



**EDB Information Disclosure Requirements
Information Templates
for
Schedules 11–12d**

Company Name	<input type="text" value="Vector Limited"/>
Disclosure Date	<input type="text" value="21 August 2013"/>
AMP Planning Period Start Date (first day)	<input type="text" value="1 April 2013"/>

Templates for Schedules 11a–12d (Asset Management Plan)
Template Version 2.0. Prepared 15 November 2012

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Schedule Description

Asset Management Plan Schedule Templates

- 11a [Report on Forecast Capital Expenditure](#)
- 11b [Report on Forecast Operational Expenditure](#)
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- 12b [Report on Forecast Capacity](#)
- 12c [Report on Forecast Demand](#)
- 12d [Report on Forecast Interruptions and Duration](#)

Disclosure Template Guidelines for Information Entry

These templates have been prepared for use by EDBs when making disclosures under subclauses 2.6.1(4), 2.6.1(5) and 2.6.5(5) of the Electricity Distribution Information Disclosure Determination 2012. Disclosures made under subclauses 2.6.1(4) and 2.6.1(5) must be made before the start of each disclosure year. Disclosures made under subclauses 2.6.5(5) must be made within 5 months after the start of the disclosure year. With the exception of Schedule 12b(ii) discussed below, the information disclosed under 2.6.5(5) should be identical to that disclosed under 2.6.1(4) and 2.6.1(5).

Company Name and Dates

To prepare the templates for disclosure, the supplier's company name should be entered in cell C8, the date of the first day of the 10 year planning period should be entered in cell C12, and the date on which the information is disclosed should be entered in cell C10 of the CoverSheet worksheet.

The cell C12 entry (planning period start date) is used to calculate disclosure years in the column headings that show above some of the tables. It is also used to calculate the AMP planning period dates in the template title blocks (the title blocks are the light green shaded areas at the top of each template).

The cell C8 entry (company name) is used in the template title blocks.

Dates should be entered in day/month/year order (Example -"1 April 2013").

Data Entry Cells and Calculated Cells

Data entered into this workbook may be entered only into the data entry cells. Data entry cells are the bordered, unshaded areas (white cells) in each template. Under no circumstances should data be entered into the workbook outside a data entry cell.

In some cases, where the information for disclosure is able to be ascertained from disclosures elsewhere in the workbook, such information is disclosed in a calculated cell. Under no circumstances should the formulas in a calculated cell be overwritten.

Validation Settings on Data Entry Cells

To maintain a consistency of format and to guard against errors in data entry, some data entry cells test entries for validity and accept only a limited range of values. For example, entries may be limited to a list of category names or to values between 0% and 100%. Where this occurs, a validation message will appear when data is being entered.

Conditional Formatting Settings on Data Entry Cells

Schedule 12a columns G to K contains conditional formatting. The cells will change colour if the row totals do not add to 100%.

Inserting Additional Rows

The templates for schedules 11a, 12b and 12c may require additional rows to be inserted in tables marked 'include additional rows if'. Additional rows must not be inserted directly above the first row or below the last row of a table. This is to ensure that entries made in the new row are included in the totals.

For schedule 12b the formula for column J will need to be copied into the inserted row(s).

Schedule 12b(ii)

The purpose of schedule 12b(ii) is to disclose transformer capacity as at the end of the current year. Because the information may not be available in time for disclosures made under subclause 2.6.1(4), but available for disclosures made under 2.6.5(5), the Commission intends to consider issuing an exemption from disclosing schedule 12b(ii) under subclause 2.6.1(4). Accordingly, the Excel template has been modified to allow the value "N/A" to be entered into these input cells.

Schedule 12d Report Forecast Interruptions and Duration sub-network disclosures

If the supplier has sub-networks, schedule 12d must be completed for the network and for each sub-network. A copy of the schedule 12d worksheet must be made for each sub-network.

Company Name	Vector Limited
AMP Planning Period	1 April 2013 – 31 March 2023

SCHEDULE 11a: REPORT ON FORECAST CAPITAL EXPENDITURE

This schedule requires a breakdown of forecast expenditure on assets for the current disclosure year and a 10 year planning period. The forecasts should be consistent with the supporting information set out in the AMP. The forecast is to be expressed in both constant price and nominal dollar terms. Also required is a forecast of the value of commissioned assets (i.e., the value of RAB additions)
 EDBs must provide explanatory comment on the difference between constant price and nominal dollar forecasts of expenditure on assets in Schedule 14a (Mandatory Explanatory Notes).
 This information is not part of audited disclosure information.

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	Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5	CY+6	CY+7	CY+8	CY+9	CY+10
	for year ended 31 Mar 13	31 Mar 14	31 Mar 15	31 Mar 16	31 Mar 17	31 Mar 18	31 Mar 19	31 Mar 20	31 Mar 21	31 Mar 22	31 Mar 23
11a(i): Expenditure on Assets Forecast	\$000 (in nominal dollars)										
Consumer connection	24,838	23,383	23,957	24,497	25,034	25,637	25,810	26,299	26,925	27,447	28,086
System growth	55,338	47,179	42,611	39,849	36,305	36,643	28,996	28,405	31,589	29,309	32,598
Asset replacement and renewal	65,694	57,112	60,700	58,969	63,057	63,122	66,845	66,213	64,140	62,487	64,605
Asset relocations	24,820	20,757	22,206	20,831	19,489	19,604	20,289	20,862	21,383	21,918	22,466
Reliability, safety and environment:											
Quality of supply	6,909	1,124	1,267	1,296	1,328	1,362	1,396	1,430	1,466	1,503	1,540
Legislative and regulatory	-	2,953	2,863	2,984	2,585	2,388	3,136	2,365	1,304	1,084	1,111
Other reliability, safety and environment	-	1,731	1,643	1,532	1,463	1,480	1,517	1,555	1,594	1,634	1,675
Total reliability, safety and environment	6,909	5,808	5,774	5,812	5,376	5,230	6,049	5,350	4,364	4,220	4,326
Expenditure on network assets	177,599	154,239	155,249	149,958	149,261	150,237	147,988	147,128	148,401	145,381	152,080
Non-network assets	12,810	12,064	12,152	12,352	12,460	9,787	9,313	9,047	9,678	9,561	9,614
Expenditure on assets	190,409	166,303	167,401	162,310	161,721	160,023	157,301	156,176	158,079	154,942	161,694
<i>plus</i> Cost of financing	1,631	3,265	3,220	3,105	3,036	3,032	2,893	2,873	2,946	2,877	3,026
<i>less</i> Value of capital contributions	25,122	26,623	29,412	27,863	26,223	26,394	27,172	27,768	28,446	29,003	29,677
<i>plus</i> Value of vested assets	-	-	-	-	-	-	-	-	-	-	-
Capital expenditure forecast	166,918	142,946	141,209	137,552	138,534	136,661	133,022	131,280	132,579	128,816	135,043
Value of commissioned assets	166,918	154,029	144,545	150,683	154,988	143,676	137,392	132,575	136,828	125,991	142,014
	Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5	CY+6	CY+7	CY+8	CY+9	CY+10
	for year ended 31 Mar 13	31 Mar 14	31 Mar 15	31 Mar 16	31 Mar 17	31 Mar 18	31 Mar 19	31 Mar 20	31 Mar 21	31 Mar 22	31 Mar 23
	\$000 (in constant prices)										
Consumer connection	24,838	23,075	23,224	23,220	23,156	23,134	22,725	22,589	22,562	22,439	22,401
System growth	55,338	46,570	41,327	37,784	33,601	33,063	25,575	24,389	26,461	23,980	25,981
Asset replacement and renewal	65,694	56,378	58,825	55,920	58,301	56,977	58,832	56,888	53,760	51,097	51,521
Asset relocations	24,820	20,484	21,522	19,758	18,033	17,691	17,861	17,918	17,918	17,918	17,918
Reliability, safety and environment:											
Quality of supply	6,909	1,107	1,229	1,229	1,229	1,229	1,229	1,229	1,229	1,229	1,229
Legislative and regulatory	-	2,907	2,779	2,827	2,395	2,156	2,757	2,037	1,096	886	886
Other reliability, safety and environment	-	1,710	1,593	1,453	1,353	1,336	1,336	1,336	1,336	1,336	1,336
Total reliability, safety and environment	6,909	5,725	5,600	5,508	4,976	4,720	5,321	4,601	3,660	3,450	3,450
Expenditure on network assets	177,599	152,232	150,497	142,191	138,068	135,585	130,315	126,385	124,361	118,883	121,271
Non-network assets	12,810	11,910	11,779	11,709	11,526	8,848	8,197	7,774	8,107	7,819	7,668
Expenditure on assets	190,409	164,142	162,276	153,900	149,593	144,432	138,512	134,159	132,468	126,703	128,939

