets	Non-System Fixed Assets	L c
	Comutative roll-forward since most recent ODV.  Asset Additions Indexed Revaluation (of System Fixed Assets) 1659. Regulatory Degreciation (of System Fixed Assets) 1694. Acquisition (Sales) of System Fixed Assets from (to). 1698. Nei Increase Due to Changes in Asset Register 1699. RAB Value of Transferred Assets at Transfer Date 1699. Assets to another EDB 1699. RAB Value of Transferred Assets at Transfer Date 1699. Tactor (propertion or year following transfer of assets) 1709. Transferred Assets at Transfer Date 1709. Transfer Open Transfer	an EDB Information							0,0 Total for System Fixed Assets	Non-System Fixed Assets	it is
	Comulative roll-forward since most recent ODV.  Asset Additions Indexed Revaluation (of System Fixed Assets) less Regulatory Depreciation (of System Fixed Assets) Net Acquisitions (Sales) of System Fixed Assets from (to) it Net Increase (Decreace) Due to Changes in Asset Register RAB Value of Transferred Assets at Transfer Date Acquisition of Assets from another EDB Sale of Assets to another EDB RAB Value of Transferred Assets at Transfer Date	an EDB Information								Non-System Fixed Assets	it is
,	Comutative roll-forward since most recent ODV.  Asset Additions Indexed Revaluation (of System Fixed Assets) 1659. Regulatory Degreciation (of System Fixed Assets) 1694. Acquisition (Sales) of System Fixed Assets from (to). 1698. Nei Increase Due to Changes in Asset Register 1699. RAB Value of Transferred Assets at Transfer Date 1699. Assets to another EDB 1699. RAB Value of Transferred Assets at Transfer Date 1699. Tactor (propertion or year following transfer of assets) 1709. Transferred Assets at Transfer Date 1709. Transfer Open Transfer	en EDB Information	d Asseta ti	ansferred							L c
,	Comulative roll-forward since most recent ODV.  Asset Additions Indexed Remitation (of System Fixed Assets)  Ress Regulatory Degresiation (of System Fixed Assets)  Net Acquisitions (Sales) of System Fixed Assets from (to) is Net Increase (Decrease) Due to Changes in Asset Regulater  RAB Value of Transferred Assets at Transfer Date  Acquisition of Assets from another EDB  Sale of Assets to another EDB  RAB Value of Transferred Assets at Transfer Date  "b" factor (projection of year following transfer of assets)  Adjustment for merger, acquisition or sale to another it	en EDB Information	d Assets ti	ansferred		RC & DRC.				(\$000)	it is
,	Comutative roll-forward since most recent ODV.  Asset Additions Indexed Revaluation (of System Fixed Assets) 1658. Regulatory Degreciation (of System Fixed Assets) 1698. Acquisition (Sales to System Fixed Assets from (to). 1698 Increase Decrease) Due to Changes in Asset Regulater 1699 RAB Value of Transferred Assets at Transfer Date 1699 Assets to another EDB 1699 Sale of Assets to another EDB 1699 RAB Value of Transferred Assets at Transfer Date 1791 factor (propertion of year following transfer of assets) 1791 Adjustment for merger, acquisition or sale to another I	en EDB Information EDB	d Assets ti	ansferred		RC & DRC System Fixe transfe	d Assets at			(\$000)	it at
	Comulative roll-forward since most recent ODV.  Asset Additions Indexed Remitation (of System Fixed Assets)  Ress Regulatory Degresiation (of System Fixed Assets)  Net Acquisitions (Sales) of System Fixed Assets from (to) is Net Increase (Decrease) Due to Changes in Asset Regulater  RAB Value of Transferred Assets at Transfer Date  Acquisition of Assets from another EDB  Sale of Assets to another EDB  RAB Value of Transferred Assets at Transfer Date  "b" factor (projection of year following transfer of assets)  Adjustment for merger, acquisition or sale to another it	en EDB Information  EDB  System Fixed an EDB - RC	d Assets ti	ansferred		System Fixe	d Assets at		- 0%	(\$000)	in the second se
,	Cumulative roll-forward since most recent ODV. Asset Additions Indexed Revaluation (ef System Fixed Assets) Ress Regulatory Depreciation (of System Fixed Assets) Net Acquisitions (Sales) of System Fixed Assets from (to); Net Increase Decrease) Due to Changes in Asset Register RAB Value of Transferred Assets at Transfer Date Sale of Assets to another EDB RAB Value of Transferred Assets at Transfer Date (b) factor (proportion of year following transfer of assets) Adjustment for merger, acquisition or sale to another if ART 3: Rolled-forward Replacement Cost values for Net Acquisitions (Sales) of System Fixed Assets from (to)	en EDB Information  EDB  System Fixed an EDB - RC	d Assets ti	ansferred Selling Entity		System Fixe	d Assets at		- 0%	(\$000)	ic al



