



**EDB Information Disclosure Requirements
Information Templates
for
Schedules 11a–13**

Company Name	Marlborough Lines Limited
Disclosure Date	31 March 2019
AMP Planning Period Start Date (first day)	1 April 2019

Templates for Schedules 11a–13 (Asset Management Plan)
Template Version 4.1. Prepared 21 December 2017

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Information disclosure asset management plan schedules

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Company Name **Marlborough Lines Limited**
 AMP Planning Period **1 April 2019 – 31 March 2029**

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.

		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 20	31 Mar 21	31 Mar 22	31 Mar 23	31 Mar 24	31 Mar 25	31 Mar 26	31 Mar 27	31 Mar 28	31 Mar 29
11a(i): Expenditure on Assets Forecast		\$000 (in nominal dollars)										
Consumer connection		85	101	104	106	108	110	112	115	117	119	122
System growth		285	101	104	741	108	110	112	115	117	119	122
Asset replacement and renewal		3,899	8,111	7,841	9,450	8,938	9,909	6,738	7,102	8,062	11,679	11,974
Asset relocations		121	254	-	-	-	330	112	115	117	119	122
Reliability, safety and environment:												
Quality of supply		454	609	2,460	370	1,052	440	3,650	4,009	2,921	149	152
Legislative and regulatory		-	-	-	-	-	-	-	-	-	-	-
Other reliability, safety and environment		6,674	1,065	259	635	1,279	490	898	458	876	298	304
Total reliability, safety and environment		7,128	1,674	2,719	1,005	2,332	930	4,548	4,467	3,797	447	456
Expenditure on network assets		11,518	10,242	10,767	11,301	11,485	11,390	11,623	11,913	12,210	12,484	12,794
Expenditure on non-network assets		1,830	1,471	1,502	1,534	1,565	1,596	1,628	1,661	1,694	1,728	1,763
Expenditure on assets		13,348	11,713	12,268	12,836	13,050	12,986	13,252	13,574	13,904	14,212	14,557
plus	Cost of financing	-	-	-	-	-	-	-	-	-	-	-
less	Value of capital contributions	38	50	50	50	50	50	50	50	50	50	50
plus	Value of vested assets	-	-	-	-	-	-	-	-	-	-	-
Capital expenditure forecast		13,310	11,663	12,218	12,786	13,000	12,936	13,202	13,524	13,854	14,162	14,507
Assets commissioned		9,969	17,397	12,118	11,936	13,750	10,436	12,302	13,424	17,954	14,162	14,507
		\$000 (in constant prices)										
Consumer connection		85	100	100	100	100	100	100	100	100	100	100
System growth		285	100	100	700	100	100	100	100	100	100	100
Asset replacement and renewal		3,899	7,995	7,570	8,930	8,280	9,000	6,000	6,200	6,900	9,800	9,850
Asset relocations		121	250	-	-	-	300	100	100	100	100	100
Reliability, safety and environment:												
Quality of supply		454	600	2,375	350	975	400	3,250	3,500	2,500	125	125
Legislative and regulatory		-	-	-	-	-	-	-	-	-	-	-
Other reliability, safety and environment		6,674	1,050	250	600	1,185	445	800	400	750	250	250
Total reliability, safety and environment		7,128	1,650	2,625	950	2,160	845	4,050	3,900	3,250	375	375
Expenditure on network assets		11,518	10,095	10,395	10,680	10,640	10,345	10,350	10,400	10,450	10,475	10,525
Expenditure on non-network assets		1,830	1,450	1,450	1,450	1,450	1,450	1,450	1,450	1,450	1,450	1,450
Expenditure on assets		13,348	11,545	11,845	12,130	12,090	11,795	11,800	11,850	11,900	11,925	11,975
Subcomponents of expenditure on assets (where known)												
	Energy efficiency and demand side management, reduction of energy losses	-	-	-	-	-	-	-	-	-	-	-
	Overhead to underground conversion	-	-	-	-	-	-	-	-	-	-	-
	Research and development	-	-	-	-	-	-	-	-	-	-	-