Company Name	Vector Limited
AMP Planning Period	1 April 2013 – 31 March 2023

SCHEDULE 11a: REPORT ON FORECAST CAPITAL EXPENDITURE

This schedule requires a breakdown of forecast expenditure on assets for the current disclosure year and a 10 year planning period. The forecasts should be consistent with the supporting information set out in the AMP. The forecast is to be expressed in both constant price and nominal dollar terms. Also required is a forecast of the value of commissioned assets (i.e., the value of RAB additions)
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	Current Year CY for year ended 31 Mar 13	CY+1 31 Mar 14	CY+2 31 Mar 15	CY+3 31 Mar 16	CY+4 31 Mar 17	CY+5 31 Mar 18	CY+6 31 Mar 19	CY+7 31 Mar 20	CY+8 31 Mar 21	CY+9 31 Mar 22	CY+10 31 Mar 23
Subcomponents of expenditure on assets (where known)											
Energy efficiency and demand side management, reduction of energy losses	-	-	-	-	-	-	-	-	-	-	-
Overhead to underground conversion	13,727	12,841	12,841	12,841	12,841	12,841	12,841	12,841	12,841	12,841	12,841
Research and development	1,792	2,388	1,911	1,911	1,911	1,911	1,911	1,911	1,911	1,911	1,911

	Current Year CY for year ended 31 Mar 13	CY+1 31 Mar 14	CY+2 31 Mar 15	CY+3 31 Mar 16	CY+4 31 Mar 17	CY+5 31 Mar 18	CY+6 31 Mar 19	CY+7 31 Mar 20	CY+8 31 Mar 21	CY+9 31 Mar 22	CY+10 31 Mar 23
Difference between nominal and constant price forecasts	\$000										
Consumer connection	-	309	734	1,277	1,878	2,502	3,085	3,711	4,363	5,008	5,685
System growth	-	610	1,284	2,065	2,703	3,581	3,421	4,016	5,129	5,330	6,617
Asset replacement and renewal	-	733	1,875	3,049	4,755	6,145	8,012	9,325	10,380	11,391	13,084
Asset relocations	-	273	684	1,073	1,456	1,914	2,428	2,943	3,465	4,000	4,547
Reliability, safety and environment:											
Quality of supply	-	16	39	68	100	133	167	202	238	274	312
Legislative and regulatory	-	46	85	157	191	233	379	328	207	198	225
Other reliability, safety and environment	-	21	50	79	109	144	181	219	258	298	339
Total reliability, safety and environment	-	83	174	304	400	510	727	749	703	770	876
Expenditure on network assets	-	2,008	4,751	7,767	11,193	14,652	17,674	20,744	24,039	26,498	30,809
Non-network assets	-	154	373	643	934	939	1,115	1,273	1,571	1,742	1,946
Expenditure on assets	-	2,162	5,124	8,410	12,127	15,591	18,789	22,017	25,611	28,240	32,755

	Current Year CY for year ended 31 Mar 13	CY+1 31 Mar 14	CY+2 31 Mar 15	CY+3 31 Mar 16	CY+4 31 Mar 17	CY+5 31 Mar 18
11a(ii): Consumer Connection						
<i>Consumer types defined by EDB*</i>						
\$000 (in constant prices)						
Service connection	8,959	9,116	9,116	9,044	9,020	
Substations (business customers)	6,071	6,040	6,040	6,040	6,040	
Business subdivisions	1,253	1,329	1,329	1,333	1,334	
Residential subdivisions	4,421	4,273	4,270	4,272	4,273	
Capacity change business customers	2,028	2,068	2,068	2,068	2,068	
2013 total connection	24,838					
Easements business customers		344	398	398	399	399
<i>*include additional rows if needed</i>						
Consumer connection expenditure	24,838	23,075	23,224	23,220	23,156	23,134
less Capital contributions funding consumer connection	17,961	17,750	17,913	17,911	17,845	17,823
Consumer connection less capital contributions	6,877	5,325	5,311	5,309	5,311	5,312

SCHEDULE 11a: REPORT ON FORECAST CAPITAL EXPENDITURE

This schedule requires a breakdown of forecast expenditure on assets for the current disclosure year and a 10 year planning period. The forecasts should be consistent with the supporting information set out in the AMP. The forecast is to be expressed in both constant price and nominal dollar terms. Also required is a forecast of the value of commissioned assets (i.e., the value of RAB additions)
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	Current Year CY for year ended	CY+1 31 Mar 14	CY+2 31 Mar 15	CY+3 31 Mar 16	CY+4 31 Mar 17	CY+5 31 Mar 18
85 11a(iii): System Growth						
86 Subtransmission		7,105	13,469	10,446	3,653	2,444
87 Zone substations		20,944	15,809	14,580	17,962	17,299
88 Distribution and LV lines		583	528	519	517	324
89 Distribution and LV cables		15,356	8,837	9,358	8,358	8,838
90 Distribution substations and transformers		744	771	814	719	692
91 Distribution switchgear		1,502	1,606	1,648	2,115	3,262
2013 total system growth	55,338					
92 Other network assets		336	307	419	277	204
93 System growth expenditure	55,338	46,570	41,327	37,784	33,601	33,063
94 less Capital contributions funding system growth	1,002	-	-	-	-	-
95 System growth less capital contributions	54,336	46,570	41,327	37,784	33,601	33,063

