Northpower

Asset Management Plan Update

2020 - 2030

March 2020

© COPYRIGHT 2020 Northpower Limited.

All rights reserved. This document is protected by copyright vested in Northpower Limited (Northpower). Any breach of Northpower's copyright may be prevented by legal proceedings seeking remedies including injunctions, damages and costs. Any material prepared in breach of Northpower's copyright must be delivered to Northpower immediately upon request by Northpower.

DISCLAIMER The information in this document is provided in good-faith and represents Northpower's opinion as at the date of publication. Northpower does not make any representations, warranties or undertakings either express or implied, about the accuracy or the completeness of the information provided; and the act of making the information available does not constitute any representation, warranty or undertaking, either express or implied. This document does not, and is not intended to; create any legal obligation or duty on Northpower. To the extent permitted by law, no liability (whether in negligence or other tort, by contract, under statute or in equity) is accepted by Northpower by reason of, or in conjunction with, any statement made in this document or by any actual or purported reliance on it by any party. Northpower reserves all rights to alter, in its absolute discretion, any of the information provided in this document.

Northpower

northpower.com

Asset Management Plan Update 2020 – 2030

Table of Contents

Northpower

Section 1:
Asset Management Plan Update

Section 1: Asset Management Plan Update

1 Asset Management Plan Update

This supplement to our Asset Management Plan published in March 2018 (for the period 2018-2028) provides an update to Northpower's approach to managing its assets and delivering the planned programmes of capital and operational spend, as well as planned maintenance work for the period 1 April 2020 to 31 March 2030.

Northpower's 2018 Asset Management Plan is available from Northpower's website at: **http://northpower.com/about/disclosures/asset-management-plan**. This update should be read in conjunction with the 2018 AMP (and subsequent 2019 AMP Update) and outlines how we are managing our Network assets for the efficient and reliable delivery of electricity to consumers.

Covered in this update are:

1. Material changes to the network development plans disclosed in the last AMP;
2. Material changes to the lifecycle asset management (maintenance and renewal) plans disclosed in the last AMP;
3. Material changes to Northpower's asset management practices; and
4. An outline of the reasons for material changes to the previous disclosures in the Report on Forecast Capital Expenditure set out in Schedule 11a and Report on Forecast Operational Expenditure set out in Schedule 11b.

Stakeholder Feedback

Northpower encourages feedback to enable continued improvement in meeting the needs of its consumers and stakeholders.

Feedback should be addressed to:

Roy Hamilton
Asset Investment and Strategy Manager

Northpower
Private Bag 9018
Whangarei Mail Centre
Whangarei 0148

Email: roy.hamilton@northpower.com

Northpower

Section 2:
Material Changes

Section 2: Material Changes

2 Material Changes

2.1 Overview

Since the 2019 AMP Update we have continued to review the existing Asset Management Plan for the electricity business and our approach to investment and maintenance with a focus on continual improvement. The key inputs into this review have included:

- A full review of forecast changes in investment need relating to aging major items of plant and load growth for the 10-year planning period FY21-FY30.
- A full review of unit costs associated with our investment programmes, noting a general trend to increased delivery costs across all work delivery streams.
- Reviewing security of supply criteria against updated load and growth forecasts for high growth areas (primarily Mangawhai and Bream Bay).
- A review of Opex and Capex programs to ensure SAIDI and SAIFI remain in line with long-term averages, taking into account an aging asset base, increases in planned work and ongoing vegetation challenges.

This 2020 AMP Update summarises the resulting changes to our Asset Management Plan.

2.2 Material Changes to Network Development Plan

Overall $18.0M increase in the 10-year Network Development profile compared with the 2019 Asset Management Plan Update[1]

We have reviewed the Network development investments for the next 10-year period and revisited growth assumptions to validate investment need. As a result, some projects have been deferred out of the 10-year planning period.

Counteracting this deferment outcome, and to ensure security of supply to areas experiencing high residential and industrial growth, we have brought forward two significant projects in Mangawhai and Bream Bay and made a number of other targeted changes as set out in the table below.

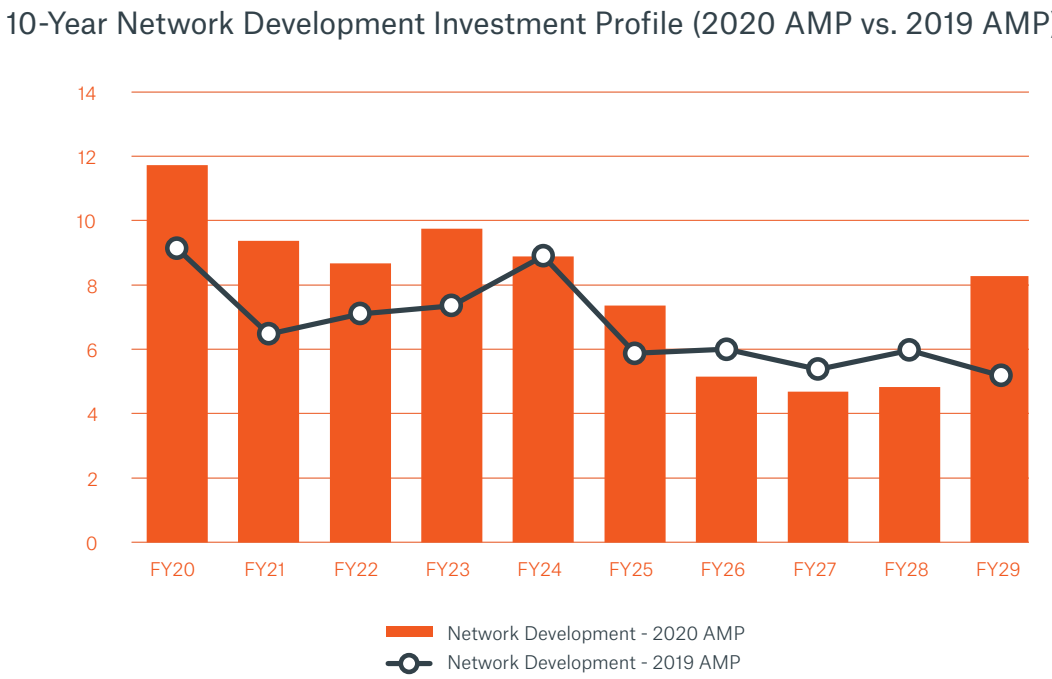
Material Changes to Network Development Plan[2]