Company Name **Marlborough Lines Limited**
 AMP Planning Period **1 April 2019 – 31 March 2029**

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.

sch ref

	Current Year CY for year ended 31 Mar 19	CY+1 31 Mar 20	CY+2 31 Mar 21	CY+3 31 Mar 22	CY+4 31 Mar 23	CY+5 31 Mar 24	CY+6 31 Mar 25	CY+7 31 Mar 26	CY+8 31 Mar 27	CY+9 31 Mar 28	CY+10 31 Mar 29
Difference between nominal and constant price forecasts	\$000										
Consumer connection	-	1	4	6	8	10	12	15	17	19	22
System growth	-	1	4	41	8	10	12	15	17	19	22
Asset replacement and renewal	-	116	271	520	658	909	738	902	1,162	1,879	2,124
Asset relocations	-	4	-	-	-	30	12	15	17	19	22
Reliability, safety and environment:											
Quality of supply	-	9	85	20	77	40	400	509	421	24	27
Legislative and regulatory	-	-	-	-	-	-	-	-	-	-	-
Other reliability, safety and environment	-	15	9	35	94	45	98	58	126	48	54
Total reliability, safety and environment	-	24	94	55	172	85	498	567	547	72	81
Expenditure on network assets	-	147	372	621	845	1,045	1,273	1,513	1,760	2,009	2,269
Expenditure on non-network assets	-	21	52	84	115	146	178	211	244	278	313
Expenditure on assets	-	168	423	706	960	1,191	1,452	1,724	2,004	2,287	2,582
11a(ii): Consumer Connection	\$000 (in constant prices)										
Consumer types defined by EDB*											
Residential	50	50	50	50	50	50					
General	1	10	10	10	10	10					
Commercial & Industrial	34	30	30	30	30	30					
Irrigation	-	-	-	-	-	-					
Other	-	10	10	10	10	10					
Consumer connection expenditure	85	100	100	100	100	100					
less Capital contributions funding consumer connection											
Consumer connection less capital contributions	85	100	100	100	100	100					
11a(iii): System Growth											
Subtransmission											
Zone substations				100							
Distribution and LV lines				500							
Distribution and LV cables	5										
Distribution substations and transformers	180										
Distribution switchgear											
Other network assets	100	100	100	100	100	100					
System growth expenditure	285	100	100	700	100	100					
less Capital contributions funding system growth											
System growth less capital contributions	285	100	100	700	100	100					

Company Name **Marlborough Lines Limited**
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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	CY+1	CY+2	CY+3	CY+4	CY+5
for year ended	31 Mar 19	31 Mar 20	31 Mar 21	31 Mar 22	31 Mar 23	31 Mar 24
11a(iv): Asset Replacement and Renewal	\$000 (in constant prices)					
Subtransmission	2,200	2,100	2,175	1,450	380	4,000
Zone substations	772	1,000	-	1,900	550	475
Distribution and LV lines	526	3,630	3,420	4,250	6,500	3,250
Distribution and LV cables	15	-	-	-	-	375
Distribution substations and transformers	72	800	1,525	300	425	475
Distribution switchgear	138	465	450	1,030	425	425
Other network assets	176	-	-	-	-	-
Asset replacement and renewal expenditure	3,899	7,995	7,570	8,930	8,280	9,000
less Capital contributions funding asset replacement and renewal	-	-	-	-	-	-
Asset replacement and renewal less capital contributions	3,899	7,995	7,570	8,930	8,280	9,000
	Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
for year ended	31 Mar 19	31 Mar 20	31 Mar 21	31 Mar 22	31 Mar 23	31 Mar 24
11a(v): Asset Relocations	\$000 (in constant prices)					
<i>Project or programme*</i>						
Roading Authorities	121	250	-	-	-	-
Other	-	-	-	-	-	300
<i>*Include additional rows if needed</i>						
All other project or programmes - asset relocations	-	-	-	-	-	-
Asset relocations expenditure	121	250	-	-	-	300
less Capital contributions funding asset relocations	38	-	-	-	-	-
Asset relocations less capital contributions	83	250	-	-	-	300
	Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
for year ended	31 Mar 19	31 Mar 20	31 Mar 21	31 Mar 22	31 Mar 23	31 Mar 24
11a(vi): Quality of Supply	\$000 (in constant prices)					
<i>Project or programme*</i>						
SCADA	8	-	-	-	-	-
Network Automation	187	150	125	100	325	150
Generators	5	-	-	-	-	-
Digital Radio Network	39	-	250	250	-	250
<i>*Include additional rows if needed</i>						
All other projects or programmes - quality of supply	216	450	2,000	-	650	-
Quality of supply expenditure	454	600	2,375	350	975	400
less Capital contributions funding quality of supply	-	-	-	-	-	-
Quality of supply less capital contributions	454	600	2,375	350	975	400

