



Nelson Electricity Ltd Asset Management Plan Update

April 2015 – March 2025

April 2015



Nelson Electricity Ltd central Nelson city view

**In accordance with the Commerce Act
Electricity Distribution Information Disclosure Determination 2012**

**SCHEDULE 17
Certification of Year-beginning Disclosures**

Clause 2.9.1 of section 2.9

We, Paul Donald LeGros and Stanley Wayne Mackey, being directors of Nelson Electricity Limited certify that, having made all reasonable inquiry, to the best of our knowledge-

- a) The following attached information of Nelson Electricity Limited, prepared for the purposes of clause 2.4.1, clause 2.6.1 and sub-clauses 2.6.3(4) and 2.6.5(3) of the Electricity Distribution Information Disclosure Determination 2012 in all material respects, complies with that determination.
- b) The prospective financial or non-financial information included in the attached information has been measured on a basis consistent with regulatory requirements or recognised industry standards.



Signed

Date 31 March 2015



Signed

Date 31 March 2015

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SECTION 1 – Asset Management Plan Update

This Asset Management Plan is prepared as the key internal asset planning document for Nelson Electricity. It is also designed to meet Electricity Distribution Information Disclosure Determination 2012.

Nelson Electricity has reviewed the 2013 – 2014 Asset Management Plan and the April 2014 Update and has determined that there has not been any significant material changes to the Plan and forecasts and has opted to disclose an update as per Electricity Distribution Information Disclosure Determination 2012 clause 2.6.3 instead of disclosing a full Asset Management Plan.

A full Asset Management Plan will be disclosed 31 March 2016 or if there is any material changes prior to that date.

SECTION 2 – Development Plan – Material Changes

The Development Plan as disclosed in the 2013 – 2023 Asset Management Plan was revised in August 2014. This revision was as a result of the re-assessment of the growth assumptions. Both peak demand (MW) and kWh growth assumptions were reduced from 1.0% per year to 0.5% per year. This amendment was documented in the 2014 update. The growth assumptions have been adjusted further to only 0.5% peak demand increase annually from 2015 and 0% kWh annual growth due to continued flat demand since 2007 and declining kWh consumption from 2008.

The growth downgrade reflects the ongoing negative to flat growth experienced by the network in recent years. It is, however, expected that the longer term peak demand forecast will return positive but only at a low growth rate of 0.5% per year. The impact on the Asset Management Plan is the further removal or deferment of a small number of capital expenditure projects that related to growth.