Year	Change ($)	Description of Change	Reasons for change
FY21-FY24	+10.5M	Second Maungaturoto - Mangawhai sub-transmission line	To address high levels of growth in the area, and to meet Northpower's security of supply standards.
FY20-FY29	+4.9M	Provision for growth in customer connections	Updated forecasts in line with recent growth trends.
FY21-FY25	+4.5M	Provision for Bream Bay area development (second transformer, switchboards)	Revision of residential and commercial growth forecasts for the area indicate a need to revisit and consolidate investment plans.
FY20-FY29	+2.7M	Increase in overhead to underground relocations in specific coastal areas	To address asset corrosion, improve reliability and extend asset lifecycles.
FY20-FY29	+1.3M	Increase distribution transformer relocation from overhead platforms	Acceleration of targeted safety programme.
FY20-FY29	+3.9M	Buildings, civil and electrical contractor cost increases	Reflects uplift in costs across industry, following cost validation exercise.
FY19-FY29	-12.3M	Project deferrals	Largely due to revision of growth forecasts deferring investment need out of the planning period.

The resulting investment profile sees an uplift in investment related to Network Development compared with our 2019 AMP Update, particularly in the first five years of the planning period.

[1] For the comparison period FY20 to FY29

[2] Includes the following investment categories: consumer connections, system growth, asset relocations, reliability, safety & environment)



2.3 Material Changes to Asset Life Cycle Management

Overall $24.7M increase in the 10-year Asset Life Cycle Management profile compared with the 2019 Asset Management Plan Update.[3]

Our latest review of our Asset Life Cycle Management Plan noted a material increase in building, civils and electrical contractor market rates. We have validated that these increases are real and likely to persist into the future even with competitive pressure. We will continue to look at options available to ensure these project works are delivered in the most cost effective manner.

We have also revised and improved our overhead inspection standard to improve the quality of inspection data received, which in turn enables enhanced asset condition assessments and replacement decisions. The key changes proposed are set out in the table below:

Material Changes to Asset Life Cycle Management Plan[4]

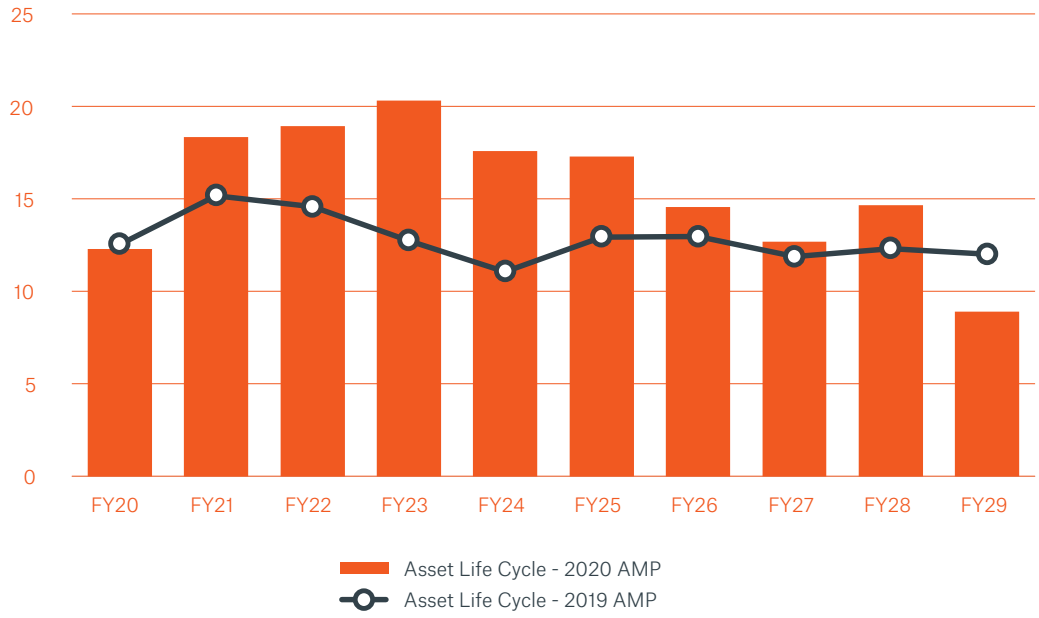
Year	Change ($)	Description of Change	Reason for change
FY22-FY23	+2.5M	New mobile substation	To enhance restoration of supply in fault situations and enable supply to be maintained during rural substation maintenance.
FY20-FY29	+2.3M	Oil filled RMUs	Increase in rate of replacement of RMUs as a result of condition based assessments.
FY21-FY29	+1.3M	New allocation corrective Capex - 110kV towers & equipment	To reflect increased need following condition assessments.
FY21-FY27	+1.2M	New network clearances 3D model (LiDAR)	To enable enhanced management of vegetation priorities and asset clearances.
FY22-FY24	+1.2M	Asset management system replacement	Replacement of end of life system.
FY21-FY29	+2.5M	Provision for overhead switch replacements	Increased need based on emerging defect rates in existing overhead switches.
FY20-FY29	+15.7M	Buildings, civil and electrical contractor cost increases	Reflects existing uplift in costs across industry, following cost validation exercise.
FY19-FY29	-6.0M	Targeted deferrals	Result of validation of asset condition and resulting amendments to the asset's Health Indices.

[3] For the comparison period FY20 to FY29

[4] Includes the following investment categories: asset replacement and renewal, non-network assets

The resulting investment profile sees an uplift in investment relating to Asset Lifecycle Management, compared with our 2019 AMP Update across the planning period.