#### REPORT MP1: NETWORK INFORMATION (Separate report required for each Non-Contiguous Network) Electricity Distribution Business: Vector Group For Year Ended: 6 Vector Group Network Name Disclosure Annual Disclosure - Requirement 6(1) Circuit Length by Operating Line Voltage (at year end) Underground (km) Overhead (km) > 66kV 50kV & 66kV 33kV SWER (all SWER vollages) 26 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 71 97 378 390 768 22kV (other than SWER) 6 6kV to 11kV (inclusive - other than SWER) Low Voltage (< 1kV) Total circuit length (for Supply) 3,851 8,461 9,259 17,720 to MP2 Dedicated Street Lighting Circuit Length 17 335 352 Overhead Circuit Length by Terrain (at year end) (km) (%) Urban (only) Rural (only) Remote (only) Remote (only) Rugged (only) Rural & rugged (only) Remote & rugged (only) Unallocated overhead lii Total overhead length 0% 34 Transformer capacity (at year end) Previous Year Distribution Transformer Capacity (EDB Owned) Distribution Transformer Capacity (Non-EDB Owned, Estimated) 3,902 MVA 3,852 467 MVA 466 37 **Total Distribution Transformer Capacity** 4,369 MVA (Io MP2) 4,318 Zone Substation Transformer Capacity 3,925 MVA 3,772 System Fixed Assets age (at year end) 41 22 Years Average Expected Total Life of System Fixed Assets Average Age as a Proportion of Average Expected Total Life 43 44 45 46 47 Estimated Proportion of Assets (by Replacement Cost) within 10 years of Total Life 16% % 48 49 50 Maximum Non-coincident system Sum of maximum demand (MW) 1,710 demands (MW) **Electricity demand** GXP Demand Embedded Generation Output at HV and Above Maximum System Demand 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 plus 1,722 less 1,722 86 1,671 to MP2 GXP Demand not Supplied at Subtransmission Level Embedded Generation Output - Connected to Subtransmission System Net Transfers to (from) Other EDBs at Subtransmission Level Only 208 Estimated Controlled Load Shed at Time of Maximum System Demand (MW) Five-Year System Maximum Demand Growth Forecast 1.9 %pa Electricity volumes carried Electricity Supplied from GXPs Jess Electricity Supplied from Embedded Generators Jess Net Electricity Supplied from Embedded Generators Jess Net Electricity Supplied to (from) Other EDBs Electricity Supplied to Customers' Connection Points Jess Electricity Supplied to Customers' Connection Points Electricity Supplied to Customers' Connection Points Electricity Supplied to Customers' Connection Points Electricity Losses (Joss ratio) 8,589 90 to MP2 4.5% % Electricity Supplied to Customers' Connection Points Electricity Supplied to Largest 5 Connection Points Electricity supplied other than to Largest 5 Connection Points 8,289 506 7,783 94% % 82 83 **Load Factor** 58% % Number of Connection Points (at year end) 84 531,185 ICPs to MP2 Intensity of service requirements Demand Density (Maximum Distribution Transformer Demand / Total circuit length) Volume Density (Electricity Supplied to Customers' Connection Points / Total circuit length) Connection Point Density (ICPs / Total circuit length) Energy Intensity (Electricity Supplied to Customers' Connection Points / ICP)



#### REPORT MP1: NETWORK INFORMATION (Separate report required for each Non-Contiguous Network) ref Electricity Distribution Business: Vector Group For Year Ended 2011 Network Name Vector Group - Auckland Annual Disclosure - Requirement 6(1) Circuit Length by Operating Line Voltage (at year end) Underground (km) (km) (km) > 66kV 71 12 13 14 15 16 17 18 19 71 50kV & 66kV 50kV s 66kV 33kV SWER (all SWER voltages) 22kV (other than SWER) 6 6kV to 11kV (inclusive - other than SWER) Low Voltage (< 1kV) Total circuit length (for Supply) 46 255 301 158 2,966 5,402 8,898 2,043 10 MP2 20 21 22 Dedicated Street Lighting Circuit Length 5 216 221 Overhead Circuit Length by Terrain (at year end) 23 24 25 26 27 28 29 30 31 32 33 34 Urban (only) Rural (only) Remote (only) Regod (only) Rugged (only) Rural & rugged (only) Remote & rugged (only) Unallocated overhead lines Total overhead length 3 006 Transformer capacity (at year end) Previous Year Distribution Transformer Capacity (EDB Owned) Distribution Transformer Capacity (Non-EDB Owned, Estimated) 35 2,506 MVA 2,474 36 400 Total Distribution Transformer Capacity 37 2.907 MVA (lo MP2) 2,874 38 Zone Substation Transformer Capacity 39 40 2.646 MVA 2,516 41 System Fixed Assets age (at year end) 22 Years 58 Years 38% % Average Age of System Fixed Assets Average Expected Total Life of System Fixed Assets Average Age as a Proportion of Average Expected Total Life 42 44 45 46 47 48 49 50 51 Estimated Proportion of Assets (by Replacement Cost) within 10 years of Total Life 13% % Maximum coincident Non-coincident Electricity demand system Sum of maximum demand (MW) demands (MW) GXP Demand Embedded Generation Output at HV and Above Maximum System Demand 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 1,125 1.279 1,128 1,128 58 59 60 61 62 63 64 85 less 72 1 078 to MP2 GXP Demand not Supplied at Subtransmission Level Embedded Generation Output - Connected to Subtransmission System Net Transfers to (from) Other EDBs at Subtransmission Level Only 208 Estimated Controlled Load Shed at Time of Maximum System Demand (MW) 66 67 68 69 70 71 72 73 74 75 76 77 78 Five-Year System Maximum Demand Growth Forecast Electricity volumes carried (GWh) Tricity Volumes carried Electricity Supplied from GXPs Electricity Exports to GXPs Electricity Supplied from Embedded Generators Net Electricity Supplied to (from) Other EDBs Electricity Supplied to (gramma of the connection Points Electricity Supplied to Guatomers' Connection Points Electricity Losses (loss ratio) 5.941 28 to MP2 257 4.3% % Electricity Supplied to Customers' Connection Points less Electricity Supplied to Largest 5 Connection Points Electricity supplied other than to Largest 5 Connection Points 79 80 81 93% % Load Factor 82 83 60% % Number of Connection Points (at year end) 321.553 ICPs to MP2 Intensity of service requirements 86 87 88 80 90 Demand Density (Maximum Distribution Transformer Demand / Total circuit length) Volume Density (Electricity Supplied to Customers' Connection Points / Total circuit length) Connection Point Density (ICPs / Total circuit length) Energy Intensity (Electricity Supplied to Customers' Connection Points / ICP) 121 kW/km 642 MWhkm 36 ICPlun 17,764 kWIVICP