	Current Year CY for year ended	CY+1 31 Mar 14	CY+2 31 Mar 15	CY+3 31 Mar 16	CY+4 31 Mar 17	CY+5 31 Mar 18
103 11a(iv): Asset Replacement and Renewal						
104						
105						
106 Subtransmission		4,022	7,026	6,269	6,285	5,222
107 Zone substations		17,008	16,934	14,849	15,347	16,357
108 Distribution and LV lines		16,912	16,733	16,777	16,738	16,758
109 Distribution and LV cables		8,295	8,197	8,219	8,200	8,210
110 Distribution substations and transformers		3,948	3,906	3,916	3,907	3,912
111 Distribution switchgear		5,400	5,217	5,171	5,160	5,166
2013 total asset replacement	65,694					
112 Other network assets		794	811	719	2,664	1,352
113 Asset replacement and renewal expenditure	65,694	56,378	58,825	55,920	58,301	56,977
114 less Capital contributions funding asset replacement and renewal	157	-	-	-	-	-
115 Asset replacement and renewal less capital contributions	65,537	56,378	58,825	55,920	58,301	56,977

	Current Year CY for year ended	CY+1 31 Mar 14	CY+2 31 Mar 15	CY+3 31 Mar 16	CY+4 31 Mar 17	CY+5 31 Mar 18
116 11a(v): Asset Relocations						
117 <i>Project or programme*</i>						
118 Major project 1		566	591	622	622	155
119 Major project 2		93	1,150	373	-	-
120 Major project 3		949	1,244	311	-	-
121 Major project 4		-	-	-	47	1,135
2013 total asset relocation	24,820					
122 Overhead improvement programme		12,841	12,841	12,841	12,841	12,841
123 <i>*include additional rows if needed</i>						
124 All other asset relocations projects or programmes		6,035	5,696	5,612	4,523	3,560
125 Asset relocations expenditure	24,820	20,484	21,522	19,758	18,033	17,691
126 less Capital contributions funding asset relocations	6,001	8,409	10,471	8,344	6,263	5,850
127 Asset relocations less capital contributions	18,818	12,075	11,051	11,415	11,770	11,841

Company Name	Vector Limited
AMP Planning Period	1 April 2013 – 31 March 2023

SCHEDULE 11a: REPORT ON FORECAST CAPITAL EXPENDITURE

This schedule requires a breakdown of forecast expenditure on assets for the current disclosure year and a 10 year planning period. The forecasts should be consistent with the supporting information set out in the AMP. The forecast is to be expressed in both constant price and nominal dollar terms. Also required is a forecast of the value of commissioned assets (i.e., the value of RAB additions)
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	Current Year CY for year ended	CY+1 31 Mar 14	CY+2 31 Mar 15	CY+3 31 Mar 16	CY+4 31 Mar 17	CY+5 31 Mar 18
128						
129	11a(vi):Quality of Supply					
130	<i>Project or programme*</i>					
131	Northern - Distribution Substation Automation	329	439	439	439	439
132	Southern - Distribution Substation Automation	420	439	439	439	439
133	Northern - Power Quality Monitoring	179	176	176	176	176
134	Southern - Power Quality Monitoring	179	176	176	176	176
135	2013 total reliability	6,909				
136	<i>*include additional rows if needed</i>					
137	All other quality of supply projects or programmes	-	-	-	-	-
138	Quality of supply expenditure	6,909	1,107	1,229	1,229	1,229
139	less Capital contributions funding quality of supply	-	-	-	-	-
140	Quality of supply less capital contributions	6,909	1,107	1,229	1,229	1,229
141						
142	11a(vii): Legislative and Regulatory					
143	<i>Project or programme*</i>					
144	Major project 1	332	443	443	443	443
145	Major project 2	332	443	443	443	443
146	Major project 3	714	238	-	-	-
147	Major project 4	-	664	221	-	-
148						
149	<i>*include additional rows if needed</i>					
150	All other legislative and regulatory projects or programmes	1,529	990	1,720	1,509	1,270
151	Legislative and regulatory expenditure	2,907	2,779	2,827	2,395	2,156
152	less Capital contributions funding legislative and regulatory	-	-	-	-	-
153	Legislative and regulatory less capital contributions	2,907	2,779	2,827	2,395	2,156
161						
162						
163	11a(viii): Other Reliability, Safety and Environm					
164	<i>Project or programme*</i>					
165	\$000 (in constant prices)					
166	Northern - Reliability Improvements	602	646	646	646	646
167	Southern - Reliability Improvements	704	689	689	689	689
168						
169						
170	<i>*include additional rows if needed</i>					
171	All other reliability, safety and environment projects or programmes	404	258	117	18	-
172	Other reliability, safety and environment expenditure	1,710	1,593	1,453	1,353	1,336
173	less Capital contributions funding other reliability, safety and environment	-	-	-	-	-
174	Other reliability, safety and environment less capital contributions	1,710	1,593	1,453	1,353	1,336
175						

Company Name	Vector Limited
AMP Planning Period	1 April 2013 – 31 March 2023

SCHEDULE 11a: REPORT ON FORECAST CAPITAL EXPENDITURE

This schedule requires a breakdown of forecast expenditure on assets for the current disclosure year and a 10 year planning period. The forecasts should be consistent with the supporting information set out in the AMP. The forecast is to be expressed in both constant price and nominal dollar terms. Also required is a forecast of the value of commissioned assets (i.e., the value of RAB additions)
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	Current Year CY for year ended	CY+1 31 Mar 14	CY+2 31 Mar 15	CY+3 31 Mar 16	CY+4 31 Mar 17	CY+5 31 Mar 18
178 11a(ix): Non-Network Assets						
179 Routine expenditure						
180 <i>Project or programme*</i>						
181 Systems Integration	1,206	973	608	486	486	486
182 Reporting		340	340	340	340	340
183 ALIS		547	669	547	486	486
184 Others	10,273	8,675	8,654	8,998	8,595	5,784
185						
186 <i>*include additional rows if needed</i>						
187 All other routine expenditure projects or programmes	101	-	-	-	-	-
188 Routine expenditure	11,579	10,536	10,271	10,372	9,909	7,097
189 Atypical expenditure						
190 <i>Project or programme*</i>						
191 Geospatial Systems	909	717	450	353	292	292
192 Outage Management		280	207	195	778	973
193 Power Systems Modelling		195	243	243	61	-
194						
195						
196 <i>*include additional rows if needed</i>						
197 All other atypical projects or programmes	322	182	608	547	486	486
198 Atypical expenditure	1,231	1,374	1,508	1,338	1,617	1,751
199						
200 Non-network assets expenditure	12,810	11,910	11,779	11,709	11,526	8,848

Company Name	Vector Limited
AMP Planning Period	1 April 2013 – 31 March 2023

SCHEDULE 11b: REPORT ON FORECAST OPERATIONAL EXPENDITURE

This schedule requires a breakdown of forecast operational expenditure for the disclosure year and a 10 year planning period. The forecasts should be consistent with the supporting information set out in the AMP. The forecast is to be expressed in both constant price and nominal dollar terms. EDBs must provide explanatory comment on the difference between constant price and nominal dollar operational expenditure forecasts in Schedule 14a (Mandatory Explanatory Notes). This information is not part of audited disclosure information.