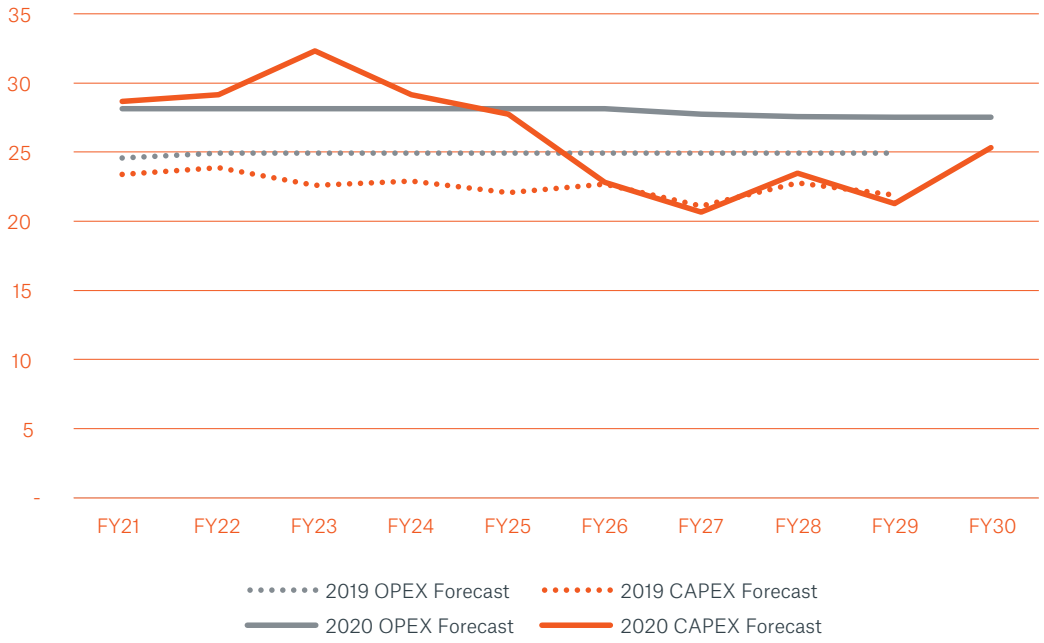
10-Year Asset Life Cycle Management Investment Profile (2020 AMP vs. 2019 AMP) - $M



2.4 Material Changes to Expenditure Forecasts (Schedule 11a and 11b)

Compared to the 2019 AMP Update we are forecasting an increase across both Capex and Opex expenditure.

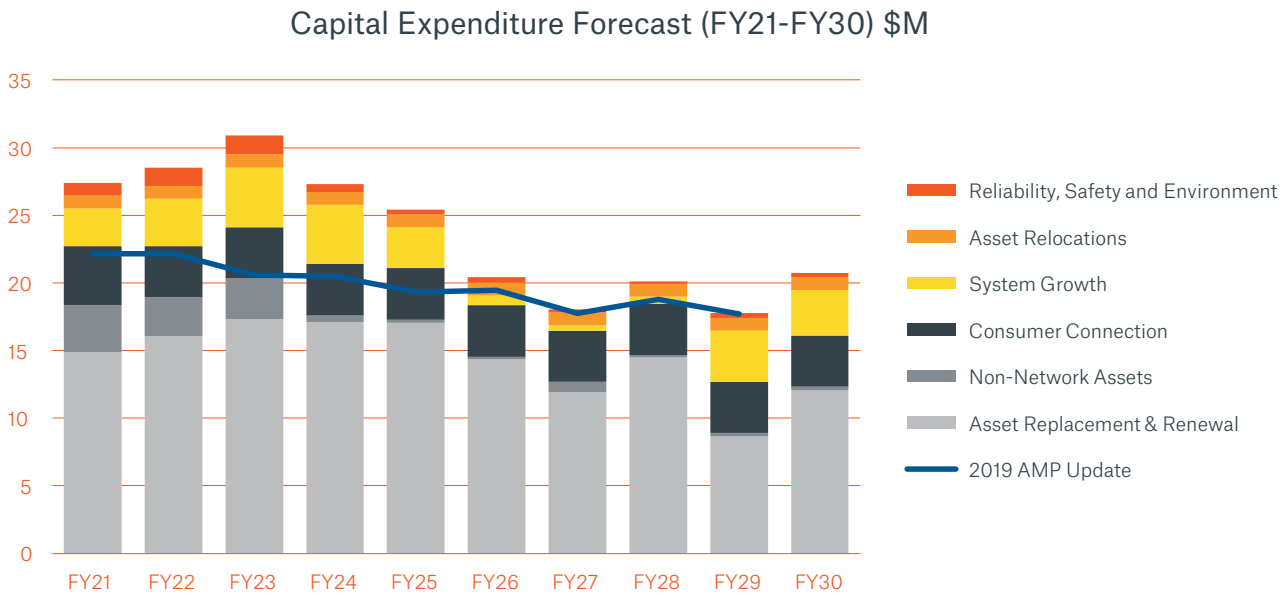
Forecast expenditure 2019 AMP Update vs. 2020 AMP Update



Capex Expenditure Forecast

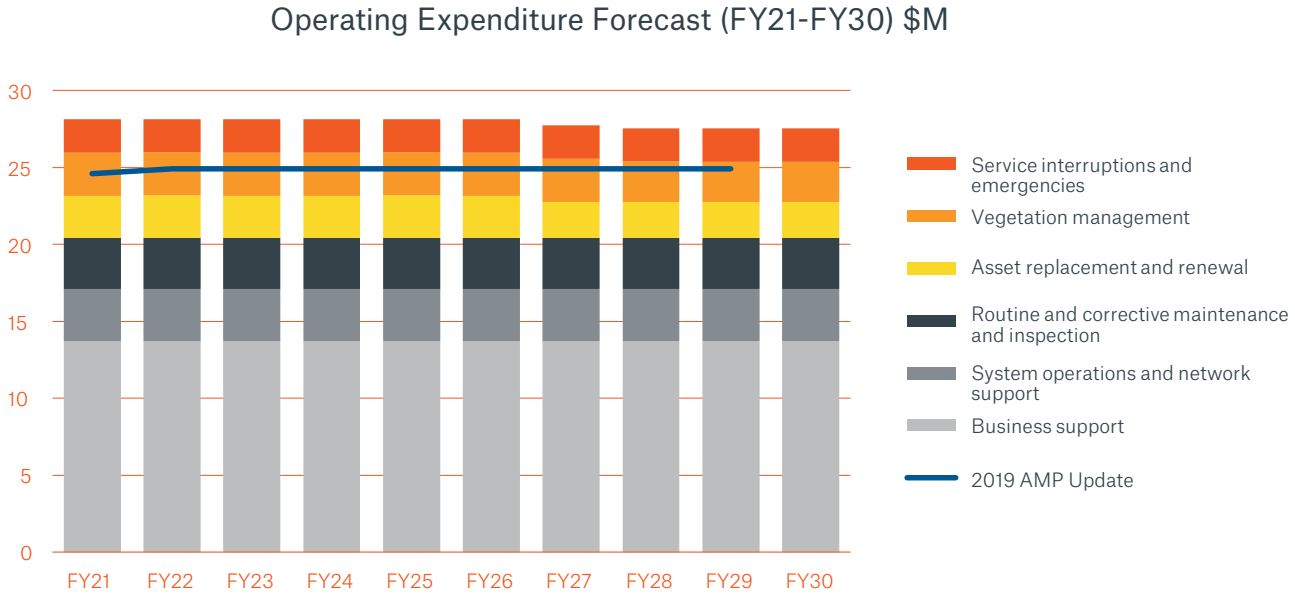
The 10-year forecast capital expenditure is $243.0M, up $42.7M compared with the 2019 Asset Management Plan Update.[5]

We expect it to return to similar levels as the 2019 AMP in the second half of the planning period.



