

Asset Management Plan Update

31 March 2021

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PREFACE

This is the Aurora Energy Asset Management Plan (AMP) Update for 2021.

In June 2020 we published a comprehensive AMP as part of our Customised Price-quality Path (CPP) proposal. This year we are publishing an AMP Update as we await the Commerce Commission's (Commission) final decision on our CPP proposal.

Overview of RY21

Over the past year we have continued to deliver our key work programmes, including:

- upgrading Cromwell zone substation to meet continued growth in the area
- remediating more than 1,000 poles and 800 crossarms
- ramping up our conductor renewals, with several projects completed or close to completion
- major protection replacements at St Kilda and Corstorphine zone substations
- progressing design and construction on large projects at Andersons Bay, Outram, and Alexandra.

We have commenced asset management system and outage management system upgrades to support customer service and responsiveness. Improved asset information will support better network analytics and investment planning.

This progress will continue as we begin our CPP work program, on 1 April 2021.

We expect the learnings from our CPP process, together with implementing our asset management system and other initiatives, to underpin the successful delivery

of our CPP investment program, helping to renew and future-proof our network.

Our Approach to this AMP Update

Given we did not have confirmed CPP allowances as we prepared this AMP Update, we have based the investment forecasts on our CPP proposal. In our view it would be unhelpful to publish plans based on the draft CPP decision that may be subject to material change. The effective delivery of our planned renewal and maintenance work will require a fully resourced delivery team. We will also need specialist resources to achieve efficiency gains through continuous improvement of our systems, technology and processes. Our ability to deliver will be impacted by the final CPP revenue determination and associated expenditure allowances. Reflecting this, we will review our AMP Update forecasts and any associated implications after receiving the Commission's final decision.

Similarly, we have not set out new reliability forecasts or targets as these will be influenced by the quality standards set under the CPP.

In 2022 we will publish a full AMP which fully reflects our CPP investment plans and quality standards.

We have updated our investment plans for RY22. While the total spend is aligned with our CPP proposal, we have prioritised within this amount to reflect new information and the evolving needs of our network.

Stakeholder Engagement

Enhancing our service and responsiveness to customers is a key focus for Aurora. We are beginning to see improvements, but we need



these to be more visible. We want customers to know more about what we have been delivering on their behalf, and what is in our future work pipeline.

This year our focus will be on:

- refining our pricing approaches
- CPP delivery reporting
- discussing investments with the local communities affected
- providing better information on outages
- implementing new asset management system software (AMS)
- beginning to integrate, plan and track the delivery of maintenance within the AMS.

This will be supported by our rollout of systems that enable better communication with customers, and more accessible information.

As part of its final CPP decision we expect the Commission to propose requirements for delivery reporting. We will provide our views on these requirements to ensure they are workable given our available resources (systems and personnel) and that they deliver genuinely valuable information to stakeholders. We expect this process to take place over the coming months.

Pricing Initiatives

We have recently announced a series of initiatives to refine our approach to network pricing.

The first relatively small change will see us use an updated cost of supply model that allows us to better allocate operating costs across our regions. This aims to ensure that all customers share an appropriate amount of the scale benefits that result from Aurora Energy delivering asset management services

across a larger network, including Dunedin and two regions in Central Otago.

The second proposed change relates to how we reflect the cost of assets used in different parts of our network. We propose to introduce regional asset allocations to take account of the value of asset replacement and network growth in each region. This is a complex change that would ensure that costs better reflect the actual investment in each pricing area. This is important given our increased capital spend and the high growth in some areas.

We will consult on the rationale for these changes as well as the resulting impact on prices. Consultation is expected to occur later this year. At that time, we will also seek views on our longer-term pricing roadmap and the use of regional pricing more generally. Further information will be available on our website.

Concluding Thoughts

As we begin our CPP investment programs we are conscious of the need for increasing prices and their potential impact on customers. However, our current prices are generally lower than peer businesses, and are lower than required to support our investment plans which are critical to public safety and the safe management and operation of the network.

Leveraging an elevated level of expenditure since 2017, our ten-year plan addresses legacy underspend and ensures that the network will sustainably deliver a service that our communities expect and appreciate.

Our investment plans have been reviewed and assessed in detail by the Commission and an independent verifier. We are committed to ensuring customers have visibility on where



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and how we are investing, and see the value those investments are delivering.

Despite increased levels of investment, it will take several years to fully stabilise network performance and to address historical underspending. Until then, elevated levels of planned outages will need to continue. During this time, our focus will be on minimising the impact of outages on customers through improved planning and more effective communications.

Lastly, I would like to reiterate our commitment to ensuring our network is safe. Safety is our number one priority, and remains the primary driver for our investment plans.

Richard Fletcher
CHIEF EXECUTIVE

AURORA ENERGY | ASSET MANAGEMENT PLAN - UPDATE 2021

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Introduction

This chapter introduces Aurora Energy's 2021 update of its Asset Management Plan (AMP).

1.1. Purpose

This Asset Management Plan (AMP) Update relates to the electricity distribution services supplied by Aurora Energy. Following an exemption from the Commission, we are publishing an update this year instead of a full AMP. We will publish a full AMP in 2022 that fully reflects the CPP final decision.

The AMP covers a 10-year planning period, from 1 April 2021 to 31 March 2031. This includes our CPP period, which we expect to cover the years RY22 – RY26 (CPP Period).²

Consistent with Information Disclosure requirements we have provided updated schedules on forecast expenditure, the condition of our assets, and expected future demand on our network. We have not included an updated Report on Asset Management Maturity as there have been no material changes to asset management practices (since the publication of our 2020 AMP).

1.2. APPROACH TO THIS AMP UPDATE

Below we explain our approach to the expenditure and reliability forecasts included in this AMP Update.