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	Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5	CY+6	CY+7	CY+8	CY+9	CY+10	
	for year ended	31 Mar 13	31 Mar 14	31 Mar 15	31 Mar 16	31 Mar 17	31 Mar 18	31 Mar 19	31 Mar 20	31 Mar 21	31 Mar 22	31 Mar 23
Operational Expenditure Forecast	\$000 (in nominal dollars)											
Service interruptions and emergencies	11,555	6,915	7,149	7,307	7,507	7,696	7,885	8,076	8,276	8,479	8,689	
Vegetation management	4,630	4,587	4,815	4,924	5,046	5,172	5,301	5,434	5,570	5,709	5,852	
Routine and corrective maintenance and inspection	9,865	12,167	11,951	12,055	12,468	12,920	13,411	13,946	14,528	15,161	15,849	
Asset replacement and renewal	10,637	11,179	11,631	11,895	11,869	12,138	12,557	13,004	13,479	13,985	14,524	
Network Opex	36,687	34,848	35,546	36,181	36,890	37,926	39,155	40,460	41,852	43,333	44,914	
System operations and network support	36,971	42,716	43,781	44,838	45,949	47,098	47,989	49,093	50,321	51,579	52,868	
Business support	29,868	29,462	29,994	30,674	31,434	32,220	33,026	33,851	34,698	35,565	36,454	
Non-network opex	66,839	72,178	73,774	75,511	77,384	79,318	81,015	82,945	85,018	87,144	89,322	
Operational expenditure	103,526	107,025	109,320	111,692	114,274	117,244	120,170	123,404	126,871	130,477	134,236	

	Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5	CY+6	CY+7	CY+8	CY+9	CY+10	
	for year ended	31 Mar 13	31 Mar 14	31 Mar 15	31 Mar 16	31 Mar 17	31 Mar 18	31 Mar 19	31 Mar 20	31 Mar 21	31 Mar 22	31 Mar 23
	\$000 (in constant prices)											
Service interruptions and emergencies	11,555	6,823	6,930	6,926	6,943	6,945	6,942	6,936	6,935	6,932	6,931	
Vegetation management	4,630	4,525	4,667	4,667	4,667	4,667	4,667	4,667	4,667	4,667	4,667	
Routine and corrective maintenance and inspection	9,865	12,004	11,588	11,427	11,532	11,658	11,806	11,978	12,173	12,393	12,640	
Asset replacement and renewal	10,637	11,029	11,275	11,275	10,980	10,952	11,055	11,169	11,294	11,432	11,583	
Network Opex	36,687	34,381	34,460	34,295	34,123	34,223	34,470	34,750	35,069	35,424	35,821	
System operations and network support	36,971	42,154	42,439	42,501	42,501	42,501	42,250	42,167	42,167	42,167	42,167	
Business support	29,868	29,075	29,075	29,075	29,075	29,075	29,075	29,075	29,075	29,075	29,075	
Non-network opex	66,839	71,229	71,515	71,576	71,576	71,576	71,325	71,242	71,242	71,242	71,242	
Operational expenditure	103,526	105,610	105,975	105,871	105,699	105,799	105,796	105,992	106,311	106,666	107,063	

Subcomponents of operational expenditure (where known)

Energy efficiency and demand side management, reduction of energy losses	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Direct billing*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Research and Development	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Insurance	3,347	3,774	4,219	4,673	4,907	4,907	4,907	4,907	4,907	4,907	4,907

* Direct billing expenditure by suppliers that direct bill the majority of their consumers

Company Name **Vector Limited**
 AMP Planning Period **1 April 2013 – 31 March 2023**

SCHEDULE 11b: REPORT ON FORECAST OPERATIONAL EXPENDITURE

This schedule requires a breakdown of forecast operational expenditure for the disclosure year and a 10 year planning period. The forecasts should be consistent with the supporting information set out in the AMP. The forecast is to be expressed in both constant price and nominal dollar terms. EDBs must provide explanatory comment on the difference between constant price and nominal dollar operational expenditure forecasts in Schedule 14a (Mandatory Explanatory Notes). This information is not part of audited disclosure information.

sch ref

		Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5	CY+6	CY+7	CY+8	CY+9	CY+10
	for year ended	31 Mar 13	31 Mar 14	31 Mar 15	31 Mar 16	31 Mar 17	31 Mar 18	31 Mar 19	31 Mar 20	31 Mar 21	31 Mar 22	31 Mar 23
41	Difference between nominal and real forecasts	\$000										
42	Service interruptions and emergencies	-	92	219	381	564	751	943	1,139	1,341	1,547	1,759
43	Vegetation management	-	62	147	257	379	505	634	767	903	1,042	1,185
44	Routine and corrective maintenance and inspection	-	163	363	629	936	1,262	1,605	1,968	2,355	2,768	3,209
45	Asset replacement and renewal	-	150	356	620	889	1,185	1,503	1,835	2,185	2,553	2,941
46	Network Opex	-	467	1,085	1,886	2,767	3,703	4,685	5,710	6,783	7,909	9,093
47	System operations and network support	-	562	1,341	2,337	3,448	4,597	5,739	6,927	8,154	9,412	10,701
48	Business support	-	386	918	1,599	2,359	3,145	3,950	4,776	5,622	6,490	7,379
49	Non-network opex	-	948	2,260	3,935	5,808	7,742	9,689	11,703	13,776	15,902	18,080
50	Operational expenditure	-	1,415	3,345	5,821	8,575	11,445	14,374	17,413	20,560	23,811	27,174

Company Name	Vector Limited
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SCHEDULE 12a: REPORT ON ASSET CONDITION

This schedule requires a breakdown of asset condition by asset class as at the start of the forecast year. The data accuracy assessment relates to the percentage values disclosed in the asset condition columns. Also required is a forecast of the percentage of units to be replaced in the next 5 years. All information should be consistent with the information provided in the AMP and the expenditure on assets forecast in Schedule 11a. All units relating to cable and line assets, that are expressed in km, refer to circuit lengths.