#### REPORT MP1: NETWORK INFORMATION (Separate report required for each Non-Contiguous Network) Electricity Distribution Business Vector Group For Year Ended. 2011 Network Name Vector Group - Northern & Lichfield Disclosure: Annual Disclosure - Requirement 6(1) Circuit Length by Operating Line Voltage (at year end) Underground (km) (km) (km) > 66kV 50kV & 66kV 12 13 14 15 16 17 18 19 26 26 332 135 467 SWER (all SWER voltages) 22kV (other than SWER) 6.6kV to 11kV (inclusive - other than SWER) Low Voltage (< 1kV) Total circuit length (for Supply) 2,928 2,169 1,276 4,204 5,455 3,367 8,822 20 21 22 23 Dedicated Street Lighting Circuit Length 12 119 131 Overhead Circuit Length by Terrain (at year end) (km) (%) 1,651 3,804 24 25 26 27 28 29 30 31 32 33 Urban (only) Rural (only) Rural (only) Remote (only) Rugged (only) Rural & rugged (only) Remote & rugged (only) Unallocated overhead in Total overhead length 5.455 Transformer capacity (at year end) 35 36 Distribution Transformer Capacity (EDB Owned) Distribution Transformer Capacity (Non-EDB Owned, Estimated) 1,396 MVA 1,379 66 MVA 37 **Total Distribution Transformer Capacity** 1.445 38 Zone Substation Transformer Capacity 1.279 MVA 1 256 41 System Fixed Assets age (at year end) 42 Average Age of System Fixed Assets 22 Years Average Expected Total Life of System Fixed Assets Average Age as a Proportion of Average Expected Total Life 41 44 45 46 47 48 50 51 52 53 54 55 56 60 61 62 63 64 65 66 67 52 Years 42% % Estimated Proportion of Assets (by Replacement Cost) within 10 years of Total Life 21% % Maximum coincident Non-coincident Electricity demand system Sum of maximum demand (MW) demands (MW) 585 622 GXP Demand 585 GXP Demand Embedded Generation Output at HV and Above Maximum System Demand Net Transfers to (from) Other EDBs at HV and Above Demand on system for supply to customers' Conrection Points Subtransmission Customers Connection Point Demand Maximum Distribution Transformer Demand 594 less 594 14 593 GXP Demand not Supplied at Subtransmission Level Embedded Generation Output - Connected to Subtransmission System Net Transfers to (from) Other EDBs at Subtransmission Level Only Estimated Controlled Load Shed at Time of Maximum System Demand (MW) Five-Year System Maximum Demand Growth Forecast 1.2 %pa Electricity Supplied from GXPs Electricity Exports to GXPs Electricity Exports to GXPs Electricity Supplied from Embedded Generators Net Electricity Supplied to (from) Other EDBs Electricity ortering system for supply to customers \*Connection Points Electricity Supplied to Customers \*Connection Points Electricity Losses (loss ratio) 70 71 72 73 74 75 76 77 78 Electricity volumes carried (GWh) 2.648 62 less 2,710 2,577 to MP2 133 4.9% % Electricity Supplied to Customers' Connection Points Less Electricity Supplied to Largest 5 Connection Points Electricity supplied other than to Largest 5 Connection Points 2,577 80 81 2.483 96.4% % Load Factor 52% % 84 85 Number of Connection Points (at year end) 209,632 ICPs to MP2 Intensity of service requirements 86 87 88 80 90 Demand Density (Maximum Distribution Transformer Demand / Total circuit length) Volume Density (Electricity Supplied to Customers' Connection Peints / Total circuit length) Connection Point Density (IDPs / Total circuit length) Energy Intensity (Electricity Supplied to Customers' Connection Points / ICP) 67 kW/km 292 MWh/km 24 ICP/km 12.293 kWh/ICP



	lectricity Distribu	ution Business I	Vecto	r Group	
			For Year Ended		
Performance comparators				2011	
	P	revious Years	•	Current Financial	
	Current Yr - 3	Current Yr - 2	Current Yr - 1	Year	
Operational expenditure ratio					
Total Operational Expenditure	115	94	90	92 Sm	from FS
Replacement Cost of System Fixed Assets (at year end')	4,274	3,797	3,664	3,945_\$m	from AV
Ratio (%)	2.70%	2.46%	2 46%	2.34% %	
Capital expenditure ratio					
Total Capital Expenditure on System Fixed Assets	159	139	114	133 sm	from FS:
Replacement Cost of System Fixed Assets (at year end*)	4,274	3,797	3,664	3,945 \$m	from FS
Ratio (%)		3.66%	3.11%	3,36% %	arom AV
				5.5576	
Capital expenditure growth ratio					
Capital Expenditure. Customer Connection and System Growth		-	48	57 \$m	from FS
Change in Total Distribution Transformer Capacity		()-	44	51_MV	from MP
\$/kVA	Not defined	Not defined	1,094	1,115 \$AN	A
Renewal expenditure ratio					
Capital & Operational Expenditure Asset Replacement, Refurbishment and Renewal					
Regulatory Depreciation of System Fixed Assets			53	66 \$m	from F31 & 2
Ratio (%)	Not defined	Not defined	75 71%		from AV
Natio (18)	Not delined.	Not defined	/170	83.8% %	
Distribution Transformer Capacity Utilisation					
Maximum Distribution Transformer Demand	2,176	1,656	1,718	1.671 MW	from MP
Total Distribution Transformer Capacity (at year and )	5,643	4,672	4,318	4,369 kVA	from MP
Ratio (%)	38.6%	35.4%	39.8%	38.2% %	
Patron as boundaries					
Return on Investment					
Regulatory Profit / Loss (pre-financing and distributions)	304	278	241	299 \$m	from FS
less Interest Tax Shield Adjustment		22	14	18_\$rn	from FS
Adjusted Regulatory Profit	279	257	226	281 \$m	
Regulatory Investment Value Ratio (%)	2,368	2,212	2,187	2,296 Sm	from FS3
Rauc (79)		el Transfer with anot		12.24% %	
- 414	the year, the denom-	natorii ara çak valed	f as time-weighted as	rereges	
Expenditure comparison table					
	Expend	diture metrics (	per):		
	Electricity				
	Supplied to	Maximum		Distribution	
Total circuit	Customers*	coincident		Transformer	
length (for Supply)	Connection Points	system		Capacity (EDB-	
(\$/km)	(\$/MWh)	demand (\$/MW)	Point (\$/ICP)	Owned) (\$/MVA)	
Capital Expenditure (\$) per 8.444	18	86,894	282		
Operational Expenditure (\$) per 5 200	11	53,508	173	38,348	from FS2 & MP1