Opex Expenditure Forecast

The 10-year forecast operating expenditure is $279.4M, up $31.0M compared with the 2019 Asset Management Plan Update.[6]



[5] For the comparison period FY20 to FY29

[6] For the comparison period FY20 to FY29

Responding to service interruptions and emergencies	+$2.11M	Uplift to address aging network and an allowance for increased faults due to more significant weather events stressing end of life overhead assets.
Vegetation management	+$4.80M	An uplift in vegetation management to deliver a 5-year vegetation management cycle (better aligned with tree growth rates).
Routine and corrective maintenance and inspection activities	+$5.47M	Increase in quantities of corrective maintenance to ensure focus remains on ensuring timeliness of rectifying defects and enhancing maintenance programmes, as well as an increase in contractor costs.
Asset replacement and renewal	+$573k	Impact of contractor rates review for asset replacement and renewal activities.
System operations and network support	+$2.13M	Reflects ongoing investment in ADMS and maintaining supporting systems, as well as enhanced operational capability and resiliency.
Business support	+$15.94M	Reflects increases in direct and indirect costs to support the network.

2.5 Material Changes to Asset Management Practices

The 2019 AMP Update outlined a number of initiatives aimed to improve our asset management processes. Further refinement over the last year includes:

- Revision of our Network organisational structure to improve focus and outcomes in asset management and delivery of capital and maintenance works. This is supplemented by additional resources to support the asset strategy, delivery and operations functions.
- Refresh of the overhead inspection standards to facilitate better information capture, and ultimately asset management decisions.
- We have further developed our Asset Health Indices and Asset Criticality processes and framework. Several assets have had condition assessments undertaken (including some sub-transmission conductors and zone sub-station transformers), resulting in a re-classification of the asset's Health Indices (and an adjustment to the investment plan).

Northpower

Section 3: Schedules

EDB Information Disclosure Requirements

Information Templates

for

Schedules 11a–13

Company Name	Northpower Ltd
Disclosure Date	31 March 2020
AMP Planning Period Start Date (first day)	1 April 2020

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

	Company Name	**Northpower Ltd**
	AMP Planning Period	**1 April 2020 – 31 March 2030**

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												
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 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**	**31 Mar 30**
9	**11a(i): Expenditure on Assets Forecast**	**$000 (in nominal dollars)**										
10	Consumer connection	5,130	5,644	3,921	4,045	4,173	4,305	4,442	4,583	4,729	4,879	5,035
11	System growth	4,509	2,775	3,556	4,608	4,647	3,278	820	423	604	4,427	4,037
12	Asset replacement and renewal	11,452	14,885	16,385	18,033	18,152	18,476	15,857	13,443	16,647	10,116	14,412
13	Asset relocations	490	945	965	984	1,004	1,024	1,044	1,065	1,087	1,108	1,130
14	Reliability, safety and environment:											
15	Quality of supply	-	-	-	-	-	-	-	-	-	-	-
16	Legislative and regulatory	-	-	-	-	-	-	-	-	-	-	-
17	Other reliability, safety and environment	1,544	955	1,378	1,494	627	390	427	265	207	399	353
18	**Total reliability, safety and environment**	1,544	955	1,378	1,494	627	390	427	265	207	399	353
19	**Expenditure on network assets**	23,125	25,204	26,206	29,165	28,603	27,473	22,590	19,779	23,273	20,929	24,967
20	Expenditure on non-network assets	1,987	3,454	2,951	3,129	547	260	227	857	220	328	335
21	**Expenditure on assets**	25,112	28,658	29,157	32,295	29,150	27,733	22,816	20,636	23,492	21,258	25,302
22												
23	*plus* Cost of financing	126	143	146	161	146	139	114	103	117	106	127
24	*less* Value of capital contributions	4,300	4,384	2,630	2,722	2,819	2,918	3,021	3,128	3,238	3,352	3,471
25	*plus* Value of vested assets	-	-	-	-	-	-	-	-	-	-	-
26												
27	**Capital expenditure forecast**	20,938	24,417	26,673	29,734	26,477	24,954	19,909	17,611	20,372	18,012	21,958
28												
29	Assets commissioned	19,263	22,464	24,539	27,355	24,359	22,957	18,317	16,202	18,742	16,571	20,201
30		*Current Year CY*	*CY+1*	*CY+2*	*CY+3*	*CY+4*	*CY+5*	*CY+6*	*CY+7*	*CY+8*	*CY+9*	*CY+10*
31	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**	**31 Mar 30**
32		**$000 (in constant prices)**										
33	Consumer connection	5,795	5,644	3,841	3,884	3,929	3,974	4,019	4,066	4,113	4,160	4,209
34	System growth	4,873	2,775	3,483	4,425	4,375	3,025	742	375	525	3,775	3,375
35	Asset replacement and renewal	9,881	14,885	16,048	17,316	17,088	17,052	14,348	11,925	14,478	8,625	12,047
36	Asset relocations	255	945	945	945	945	945	945	945	945	945	945
37	Reliability, safety and environment:											
38	Quality of supply	-	-	-	-	-	-	-	-	-	-	-
39	Legislative and regulatory	-	-	-	-	-	-	-	-	-	-	-
40	Other reliability, safety and environment	1,057	955	1,350	1,435	590	360	386	235	180	340	295
41	**Total reliability, safety and environment**	1,057	955	1,350	1,435	590	360	386	235	180	340	295
42	**Expenditure on network assets**	21,861	25,204	25,667	28,005	26,927	25,356	20,440	17,546	20,241	17,845	20,871
43	Expenditure on non-network assets	2,411	3,454	2,890	3,005	515	240	205	760	191	280	280
44	**Expenditure on assets**	24,272	28,658	28,557	31,010	27,442	25,596	20,645	18,306	20,432	18,125	21,151
45												
46	**Subcomponents of expenditure on assets (where known)**											
47	Energy efficiency and demand side management, reduction of energy losses	85	85	185	185	185	85	85	85	85	85	85
48	Overhead to underground conversion	-	550	550	550	550	550	550	550	550	550	550
49	Research and development	50	50	50	50	60	70	80	85	90	100	100