sch ref		Asset condition at start of planning period (percentage of units by grade)									
Voltage	Asset category	Asset class	Units	Grade 1	Grade 2	Grade 3	Grade 4	Grade unknown	Data accuracy (1-4)	% of asset forecast to be replaced in next 5 years	
7											
8											
9	All	Overhead Line	Concrete poles / steel structure	No.	0.3%	0.0%	43.7%	56.0%	3	5.6%	
10	All	Overhead Line	Wood poles	No.	0.9%	0.0%	56.8%	42.3%	2	1.0%	
11	All	Overhead Line	Other pole types	No.				100.0%	4	-	
12	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km			82.2%	17.8%	4	-	
13	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km			96.8%	3.2%	4	-	
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km		0.1%	11.4%	88.5%	4	5.4%	
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km		3.4%	96.2%	0.4%	4	3.3%	
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km		44.5%	55.5%		4	100.0%	
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km		5.5%	88.4%	6.2%	3	16.7%	
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km				100.0%	4	-	
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km			99.8%	0.2%	4	27.9%	
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km					N/A	-	
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km					N/A	-	
22	HV	Subtransmission Cable	Subtransmission submarine cable	km			97.8%	2.2%	4	-	
23	HV	Zone substation Buildings	Zone substations up to 66kV	No.		3.7%	71.6%	24.6%	2	4.5%	
24	HV	Zone substation Buildings	Zone substations 110kV+	No.			100.0%		3	-	
25	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.				100.0%	4	-	
26	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.				100.0%	4	-	
27	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.					N/A	-	
28	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.			82.7%	17.3%	4	-	
29	HV	Zone substation switchgear	33kV RMU	No.				100.0%	4	-	
30	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.		10.8%	12.7%	76.4%	4	10.8%	
31	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.		12.1%	86.3%	1.6%	4	12.1%	
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.		11.6%	37.7%	50.7%	4	20.7%	
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.					N/A	-	
34											

Company Name	Vector Limited
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SCHEDULE 12a: REPORT ON ASSET CONDITION

This schedule requires a breakdown of asset condition by asset class as at the start of the forecast year. The data accuracy assessment relates to the percentage values disclosed in the asset condition columns. Also required is a forecast of the percentage of units to be replaced in the next 5 years. All information should be consistent with the information provided in the AMP and the expenditure on assets forecast in Schedule 11a. All units relating to cable and line assets, that are expressed in km, refer to circuit lengths.

sch ref

		Asset condition at start of planning period (percentage of units by grade)									
Voltage	Asset category	Asset class	Units	Grade 1	Grade 2	Grade 3	Grade 4	Grade unknown	Data accuracy (1-4)	% of asset forecast to be replaced in next 5 years	
42											
43											
44											
45	HV	Zone Substation Transformer	Zone Substation Transformers	No.	1.0%	2.4%	49.5%	47.1%	4	4.4%	
46	HV	Distribution Line	Distribution OH Open Wire Conductor	km		0.0%	88.6%	11.4%	4	0.3%	
47	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km					N/A	-	
48	HV	Distribution Line	SWER conductor	km					N/A	-	
49	HV	Distribution Cable	Distribution UG XLPE or PVC	km	0.0%	0.1%	7.3%	92.6%	4	4.7%	
50	HV	Distribution Cable	Distribution UG PILC	km	0.0%	0.3%	62.0%	37.8%	4	2.3%	
51	HV	Distribution Cable	Distribution Submarine Cable	km			100.0%		4	-	
52	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	1.2%			98.8%	4	10.2%	
53	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.			19.2%	80.8%	4	-	
54	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	2.1%	4.1%	14.0%	79.8%	4	10.3%	
55	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.			22.7%	77.3%	4	6.6%	
56	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.			13.2%	86.8%	4	4.7%	
57	HV	Distribution Transformer	Pole Mounted Transformer	No.	0.3%	0.0%	14.2%	85.5%	4	10.6%	
58	HV	Distribution Transformer	Ground Mounted Transformer	No.	1.0%	0.3%	17.1%	81.6%	4	5.1%	
59	HV	Distribution Transformer	Voltage regulators	No.			14.3%	85.7%	3	-	
60	HV	Distribution Substations	Ground Mounted Substation Housing	No.	0.9%	1.8%	21.7%	75.6%	4	3.0%	
61	LV	LV Line	LV OH Conductor	km			92.5%	7.5%	4	0.2%	
62	LV	LV Cable	LV UG Cable	km		0.0%	47.1%	52.9%	4	0.1%	
63	LV	LV Streetlighting	LV OH/UG Streetlight circuit	km					100.00%	3	0.1%
64	LV	Connections	OH/UG consumer service connections	No.					100.00%	4	-
65	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	3.6%	11.5%	45.6%	39.4%	4	16.5%	
66	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot		12.6%		87.4%	4	13.0%	
67	All	Capacitor Banks	Capacitors including controls	No.			96.2%	3.8%	4	-	
68	All	Load Control	Centralised plant	Lot			100.0%		2	-	
69	All	Load Control	Relays	No.					N/A	-	
70	All	Civils	Cable Tunnels	km			8.7%	91.3%	4	-	

Company Name	Vector Limited
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SCHEDULE 12b: REPORT ON FORECAST CAPACITY

This schedule requires a breakdown of current and forecast capacity and utilisation for each zone substation and current distribution transformer capacity. The data provided should be consistent with the information provided in the AMP. Information provided in this table should relate to the operation of the network in its normal steady state configuration.

