Nelson Electricity Ltd
Asset Management Plan
Update

April 2022 – March 2032

April 2022

Nelson Electricity Ltd central Nelson city view

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

Nelson Electricity Limited - Asset Management Plan Update 2019-2029

SCHEDULE 17
Certification of Year-beginning Disclosures

Clause 2.9.1

We, Philip Ian Robinson and Oliver Rupert Kearney, 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 clauses 2.4.1, 2.6.1, 2.6.3, 2.6.6 and 2.7.2 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.

c) The forecasts in Schedules 11a, 11b, 12a, 12b, 12c and 12d are based on objective and reasonable assumptions which both align with Nelson Electricity Limited's corporate vision and strategy and are documented in retained records.

Signed 

Date 31 March 2022

Signed 

Date 31 March 2022

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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 2021–2031 Asset Management Plan and has determined that there have 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.

SECTION 2 – Development Plan – Material Changes

The Development Plan that is used as a basis for this Asset Management Plan update is not materially different from that disclosed in the 2021-2031 Asset Management Plan. This update is based on the peak demand (MW) remaining unchanged at 35MVA and kWh consumption remaining at current levels. The 2021-2022 years consumption is tracking at only 0.5% above previous year's volumes.

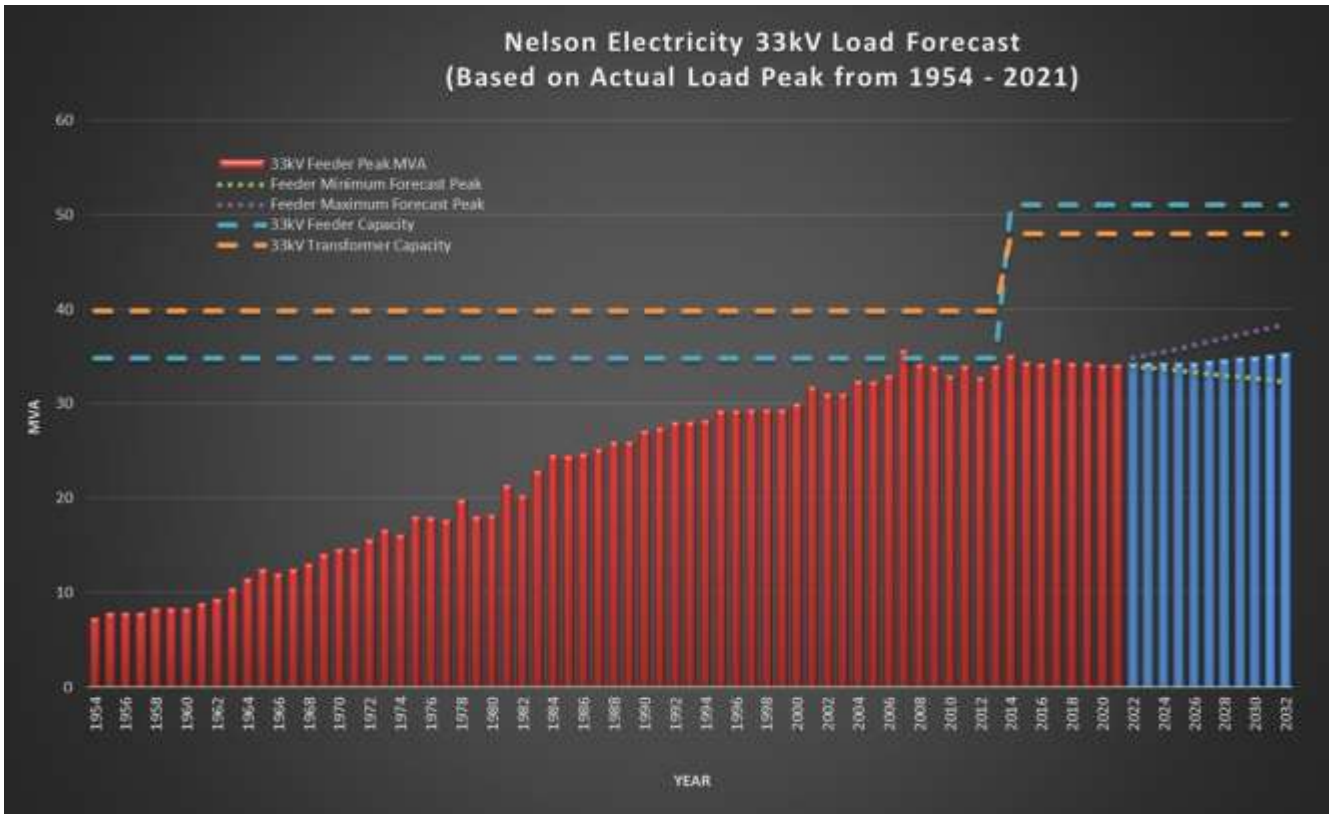

Figure 1: Nelson Electricity Historical Peak Demand and Forecast Demand

Figure 2: Nelson Electricity Historical GXP and Billed Consumption MWh

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

There were no material changes to the lifecycle management since the April 2021 Asset Management Plan disclosure.

The financial impact is outlined in Section 4.

SECTION 4 – Capital and Operational Expenditure Forecast – Material Changes

Capital Expenditure

There is no material change to the Asset Management Plan for the period 2022-2032.

Capital Expenditure for the 2021-2022 year is forecast to be $1.45M or 12.3% under the $1.655M budget (excluding developer driven projects). This has been primarily due to switchgear supply chain issues. The delayed work will be completed in the 2022-2023 year of the planning period. Several developer driven projects have also been delayed or did not proceed as planned. Provision for these projects has been moved into the current planning period.

Nelson Electricity continually reviews and prioritises planned projects. Where possible Nelson Electricity may reschedule projects within the Capital Expenditure Plan to align with Nelson City Council and other utility operator activities to minimise disruption and civil costs.