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 31 Mar 19	CY+1 31 Mar 20	CY+2 31 Mar 21	CY+3 31 Mar 22	CY+4 31 Mar 23	CY+5 31 Mar 24
135						
136	for year ended					
137	11a(vii): Legislative and Regulatory					
138	<i>Project or programme*</i>					
139						
144	<i>*include additional rows if needed</i>					
145	All other projects or programmes - legislative and regulatory					
146						
147	less					
148	Capital contributions funding legislative and regulatory					
149						
150						
151						
152	for year ended					
153	11a(viii): Other Reliability, Safety and Environment					
154	<i>Project or programme*</i>					
155						
156						
157						
158	<i>*include additional rows if needed</i>					
159	All other projects or programmes - other reliability, safety and environment					
160						
161	less					
162	Capital contributions funding other reliability, safety and environment					
163						
164						
165	for year ended					
166						
167						
168	11a(ix): Non-Network Assets					
169	<i>Routine expenditure</i>					
170						
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Company Name **Marlborough Lines Limited**
 AMP Planning Period **1 April 2019 – 31 March 2029**

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 19	31 Mar 20	31 Mar 21	31 Mar 22	31 Mar 23	31 Mar 24	31 Mar 25	31 Mar 26	31 Mar 27	31 Mar 28	31 Mar 29	
9	Operational Expenditure Forecast	\$000 (in nominal dollars)											
10	Service interruptions and emergencies	1,020	1,015	1,036	1,058	1,079	1,101	1,123	1,145	1,168	1,192	1,216	
11	Vegetation management	2,288	2,029	1,968	1,958	1,943	1,927	1,909	1,947	1,928	1,966	2,006	
12	Routine and corrective maintenance and inspection	2,909	2,841	2,797	2,857	2,806	2,863	2,920	2,864	2,921	2,979	3,039	
13	Asset replacement and renewal	756	710	725	741	756	771	786	802	818	834	851	
14	Network Opex	6,973	6,594	6,525	6,614	6,584	6,661	6,738	6,758	6,835	6,972	7,111	
15	System operations and network support	4,075	4,312	4,402	4,497	4,587	4,679	4,773	4,868	4,966	5,065	5,166	
16	Business support	4,033	4,160	4,247	4,339	4,426	4,514	4,604	4,696	4,790	4,886	4,984	
17	Non-network opex	8,108	8,471	8,648	8,836	9,013	9,193	9,377	9,565	9,756	9,951	10,150	
18	Operational expenditure	15,081	15,066	15,174	15,450	15,597	15,854	16,115	16,323	16,591	16,923	17,261	
21		\$000 (in constant prices)											
22	Service interruptions and emergencies	1,020	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
23	Vegetation management	2,288	2,000	1,900	1,850	1,800	1,750	1,700	1,700	1,650	1,650	1,650	
24	Routine and corrective maintenance and inspection	2,909	2,800	2,700	2,700	2,600	2,600	2,600	2,500	2,500	2,500	2,500	
25	Asset replacement and renewal	756	700	700	700	700	700	700	700	700	700	700	
26	Network Opex	6,973	6,500	6,300	6,250	6,100	6,050	6,000	5,900	5,850	5,850	5,850	
27	System operations and network support	4,075	4,250	4,250	4,250	4,250	4,250	4,250	4,250	4,250	4,250	4,250	
28	Business support	4,033	4,100	4,100	4,100	4,100	4,100	4,100	4,100	4,100	4,100	4,100	
29	Non-network opex	8,108	8,350	8,350	8,350	8,350	8,350	8,350	8,350	8,350	8,350	8,350	
30	Operational expenditure	15,081	14,850	14,650	14,600	14,450	14,400	14,350	14,250	14,200	14,200	14,200	
31	Subcomponents of operational expenditure (where known)												
32	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	
33	Direct billing*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
34	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	
35	Insurance	340	360	340	330	330	330	330	330	330	330	330	
37	* Direct billing expenditure by suppliers that direct bill the majority of their consumers												
41	Difference between nominal and real forecasts	\$000											
42	Service interruptions and emergencies	-	15	36	58	79	101	123	145	168	192	216	
43	Vegetation management	-	29	68	108	143	177	209	247	278	316	356	
44	Routine and corrective maintenance and inspection	-	41	97	157	206	263	320	364	421	479	539	
45	Asset replacement and renewal	-	10	25	41	56	71	86	102	118	134	151	
46	Network Opex	-	94	225	364	484	611	738	858	985	1,122	1,261	
47	System operations and network support	-	62	152	247	337	429	523	618	716	815	916	
48	Business support	-	60	147	239	326	414	504	596	690	786	884	
49	Non-network opex	-	121	298	486	663	843	1,027	1,215	1,406	1,601	1,800	
50	Operational expenditure	-	216	524	850	1,147	1,454	1,765	2,073	2,391	2,723	3,061	