sch ref

12b(i): System Growth - Zone Substations

Existing Zone Substations	Current Peak Load (MVA)	Installed Firm Capacity (MVA)	Security of Supply Classification (type)	Transfer Capacity (MVA)	Utilisation of Installed Firm Capacity %	Installed Firm Capacity +5 years (MVA)	Utilisation of Installed Firm Capacity + 5yrs %	Installed Firm Capacity Constraint +5 years (cause)	Explanation
Atkinson Road	19	20	N-1	20	95%	20	98%	No constraint within +5 years	Meets Vector security criteria
Auckland Airport	18	25	N-1	-	71%	25	107%	Transformer	Meets Customer security criteria, any upgrade is initiated by customer
Avondale	30	20	N-1 switched	24	149%	20	156%	No constraint within +5 years	Meets Vector security criteria
Bairds	27	20	N-1 switched	26	133%	20	137%	No constraint within +5 years	Meets Vector security criteria
Balmain	9	-	N	13	-	-	-	No constraint within +5 years	Meets Vector security criteria
Balmoral	18	12	N-1 switched	13	149%	20	92%	No constraint within +5 years	Meets Vector security criteria
Belmont	14	13	N-1 switched	11	109%	13	113%	No constraint within +5 years	Meets Vector security criteria
Birkdale	23	16	N-1 switched	17	144%	20	119%	No constraint within +5 years	Meets Vector security criteria - Transformer upgrade planned within 5 years
Brickworks	8	-	N	8	-	15	58%	No constraint within +5 years	Meets Vector security criteria - Second transformer installation planned within 5 years
Browns Bay	17	13	N-1 switched	18	135%	13	143%	No constraint within +5 years	Meets Vector security criteria
Bush Road	26	24	N-1 switched	13	109%	24	112%	No constraint within +5 years	Meets Vector security criteria
Carbine	18	20	N-1	19	92%	20	98%	No constraint within +5 years	Meets Vector security criteria
Chevalier	20	20	N-1	16	98%	20	101%	No constraint within +5 years	Meets Vector security criteria
Clendon	19	20	N-1	19	93%	20	95%	No constraint within +5 years	Meets Vector security criteria
Clevedon	3	-	N	4	-	-	-	No constraint within +5 years	Meets Vector security criteria
Coatesville	10	-	N	10	-	20	54%	No constraint within +5 years	Meets Vector security criteria - Second transformer installation planned within 5 years
Drive	28	20	N-1 switched	27	141%	20	151%	No constraint within +5 years	Meets Vector security criteria
East Coast Road	17	-	N	13	-	-	-	No constraint within +5 years	Meets Vector security criteria - Planned Rosedale substation will reduce the load at East Coast Rd
East Tamaki	17	20	N-1	8	84%	20	84%	No constraint within +5 years	Meets Vector security criteria
Forrest Hill	19	20	N-1	17	93%	20	96%	No constraint within +5 years	Meets Vector security criteria
Freemans Bay	20	18	N-1 switched	19	113%	18	126%	No constraint within +5 years	Meets Vector security criteria
Glen Innes	10	12	N-1	12	87%	20	55%	No constraint within +5 years	Meets Vector security criteria, transformer change as part of asset replacement programme
Greenhithe	14	-	N	10	-	20	79%	No constraint within +5 years	Meets Vector security criteria - Second transformer installation planned within 5 years
Greenmount	39	40	N-1	29	97%	40	98%	No constraint within +5 years	Meets Vector security criteria
Gulf Harbour	8	-	N	13	-	-	-	No constraint within +5 years	Meets Vector security criteria
Hans	25	20	N-1 switched	11	124%	20	129%	No constraint within +5 years	Meets Vector security criteria
Hauraki	9	-	N	10	-	-	-	No constraint within +5 years	Meets Vector security criteria
Helensville	13	8	N-1 switched	10	176%	8	191%	No constraint within +5 years	Meets Vector security criteria
Henderson Valley	18	16	N-1 switched	19	112%	16	118%	No constraint within +5 years	Meets Vector security criteria
Highbrook	5	-	N	-	-	-	-	No constraint within +5 years	Switching Station
Highbury	14	-	N	10	-	15	96%	No constraint within +5 years	Meets Vector security criteria - Second transformer installation planned within 5 years
Hillcrest	24	24	N-1	23	98%	24	105%	No constraint within +5 years	Meets Vector security criteria
Hillsborough	15	-	N	18	-	20	80%	No constraint within +5 years	Meets Vector security criteria - Second transformer currently being installed
Hobson 110/11kV	22	25	N-1	15	87%	25	91%	No constraint within +5 years	Meets Vector security criteria
Hobson 22/11kV	20	15	N-1 switched	16	134%	15	143%	No constraint within +5 years	Meets Vector security criteria

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SCHEDULE 12b: REPORT ON FORECAST CAPACITY

This schedule requires a breakdown of current and forecast capacity and utilisation for each zone substation and current distribution transformer capacity. The data provided should be consistent with the information provided in the AMP. Information provided in this table should relate to the operation of the network in its normal steady state configuration.

sch ref

Hobson 22kV	72	40	N-1 switched	37	181%	80	102%	No constraint within +5 years	Meets Vector security criteria - third transformer installation planned within 5 years
Hobsonville	22	16	N-1 switched	12	135%	16	145%	No constraint within +5 years	Meets Vector security criteria , Hobsonville Point and Westgate substations planned to reduce Hobsonville load
Hospital	6	-	N	7	-	-	-	No constraint within +5 years	This substation is dedicated to supply the customer. Capacity upgrades will be driven by the customer.
Howick	41	40	N-1 switched	15	102%	40	105%	No constraint within +5 years	Meets Vector security criteria
James Street	20	16	N-1 switched	19	126%	16	131%	No constraint within +5 years	Meets Vector security criteria
Keeling Road	15	-	N	18	-	20	78%	No constraint within +5 years	Meets Vector security criteria - Second transformer installation planned within 5 years
Kingsland	22	20	N-1 switched	23	110%	20	118%	No constraint within +5 years	Meets Vector security criteria
Laingholm	9	8	N-1 switched	10	126%	8	130%	No constraint within +5 years	Meets Vector security criteria
Liverpool	45	40	N-1 switched	28	111%	40	117%	No constraint within +5 years	Meets Vector security criteria
Liverpool 22kV	87	135	N-1	65	65%	135	71%	No constraint within +5 years	Meets Vector security criteria
Mangere Central	26	20	N-1 switched	14	128%	20	132%	No constraint within +5 years	Meets Vector security criteria
Mangere East	26	20	N-1 switched	26	130%	20	141%	No constraint within +5 years	Meets Vector security criteria
Mangere West	17	30	N-1	3	56%	30	57%	No constraint within +5 years	Meets Vector security criteria
Manly	19	16	N-1 switched	15	120%	16	125%	No constraint within +5 years	Meets Vector security criteria
Manukau	29	40	N-1	27	72%	40	76%	No constraint within +5 years	Meets Vector security criteria
Manurewa	46	40	N-1 switched	28	115%	40	119%	No constraint within +5 years	Meets Vector security criteria
Maraetai	6	15	N-1	2	40%	15	44%	No constraint within +5 years	Meets Vector security criteria
McKinnon	24	20	N-1 switched	11	119%	20	136%	No constraint within +5 years	Meets Vector security criteria
McLeod Road	13	-	N	13	-	-	-	No constraint within +5 years	Meets Vector security criteria
McNab	47	40	N-1 switched	29	118%	40	128%	No constraint within +5 years	Meets Vector security criteria
Milford	8	-	N	9	-	-	-	No constraint within +5 years	Meets Vector security criteria
Mt Albert	8	-	N	9	-	-	-	No constraint within +5 years	Meets Vector security criteria
Mt Wellington	20	20	N-1 switched	22	101%	20	107%	No constraint within +5 years	Meets Vector security criteria
New Lynn	14	13	N-1 switched	14	116%	13	123%	No constraint within +5 years	Meets Vector security criteria
Newmarket	42	40	N-1 switched	32	105%	40	119%	No constraint within +5 years	Meets Vector security criteria
Newton	19	16	N-1 switched	21	118%	16	127%	No constraint within +5 years	Meets Vector security criteria
Ngataranga Bay	8	-	N	10	-	-	-	No constraint within +5 years	Meets Vector security criteria
Northcote	7	-	N	8	-	-	-	No constraint within +5 years	Meets Vector security criteria
Onehunga	15	15	N-1 switched	14	102%	20	81%	No constraint within +5 years	Meets Vector security criteria, transformer change as part of asset replacement programme
Orakei	22	18	N-1 switched	15	124%	18	134%	No constraint within +5 years	Meets Vector security criteria
Oratia	6	-	N	6	-	-	-	No constraint within +5 years	Meets Vector security criteria
Orewa	16	20	N-1	10	81%	20	108%	No constraint within +5 years	Meets Vector security criteria
Otara	32	30	N-1 switched	25	105%	30	170%	No constraint within +5 years	Meets Vector security criteria - Planned Flat Bush substation will reduce the load at Otara within 5 years
Pacific Steel	56	40	-	15	140%	40	140%	No constraint within +5 years	Meets Vector security criteria
Pakuranga	24	20	N-1 switched	10	119%	20	129%	No constraint within +5 years	Meets Vector security criteria
Papakura	26	20	N-1 switched	10	130%	20	133%	No constraint within +5 years	Meets Vector security criteria
Parnell	10	12	N-1	16	87%	20	62%	No constraint within +5 years	Meets Vector security criteria, transformer change as part of asset replacement programme
Ponsonby	16	12	N-1 switched	11	131%	12	135%	No constraint within +5 years	Meets Vector security criteria
Quay	23	20	N-1 switched	27	115%	20	140%	No constraint within +5 years	Meets Vector security criteria
Quay 22kV	34	60	N-1	33	56%	60	69%	No constraint within +5 years	Meets Vector security criteria
Ranui	11	-	N	12	-	-	-	No constraint within +5 years	Meets Vector security criteria