Operational Expenditure

Network Operational Expenditure FY2022 is forecast to be $117k or 15% over the $783k budget. This variance is due to three key reasons:

1. An uncharacteristic number of 11kV cable faults during the year resulting in $50k additional expenditure.
2. Zone Substation operational expenditure which accounts for an additional $40k.
3. Additional inflationary cost increases across the board which account for the remaining differences.

Non-Network Operational Expenditure FY2022 is in in line with the 2021–2031 Asset Management Plan forecast.

There are no material changes to the overall operational expenditure. The Network Operational Expenditure FY2023 is estimated at $822k with a 5.0% increase for FY2024, 3% FY2025 and dropping back to 2% per year thereafter for the rest of the planning period. Non-network expenditure FY2023 is estimated at $1,515k with a 2% increase per year for the rest of the planning period.

SECTION 5 – Changes in Asset Management Practises

There are no material changes to existing asset management practises.

SECTION 6 – Asset Management Plan Disclosure Schedules

Company Name	**Nelson Electricity Ltd**
AMP Planning Period	**1 April 2022 – 31 March 2032**

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	*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 22**	**31 Mar 23**	**31 Mar 24**	**31 Mar 25**	**31 Mar 26**	**31 Mar 27**	**31 Mar 28**	**31 Mar 29**	**31 Mar 30**	**31 Mar 31**	**31 Mar 32**
	11a(i): Expenditure on Assets Forecast	**$000 (in nominal dollars)**										
	Consumer connection	99	245	110	141	55	56	57	59	60	61	62
	System growth	5	270	189	379	386	281	172	176	179	183	186
	Asset replacement and renewal	890	540	961	1,433	1,456	979	1,194	1,253	1,278	1,303	1,329
	Asset relocations	47	110	53	54	-	-	-	-	-	-	-
	Reliability, safety and environment:											
	Quality of supply	24	550	105	-	-	56	-	-	60	-	-
	Legislative and regulatory	-	-	-	-	-	-	-	-	-	-	-
	Other reliability, safety and environment	315	475	425	238	397	371	350	357	364	371	342
	Total reliability, safety and environment	339	1,025	530	238	397	428	350	357	424	371	342
	Expenditure on network assets	1,380	2,190	1,843	2,244	2,295	1,744	1,773	1,844	1,940	1,918	1,919
	Expenditure on non-network assets	40	107	28	29	85	30	31	32	92	33	34
	Expenditure on assets	1,420	2,297	1,871	2,273	2,379	1,774	1,804	1,875	2,032	1,951	1,953
plus	Cost of financing											
less	Value of capital contributions											
plus	Value of vested assets											
	Capital expenditure forecast	1,420	2,297	1,871	2,273	2,379	1,774	1,804	1,875	2,032	1,951	1,953
	Assets commissioned	1,420	2,297	1,871	2,273	2,379	1,774	1,804	1,875	2,032	1,951	1,953