Company Name	Marlborough Lines Limited
AMP Planning Period	1 April 2019 – 31 March 2029

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)										%
												of asset
												forecast to be
												replaced in
												next 5 years
Voltage	Asset category	Asset class	Units	H1	H2	H3	H4	H5	Grade unknown	Data accuracy (1-4)		
7												
8												
9												
10	All	Overhead Line	Concrete poles / steel structure	No.	0.2%	2.5%	7.7%	71.5%	18.0%	-	3	3%
11	All	Overhead Line	Wood poles	No.	0.3%	1.8%	11.4%	67.3%	19.1%	-	3	5%
12	All	Overhead Line	Other pole types	No.	-	-	-	-	-	-	N/A	N/A
13	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	7.0%	5.4%	38.9%	17.8%	30.3%	0.8%	3	10%
14	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	-	-	0.0%	5.6%	94.4%	-	3	-
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
18	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	-	-	-	-	100.0%	-	3	-
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas pressurised)	km	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
22	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
23	HV	Subtransmission Cable	Subtransmission submarine cable	km	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
24	HV	Zone substation Buildings	Zone substations up to 66kV	No.	-	-	-	50%	50%	-	4	-
25	HV	Zone substation Buildings	Zone substations 110kV+	No.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
26	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	-	-	-	-	100.0%	-	4	-
27	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	-	-	-	20.0%	80.0%	-	3	-
28	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
29	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	-	4.1%	4.1%	27.0%	64.9%	-	3	5%
30	HV	Zone substation switchgear	33kV RMU	No.	-	-	-	-	100%	-	4	-
31	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
32	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	-	-	-	22.9%	77.1%	-	3	-
34	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	-	-	-	-	-	-	3	-
35												

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SCHEDULE 12a: REPORT ON ASSET CONDITION