Figure 1: Nelson Electricity Historical Peak Demand and Forecast Demand

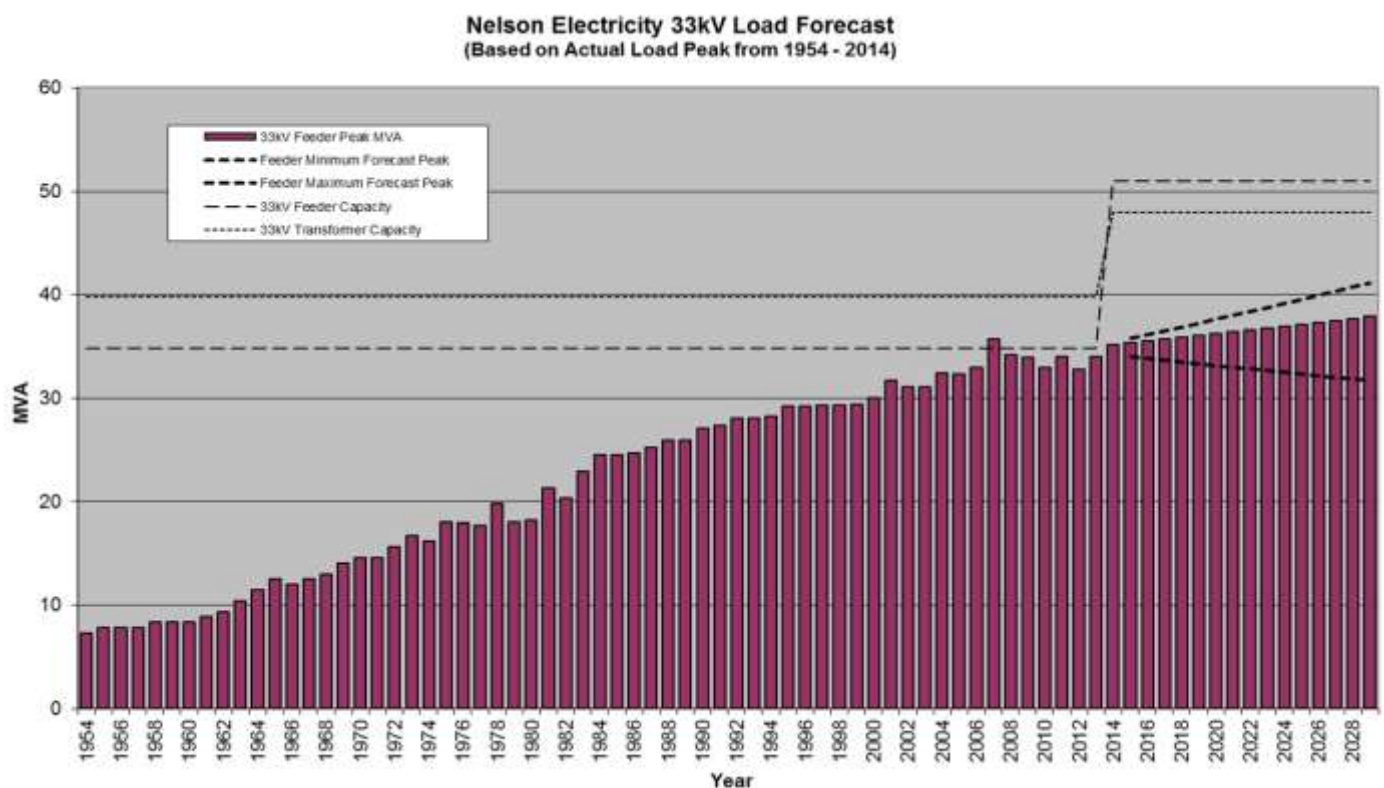
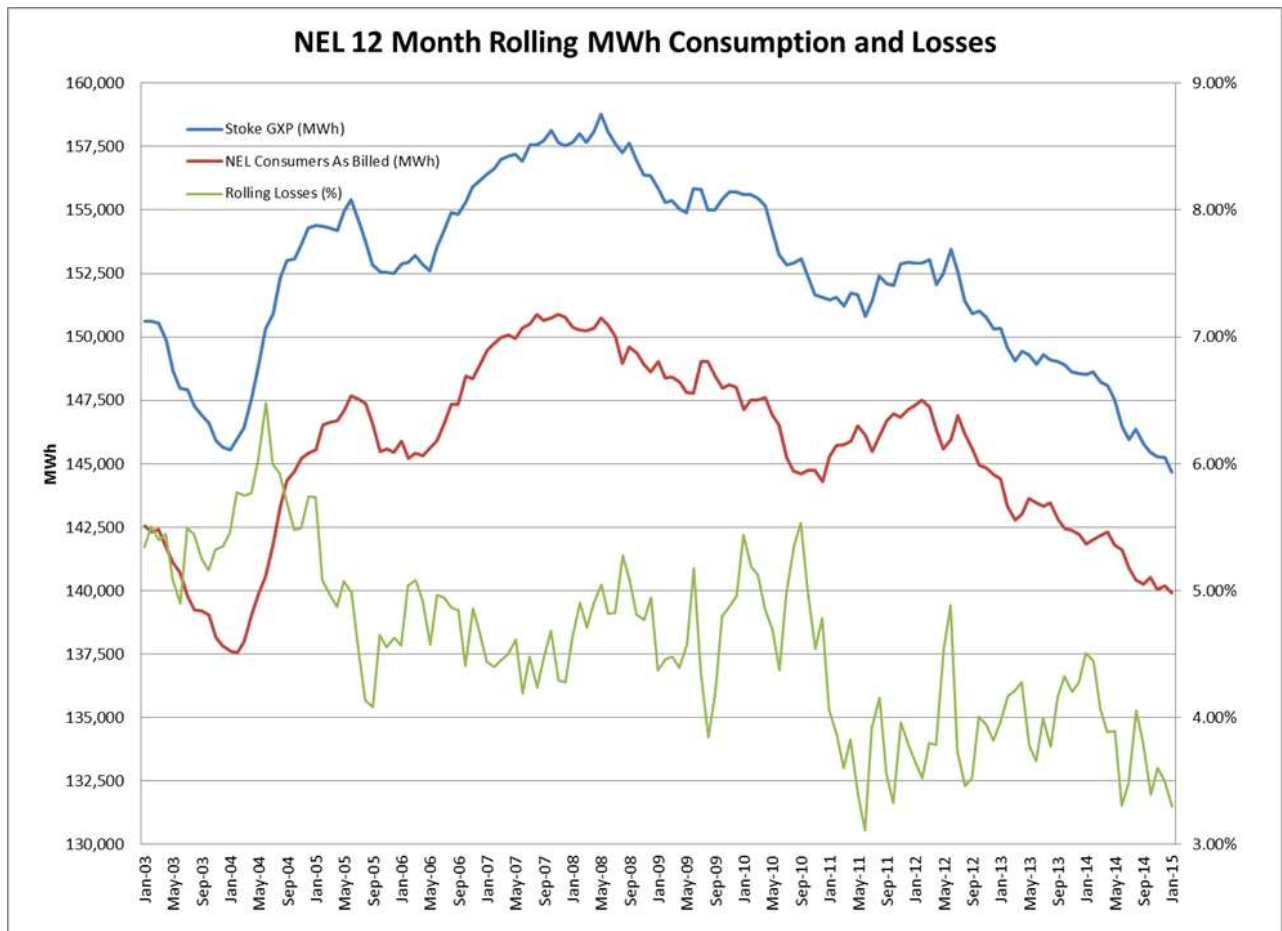