		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 22**	**31 Mar 23**	**31 Mar 24**	**31 Mar 25**	**31 Mar 26**	**31 Mar 27**	**31 Mar 28**	**31 Mar 29**	**31 Mar 30**	**31 Mar 31**	**31 Mar 32**
		$000 (in constant prices)										
	Consumer connection	99	245	105	130	50	50	50	50	50	50	50
	System growth	5	270	180	350	350	250	150	150	150	150	150
	Asset replacement and renewal	890	540	915	1,325	1,320	870	1,040	1,070	1,070	1,070	1,070
	Asset relocations	47	110	50	50	-	-	-	-	-	-	-
	Reliability, safety and environment:											
	Quality of supply	24	550	100	-	-	50	-	-	50	-	-
	Legislative and regulatory	-	-	-	-	-	-	-	-	-	-	-
	Other reliability, safety and environment	315	475	405	220	360	330	305	305	305	305	275
	Total reliability, safety and environment	339	1,025	505	220	360	380	305	305	355	305	275
	Expenditure on network assets	1,380	2,190	1,755	2,075	2,080	1,550	1,545	1,575	1,625	1,575	1,545
	Expenditure on non-network assets	40	107	27	27	77	27	27	27	77	27	27
	Expenditure on assets	1,420	2,297	1,782	2,102	2,157	1,577	1,572	1,602	1,702	1,602	1,572
	Subcomponents of expenditure on assets (where known)											
	Energy efficiency and demand side management, reduction of energy losses											
	Overhead to underground conversion		80	120	120	-	-	-	-	-	-	-
	Research and development											

		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 22	31 Mar 23	31 Mar 24	31 Mar 25	31 Mar 26	31 Mar 27	31 Mar 28	31 Mar 29	31 Mar 30	31 Mar 31	31 Mar 32
Difference between nominal and constant price forecasts		$000										
Consumer connection		-	-	5	11	5	6	7	9	10	11	12
System growth		-	-	9	29	36	31	22	26	29	33	36
Asset replacement and renewal		-	-	46	108	136	109	154	183	208	233	259
Asset relocations		-	-	3	4	-	-	-	-	-	-	-
Reliability, safety and environment:												
Quality of supply		-	-	5	-	-	6	-	-	10	-	-
Legislative and regulatory		-	-	-	-	-	-	-	-	-	-	-
Other reliability, safety and environment		-	-	20	18	37	41	45	52	59	66	67
Total reliability, safety and environment		-	-	25	18	37	48	45	52	69	66	67
Expenditure on network assets		-	-	88	169	215	194	228	269	315	343	374
Expenditure on non-network assets		-	-	1	2	8	3	4	5	15	6	7
Expenditure on assets		-	-	89	171	222	197	232	273	330	349	381

	Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
for year ended	31 Mar 22	31 Mar 23	31 Mar 24	31 Mar 25	31 Mar 26	31 Mar 27
11a(ii): Consumer Connection						
*Consumer types defined by EDB**	$000 (in constant prices)					
Group 2	99	245	105	130	50	50
*include additional rows if needed						
Consumer connection expenditure	99	245	105	130	50	50
less Capital contributions funding consumer connection						
Consumer connection less capital contributions	99	245	105	130	50	50
11a(iii): System Growth						
Subtransmission		-	-	-	-	-
Zone substations		-	-	-	-	-
Distribution and LV lines		-	-	-	-	-
Distribution and LV cables	5	-	-	-	-	-
Distribution substations and transformers		165	80	250	250	155
Distribution switchgear		-	-	-	-	-
Other network assets		105	100	100	100	95
System growth expenditure	5	270	180	350	350	250
less Capital contributions funding system growth						
System growth less capital contributions	5	270	180	350	350	250

		Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
	for year ended	31 Mar 22	31 Mar 23	31 Mar 24	31 Mar 25	31 Mar 26	31 Mar 27
11a(iv): Asset Replacement and Renewal	**$000 (in constant prices)**						
Subtransmission		-	-	-	-	-	-
Zone substations		-	-	-	-	-	-
Distribution and LV lines		-	-	85	60	-	-
Distribution and LV cables		733	445	770	895	1,050	600
Distribution substations and transformers		-	-	-	-	-	-
Distribution switchgear		24	-	-	275	-	-
Other network assets		133	95	60	95	270	270
Asset replacement and renewal expenditure		890	540	915	1,325	1,320	870
less Capital contributions funding asset replacement and renewal							
Asset replacement and renewal less capital contributions		890	540	915	1,325	1,320	870

		Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
	for year ended	31 Mar 22	31 Mar 23	31 Mar 24	31 Mar 25	31 Mar 26	31 Mar 27
11a(v): Asset Relocations							
*Project or programme**	**$000 (in constant prices)**						
Relocate AMP substation (programme)			20	-	-	-	-
Relocate New South Wales substation (programme)			20	50	50	-	-
Konini St - Replace O/H sub with GM		22	70	-	-	-	-
Wakefield Quay - Relocate substation		25					
**include additional rows if needed*							
All other project or programmes - asset relocations							
Asset relocations expenditure		47	110	50	50	-	-
less Capital contributions funding asset relocations							
Asset relocations less capital contributions		47	110	50	50	-	-

		Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
	for year ended	31 Mar 22	31 Mar 23	31 Mar 24	31 Mar 25	31 Mar 26	31 Mar 27
11a(vi): Quality of Supply							
*Project or programme**	**$000 (in constant prices)**						
Emano St North Tripping VCB		14	250	-	-	-	-
Age related HV cable test programme			-	50	-	-	50
LV Network Monitoring			50	50	-	-	-
Sectionalise GPO feeder with a tripping VCB			250				
Additional network switchs		10					
Qu **include additional rows if needed*							
less All other projects or programmes - quality of supply							
Quality of supply less capital contributions		24	550	100	-	-	50
Capital contributions funding quality of supply							
		24	550	100	-	-	50

11a(vii): Legislative and Regulatory

		Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
for year ended		31 Mar 22	31 Mar 23	31 Mar 24	31 Mar 25	31 Mar 26	31 Mar 27
*Project or programme**	$000 (in constant prices)						
Le *include additional rows if needed							
less All other projects or programmes - legislative and regulatory							
Legislative and regulatory less capital contributions		-	-	-	-	-	-
Capital contributions funding legislative and regulatory							
		-	-	-	-	-	-

11a(viii): Other Reliability, Safety and Environment

		Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
for year ended		31 Mar 22	31 Mar 23	31 Mar 24	31 Mar 25	31 Mar 26	31 Mar 27
*Project or programme**	$000 (in constant prices)						
Other		135	395	285	100	360	330
O/H to U/G		180	80	120	120	-	-
Ot *include additional rows if needed							
less All other projects or programmes - other reliability, safety and environment							
Other reliability, safety and environment less capital contributions		315	475	405	220	360	330
Capital contributions funding other reliability, safety and environment							
		315	475	405	220	360	330

11a(ix): Non-Network Assets

		Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
Routine expenditure for year ended		31 Mar 22	31 Mar 23	31 Mar 24	31 Mar 25	31 Mar 26	31 Mar 27
*Project or programme**	$000 (in constant prices)						
Misc			25	25	25	25	25
Office Equipment			2	2	2	2	2
Computers			50			20	
Vehicles		40	-			30	
Ro *include additional rows if needed							
Atypi All other projects or programmes - routine expenditure							
		40	77	27	27	77	27
*Project or programme**							
Haven Road Office Building Work			30				
At *include additional rows if needed							
All other projects or programmes - atypical expenditure							
Expenditure on non-network assets		-	30	-	-	-	-
		40	107	27	27	77	27

Company Name	**Nelson Electricity Ltd**
AMP Planning Period	**1 April 2022 – 31 March 2032**