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SCHEDULE 12b: REPORT ON FORECAST CAPACITY

This schedule requires a breakdown of current and forecast capacity and utilisation for each zone substation and current distribution transformer capacity. The data provided should be consistent with the information provided in the AMP. Information provided in this table should relate to the operation of the network in its normal steady state configuration.

sch ref

	Red Beach	16	-	N	17	-	20	104%	No constraint within +5 years	Meets Vector security criteria - Second transformer installation planned within 5 years
	Remuera	28	20	N-1 switched	22	138%	20	170%	No constraint within +5 years	Meets Vector security criteria
	Riverhead	9	8	N-1 switched	13	120%	8	134%	No constraint within +5 years	Meets Vector security criteria
	Rockfield	21	20	N-1 switched	31	104%	20	130%	No constraint within +5 years	Meets Vector security criteria
	Rosebank	21	22	N-1	17	96%	22	99%	No constraint within +5 years	Meets Vector security criteria
	Sabulite Road	20	13	N-1 switched	20	156%	13	166%	No constraint within +5 years	Meets Vector security criteria
	Sandringham	21	20	N-1 switched	49	104%	20	107%	No constraint within +5 years	Meets Vector security criteria
	Simpson Road	5	-	N	6	-	-	-	No constraint within +5 years	Meets Vector security criteria
	Snells Beach	6	-	N	6	-	-	-	No constraint within +5 years	Meets Vector security criteria - Planned Sandspit substation will reduce the load at Snells Beach and increase transfer capacity at this substation
	South Howick	30	20	N-1 switched	16	149%	20	152%	No constraint within +5 years	Meets Vector security criteria
	Spur Road	10	-	N	16	-	-	-	No constraint within +5 years	Meets Vector security criteria
	St Heliers	22	18	N-1 switched	18	126%	18	130%	No constraint within +5 years	Meets Vector security criteria
	St Johns	18	20	N-1	28	91%	20	132%	No constraint within +5 years	Meets Vector security criteria
	Sunset Road	18	13	N-1 switched	17	142%	13	146%	No constraint within +5 years	Meets Vector security criteria
	Swanson	11	-	N	12	-	-	-	No constraint within +5 years	Meets Vector security criteria
10	Sylvia Park	18	20	N-1	14	88%	20	110%	No constraint within +5 years	Meets Vector security criteria
11	Takanini	14	15	N-1	12	91%	15	96%	No constraint within +5 years	Meets Vector security criteria
12	Takapuna	9	-	N	10	-	-	-	No constraint within +5 years	Meets Vector security criteria
13	Te Atatu	22	13	N-1 switched	11	173%	20	116%	No constraint within +5 years	Meets Vector security criteria - Transformer upgrade planned within 5 years
14	Te Papapa	24	20	N-1 switched	11	121%	20	125%	No constraint within +5 years	Meets Vector security criteria
15	Torbay	9	-	N	8	-	-	-	No constraint within +5 years	Meets Vector security criteria - Planned Glenvar substation will reduce the load at Torbay and increase transfer capacity at this substation
16	Triangle Road	17	10	N-1 switched	19	167%	10	180%	No constraint within +5 years	Meets Vector security criteria - Transformer upgrade planned within 5 years
17	Victoria	27	20	N-1 switched	24	134%	20	140%	No constraint within +5 years	Meets Vector security criteria
18	Waiake	10	-	N	9	-	-	-	No constraint within +5 years	Meets Vector security criteria - Planned Glenvar substation will reduce the load at Waiake and increase transfer capacity at this substation
19	Waiheke	11	13	N-1	3	88%	13	94%	No constraint within +5 years	Meets Vector security criteria
20	Waikaukau	7	-	N	9	-	-	-	No constraint within +5 years	Meets Vector security criteria
21	Waimauku	9	-	N	5	-	10	100%	No constraint within +5 years	completed
22	Wairau	16	16	N-1 switched	18	100%	16	105%	No constraint within +5 years	Meets Vector security criteria
23	Warkworth	17	15	N-1 switched	20	116%	15	125%	No constraint within +5 years	Meets Vector security criteria
24	Wellsford	8	8	N-1 switched	6	105%	8	113%	No constraint within +5 years	Meets Vector security criteria
25	Westfield	30	20	N-1 switched	17	152%	20	159%	No constraint within +5 years	Meets Vector security criteria
26	White Swan	31	30	N-1 switched	20	103%	30	106%	No constraint within +5 years	Meets Vector security criteria
27	Wiri	38	40	N-1	24	96%	40	100%	No constraint within +5 years	Meets Vector security criteria
28	Woodford	10	-	N	20	-	-	-	No constraint within +5 years	Meets Vector security criteria

¹ Extend forecast capacity table as necessary to disclose all capacity by each zone substation

Company Name	Vector Limited
AMP Planning Period	1 April 2013 – 31 March 2023

SCHEDULE 12b: REPORT ON FORECAST CAPACITY

This schedule requires a breakdown of current and forecast capacity and utilisation for each zone substation and current distribution transformer capacity. The data provided should be consistent with the information provided in the AMP. Information provided in this table should relate to the operation of the network in its normal steady state configuration.

sch ref

30	12b(ii): Transformer Capacity	
31		(MVA)
32	Distribution transformer capacity (EDB owned)	3,960
33	Distribution transformer capacity (Non-EDB owned)	499
34	Total distribution transformer capacity	4,460
35		
36	Zone substation transformer capacity	4,006