Figure 2: Nelson Electricity Historical GXP and Billed Consumption MWh



In addition to the revised growth forecast, there was an additional \$500,000 expenditure relating to the new Haven Road Zone Substation and the cut-over transition from the old substation that was incurred in the 2014-2015 year. While the substation was lived in March 2014, the full cut-over was not completed until May 2015. This additional expenditure was offset partly by the deferment of two small renewal projects at \$250,000. It is expected the capital budget will be exceeded by \$250,000 at \$1,115,000.

The financial impact is outlined in Section 4.

SECTION 3 – Lifecycle Management (Maintenance and Renewal) – Material Changes

There were no material changes to the lifecycle management since the April 2014 update.

Operational Expenditure is in line with forecast of \$800,000 (which includes an allowance of \$100,000 for subsequent expenditure due to the completion of the Haven Road Zone Substation).

The 2015-2016 year will see operational expenditure drop back to the typical levels experienced prior to 2013.

The financial impact is outlined in Section 4.

SECTION 4 – Capital and Operational Expenditure Forecast – Material Changes

Capital Expenditure

As outlined in Section 2, the revised growth forecast reduction has had an impact on growth related projects in the Asset Management Plan. There is an overall reduction in the forecast expenditure of \$500,000 over the next five years. This reduction is on top of the \$3,000,000 (excluding the Haven Road Zone Substation replacement and new 33kV sub transmission feeder projects) in capital expenditure over the five years as reported in the 2014 update.

Operational Expenditure

The operational expenditure for the year 2014-2015 will be estimated at the budget of \$800,000 (this included an allowance of \$100,000 for subsequent expenditure as a result of the completion of the new Haven Road Zone Substation). Material changes have been the vegetation management costs which will be estimated at 100% greater than the forecast of \$30,000, this has been offset by lower than forecast expenditure in other areas.

As outlined in Section 2 from 2015 expenditure levels will be reduced back to normal expenditure trends.

SECTION 5 – Changes in Asset Management Practises

There are no material changes to existing asset management practises. The commissioning of the new Zone Substation and 33kV sub transmission feeder in 2014 has required some changes given that the old Zone Substation is now disconnected and removed from the network.

SECTION 6 – Asset management Plan Disclosure Schedules

Company Name	Nelson Electricity Ltd
AMP Planning Period	1 April 2015 – 31 March 2025

SCHEDULE 11a: REPORT ON FORECAST CAPITAL EXPENDITURE

This schedule requires a breakdown of forecast expenditure on assets for the current, closure 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.