E	lectricity Distribi	ution Business	Vector Grou	p - Auckland	1	
		and Duchioso	For Year Ended			
Performance comparators						
		revious Years		Current Financial		
	Current Yr - 3	Current Yr - 2	Current Yr - 1	Year		
Operational expenditure ratio						
Total Operational Expenditure Replacement Cost of System Fixed Assets (at year end')					\$m	from FS
Ratio (%)	Not defined	Not defined	Not defined	-	\$m	from AV
Natio (18)	Not defined	Not defined	Not delined	Not defined	%	
Capital expenditure ratio						
Total Capital Expenditure on System Fixed Assets					Sm	from FS
Replacement Cost of System Fixed Assets (at year end*)					Sm	from AV
Ratio (%)	Not defined	Not defined	Not defined	Not defined	SALES CONT.	"MILAV
Capital expenditure growth ratio						
Capital Expenditure, Customer Connection and System Growth	-		-		\$m	from FS.
Change in Total Distribution Transformer Capacity			-		MVA.	from MP
\$/kVA	Not defined	Not defined	Not defined	Not defined	\$4VA	
Renewal expenditure ratio						
Capital & Operational Expenditure. Asset Replacement, Refurbishment and Renewal						
Fegulatory Depreciation of System Fixed Assets			-	· · · · · · · · · · · · · · · · · · ·	\$m	from FS1 & :
Ratio (%)	Not defined	Not defined	Not defined		\$m	from AV
realio (16)	Not defined	Not defined	Not defined	Not defined	%	
Distribution Transformer Capacity Utilisation						
Maximum Distribution Transformer Demand	1.085	1.063	1,106	1.078	Mary	from MP
Total Distribution Transformer Capacity (at year end")	2,916	2,843	2,874	2,907		from MP
Ratio (%)	37.2%	37.4%	38.5%	37.1%	Street, Street,	
Return on Investment						
Regulatory Profit / Loss (pre-financing and distributions)			-	-	\$m	from FS
less interest Tax Shield Adjustment				-	\$m	from FS:
Adjusted Regulatory Profit					\$m	
Regulatory Investment Value	Not delle	No. of the	-		\$m	from FS2
Ratio (%)	Not defined	Not defined	Not defined her EDB was enelon	Not defined	%	
			l as fime-weighted a:			
Expenditure comparison table						
	Expend	liture metrics (	\$ per):			
	The state in					
	Electricity Supplied to	Maximum		Distribution		
Total circuit	Customers'	coincident		Transformer		
length (for	Connection	system	Connection	Capacity (EDB-		
Supply)	Points	demand	Point	Owned)		
(\$/km)	(\$/MWh)	(\$/MW)	(\$/ICP)	(\$/MVA)		
Capital Expenditure (\$) per	-	-		-	fro	m FS2 & MP1