Company Name	**Northpower Ltd**
AMP Planning Period	**1 April 2020 – 31 March 2030**

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 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	31 Mar 30
	Difference between nominal and constant price forecasts	$000										
	Consumer connection	(665)	-	81	161	245	332	423	517	616	719	826
	System growth	(364)	-	73	183	272	253	78	48	79	652	662
	Asset replacement and renewal	1,571	0	337	717	1,064	1,424	1,509	1,518	2,169	1,491	2,364
	Asset relocations	235	-	20	39	59	79	99	120	142	163	185
	Reliability, safety and environment:											
	Quality of supply	-	-	-	-	-	-	-	-	-	-	-
	Legislative and regulatory	-	-	-	-	-	-	-	-	-	-	-
	Other reliability, safety and environment	487	-	28	59	37	30	41	30	27	59	58
	Total reliability, safety and environment	487	-	28	59	37	30	41	30	27	59	58
	Expenditure on network assets	1,264	0	539	1,160	1,676	2,117	2,150	2,233	3,032	3,084	4,096
	Expenditure on non-network assets	(424)	-	61	124	32	20	22	97	29	48	55
	Expenditure on assets	840	0	600	1,284	1,708	2,137	2,171	2,329	3,061	3,133	4,151

		Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
	for year ended	31 Mar 20	31 Mar 21	31 Mar 22	31 Mar 23	31 Mar 24	31 Mar 25
	11a(ii): Consumer Connection						
	*Consumer types defined by EDB**	$000 (in constant prices)					
	Capital contributions (Network)	500	505	510	515	520	526
	Capital contributions (Customer)	4,300	4,384	2,576	2,614	2,653	2,693
	Transformer Acquisition Cost	1,040	800	800	800	800	800
	Transformer Credits from Upgrades	(130)	(130)	(130)	(130)	(130)	(130)
	Ripple relay purchases	85	85	85	85	85	85
	**include additional rows if needed*						
	Consumer connection expenditure	5,795	5,644	3,841	3,884	3,929	3,974
less	Capital contributions funding consumer connection	4,300	4,384	2,576	2,614	2,653	2,693
	Consumer connection less capital contributions	1,495	1,260	1,265	1,270	1,275	1,281
	11a(iii): System Growth						
	Subtransmission	-	500	2,500	4,000	2,000	1,500
	Zone substations	4,748	1,650	500	300	2,000	1,400
	Distribution and LV lines	-	-	-	-	-	-
	Distribution and LV cables	-	-	-	-	-	-
	Distribution substations and transformers	50	550	300	50	300	50
	Distribution switchgear	-	-	108	-	-	-
	Other network assets	75	75	75	75	75	75
	System growth expenditure	4,873	2,775	3,483	4,425	4,375	3,025
less	Capital contributions funding system growth	-	-	-	-	-	-
	System growth less capital contributions	4,873	2,775	3,483	4,425	4,375	3,025

Company Name	Northpower Ltd
AMP Planning Period	1 April 2020 – 31 March 2030

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

11a(iv): Asset Replacement and Renewal

		Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
	for year ended	31 Mar 20	31 Mar 21	31 Mar 22	31 Mar 23	31 Mar 24	31 Mar 25
	$000 (in constant prices)						
	Subtransmission	500	-	300	2,000	350	-
	Zone substations	3,161	7,138	7,928	7,428	8,638	8,638
	Distribution and LV lines	5,020	5,349	5,449	5,649	5,849	6,049
	Distribution and LV cables	260	390	400	410	410	430
	Distribution substations and transformers	565	541	594	571	624	591
	Distribution switchgear	300	1,068	1,093	978	978	1,013
	Other network assets	75	400	286	281	241	333
	Asset replacement and renewal expenditure	9,881	14,885	16,048	17,316	17,088	17,052
less	Capital contributions funding asset replacement and renewal	-	-	-	-	-	-
	Asset replacement and renewal less capital contributions	9,881	14,885	16,048	17,316	17,088	17,052

11a(v): Asset Relocations

		Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
	for year ended	31 Mar 20	31 Mar 21	31 Mar 22	31 Mar 23	31 Mar 24	31 Mar 25
	*Project or programme**	$000 (in constant prices)					
	Minor capital expenditure (relocation)	55	55	55	55	55	55
	Roading works asset relocations	100	50	50	50	50	50
	Overhead to underground conversion	-	550	550	550	550	550
	Ground mounting of 2/4 pole distribution transformers	100	290	290	290	290	290
	**include additional rows if needed*						
	All other project or programmes - asset relocations	-	-	-	-	-	-
	Asset relocations expenditure	255	945	945	945	945	945
less	Capital contributions funding asset relocations	-	-	-	-	-	-
	Asset relocations less capital contributions	255	945	945	945	945	945

11a(vi): Quality of Supply

		Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
	for year ended	31 Mar 20	31 Mar 21	31 Mar 22	31 Mar 23	31 Mar 24	31 Mar 25
	*Project or programme**	$000 (in constant prices)					
	[Description of material project or programme]						
	[Description of material project or programme]						
	[Description of material project or programme]						
	[Description of material project or programme]						
	[Description of material project or programme]						
	**include additional rows if needed*						
	All other projects or programmes - quality of supply						
	Quality of supply expenditure	-	-	-	-	-	-
less	Capital contributions funding quality of supply						
	Quality of supply less capital contributions	-	-	-	-	-	-

Company Name	**Northpower Ltd**
AMP Planning Period	**1 April 2020 – 31 March 2030**

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

11a(vii): Legislative and Regulatory

		Current Year CY	*CY+1*	*CY+2*	*CY+3*	*CY+4*	*CY+5*
	for year ended	**31 Mar 20**	**31 Mar 21**	**31 Mar 22**	**31 Mar 23**	**31 Mar 24**	**31 Mar 25**
	*Project or programme**	**$000 (in constant prices)**					
	[Description of material project or programme]						
	[Description of material project or programme]						
	[Description of material project or programme]						
	[Description of material project or programme]						
	[Description of material project or programme]						
	*include additional rows if needed						
	All other projects or programmes - legislative and regulatory						
	Legislative and regulatory expenditure	-	-	-	-	-	-
less	Capital contributions funding legislative and regulatory						
	Legislative and regulatory less capital contributions	-	-	-	-	-	-