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												
7		*Current Year CY*	*CY+1*	*CY+2*	*CY+3*	*CY+4*	*CY+5*	*CY+6*	*CY+7*	*CY+8*	*CY+9*	*CY+10*
8	for year ended	**31 Mar 22**	**31 Mar 23**	**31 Mar 24**	**31 Mar 25**	**31 Mar 26**	**31 Mar 27**	**31 Mar 28**	**31 Mar 29**	**31 Mar 30**	**31 Mar 31**	**31 Mar 32**
9	**Operational Expenditure Forecast**	**$000 (in nominal dollars)**										
10	Service interruptions and emergencies	180	142	149	153	156	159	163	166	169	173	176
11	Vegetation management	52	40	42	43	44	45	46	47	48	49	50
12	Routine and corrective maintenance and inspection	311	266	279	287	293	299	305	311	317	324	330
13	Asset replacement and renewal	357	375	394	405	414	422	430	439	448	457	466
14	**Network Opex**	900	822	863	889	907	925	944	962	982	1,001	1,021
15	System operations and network support	258	268	273	279	284	290	296	302	308	314	320
16	Business support	1,228	1,248	1,273	1,298	1,324	1,351	1,378	1,405	1,434	1,462	1,491
17	**Non-network opex**	1,486	1,516	1,546	1,577	1,609	1,641	1,674	1,707	1,741	1,776	1,812
18	**Operational expenditure**	2,386	2,338	2,410	2,466	2,516	2,566	2,617	2,670	2,723	2,778	2,833

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 22**	**31 Mar 23**	**31 Mar 24**	**31 Mar 25**	**31 Mar 26**	**31 Mar 27**	**31 Mar 28**	**31 Mar 29**	**31 Mar 30**	**31 Mar 31**	**31 Mar 32**
21		**$000 (in constant prices)**										
22	Service interruptions and emergencies	180	142	142	142	142	142	142	142	142	142	142
23	Vegetation management	52	40	40	40	40	40	40	40	40	40	40
24	Routine and corrective maintenance and inspection	311	266	266	266	266	266	266	266	266	266	266
25	Asset replacement and renewal	357	375	375	375	375	375	375	375	375	375	375
26	**Network Opex**	900	822	822	822	822	822	822	822	822	822	822
27	System operations and network support	258	268	268	268	268	268	268	268	268	268	268
28	Business support	1,228	1,248	1,248	1,248	1,248	1,248	1,248	1,248	1,248	1,248	1,248
29	**Non-network opex**	1,486	1,516	1,516	1,516	1,516	1,516	1,516	1,516	1,516	1,516	1,516
30	**Operational expenditure**	2,386	2,338	2,338	2,338	2,338	2,338	2,338	2,338	2,338	2,338	2,338

31	**Subcomponents of operational expenditure (where known)**											
32	Energy efficiency and demand side management, reduction of											
33	energy losses											
34	Direct billing*											
35	Research and Development											
36	Insurance											
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 22**	**31 Mar 23**	**31 Mar 24**	**31 Mar 25**	**31 Mar 26**	**31 Mar 27**	**31 Mar 28**	**31 Mar 29**	**31 Mar 30**	**31 Mar 31**	**31 Mar 32**
41	**Difference between nominal and real forecasts**	**$000**										
42	Service interruptions and emergencies	-	-	7	12	15	18	21	24	28	31	34
43	Vegetation management	-	-	2	3	4	5	6	7	8	9	10
44	Routine and corrective maintenance and inspection	-	-	13	22	27	33	39	45	52	58	64
45	Asset replacement and renewal	-	-	19	31	39	47	55	64	73	82	91
46	**Network Opex**	-	-	41	67	85	103	121	140	160	179	199
47	System operations and network support	-	-	5	11	16	22	28	34	40	46	52
48	Business support	-	-	25	50	76	103	130	157	186	214	243
49	**Non-network opex**	-	-	30	61	93	125	158	191	225	260	296
50	**Operational expenditure**	-	-	71	128	178	228	279	332	385	439	495

Company Name	**Nelson Electricity Ltd**
AMP Planning Period	**1 April 2022 – 31 March 2032**