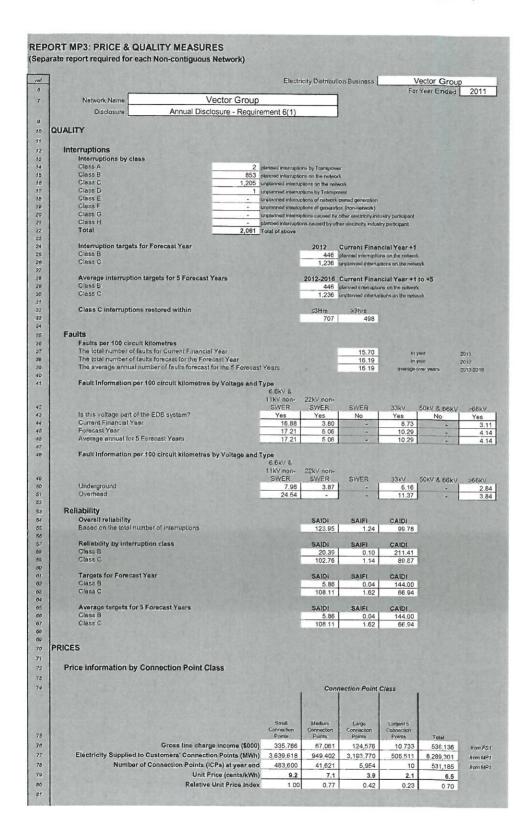


MP2 - Auckland

	lectricity Distrib	ution Business:	Vector Group - N	orthern & Lichfield	
			For Year Ended		
Performance comparators		D			
		Previous Year	S:	Current Financial Year	
	Current Yr - 3	Current Yr - 2	Current Yr - 1		
Operational expenditure ratio					
Total Operational Expenditure		-		- \$m	from FS
Replacement Cost of System Fixed Assets (at year end*)				\$m	from AV
Ratio (%)	Not defined	Not defined	Not defined	Not defined %	
Capital expenditure ratio					
Total Capital Expenditure on System Fixed Assets	-	- 1	-	- \$m	from FS:
Replacement Cost of System Fixed Assets (at year end*)			-	- Sm	from AV
Ratio (%)	Not defined	Not defined	Not defined	Not defined %	
Capital expenditure growth ratio					
Capital Expenditure: Customer Connection and System Growth Change in Total Distribution Transformer Capacity				- 5m	from FS
\$/kVA	Not defined	Not defined	Not defined	MV	
WAYA	145t defined	140t delilled	Not defined	Not defined \$30	A
Renewal expenditure ratio					
Capital & Operational Expenditure: Asset Replacement, Refurbishment and Renewal	. 1	-	-	- \$m	from FS1 & 2
Regulatory Depreciation of System Fixed Assets		-		3m	irom AV
Ratio (%)	Not defined	Not defined	Not defined	Not defined %	
Distribution Transformer Capacity Utilisation					
Maximum Distribution Trensformer Demand	594	598	613		
Total Distribution Transformer Capacity (at year end*)	1,432	1,430	1,445	593 MW	
Ratio (%)	41.5%	41.8%	42.4%	1,462 KVA	from MP1
				40.076 %	
Return on Investment					
Regulatory Profit Loss (pre-financing and distributions)		-		- \$m	from FS1
less interest Tax Shield Adjustment			-	\$m	kom FSS
Adjusted Regulatory Profit			-	- \$m	
Regulatory Investment Value	Not defined	Not defired	Nat defice	\$m	from FS2
Ratio (%)		Not defined of Transfer with anoth	Not defined or EDB was englared to	Not defined %	
Europaditus compositore telefo			as time-weighted aver-		
Expenditure comparison table					
	Expe	nditure metrics	(\$ per):		
Total circuit langth (for	Electricity Supplied to Customers'	Maximum coincident		Distribution Transformer	
Supply)	Connection Points	system demand	Connection Point	Capacity (EDB- Owned)	
(\$/km)	(\$/MWh)	(S/MW)	(\$/ICF)	(\$/MVA)	
Capital Expenditure (\$) per			- 1		from FS2 & MP1
Operational Expenditure (\$) per				-	



MP2 - North Lichfield





# 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 - additional disclosure Breakpoint between small and medium classes Breakpoint between large and medium classes 69 kVA

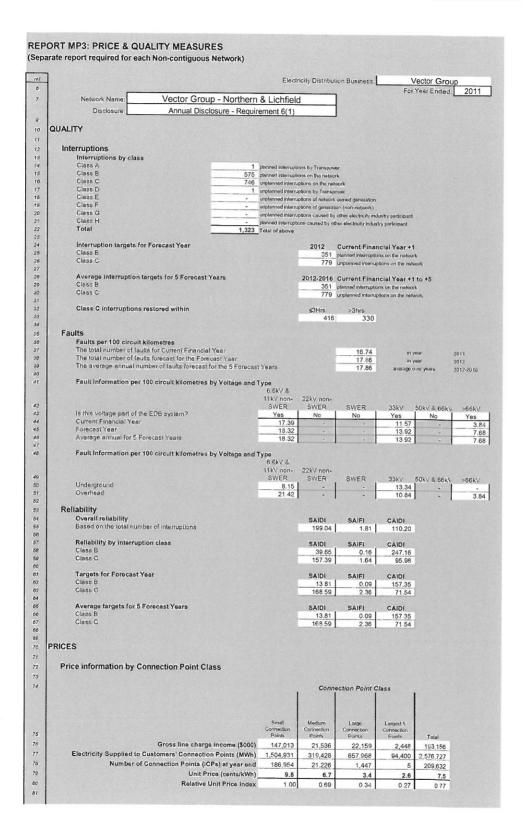


	Electricity Distribution Business Vector Group
	For Year Ended: 2011
Network Name: Vector Group - Au	
Disclosure Annual Disclosure - Requ	irement 6(1)
QUALITY	
Interruptions Interruptions by class	
Class A	planned interruptions by Transpower.
Class B 278 Class C 459	
Class D - Class E -	unplanned interruptions by Transpower unplanned interruptions of network owned generation
Class F	unplanned interruptions of generation (non-network)
Class G - Class H -	unplanned interruptions caused by other electricity industry participant planned interruptions caused by other electricity industry participant
	Total of above
Interruption targets for Forecast Year	2012 Current Financial Year +1
Class B Class C	95 planned interruptions on the network
	457 unplanned interruptions on the network.
Average interruption targets for 5 Forecast Years Class B	2012-2016 Current Financial Year +1 to +5 95 planned interruptions on the network
Class C	457 unplanned interruptions on the network
Class C interruptions restored within	≤3Hrs >3hrs
	291 168
Faults	
Faults per 100 circuit kilometres The total number of faults for Current Financial Year	14.31 in year 2011
The total number of faults forecast for the Forecast Year The average annual number of faults forecast for the 5 Foreca	13.88 in year 2012
Fault Information per 100 circuit kilometres by Voltage and	d Type 6.6kV &
	11kV non- 22kV non-
Is this voltage part of the EDB system?	SWER         SWER         SWER         33kV         50kV & 66k         >66k           Yes         Yes         No         Yes         No         Yes
Current Financial Year Forecast Year	16.15 3.80 - 4.32 - 2 15.65 5.06 - 4.65 - 2
Average annual for 5 Forecast Years	15.65 5.06 - 4.65 - 2
Fault Information per 100 circuit kilometres by Voltage and	
	6 6kV & 11kV non- 22kV non-
Underground	SWER SWER SWER 33kV 50kV 8 66kV >66kV
Overhead	7.88 3.87 - 2.36 - 2 34.46 - 15.19 -
Reliability	
Overall reliability	SAIDI SAIFI CAIDI
Based on the total number of interruptions	75.00 0.87 85.74
Reliability by interruption class	SAIDI SAIFI CAIDI
Class B Class C	7.83 0.05 143.10 67.15 0.82 81.90
Targets for Forecast Year	SAIDI SAIFI CAIDI
Class B	0.68 0.01 67.86
Class C	68.73 1.13 60.71
Average targets for 5 Forecast Years Class B	SAIDI SAIFI CAIDI 0.68 0.01 67.86
Class C	68.73 1.13 60.71
PRICES	
Price information by Connection Point Class	
	Connection Point Class
	Small Medium Large Largest 5 Connection Connection Connection
Gross line charge income (\$000	Points Points Points Total 0) 188,753 45,525 102,417 8,285 344 980
Electricity Supplied to Customers' Connection Points (MW)	2,134,687 629,974 2,535,802 412,111 5,712,574
Number of Connection Points (ICPs) at year en Unit Price (cents/kWi	d 296 646 20 395 4.507 5 321,553
	h) 8.8 7.2 4.0 2.0 6.0