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 20**	**31 Mar 21**	**31 Mar 22**	**31 Mar 23**	**31 Mar 24**	**31 Mar 25**
	*Project or programme**	**$000 (in constant prices)**					
	Zone Substations Risk Mitigation	134	150	-	-	-	-
	Zone Substations Security Improvement	65	75	90	90	75	-
	Whakapara Feeder Express Line to Hikurangi	-	-	700	-	-	-
	New Reclosers	-	55	-	-	55	-
	Whangarei City additional 11kV RMU's	-	-	50	-	-	-
	11KV Automation at mid and end point of feeder	-	180	180	180	180	180
	11kV feeder backstopping improvements	-	-	-	85	-	-
	DSUB MDI Meters (CBD)	100	65	-	-	-	-
	LV Automation	-	30	30	30	30	30
	SMART Distribution system (load monitoring)	-	50	100	100	100	-
	Radio Transmission site Resilience	-	-	50	-	-	-
	Provision for fibre	658	250	50	50	50	50
	Minor capital expenditure (reliability, safety, environment)	100	100	100	100	100	100
	Ruawai Transformer Replacement	-	-	-	800	-	-
	*include additional rows if needed						
	All other projects or programmes - other reliability, safety and environment	-	-	-	-	-	-
	Other reliability, safety and environment expenditure	1,057	955	1,350	1,435	590	360
less	Capital contributions funding other reliability, safety and environment	-	-	-	-	-	-
	Other reliability, safety and environment less capital contributions	1,057	955	1,350	1,435	590	360

11a(ix): Non-Network Assets

		Current Year CY	*CY+1*	*CY+2*	*CY+3*	*CY+4*	*CY+5*
	for year ended	**31 Mar 20**	**31 Mar 21**	**31 Mar 22**	**31 Mar 23**	**31 Mar 24**	**31 Mar 25**
	Routine expenditure						
	*Project or programme**	**$000 (in constant prices)**					
	Network strategic spares store	-	-	-	-	-	40
	Research and Development (component testing)	30	30	30	30	30	50

Company Name	**Northpower Ltd**
AMP Planning Period	**1 April 2020 – 31 March 2030**

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								
171		Aerial Imagery (GIS)	-	-	40	-	-	-
172		Engineering hardware/Software	-	50	-	-	-	55
173		Research and Development (new technology)	50	50	50	50	60	70
		AMS (WASP replacement and CBRM software)	-	-	700	1,400	400	-
		ADMS (Advanced Distribution Management System)	2,206	1,659	1,045	-	-	-
		SalesForce Enhancements	-	325	-	-	-	-
		Gentrack	-	150	-	-	-	-
		Faults Management System	-	300	-	-	-	-
		LiDAR for entire network	-	600	-	-	-	-
		ESRI Geospatial Tool Sets	-	165	-	-	-	-
		Mobile substation/ Step Up/Statcom	-	-	1,000	1,500	-	-
		Minor capital expenditure (non-network assets)	25	25	25	25	25	25
		LV network operational management system	100	100	-	-	-	-
174		**include additional rows if needed*						
175		All other projects or programmes - routine expenditure	-	-	-	-	-	-
176	**Routine expenditure**		2,411	3,454	2,890	3,005	515	240
177	**Atypical expenditure**							
178		*Project or programme**						
179		[Description of material project or programme]						
180		[Description of material project or programme]						
181		[Description of material project or programme]						
182		[Description of material project or programme]						
183		[Description of material project or programme]						
184		**include additional rows if needed*						
185		All other projects or programmes - atypical expenditure						
186	**Atypical expenditure**		-	-	-	-	-	-
187								
188	**Expenditure on non-network assets**		2,411	3,454	2,890	3,005	515	240

Company Name	**Northpower Ltd**
AMP Planning Period	**1 April 2020 – 31 March 2030**

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*
8	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**	**31 Mar 30**
9	**Operational Expenditure Forecast**	**$000 (in nominal dollars)**										
10	Service interruptions and emergencies	2,819	2,150	2,195	2,239	2,284	2,329	2,376	2,424	2,472	2,521	2,572
11	Vegetation management	2,820	2,820	2,879	2,937	2,996	3,055	3,117	3,179	3,013	3,073	3,134
12	Routine and corrective maintenance and inspection	3,326	3,320	3,410	3,458	3,527	3,619	3,669	3,743	3,841	3,894	3,972
13	Asset replacement and renewal	2,994	2,734	2,792	2,848	2,905	2,963	3,022	2,631	2,684	2,738	2,792
14	**Network Opex**	11,959	11,024	11,276	11,481	11,711	11,967	12,184	11,977	12,009	12,226	12,470
15	System operations and network support	2,663	3,396	3,467	3,537	3,608	3,680	3,753	3,828	3,905	3,983	4,063
16	Business support	13,182	13,710	13,998	14,278	14,563	14,855	15,152	15,455	15,764	16,079	16,401
17	**Non-network opex**	15,845	17,106	17,465	17,815	18,171	18,534	18,905	19,283	19,669	20,062	20,464
18	**Operational expenditure**	27,804	28,130	28,742	29,296	29,882	30,501	31,089	31,260	31,678	32,288	32,934

		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 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**	**31 Mar 30**
21		**$000 (in constant prices)**										
22	Service interruptions and emergencies	2,819	2,150	2,150	2,150	2,150	2,150	2,150	2,150	2,150	2,150	2,150
23	Vegetation management	2,820	2,820	2,820	2,820	2,820	2,820	2,820	2,820	2,620	2,620	2,620
24	Routine and corrective maintenance and inspection	3,326	3,320	3,340	3,320	3,320	3,340	3,320	3,320	3,340	3,320	3,320
25	Asset replacement and renewal	2,994	2,734	2,734	2,734	2,734	2,734	2,734	2,334	2,334	2,334	2,334
26	**Network Opex**	11,959	11,024	11,044	11,024	11,024	11,044	11,024	10,624	10,444	10,424	10,424
27	System operations and network support	2,663	3,396	3,396	3,396	3,396	3,396	3,396	3,396	3,396	3,396	3,396
28	Business support	13,182	13,710	13,710	13,710	13,710	13,710	13,710	13,710	13,710	13,710	13,710
29	**Non-network opex**	15,845	17,106	17,106	17,106	17,106	17,106	17,106	17,106	17,106	17,106	17,106
30	**Operational expenditure**	27,804	28,130	28,151	28,131	28,131	28,151	28,131	27,731	27,551	27,531	27,531
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												