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	H1	H2	H3	H4	H5	Grade unknown	Data accuracy (1–4)	% of asset forecast to be replaced in next 5 years
10	All	Overhead Line	Concrete poles / steel structure	No.			5%	75%	20%		4	1.00%
11	All	Overhead Line	Wood poles	No.			15%	85%			4	1.00%
12	All	Overhead Line	Other pole types	No.							N/A	
13	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km							N/A	
14	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km							N/A	
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km				100%			3	
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km							N/A	
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km							N/A	
18	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km			50%	50%			3	
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km							N/A	
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km							N/A	
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km							N/A	
22	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km							N/A	
23	HV	Subtransmission Cable	Subtransmission submarine cable	km							N/A	
24	HV	Zone substation Buildings	Zone substations up to 66kV	No.					100%		4	
25	HV	Zone substation Buildings	Zone substations 110kV+	No.							N/A	
26	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.					100%		4	
27	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.							N/A	
28	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.							N/A	
29	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.							N/A	
30	HV	Zone substation switchgear	33kV RMU	No.							N/A	
31	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.							N/A	
32	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.							N/A	
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.					100%		4	
34	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.							N/A	

					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
39	HV	Zone Substation Transformer	Zone Substation Transformers	No.					100%		4	
40	HV	Distribution Line	Distribution OH Open Wire Conductor	km				78%	22%		3	
41	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km							N/A	
42	HV	Distribution Line	SWER conductor	km							N/A	
43	HV	Distribution Cable	Distribution UG XLPE or PVC	km		10%	10%	65%	15%		2	10.00%
44	HV	Distribution Cable	Distribution UG PILC	km		2%	58%	40%			2	1.00%
45	HV	Distribution Cable	Distribution Submarine Cable	km							N/A	
46	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.				100%			4	
47	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.			15%	-	85%		4	15.00%
48	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.				100%			3	40.00%
49	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.				100%			3	
50	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.		5%	5%	40%	50%		3	5.00%
51	HV	Distribution Transformer	Pole Mounted Transformer	No.			4%	96%			3	1.00%
52	HV	Distribution Transformer	Ground Mounted Transformer	No.			9%	74%	17%		3	1.00%
53	HV	Distribution Transformer	Voltage regulators	No.							N/A	
54	HV	Distribution Substations	Ground Mounted Substation Housing	No.				80%	20%		3	
55	LV	LV Line	LV OH Conductor	km				100%			3	
56	LV	LV Cable	LV UG Cable	km			20%	60%	20%		2	
57	LV	LV Streetlighting	LV OH/UG Streetlight circuit	km			30%	60%	10%		2	
58	LV	Connections	OH/UG consumer service connections	No.			10%	50%	40%		3	
59	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.					100%		3	
60	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot				10%	90%		3	
61	All	Capacitor Banks	Capacitors including controls	No.							N/A	
62	All	Load Control	Centralised plant	Lot					100%		4	
63	All	Load Control	Relays	No.							N/A	
64	All	Civils	Cable Tunnels	km							N/A	

Company Name	**Nelson Electricity Ltd**
AMP Planning Period	**1 April 2022 – 31 March 2032**

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**

sch ref	*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
8										
9	Haven Road Zone Substation	35	48	N-1	4	73%	48	73%	No constraint within +5 years	
10						-			[Select one]	
11						-			[Select one]	
12						-			[Select one]	
13						-			[Select one]	
14						-			[Select one]	
15						-			[Select one]	
16						-			[Select one]	
17						-			[Select one]	
18						-			[Select one]	
19						-			[Select one]	
20						-			[Select one]	
21						-			[Select one]	
22						-			[Select one]	
23						-			[Select one]	
24						-			[Select one]	
25						-			[Select one]	
26						-			[Select one]	
27						-			[Select one]	
28						-			[Select one]	

29 [1] *Extend forecast capacity table as necessary to disclose all capacity by each zone substation*

Company Name	**Nelson Electricity Ltd**
AMP Planning Period	**1 April 2022 – 31 March 2032**

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

	for year ended	*Current Year CY* **31 Mar 22**	*CY+1* **31 Mar 23**	*CY+2* **31 Mar 24**	*CY+3* **31 Mar 25**	*CY+4* **31 Mar 26**	*CY+5* **31 Mar 27**
*Consumer types defined by EDB**							
Load Group 0 (Unmetered and Builders Temporary)		8	-	-	-	-	-
Load Group 1 (Low User)		-	15	15	15	15	15
Load Group 2 (Mass Market - Residential)		26	30	30	30	30	30
Load Group 2 (Mass Market - Business)		10	15	15	15	15	15
Load Group 3 (Time of Use)		-	-	-	-	-	-
Connections total		44	60	60	60	60	60