# 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 - additional disclosure Breakpoint between reall and medium classes Breakpoint between large and medium classes Breakpoint between large and medium classes 69 kVA







## 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	15 kVA	
Breakpoint between large and medium classes	69 kVA	
	OF HEAD	



## 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; and
- 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 is consistent with the Electricity Distribution (Information Disclosure) Requirements 2008.

## Forecast methodology

Targets and forecasts submitted in the MP1 and MP3 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); and
- SAIDI and SAIFI targets (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 historic Wellington outages) for the period from 1 April 2004 to 31

## Maximum demand growth forecast

The maximum demand growth forecast (row 67 of MP1) is 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. Vector's Asset Management Plan also incorporates these predictions.

## Treatment of the Southdown cogeneration plant

The Southdown cogeneration plant which feeds into Transpower's Otahuhu-Henderson 220kV circuit has historically been treated as a notionally embedded generator in the Auckland region. Vector reviewed this in 2011 and concluded that, for the purposes of reporting actual physical quantities of GXP demand and electricity volumes carried, the physical rather than the contractual arrangement should be reported.

As a consequence, the Auckland and full network 'GXP Demand' value (row 53 of MP1) has increased by the value of Southdown's generation (relative to previous year's reporting). The 'embedded generation output' value (row 54 of MP1) has decreased by the same amount. This has no net effect on the 'maximum system demand' figure (row 55 of MP1).

The treatment in the financial data remains the same as in previous years.