		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 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**	**31 Mar 30**
41	**Difference between nominal and real forecasts**	**$000**										
42	Service interruptions and emergencies	-	-	45	89	134	180	226	274	322	372	422
43	Vegetation management	-	-	59	117	176	235	297	359	393	453	514
44	Routine and corrective maintenance and inspection	-	-	70	138	207	279	349	423	500	574	652
45	Asset replacement and renewal	-	-	57	113	170	228	288	297	350	403	458
46	**Network Opex**	-	-	232	457	686	922	1,159	1,352	1,565	1,801	2,046
47	System operations and network support	-	-	71	141	211	284	357	432	509	587	667
48	Business support	-	-	288	568	853	1,145	1,442	1,745	2,054	2,369	2,691

Company Name	**Northpower Ltd**
AMP Planning Period	**1 April 2020 – 31 March 2030**

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												
49	**Non-network opex**	-	-	359	709	1,065	1,428	1,799	2,177	2,563	2,956	3,357
50	**Operational expenditure**	-	-	591	1,165	1,751	2,350	2,958	3,529	4,127	4,758	5,403

Company Name	**Northpower Ltd**
AMP Planning Period	**1 April 2020 – 31 March 2030**

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.	1.67%	3.70%	37.44%	52.90%	4.29%	-	2	3%
11	All	Overhead Line	Wood poles	No.	13.26%	4.59%	40.10%	40.91%	1.14%	-	2	17%
12	All	Overhead Line	Other pole types	No.	30.61%	16.32%	38.77%	13.26%	1.04%	-	2	31%
13	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	-	21.11%	48.05%	30.63%	0.21%	-	3	4%
14	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	-	-	99.65%	0.35%	-	-	4	-
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	-	-	5.31%	94.69%	-	-	3	-
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	-	-	98.86%	1.14%	-	-	4	26%
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	-	-	-	-	-	-	4	-
18	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	-	-	-	100.00%	-	-	4	-
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	-	-	-	100.00%	-	-	4	-
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	-	-	-	-	-	-	4	-
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	-	-	-	-	-	-	4	-
22	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	-	-	-	-	-	-	4	-
23	HV	Subtransmission Cable	Subtransmission submarine cable	km	-	-	-	100.00%	-	-	4	-
24	HV	Zone substation Buildings	Zone substations up to 66kV	No.	5.00%	-	35.00%	60.00%	-	-	4	-
25	HV	Zone substation Buildings	Zone substations 110kV+	No.	-	-	-	100.00%	-	-	4	-
26	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	-	-	63.33%	36.67%	-	-	4	27%
27	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	-	-	13.55%	79.66%	6.79%	-	4	-
28	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	-	-	-	100.00%	-	-	4	-
29	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	-	-	56.32%	40.80%	2.88%	-	2	-
30	HV	Zone substation switchgear	33kV RMU	No.	-	-	-	100.00%	-	-	4	-
31	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	-	-	-	-	-	-	4	-
32	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	-	-	60.00%	40.00%	-	-	2	-
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	11.72%	15.17%	18.62%	54.49%	-	-	4	31%
34	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	-	-	-	-	-	-	4	-

Company Name	**Northpower Ltd**
AMP Planning Period	**1 April 2020 – 31 March 2030**

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
39	HV	Zone Substation Transformer	Zone Substation Transformers	No.	2.50%	7.50%	47.50%	35.00%	7.50%	-	4	25.64%
40	HV	Distribution Line	Distribution OH Open Wire Conductor	km	2.15%	3.05%	36.33%	53.07%	5.40%	-	4	4.20%
41	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	-	-	-	-	-	-	4	-
42	HV	Distribution Line	SWER conductor	km	-	-	-	-	-	-	4	-
43	HV	Distribution Cable	Distribution UG XLPE or PVC	km	0.54%	0.04%	4.05%	85.62%	9.75%	-	3	-
44	HV	Distribution Cable	Distribution UG PILC	km	-	-	24.20%	74.63%	1.17%	-	2	-
45	HV	Distribution Cable	Distribution Submarine Cable	km	-	-	100.00%	-	-	-	1	-
46	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	9.67%	-	-	83.88%	6.45%	-	4	9.68%
47	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	-	-	-	-	-	-	4	-
48	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	4.48%	2.41%	17.21%	67.93%	7.97%	-	2	3.39%
49	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	14.28%	47.61%	33.33%	-	4.78%	-	3	66.67%
50	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	0.96%	0.48%	8.17%	81.25%	9.14%	-	4	7.21%
51	HV	Distribution Transformer	Pole Mounted Transformer	No.	6.80%	3.29%	17.72%	62.62%	9.57%	-	3	7.32%
52	HV	Distribution Transformer	Ground Mounted Transformer	No.	3.10%	4.94%	21.66%	60.12%	10.18%	-	3	5.56%
53	HV	Distribution Transformer	Voltage regulators	No.	-	-	20.00%	50.00%	30.00%	-	4	10.00%
54	HV	Distribution Substations	Ground Mounted Substation Housing	No.	14.87%	10.74%	23.14%	48.76%	2.49%	-	4	12.40%
55	LV	LV Line	LV OH Conductor	km	1.00%	2.97%	39.10%	53.36%	3.57%	-	4	2.36%
56	LV	LV Cable	LV UG Cable	km	0.04%	0.15%	10.05%	76.04%	13.72%	-	2	0.31%
57	LV	LV Streetlighting	LV OH/UG Streetlight circuit	km	13.48%	6.93%	39.14%	35.78%	4.67%	-	2	-
58	LV	Connections	OH/UG consumer service connections	No.	-	-	-	19.81%	80.19%	-	3	0.26%
59	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	2.10%	0.30%	21.08%	75.30%	1.22%	-	2	13.55%
60	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	-	100.00%	-	-	-	-	4	100.00%
61	All	Capacitor Banks	Capacitors including controls	No.	-	-	-	100.00%	-	-	4	6.90%
62	All	Load Control	Centralised plant	Lot	33.33%	33.33%	16.66%	16.68%	-	-	4	50.00%
63	All	Load Control	Relays	No.	26.72%	11.00%	32.56%	28.53%	1.19%	-	3	2.96%
64	All	Civils	Cable Tunnels	km	-	-	-	-	-	-	N/A	-