[illegible]

57			Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5	CY+6	CY+7	CY+8	CY+9	CY+10	
58			for year ended	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	31 Mar 24	31 Mar 25
59		Difference between nominal and constant price forecasts	\$000											
60		Consumer connection	-	-	-	-	-	-	-	-	-	-	-	-
61		System growth	-	2	5	8	11	14	17	21	24	28	31	
62		Asset replacement and renewal	-	7	16	57	79	121	142	182	220	206	269	
63		Asset relocations	-	-	-	-	-	-	-	-	-	-	-	-
64		Reliability, safety and environment:												
65		Quality of supply	-	-	-	-	-	-	-	-	-	-	-	-
66		Legislative and regulatory	-	-	-	-	-	-	-	-	-	-	-	-
67		Other reliability, safety and environment	-	0	6	2	7	11	50	36	13	28	19	
68		Total reliability, safety and environment	-	0	6	2	7	11	50	36	13	28	19	
69		Expenditure on network assets	-	8	27	67	97	147	209	238	256	261	319	
70		Non-network assets	-	0	3	1	1	4	4	11	3	7	4	
71		Expenditure on assets	-	9	29	68	99	150	214	249	260	269	323	
72														
73			Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5						
		for year ended	31 Mar 15	31 Mar 16	31 Mar 17	31 Mar 18	31 Mar 19	31 Mar 20						
74		11a(ii): Consumer Connection												
75		Consumer types defined by EDB*	\$000 (in constant prices)											
76		[EDB consumer type]												
77		[EDB consumer type]												
78		[EDB consumer type]												
79		[EDB consumer type]												
80		[EDB consumer type]												
81		*include additional rows if needed												
82		Consumer connection expenditure	-	-	-	-	-	-	-	-	-	-	-	-
83	less	Capital contributions funding consumer connection												
84		Consumer connection less capital contributions	-	-	-	-	-	-	-	-	-	-	-	-
85		11a(iii): System Growth												
86		Subtransmission	-	-	-	-	-	-	-	-	-	-	-	-
87		Zone substations	-	-	-	-	-	-	-	-	-	-	-	-
88		Distribution and LV lines	-	-	-	-	-	-	-	-	-	-	-	-
89		Distribution and LV cables	-	-	-	-	-	-	-	-	-	-	-	-
90		Distribution substations and transformers	185	50	50	50	50	50	50	50	50	50	50	50
91		Distribution switchgear	-	-	-	-	-	-	-	-	-	-	-	-
92		Other network assets	50	100	100	100	100	100	100	100	100	100	100	100
93		System growth expenditure	235	150	150	150	150	150	150	150	150	150	150	150
94	less	Capital contributions funding system growth												
95		System growth less capital contributions	235	150	150	150	150	150	150	150	150	150	150	150
103			Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5						
104		for year ended	31 Mar 15	31 Mar 16	31 Mar 17	31 Mar 18	31 Mar 19	31 Mar 20						
105		11a(iv): Asset Replacement and Renewal	\$000 (in constant prices)											
106		Subtransmission	-	-	-	-	-	-	-	-	-	-	-	-
107		Zone substations	-	-	-	-	-	-	-	-	-	-	-	-
108		Distribution and LV lines	-	-	-	-	-	-	-	-	-	-	-	-
109		Distribution and LV cables	640	531	390	1,001	970	1,052						
110		Distribution substations and transformers												
111		Distribution switchgear	30	30	30	30	30	30	30	30	30	30	30	30
112		Other network assets	100	100	100	100	100	100	100	100	100	100	100	100
113		Asset replacement and renewal expenditure	770	661	520	1,131	1,100	1,302						
114	less	Capital contributions funding asset replacement and renewal												
115		Asset replacement and renewal less capital contributions	770	661	520	1,131	1,100	1,302						

116	11a(v):Asset Relocations						
117	<i>Project or programme*</i>						
118	[Description of material project or programme]						
119	[Description of material project or programme]						
120	[Description of material project or programme]						
121	[Description of material project or programme]						
122	[Description of material project or programme]						
123	<i>*include additional rows if needed</i>						
124	All other asset relocations projects or programmes						
125	Asset relocations expenditure	-	-	-	-	-	-
126	less Capital contributions funding asset relocations						
127	Asset relocations less capital contributions	-	-	-	-	-	-
128							
129	11a(vi):Quality of Supply						
130	<i>Project or programme*</i>						
131	[Description of material project or programme]						
132	[Description of material project or programme]						
133	[Description of material project or programme]						
134	[Description of material project or programme]						
135	[Description of material project or programme]						
136	<i>*include additional rows if needed</i>						
137	All other quality of supply projects or programmes						
138	Quality of supply expenditure	-	-	-	-	-	-
139	less Capital contributions funding quality of supply						
140	Quality of supply less capital contributions	-	-	-	-	-	-
141							
142	11a(vii): Legislative and Regulatory						
143	<i>Project or programme*</i>						
144	[Description of material project or programme]						
145	[Description of material project or programme]						
146	[Description of material project or programme]						
147	[Description of material project or programme]						
148	[Description of material project or programme]						
149	<i>*include additional rows if needed</i>						
150	All other legislative and regulatory projects or programmes						
151	Legislative and regulatory expenditure	-	-	-	-	-	-
152	less Capital contributions funding legislative and regulatory						
153	Legislative and regulatory less capital contributions	-	-	-	-	-	-
161							