**Distributed generation*

*include additional rows if needed

Distributed generation

Number of connections		36	60	90	120	160	180
Capacity of distributed generation installed in year (MVA)		0.2	0.2	0.2	0.3	0.4	0.5

12c(ii) System Demand

		for year ended	*Current Year CY* **31 Mar 22**	*CY+1* **31 Mar 23**	*CY+2* **31 Mar 24**	*CY+3* **31 Mar 25**	*CY+4* **31 Mar 26**	*CY+5* **31 Mar 27**
Maximum coincident system demand (MW)								
	GXP demand		33	33	33	33	33	34
plus	Distributed generation output at HV and above		-	-	-	-	-	-
	Maximum coincident system demand		33	33	33	33	33	34
less	Net transfers to (from) other EDBs at HV and above							
	Demand on system for supply to consumers' connection points		33	33	33	33	33	34
Electricity volumes carried (GWh)								
	Electricity supplied from GXPs		142	142	142	142	141	143
less	Electricity exports to GXPs		-	-	-	-	-	-
plus	Electricity supplied from distributed generation		0	1	1	1	1	1
less	Net electricity supplied to (from) other EDBs		-	-	-	-	-	-
	Electricity entering system for supply to ICPs		142	142	142	142	142	144
less	Total energy delivered to ICPs		138	138	138	138	138	139
	Losses		5	5	5	5	5	5
	Load factor		49%	49%	49%	49%	49%	49%
	Loss ratio		3.3%	3.3%	3.3%	3.3%	3.3%	3.3%

Company Name	**Nelson Electricity Ltd**
AMP Planning Period	**1 April 2022 – 31 March 2032**
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							
8		*Current Year CY*	*CY+1*	*CY+2*	*CY+3*	*CY+4*	*CY+5*
9	for year ended	**31 Mar 22**	**31 Mar 23**	**31 Mar 24**	**31 Mar 25**	**31 Mar 26**	**31 Mar 27**
10	**SAIDI**						
11	Class B (planned interruptions on the network)	18.8	15.0	15.0	15.0	15.0	15.0
12	Class C (unplanned interruptions on the network)	32.2	15.0	15.0	15.0	15.0	15.0
13	**SAIFI**						
14	Class B (planned interruptions on the network)	0.10	0.30	0.30	0.30	0.30	0.30
15	Class C (unplanned interruptions on the network)	0.46	0.60	0.60	0.60	0.60	0.60

SCHEDULE 14a - Mandatory Explanatory Notes on Forecast Information

1. This Schedule requires EDBs to provide explanatory notes to reports prepared in accordance with clause 2.6.6.

2. This Schedule is mandatory—EDBs must provide the explanatory comment specified below, in accordance with clause 2.7.2. This information is not part of the audited disclosure information, and so is not subject to the assurance requirements specified in section 2.8.

Commentary on difference between nominal and constant price capital expenditure forecasts (Schedule 11a)

3. In the box below, comment on the difference between nominal and constant price capital expenditure for the current disclosure year and 10 year planning period, as disclosed in Schedule 11a.

Box 1: Commentary on difference between nominal and constant price capital expenditure forecasts

There has been a marked increase in costs FY2023. The difference between nominal and constant is assessed at 5% FY2024, 3% FY2025 and 2% for every year thereafter for the rest of the planning period.

Commentary on difference between nominal and constant price operational expenditure forecasts (Schedule 11b)

4. In the box below, comment on the difference between nominal and constant price operational expenditure for the current disclosure year and 10 year planning period, as disclosed in Schedule 11b.

Box 2: Commentary on difference between nominal and constant price operational expenditure forecasts

There has been a marked increase in costs FY2023. For Network Operational Expenditure the difference between nominal and constant is assessed at 5% FY2024, 3% FY2025 and 2% for every year thereafter for the rest of the planning period. For Non-Network Operational Expenditure the difference between nominal and constant is assessed at 2% for every year of the planning period