Company Name	**Northpower Ltd**
AMP Planning Period	**1 April 2020 – 31 March 2030**

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
Alexander Street	13	15	N-1	13	88%	15	90%	No constraint within +5 years	Load transfer to new Maunu Substation
Bream Bay	4	-	N	1	-	-	-	Other	Security Of Supply
Dargaville	11	15	N-1	1	76%	15	82%	No constraint within +5 years	
Hikurangi	6	5	N-1 Switchable	3	125%	10	69%	No constraint within +5 years	New transformers
Kaiwaka	2	-	N-1 Switchable	2	-	-	-	No constraint within +5 years	
Kamo	12	15	N-1	7	82%	15	93%	No constraint within +5 years	
Kioreroa	12	20	N-1	8	58%	20	69%	No constraint within +5 years	
Mangawhai	7	-	N	2	-	-	-	Other	Security Of Supply
Mareretu	3	-	N	2	-	-	-	No constraint within +5 years	
Maungatapere	7	8	N-1	6	92%	10	63%	No constraint within +5 years	Load transfer to new Maunu Substation
Maungaturoto	6	8	N-1	2	85%	8	87%	No constraint within +5 years	
Ngunguru	3	-	N	3	-	-	-	Other	Security Of Supply
Onerahi	8	15	N-1 Switchable	6	55%	15	58%	No constraint within +5 years	
Parua Bay	3	-	N	3	-	-	-	Other	Security Of Supply
Poroti	3	-	N-1 Switchable	3	-	-	-	No constraint within +5 years	
Ruakaka	7	10	N-1	5	71%	10	78%	No constraint within +5 years	
Ruawai	3	-	N	3	-	-	-	No constraint within +5 years	
Tikipunga	15	20	N-1	13	76%	20	82%	No constraint within +5 years	
Whangarei South	12	10	N-1	10	119%	10	114%	No constraint within +5 years	Load transfer to new Maunu Substation

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

Company Name	**Northpower Ltd**
AMP Planning Period	**1 April 2020 – 31 March 2030**

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	*CY+1*	*CY+2*	*CY+3*	*CY+4*	*CY+5*
	for year ended	**31 Mar 20**	**31 Mar 21**	**31 Mar 22**	**31 Mar 23**	**31 Mar 24**	**31 Mar 25**
	*Consumer types defined by EDB**						
	Very large industrial	-	-	-	-	-	-
	Commercial and Industrial (demand based ND9)	-	1	1	1	1	1
	Mass market	941	960	979	999	1,019	1,039
	Connections total	941	961	980	1,000	1,020	1,040
	**include additional rows if needed*						
	Distributed generation						
	Number of connections	169	200	200	200	200	200
	Capacity of distributed generation installed in year (MVA)	1	1	1	1	1	1

12c(ii) System Demand

		Current Year CY	*CY+1*	*CY+2*	*CY+3*	*CY+4*	*CY+5*
	Maximum coincident system demand (MW) for year ended	**31 Mar 20**	**31 Mar 21**	**31 Mar 22**	**31 Mar 23**	**31 Mar 24**	**31 Mar 25**
	GXP demand	173	183	185	190	192	194
plus	Distributed generation output at HV and above	4	4	4	4	4	4
	Maximum coincident system demand	176	187	189	194	196	198
less	Net transfers to (from) other EDBs at HV and above	-	-	-	-	-	-
	Demand on system for supply to consumers' connection points	176	187	189	194	196	198
	Electricity volumes carried (GWh)						
	Electricity supplied from GXPs	1,113	1,136	1,160	1,185	1,209	1,235
less	Electricity exports to GXPs	-	-	-	-	-	-
plus	Electricity supplied from distributed generation	19	22	22	22	22	22
less	Net electricity supplied to (from) other EDBs	-	-	-	-	-	-
	Electricity entering system for supply to ICPs	1,132	1,158	1,182	1,207	1,231	1,257
less	Total energy delivered to ICPs	1,100	1,122	1,144	1,167	1,191	1,214
	Losses	32	36	38	39	41	42
	Load factor	73%	71%	72%	71%	72%	72%
	Loss ratio	2.8%	3.1%	3.2%	3.3%	3.3%	3.4%

Company Name	**Northpower Ltd**
AMP Planning Period	**1 April 2020 – 31 March 2030**
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*
9	for year ended	**31 Mar 20**	**31 Mar 21**	**31 Mar 22**	**31 Mar 23**	**31 Mar 24**	**31 Mar 25**
10	**SAIDI**						
11	Class B (planned interruptions on the network)	114.0	100.0	100.0	100.0	100.0	100.0
12	Class C (unplanned interruptions on the network)	151.0	105.0	105.0	100.0	100.0	100.0
13	**SAIFI**						
14	Class B (planned interruptions on the network)	0.46	0.50	0.50	0.50	0.50	0.50
15	Class C (unplanned interruptions on the network)	3.15	2.75	2.75	2.75	2.75	2.75

Schedule 14a: Mandatory Explanatory Notes on Forecast Information

Electricity Distribution Information Disclosure Determination 2012 – (consolidated in 2015)

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 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

The differences between nominal and constant prices is based on the application of an escalation factor using Reserve Bank economic projections.

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

4. In the box below, comment on the difference between nominal and constant price operational expenditure for the 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

The differences between nominal and constant prices is based on the application of an escalation factor using Reserve Bank economic projections.

Northpower

Section 4:
Director Certification

Director Certification

We, Richard Booth and Mark Trigg, being Directors of Northpower Limited certify that, having made all reasonable enquiry, to the best of our knowledge:

a) The following attached information of Northpower Limited prepared for the purposes of clauses 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 Northpower Limited's corporate vision and strategy and are documented in retained records.

Director

Date: 25/03/2020

Director

Date: 25/03/2020

Northpower

Head Office:
Northpower Ltd
28 Mt Pleasant Road,
Raumanga, Whangarei 0110,
New Zealand

Postal Address:
Northpower Ltd
Private Bag 9018,
Whangarei Mail Centre 0148,
New Zealand

Ph: 09 430 1803
Fax: 09 430 1804
Email: info@northpower.com
Web: northpower.com