162			Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
		for year ended	31 Mar 15	31 Mar 16	31 Mar 17	31 Mar 18	31 Mar 19	31 Mar 20
163	11a(viii): Other Reliability, Safety and Environment							
164	<i>Project or programme*</i>		\$000 (in constant prices)					
165	Security		110	30	210	30	102	120
166	[Description of material project or programme]							
167	[Description of material project or programme]							
168	[Description of material project or programme]							
169	[Description of material project or programme]							
170	<i>*include additional rows if needed</i>							
171	All other reliability, safety and environment projects or programmes							
172	Other reliability, safety and environment expenditure		110	30	210	30	102	120
173	less Capital contributions funding other reliability, safety and environment							
174	Other reliability, safety and environment less capital contributions		110	30	210	30	102	120
175								
176								
177								
178	11a(ix): Non-Network Assets							
179	Routine expenditure							
180	<i>Project or programme*</i>							
181	Purchase of New Vehicles		-	-	59	-	-	-
182	Computers		-	-	17	-	-	20
183	Computer Network File Server		-	-	-	-	-	-
184	Office Equipment		-	-	-	-	-	-
185	Misc			20	20	20	20	20
186	<i>*include additional rows if needed</i>							
187	All other routine expenditure projects or programmes							
188	Routine expenditure		-	20	96	20	20	40
189	Atypical expenditure							
190	<i>Project or programme*</i>							
191	[Description of material project or programme]							
192	[Description of material project or programme]							
193	[Description of material project or programme]							
194	[Description of material project or programme]							
195	[Description of material project or programme]							
196	<i>*include additional rows if needed</i>							
197	All other atypical projects or programmes							
198	Atypical expenditure		-	-	-	-	-	-
199								
200	Non-network assets expenditure		-	20	96	20	20	40

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 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	31 Mar 24	31 Mar 25
9	Operational Expenditure Forecast	\$000 (in nominal dollars)										
10	Service interruptions and emergencies	144	147	150	153	156	159	163	166	169	173	176
11	Vegetation management	60	51	52	53	54	55	56	57	59	60	61
12	Routine and corrective maintenance and inspection	240	228	232	237	242	246	251	256	262	267	272
13	Asset replacement and renewal	356	339	346	353	360	367	374	382	389	397	405
14	Network Opex	800	765	780	796	812	828	845	862	879	896	914
15	System operations and network support	258	263	268	273	279	284	290	296	302	308	314
16	Business support	1,037	1,081	1,097	1,114	1,130	1,148	1,171	1,195	1,219	1,243	1,268
17	Non-network opex	1,295	1,344	1,365	1,387	1,409	1,433	1,461	1,490	1,520	1,551	1,582
18	Operational expenditure	2,095	2,109	2,145	2,183	2,221	2,261	2,306	2,352	2,399	2,447	2,496
19		Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5	CY+6	CY+7	CY+8	CY+9	CY+10
20	for year ended	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	31 Mar 24	31 Mar 25
21		\$000 (in constant prices)										
22	Service interruptions and emergencies	144	144	144	144	144	144	144	144	144	144	144
23	Vegetation management	60	50	50	50	50	50	50	50	50	50	50
24	Routine and corrective maintenance and inspection	240	223	223	223	223	223	223	223	223	223	223
25	Asset replacement and renewal	356	332	332	332	332	332	332	332	332	332	332
26	Network Opex	800	750	750	750	750	750	750	750	750	750	750
27	System operations and network support	258	258	258	258	258	258	258	258	258	258	258
28	Business support	1,037	1,060	1,055	1,050	1,044	1,040	1,040	1,040	1,040	1,040	1,040
29	Non-network opex	1,295	1,318	1,312	1,307	1,302	1,298	1,298	1,298	1,298	1,298	1,298
30	Operational expenditure	2,095	2,068	2,062	2,057	2,052	2,048	2,048	2,048	2,048	2,048	2,048
31	Subcomponents of operational expenditure (where known)											
32	Energy efficiency and demand side management, reduction of energy losses											
33	Direct billing*											
34	Research and Development											
35	Insurance											
36												
37	* Direct billing expenditure by suppliers that direct bill the majority of their consumers											
38												
39		Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5	CY+6	CY+7	CY+8	CY+9	CY+10
40	for year ended	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	31 Mar 24	31 Mar 25
41	Difference between nominal and real forecasts	\$000										
42	Service interruptions and emergencies	-	3	6	9	12	15	18	21	25	28	32
43	Vegetation management	-	1	2	3	4	5	6	7	9	10	11
44	Routine and corrective maintenance and inspection	-	4	9	14	18	23	28	33	38	44	49
45	Asset replacement and renewal	-	7	13	20	27	35	42	49	57	65	73
46	Network Opex	-	15	30	46	62	78	95	112	129	146	164
47	System operations and network support	-	5	10	16	21	27	32	38	44	50	56
48	Business support	-	21	43	64	86	108	131	155	179	203	228
49	Non-network opex	-	26	53	80	107	135	164	193	223	253	284
50	Operational expenditure	-	41	83	126	169	213	258	304	351	399	448