Company Name **Vector Limited**

AMP Planning Period **1 April 2013 – 31 March 2023**

SCHEDULE 12C: REPORT ON FORECAST NETWORK DEMAND

This schedule requires a forecast of new connections (by consumer type), peak demand and energy volumes for the disclosure year and a 5 year planning period. The forecasts should be consistent with the supporting information set out in the AMP as well as the assumptions used in developing the expenditure forecasts in Schedule 11a and Schedule 11b and the capacity and utilisation forecasts in Schedule 12b.

sch ref

12c(i): Consumer Connections

Number of ICPS connected in year by consumer type

	Number of connections					
	Current Year CY for year ended 31 Mar 13	CY+1 31 Mar 14	CY+2 31 Mar 15	CY+3 31 Mar 16	CY+4 31 Mar 17	CY+5 31 Mar 18
<i>Consumer types defined by EDB*</i>						
Residential & Small Medium Enterprise (SME)	3,633	4,858	4,858	4,858	4,833	4,833
Industrial & Commercial (I & C)	108	120	120	120	120	120
Connections total	3,742	4,978	4,978	4,978	4,953	4,953

*Consumer types defined by EDB**

Residential & Small Medium Enterprise (SME)
Industrial & Commercial (I & C)

Connections total

**include additional rows if needed*

Distributed generation

Number of connections

Installed connection capacity of distributed generation (MVA)

	Current Year CY for year ended 31 Mar 13	CY+1 31 Mar 14	CY+2 31 Mar 15	CY+3 31 Mar 16	CY+4 31 Mar 17	CY+5 31 Mar 18
Number of connections	78	83	80	80	80	80
Installed connection capacity of distributed generation (MVA)	0	11	5	5	5	5

12c(ii) System Demand

Maximum coincident system demand (MW)

GXP demand

plus Distributed generation output at HV and above

Maximum coincident system demand

less Net transfers to (from) other EDBs at HV and above

Demand on system for supply to consumers' connection points

	Current Year CY for year ended 31 Mar 13	CY+1 31 Mar 14	CY+2 31 Mar 15	CY+3 31 Mar 16	CY+4 31 Mar 17	CY+5 31 Mar 18
GXP demand	1,698	1,744	1,766	1,789	1,815	1,836
plus Distributed generation output at HV and above	13	13	13	13	13	13
Maximum coincident system demand	1,711	1,757	1,780	1,802	1,828	1,849
less Net transfers to (from) other EDBs at HV and above	-	-	-	-	-	-
Demand on system for supply to consumers' connection points	1,711	1,757	1,780	1,802	1,828	1,849

Electricity volumes carried (GWh)

Electricity supplied from GXPs

less Electricity exports to GXPs

plus Electricity supplied from distributed generation

less Net electricity supplied to (from) other EDBs

Electricity entering system for supply to ICPS

less Total energy delivered to ICPS

Losses

Load factor

Loss ratio

	Current Year CY for year ended 31 Mar 13	CY+1 31 Mar 14	CY+2 31 Mar 15	CY+3 31 Mar 16	CY+4 31 Mar 17	CY+5 31 Mar 18
Electricity supplied from GXPs	8,656	8,659	8,661	8,661	8,659	8,655
less Electricity exports to GXPs	-	-	-	-	-	-
plus Electricity supplied from distributed generation	112	112	112	112	112	112
less Net electricity supplied to (from) other EDBs	-	-	-	-	-	-
Electricity entering system for supply to ICPS	8,768	8,771	8,773	8,773	8,771	8,767
less Total energy delivered to ICPS	8,413	8,416	8,417	8,417	8,415	8,412
Losses	355	355	356	356	356	356
Load factor	59%	57%	56%	56%	55%	54%
Loss ratio	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%

Company Name	Vector Limited
AMP Planning Period	1 April 2013 – 31 March 2023
Network / Sub-network Name	Vector Limited

SCHEDULE 12d: REPORT FORECAST INTERRUPTIONS AND DURATION

This schedule requires a forecast of SAIFI and SAIDI for disclosure and a 5 year planning period. The forecasts should be consistent with the supporting information set out in the AMP as well as the assumed impact of planned and unplanned SAIFI and SAIDI on the expenditures forecast provided in Schedule 11a and Schedule 11b.

sch ref

		Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
	for year ended	31 Mar 13	31 Mar 14	31 Mar 15	31 Mar 16	31 Mar 17	31 Mar 18
8							
9							
10	SAIDI						
11	Class B (planned interruptions on the network)	19.5	18.9	18.9	18.9	18.9	18.9
12	Class C (unplanned interruptions on the network)	75.8	95.1	95.1	88.3	88.3	88.3
13	SAIFI						
14	Class B (planned interruptions on the network)	0.14	0.11	0.11	0.08	0.08	0.08
15	Class C (unplanned interruptions on the network)	0.87	1.55	1.55	1.16	1.16	1.16

Company Name	Vector Limited
AMP Planning Period	1 April 2013 – 31 March 2023
Network / Sub-network Name	Vector (Southern region)

SCHEDULE 12d: REPORT FORECAST INTERRUPTIONS AND DURATION

This schedule requires a forecast of SAIFI and SAIDI for disclosure and a 5 year planning period. The forecasts should be consistent with the supporting information set out in the AMP as well as the assumed impact of planned and unplanned SAIFI and SAIDI on the expenditures forecast provided in Schedule 11a and Schedule 11b.

sch ref

		Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
	for year ended	31 Mar 13	31 Mar 14	31 Mar 15	31 Mar 16	31 Mar 17	31 Mar 18
8							
9							
10	SAIDI						
11	Class B (planned interruptions on the network)	5.6	5.5	5.5	4.9	4.9	4.9
12	Class C (unplanned interruptions on the network)	49.2	62.3	62.3	53.7	53.7	53.7
13	SAIFI						
14	Class B (planned interruptions on the network)	0.09	0.08	0.08	0.04	0.04	0.04
15	Class C (unplanned interruptions on the network)	0.62	1.12	1.12	0.75	0.75	0.75

Company Name	Vector Limited
AMP Planning Period	1 April 2013 – 31 March 2023
Network / Sub-network Name	Vector (Northern region)

SCHEDULE 12d: REPORT FORECAST INTERRUPTIONS AND DURATION

This schedule requires a forecast of SAIFI and SAIDI for disclosure and a 5 year planning period. The forecasts should be consistent with the supporting information set out in the AMP as well as the assumed impact of planned and unplanned SAIFI and SAIDI on the expenditures forecast provided in Schedule 11a and Schedule 11b.

sch ref

		Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
	for year ended	31 Mar 13	31 Mar 14	31 Mar 15	31 Mar 16	31 Mar 17	31 Mar 18
8							
9							
10	SAIDI						
11	Class B (planned interruptions on the network)	40.9	39.4	39.4	40.4	40.4	40.4
12	Class C (unplanned interruptions on the network)	116.7	145.5	145.5	141.3	141.3	141.3
13	SAIFI						
14	Class B (planned interruptions on the network)	0.21	0.17	0.17	0.13	0.13	0.13
15	Class C (unplanned interruptions on the network)	1.26	2.21	2.21	1.78	1.78	1.78