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sch ref	Asset condition at start of planning period (percentage of units by grade)											
	Voltage	Asset category	Asset class	Units	H1	H2	H3	H4	H5	Grade unknown	Data accuracy (1-4)	% of asset forecast to be replaced in next 5 years
36												
37												
38												
39	HV	Zone Substation Transformer	Zone Substation Transformers	No.	-	3.2%	9.7%	32.3%	54.8%	-	4	13%
40	HV	Distribution Line	Distribution OH Open Wire Conductor	km	1.7%	12.2%	37.5%	19.2%	29.1%	0.2%	3	3%
41	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	-	-	-	-	100.0%	-	4	-
42	HV	Distribution Line	SWER conductor	km	-	8.4%	57.8%	28.4%	5.4%	-	3	2%
43	HV	Distribution Cable	Distribution UG XLPE or PVC	km	-	0.4%	3.0%	11.8%	84.0%	0.9%	3	1%
44	HV	Distribution Cable	Distribution UG PILC	km	-	-	-	73.3%	24.1%	2.6%	3	-
45	HV	Distribution Cable	Distribution Submarine Cable	km	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
46	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	-	3.5%	13.3%	21.2%	61.9%	-	3	5%
47	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	-	-	52.4%	-	47.6%	-	3	-
48	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	1.4%	6.0%	19.1%	32.5%	39.4%	1.7%	3	5%
49	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	5.3%	-	78.9%	15.8%	-	-	3	5%
50	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	1.0%	2.4%	25.7%	36.4%	34.5%	-	3	8%
51	HV	Distribution Transformer	Pole Mounted Transformer	No.	-	9.8%	41.0%	29.2%	19.5%	0.6%	3	2%
52	HV	Distribution Transformer	Ground Mounted Transformer	No.	-	4.5%	20.9%	45.7%	31.7%	0.6%	3	2%
53	HV	Distribution Transformer	Voltage regulators	No.	-	3.6%	-	67.9%	28.6%	-	3	-
54	HV	Distribution Substations	Ground Mounted Substation Housing	No.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
55	LV	LV Line	LV OH Conductor	km	6.5%	13.0%	34.6%	11.7%	5.8%	28.3%	2	4%
56	LV	LV Cable	LV UG Cable	km	-	0.1%	11.2%	21.1%	65.1%	2.5%	3	1%
57	LV	LV Streetlighting	LV OH/UG Streetlight circuit	km	1.5%	3.0%	12.2%	19.9%	54.6%	8.7%	2	2%
58	LV	Connections	OH/UG consumer service connections	No.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
59	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	-	-	43.2%	37.9%	18.9%	-	4	15%
60	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	-	-	-	100.0%	-	-	3	-
61	All	Capacitor Banks	Capacitors including controls	No.	-	100.0%	-	-	-	-	2	-
62	All	Load Control	Centralised plant	Lot	-	-	-	33.0%	67.0%	-	4	-
63	All	Load Control	Relays	No.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
64	All	Civils	Cable Tunnels	km	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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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

7	12b(i): System Growth - Zone Substations											
8		Current Peak Load (MVA)	Installed Firm Capacity (MVA)	Security of Supply Classification (type)	Transfer Capacity (MVA)	Utilisation or Installed Firm Capacity %	Installed Firm Capacity +5 years (MVA)	Utilisation or Installed Firm Capacity + 5yrs %	Installed Firm Capacity Constraint +5 years (cause)	Explanation		
9	<i>Existing Zone Substations</i>											
10	Cloudy Bay Zone Substation	3.7	16.5	n-1	8	22%	16.5	55%	No constraint within +5 years	Transfer of load from Riverlands Substation to Cloudy Bay planned		
11	Havelock Zone Substation	2.8	5	n-1	2	55%	5.0	55%	No constraint within +5 years	Assets rated adequately to handle forecast load growth		
12	Leefield Zone Substation	1.3	-	n	1	-	5.0	29%	Transformer	Proposed installation of second transformer within 5 years to provide additional security (not capacity related investment)		
13	Linkwater Zone Substation	3.2	5	n-1	1	63%	5.0	66%	No constraint within +5 years	Assets rated adequately to handle forecast load growth		
14	Nelson St Zone Substation	14.8	16.5	n-1	10	89%	16.5	101%	Transformer	Load transfer to adjacent substations or uprating of transformer may be required		
15	Picton Zone Substation	7.2	15	n-1	-	48%	15.0	46%	No constraint within +5 years	Assets rated adequately to handle forecast load growth		
16	Rai Valley Zone Substation	2.0	3	n-1	1	66%	5.0	40%	No constraint within +5 years	Planned transformer replacement within 5 years due to age.		
17	Redwoodtown Zone Substation	10.4	15	n-1	8	69%	16.5	66%	No constraint within +5 years	Increase in transformer capacity. Recent transfer of load from adjacent substation.		
18	Renwick Zone Substation	8.9	10	n-1	5	89%	16.5	63%	Transformer	New substation (including new transformers with increased capacity) currently under construction and likely available from		
19	Riverlands Zone Substation	8.7	10	n-1	8	87%	10.0	70%	No constraint within +5 years	Transfer of load from Riverlands Substation to Cloudy Bay planned		
20	Seddon Zone Substation	5.1	10	n-1	1	51%	10.0	66%	No constraint within +5 years	Assets rated adequately to handle forecast load growth		
21	Spring Creek Zone Substation	4.0	5	n-1	4	80%	5.0	95%	No constraint within +5 years	Assets rated adequately to handle forecast load growth		
22	Springlands Zone Substation	11.0	16.5	n-1	10	66%	16.5	70%	No constraint within +5 years	Assets rated adequately to handle forecast load growth		
23	Ward Zone Substation	1.3	5	n-1	1	27%	5.0	30%	No constraint within +5 years	Assets rated adequately to handle forecast load growth		
24	Waters Zone Substation	7.5	16.5	n-1	10	46%	16.5	48%	No constraint within +5 years	Assets rated adequately to handle forecast load growth		
25	Woodbourne Zone Substation	9.7	10	n-1	5	97%	10.0	101%	Transformer	Transfer of load to adjacent substations may be required.		