			Elec	tricity Distribu	tion Business:	Vector 0	Broup
1						r Year Ended	2011
L	A) Five year forecasts of expenditure						(\$000)
ı	From most recent Asset Management Plan	Actual for		,	orecast Years		
ı		Current					
l		Financial Year	year 1	year 2	year 3	year 4	year 5
	for year ended	2011	2012	2013	2014	2015	2016
	Capital Expenditure Customer Connection	25,749	21,600	22,000	22,200	22,400	22,500
	Capital Expenditure System Growth	31,098	55,500	50.600	45,000	41,000	43,100
	Capital Expenditure. Reliability, Safety and Environment	2,587	3,400	4.000	3,800	3,200	2,800
	Capital Expenditure: Asset Replacement and Renewal	56,101	55,900	63,200	62,700	59,500	59,800
	Capital Expenditure: Asset Relocations	17,057	25,800	21,600	19,400	19,100	18,500
	Subtotal - Capital Expenditure on asset management	132,592	162,200	161,400	153,100	145,200	146,700
	Operational Expenditure Routine and Preventative Maintenance	45.450	40.000				
	Operational Expenditure: Refurbishment and Renewal Maintenance	15,159 10,315	19,600 11,600	19.800 12,000	19,700 11,900	19,900	19,900
	Operational Expenditure, Fault and Emergency Maintenance	13,148	13,000	13,100	13,100	11,900 13,200	11,000
	Subtotal - Operational Expenditure on asset management	38,622	44,200	44,900	44,700	45,000	13,300
						40,000	44,200
	Total direct expenditure on distribution network	171,214	206,400	206,300	197,800	190,200	190,900
	Overhead to Underground Conversion Expenditure	7.716	17,300	13,400	12,600	12,600	12,600
				10,400	12,000	12,000	12,600
	The Electricity Distribution Business is to provide the amount of Overhead to Underground Conversion Expenditure included in each of the above Expenditure Categories (explanatory						
E	B) Variance between Previous Forecast for the Current Financi	al Year, and Act		Previous			
E	B) Variance between Previous Forecast for the Current Financi	al Year, and Act	ual Expend Actual for Current Financial Year		% Variance		
E	B) Variance between Previous Forecast for the Current Financi	al Year, and Act	Actual for Current Financial	Previous forecast for Current Financial	% Variance (a)/(b)-1		
E	B) Variance between Previous Forecast for the Current Financi  Capital Expenditure Customer Connection	al Year, and Act	Actual for Current Financial Year	Previous forecast for Current Financial Year			
E	Capital Expenditure Customer Connection Capital Expenditure System Growth	al Year, and Act	Actual for Current Financial Year (a)	Previous forecast for Current Financial Year (b)	(a)/(b)-1		
E	Capital Expenditure Customer Connection Capital Expenditure System Growth Capital Expenditure, Reliability, Safety and Environment	al Year, and Act	Actual for Current Financial Year (a) 25,749	Previous forecast for Current Financial Year (b) 17,500	(a)/(b)-1 47.1%		
E	Capital Expenditure: Customer Connection Capital Expenditure: System Growth Capital Expenditure: Reliability, Safety and Environment Capital Expenditure: Asset Replacement and Renewal	al Year, and Act	Actual for Current Financial Year (a) 25,749 31,098	Previous forecast for Current Financial Year (b) 17,500 43,300	(a)/(b)-1 47.1% -28.2%		
E	Capital Expenditure: Customer Connection Capital Expenditure: System Growth Capital Expenditure: Reliability: Safety and Environment Capital Expenditure: Asset Replacement and Renewal Capital Expenditure: Asset Replacations	al Year, and Act	Actual for Current Financial Year (a) 25,749 31,098 2.587	Previous forecast for Current Financial Year (b) 17,500 43,300 4,500	(a)/(b)-1 47.1% -28.2% -42.5%		
E	Capital Expenditure: Customer Connection Capital Expenditure: System Growth Capital Expenditure: Reliability, Safety and Environment Capital Expenditure: Asset Replacement and Renewal	al Year, and Act	Actual for Current Financial Year (a) 25,749 31,098 2,587 56,101	Previous forecast for Current Financial Year (b) 17,500 43,300 4,500 47,500	(a)/(b)-1 47.1% -28.2% -42.5% 18.1%		
E	Capital Expenditure: Customer Connection Capital Expenditure: System Growth Capital Expenditure: Reliability: Safety and Erryironment Capital Expenditure: Asset Replacement and Renewal Capital Expenditure: Asset Relocations Subtotal - Capital Expenditure on asset management	al Year, and Act	Actual for Current Financial Year (a) 25,749 31,098 2.587 56,101 17,057 132,592	Previous forecast for Current Financial Year (b) 17,500 43,300 4,500 23,300 136,100	(a)/(b)-1 47.1% -28.2% -42.5% 18.1% -26.8% -2.6%		
E	Capital Expenditure: Customer Connection Capital Expenditure: System Growth Capital Expenditure: Reliability: Safety and Environment Capital Expenditure: Asset Replacement and Renewel Capital Expenditure: Asset Relocations Subtotal - Capital Expenditure on asset management Operational Expenditure: Routine and Preventative Maintenance	al Year, and Act	Actual for Current Financial Year (a) 25,749 31,098 2.587 56,101 17,057 132,592	Previous forecast for Current Financial Year (b) 17.500 43.300 4.500 23.300 136.100	(a)/(b)-1 47.1% -28.2% -42.5% 18.1% -26.8% -2.6%		
F	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	al Year, and Act	Actual for Current Financial Year (a) 25,749 31,098 2.587 56,101 17,057 132,592 15,159 10,315	Previous forecast for Current Financial Year (b) 17,500 43,300 4,500 23,300 136,100 13,700 11,800	(a)/(b)-1 47.1% -28.2% -42.5% 18.1% -26.8% -2.6% 10.6% -12.6%		
	Capital Expenditure: Customer Connection Capital Expenditure: System Crowth 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 Operational Expenditure: Fault and Emergency Maintenance	al Year, and Act	Actual for Current Financial Year (a) 25,749 31,098 2.587 56,101 17,057 132,592 15,159 10,315	Previous forecast for Current Financial Year (b) 17,500 43,300 4,500 23,300 136,100 11,800 14,900	(a)/(b)-1 47.1% -28.2% -42.5% 18.1% -26.8% -2.6% 10.6% -11.8%		
	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	al Year, and Act	Actual for Current Financial Year (a) 25,749 31,098 2.587 56,101 17,057 132,592 15,159 10,315	Previous forecast for Current Financial Year (b) 17,500 43,300 4,500 23,300 136,100 13,700 11,800	(a)/(b)-1 47.1% -28.2% -42.5% 18.1% -26.8% -2.6% 10.6% -12.6%		
E	Capital Expenditure: Customer Connection Capital Expenditure: System Growth Capital Expenditure: Reliability; Safety and Environment Capital Expenditure: Asset Replacement and Renewal Capital Expenditure: Asset Replacement 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	al Year, and Act	Actual for Current Financial Year (a) 25,749 31,098 2,587 56,101 17,057 132,592 15,159 10,315 13,148 38,622	Previous forecast for Current Financial Year (b) 17,500 43,300 4,500 47,500 136,100 14,900 40,400	(a)/(b)-1 47.1% -28.2% -42.5% 18.1% -26.8% -2.6% 10.6% -11.6% -11.8% -4.4%		
	Capital Expenditure: Customer Connection Capital Expenditure: System Crowth 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 Operational Expenditure: Fault and Emergency Maintenance	al Year, and Act	Actual for Current Financial Year (a) 25,749 31,098 2.587 56,101 17,057 132,592 15,159 10,315	Previous forecast for Current Financial Year (b) 17,500 43,300 4,500 23,300 136,100 11,800 14,900	(a)/(b)-1 47.1% -28.2% -42.5% 18.1% -26.8% -2.6% 10.6% -11.8%		
	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: Fault and Emergency Maintenance Subtotal - Operational Expenditure on asset management  Total direct expenditure on distribution network	al Year, and Act	Actual for Current Financial Year (a) 25,749 31,098 2,587 56,101 17,057 132,592 15,159 10,315 13,148 38,622	Previous forecast for Current Financial Year (b) 17,500 43,300 4,500 47,500 136,100 14,900 40,400	(a)/(b)-1 47.1% -28.2% -42.5% 18.1% -26.8% -2.6% 10.6% -11.6% -11.8% -4.4%		
	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: Replacement 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		Actual for Current Financial Year (a) 25,749 31,098 2,587 56,101 17,057 132,592 15,159 10,315 13,148 38,622	Previous forecast for Current Financial Year (b) 17,500 43,300 4,500 47,500 136,100 14,900 40,400	(a)/(b)-1 47.1% -28.2% -42.5% 18.1% -26.8% -2.6% 10.6% -11.6% -11.8% -4.4%		
	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: Fault and Emergency Maintenance Subtotal - Operational Expenditure on asset management  Total direct expenditure on distribution network		Actual for Current Financial Year (a) 25,749 31,098 2,587 56,101 17,057 132,592 15,159 10,315 13,148 38,622	Previous forecast for Current Financial Year (b) 17,500 43,300 4,500 47,500 136,100 14,900 40,400	(a)/(b)-1 47.1% -28.2% -42.5% 18.1% -26.8% -2.6% 10.6% -11.6% -11.8% -4.4%		
	Capital Expenditure: Customer Connection 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: Fault 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 varia		Actual for Current Financial Year (a) 25,749 31,098 2,587 56,101 17,057 132,592 15,159 10,315 13,148 38,622	Previous forecast for Current Financial Year (b) 17,500 43,300 4,500 47,500 136,100 14,900 40,400	(a)/(b)-1 47.1% -28.2% -42.5% 18.1% -26.8% -2.6% 10.6% -11.6% -11.8% -4.4%		
	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: Replacement 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		Actual for Current Financial Year (a) 25,749 31,098 2,587 56,101 17,057 132,592 15,159 10,315 13,148 38,622	Previous forecast for Current Financial Year (b) 17,500 43,300 4,500 47,500 136,100 14,900 40,400	(a)/(b)-1 47.1% -28.2% -42.5% 18.1% -26.8% -2.6% 10.6% -11.6% -11.8% -4.4%		
	Capital Expenditure: Customer Connection 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: Fault 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 varia		Actual for Current Financial Year (a) 25,749 31,098 2,587 56,101 17,057 132,592 15,159 10,315 13,148 38,622	Previous forecast for Current Financial Year (b) 17,500 43,300 4,500 47,500 136,100 14,900 40,400	(a)/(b)-1 47.1% -28.2% -42.5% 18.1% -26.8% -2.6% 10.6% -11.6% -11.8% -4.4%		
	Capital Expenditure: Customer Connection 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: Fault 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 varia		Actual for Current Financial Year (a) 25,749 31,098 2,587 56,101 17,057 132,592 15,159 10,315 13,148 38,622	Previous forecast for Current Financial Year (b) 17,500 43,300 4,500 47,500 136,100 14,900 40,400	(a)/(b)-1 47.1% -28.2% -42.5% 18.1% -26.8% -2.6% 10.6% -11.6% -11.8% -4.4%		
E	Capital Expenditure: Customer Connection 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: Fault 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 varia		Actual for Current Financial Year (a) 25,749 31,098 2,587 56,101 17,057 132,592 15,159 10,315 13,148 38,622	Previous forecast for Current Financial Year (b) 17,500 43,300 4,500 47,500 136,100 14,900 40,400	(a)/(b)-1 47.1% -28.2% -42.5% 18.1% -26.8% -2.6% 10.6% -11.6% -11.8% -4.4%		