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.

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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	All	Overhead Line	Concrete poles / steel structure	No.			80.00%	20.00%		4	1.00%
8	All	Overhead Line	Wood poles	No.		60.00%	20.00%	20.00%		4	1.00%
9	All	Overhead Line	Other pole types	No.					[Select one]		
10	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km		100.00%				3	100.00%
11	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km					[Select one]		
12	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km			100.00%			2	-
13	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km					[Select one]		
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km					[Select one]		
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km			100.00%			2	-
16	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km					[Select one]		
17	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km					[Select one]		
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km					[Select one]		
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km					[Select one]		
20	HV	Subtransmission Cable	Subtransmission submarine cable	km					[Select one]		
21	HV	Zone substation Buildings	Zone substations up to 66kV	No.				100.00%		4	100.00%
22	HV	Zone substation Buildings	Zone substations 110kV+	No.					[Select one]		
23	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.					[Select one]		
24	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.				100.00%		4	100.00%
25	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.					[Select one]		
26	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.				100.00%		4	100.00%
27	HV	Zone substation switchgear	33kV RMU	No.					[Select one]		
28	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.					[Select one]		
29	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.					[Select one]		
30	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.			100.00%			3	1.00%
31	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.					[Select one]		

42	Asset condition at start of planning period (percentage of units by grade)										
43											
	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
44											
45	HV	Zone Substation Transformer	Zone Substation Transformers	No.				100.00%		4	100.00%
46	HV	Distribution Line	Distribution OH Open Wire Conductor	km			90.00%	10.00%		3	-
47	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km						[Select one]	
48	HV	Distribution Line	SWER conductor	km			100.00%			3	-
49	HV	Distribution Cable	Distribution UG XLPE or PVC	km			90.00%	10.00%		2	-
50	HV	Distribution Cable	Distribution UG PILC	km			60.00%	40.00%		2	7.00%
51	HV	Distribution Cable	Distribution Submarine Cable	km						[Select one]	
52	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.			100.00%			4	-
53	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.		23.00%	64.00%	13.00%		3	-
54	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.				100.00%		3	-
55	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.				100.00%		3	-
56	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.		1.00%	49.00%	50.00%		3	-
57	HV	Distribution Transformer	Pole Mounted Transformer	No.			40.00%	60.00%		3	1.00%
58	HV	Distribution Transformer	Ground Mounted Transformer	No.		10.00%	75.00%	15.00%		3	-
59	HV	Distribution Transformer	Voltage regulators	No.						[Select one]	
60	HV	Distribution Substations	Ground Mounted Substation Housing	No.			80.00%	20.00%		3	1.00%
61	LV	LV Line	LV OH Conductor	km			100.00%			3	-
62	LV	LV Cable	LV UG Cable	km		20.00%	60.00%	20.00%		2	0.50%
63	LV	LV Streetlighting	LV OH/UG Streetlight circuit	km		30.00%	60.00%	10.00%		2	-
64	LV	Connections	OH/UG consumer service connections	No.			60.00%	40.00%		3	-
65	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.			10.00%	90.00%		3	10.00%
66	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot			10.00%	90.00%		3	-
67	All	Capacitor Banks	Capacitors including controls	No.						[Select one]	
68	All	Load Control	Centralised plant	Lot						[Select one]	
69	All	Load Control	Relays	No.						[Select one]	
70	All	Civils	Cable Tunnels	km						[Select one]	

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.