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

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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

		Number of connections						
		Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5	
		for year ended	31 Mar 19	31 Mar 20	31 Mar 21	31 Mar 22	31 Mar 23	31 Mar 24
7	12c(i): Consumer Connections							
8	<i>Number of ICPs connected in year by consumer type</i>							
9								
10								
11	<i>Consumer types defined by EDB*</i>							
12	Residential	167	200	180	180	180	180	180
13	General	7	7	7	7	7	7	7
14	Commercial and Industrial	4	4	4	4	4	4	4
15	Irrigation	2	2	2	2	2	2	2
16	Other	8	8	8	8	8	8	8
17	Connections total	188	221	201	201	201	201	201
18	<i>*include additional rows if needed</i>							
19	Distributed generation							
20	Number of connections	89	100	100	120	120	120	120
21	Capacity of distributed generation installed in year (MVA)				1	1	1	1
22	12c(ii) System Demand							
23								
24	Maximum coincident system demand (MW)							
25	GXP demand	79	77	78	78	78	78	79
26	plus Distributed generation output at HV and above	1	3	3	3	3	3	3
27	Maximum coincident system demand	80	80	81	81	81	81	82
28	less Net transfers to (from) other EDBs at HV and above	-	-	-	-	-	-	-
29	Demand on system for supply to consumers' connection points	80	80	81	81	81	81	82
30	Electricity volumes carried (GWh)							
31	Electricity supplied from GXPs	385	387	388	390	393	395	395
32	less Electricity exports to GXPs	-	-	-	-	-	-	-
33	plus Electricity supplied from distributed generation	16	16	17	17	18	18	18
34	less Net electricity supplied to (from) other EDBs	-	-	-	-	-	-	-
35	Electricity entering system for supply to ICPs	401	403	405	407	411	413	413
36	less Total energy delivered to ICPs	381	383	385	387	389	391	391
37	Losses	20	20	20	20	22	22	22
38								
39	Load factor	57%	58%	57%	57%	58%	57%	57%
40	Loss ratio	5.0%	5.0%	4.9%	4.9%	5.4%	5.3%	5.3%

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Network / Sub-network Name	

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 19	31 Mar 20	31 Mar 21	31 Mar 22	31 Mar 23	31 Mar 24
8							
9							
10	SAIDI						
11	Class B (planned interruptions on the network)	49.0	65.0	65.0	65.0	65.0	65.0
12	Class C (unplanned interruptions on the network)	86.0	80.0	80.0	80.0	80.0	80.0
13	SAIFI						
14	Class B (planned interruptions on the network)	0.31	0.35	0.35	0.35	0.35	0.35
15	Class C (unplanned interruptions on the network)	0.70	0.67	0.67	0.67	0.67	0.67