AM1 AMP variance

Table B of report AM1 compares actual expenditure for the current year against the previously forecasted expenditure for that year, split by capital and operating expenditure. An explanation for variances more than 10% is provided below.

### Customer connection

The variance in relation to actual customer connection expenditure of \$25.7 million compared to the forecast expenditure of \$17.5 million is due to higher levels of expenditure for new connection work, disconnections, substation upgrade requests, subdivision activity (especially on the Northern network) and relocation requests from customers. The forecasts were set during uncertain economic times where it was difficult to predict levels of activity for these types of works. Actual activity proved to be higher than expected.

## System growth

Actual expenditure in the "System Growth" category was below forecast by \$12.2 million due to the following reasons.

## Network reinforcement

Expenditure incurred on upgrading the transformers at the Liverpool substation was \$2 million less than forecasted as at 31 March 2011. The purchase of land for a future substation in Newmarket did not proceed (\$2.5 million) while network reinforcements at Warkworth, Orewa and Remuera were deferred due to a reduction in demand against forecast (\$2.5 million).

#### Large customer projects

A number of large customer projects (\$5 million) forecasted in 2011 are now expected to occur in future periods as agreed with customers.

## Reliability, safety and environment

The forecast was under-spent by \$1.9 million as there has been a reduced need for some asset performance improvements.

## Asset replacement and renewal

The forecast was over spent by \$8.6 million. This was due to the acceleration of the Transpower Wairau Valley project and the Sandringham cable replacement project as well as an increase in the cost of reactive asset replacement projects.

## Asset relocations

Expenditure on the larger relocations was similar to last year's expenditure. However, expenditure on the smaller relocations projects increased, reflecting greater activity by the Council. The overhead improvement programme was approximately \$5 million below forecast due to project deferrals.

## Routine and preventative maintenance / Refurbishment and renewal maintenance

The expenditure in "Routine and Preventative Maintenance" was \$1.4 million over the forecast while the expenditure in the "Refurbishment and Renewal Maintenance" category was \$1.4 million below the forecast. This was in part due to some activities being re-categorised between the two groupings when comparing to the forecast and due to the re-prioritisation of some activities.

## Fault and emergency maintenance

Fault and emergency maintenance was \$1.7 million below the forecast as there were less faults than forecast during the period.