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12b(i): System Growth - Zone Substations

8

	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
Existing Zone Substations									
New Haven Road	34	48	N-1	4	71%	48	71%	No constraint within +5 years	
[Zone Substation_02]					-			[Select one]	
[Zone Substation_03]					-			[Select one]	
[Zone Substation_04]					-			[Select one]	
[Zone Substation_05]					-			[Select one]	
[Zone Substation_06]					-			[Select one]	
[Zone Substation_07]					-			[Select one]	
[Zone Substation_08]					-			[Select one]	
[Zone Substation_09]					-			[Select one]	
[Zone Substation_10]					-			[Select one]	
[Zone Substation_11]					-			[Select one]	
[Zone Substation_12]					-			[Select one]	
[Zone Substation_13]					-			[Select one]	
[Zone Substation_14]					-			[Select one]	
[Zone Substation_15]					-			[Select one]	
[Zone Substation_16]					-			[Select one]	
[Zone Substation_17]					-			[Select one]	
[Zone Substation_18]					-			[Select one]	
[Zone Substation_19]					-			[Select one]	
[Zone Substation_20]					-			[Select one]	

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

30

12b(ii): Transformer Capacity

31

	(MVA)
Distribution transformer capacity (EDB owned)	95
Distribution transformer capacity (Non-EDB owned)	-
Total distribution transformer capacity	95
Zone substation transformer capacity	48

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

Consumer types defined by EDB*

Load Group 0 (Unmetered and Builders Temporary)
Load Group 1 (Low User)
Load Group 2 (Mass Market - Residential)
Load Group 2 (Mass Market - Business)
Load Group 3 (Time of Use)

Connections total

*include additional rows if needed

Distributed generation

Number of connections

Installed connection capacity of distributed generation (MVA)

	Number of connections					
for year ended	Current Year CY 31 Mar 15	CY+1 31 Mar 16	CY+2 31 Mar 17	CY+3 31 Mar 18	CY+4 31 Mar 19	CY+5 31 Mar 20
	47	49	50	50	50	50
	3,049	3,361	3,659	3,939	4,197	4,462
	4,602	4,330	4,073	3,836	3,619	3,395
	1,415	1,418	1,421	1,424	1,429	1,434
	93	94	95	96	97	98
	9,206	9,252	9,298	9,345	9,392	9,439
	48	77	123	197	315	503
	2	2	2	3	3	4

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

for year ended	Current Year CY 31 Mar 15	CY+1 31 Mar 16	CY+2 31 Mar 17	CY+3 31 Mar 18	CY+4 31 Mar 19	CY+5 31 Mar 20
	34	34	34	35	35	35
	-	-	-	-	-	-
	34	34	34	35	35	35
	34	34	34	35	35	35

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

	145	146	146	147	147	148
	-	-	-	-	-	-
	0	0	0	0	1	1
	-	-	-	-	-	-
	145	146	147	147	148	149
	140	141	141	142	143	144
	5	5	5	5	5	5
	49%	49%	49%	49%	49%	49%
	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%

Company Name	Nelson Electricity Ltd
AMP Planning Period	1 April 2015 – 31 March 2025
Network / Sub-network Name	Nelson Electricity Ltd

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 15	31 Mar 16	31 Mar 17	31 Mar 18	31 Mar 19	31 Mar 20
8							
9							
10	SAIDI						
11	Class B (planned interruptions on the network)	3.0	15.0	15.0	15.0	15.0	15.0
12	Class C (unplanned interruptions on the network)	17.5	30.0	30.0	30.0	30.0	30.0
13	SAIFI						
14	Class B (planned interruptions on the network)	0.90	0.30	0.30	0.30	0.30	0.30
15	Class C (unplanned interruptions on the network)	0.70	0.60	0.60	0.60	0.60	0.60