AMP Expenditure Forecasts

Given we did not have confirmed CPP allowances when preparing the AMP Update, we have elected to base our forecasts on our latest published view of expenditure needs as reflected in our CPP Proposal. In our view, until CPP allowances are confirmed, it would be unhelpful to publish forecasts that may be subject to material change.

As part of our 'business-as-usual' internal planning and governance processes we have developed updated investment plans for RY22. These plans reflect updated asset information and changes to our delivery program to accommodate reprioritisation and rescheduling of works. The RY22 plans have been approved by our Board and will form the basis of our work plan next year, but may be refined early in the RY22 year to reflect the CPP final decision.

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We requested that the Commission grant us an exemption from publishing a full AMP in 2021 given the large amount of information provided to stakeholders as part of our CPP proposal and subsequent consultation process. In a letter (dated 18 December, 2020) the Commission granted our exemption request on the condition that Aurora completes and publicly discloses a full AMP before 1 April 2022.

The CPP Period will be confirmed as part of the Commission's final decision, which is expected to be published at the end of March 2021.



The highlight box below summarises our approach to the forecasts included in this AMP Update, as reflected in Schedules 11a and 11b in Appendix A.

Box 1.1: Approach to 2021 AMP Update Forecasts

When setting out our expenditure forecasts in Schedules 11a and 11b, we have taken the following approaches:

- RY21: we have reflected our expected capital expenditure (Capex) and operational expenditure (Opex) for the regulatory year, this has not been impacted by the CPP decision.
- RY22: we have reflected our Board-approved budgets for the coming regulatory year. These may change following determination of our final CPP allowances.
- RY23-26: we have included our proposed CPP expenditure.
- Remainder of the period: is consistent with our 2020 AMP forecasts. These will be impacted by the
 work we expect to complete during the CPP Period and will be updated once the latter has been
 confirmed.

Chapter 2 includes an explanation of the material changes to our RY22 expenditure plans compared with those set out in our 2020 AMP.

SAIDI/SAIFI Forecasts

Similarly, we do not propose to update our SAIDI / SAIFI forecasts as these are likely to be influenced by the quality standards set as part of the CPP final decision.

These forecasts are set out in Schedule 12d in Appendix A.



2. UPDATE ON RY22 INVESTMENT PLANS

Given that the CPP final decision is pending, we have made no material changes to the following aspects of our 2020 AMP:

- growth-driven, network development plans
- maintenance-related, lifecycle management plans
- other forecast Opex set out in Schedule 11b.

Material differences between our updated RY22 forecast Capex and the forecasts and plans included in our CPP proposal are set out in the table below. These changes relate to our renewal-related lifecycle management plans. Consistent with Information Disclosure requirements we have focussed the discussion on "material" changes to our expenditure categories.

Note the portfolios and fleets in the table reflect our internal categorisation and may vary from those included in Schedule 11a.

Table 2.1: Summary of material changes in RY22 Capex

PORTFOLIO / FLEET	COMMENTARY	RY22 CHANGE CAPEX (\$M)
Support Structures		4.4
Poles	Increase: due to increased levels (versus steady state) of pole testing in RY21. Pole testing in harder to access, often lower criticality areas resulted in higher find rates of structurally poor poles than in RY20. First cycle of concrete pole inspections resulting in higher than expected find rates of poor condition concrete poles.	
Crossarms	Decrease: due to increased pole expenditure which includes crossarms installed on new poles. Reduced need for standalone crossarm replacements.	

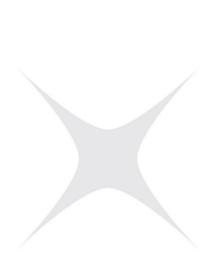
³ Information Disclosure does not define the term "material" in this context. Consistent with our previous disclosures we have used a 5% change to denote materiality.



PORTFOLIO / FLEET	COMMENTARY	RY22 CHANGE CAPEX (\$M)
Overhead conductors		-1.9
Subtransmission conductors	Decrease: the deferral of Halfway Bush – Berwick 33 kV lines rebuild stages due to better-than-expected forensic condition information gathered on the conductor.	
Distribution conductors	Increase: to address high failure rates and known poor-condition, aged conductor types, particularly no. 8 steel and small copper. The deferral of the Halfway Bush – Berwick rebuild allows reprioritisation of planning and delivery resources to this fleet.	
LV conductors	Decrease: programme will be in its first year and will be focused on conductor sampling and gathering learnings to reflect in future years.	
Cables	Increase: further options analysis on the Otago Overhead Harbour Crossing resulted in an underground solution rather than an overhead solution. The project has been consolidated with the replacement of an existing 75-year-old submarine cable.	2.4
Zone Substations	Decrease: new options analysis on two circuit-breaker replacement projects resulted in Opex (corrective maintenance) solutions at lower whole of life cost.	- 0.7
Distribution Switchgear	Decrease: due to risk trade-offs that allowed expenditure transfer to other portfolios/fleets. Facilitated by lower volumes of higher-risk replacement candidates being identified.	- 1.8
Distribution Transformers	Decrease: reflecting risk trade-offs that resulted in expenditure transfer to other portfolios/fleets. Facilitated by lower volumes of higher-risk replacement candidates being identified.	- 1.5
Secondary Systems	Decrease: due to scope reduction in DC systems to better align the programme with major projects. Protection replacement expenditure reduced to reflect lower unit rates (based on expected outturns).	- 1.1
Total		-0.2



APPENDICES





APPENDIX A. DISCLOSURE SCHEDULES

This appendix includes the following Information Disclosure schedules:

- Schedule 11a: Report on Forecast Capital Expenditure
- Schedule 11b: Report on Forecast Operational Expenditure
- Schedule 12a: Report on Asset Condition
- Schedule 12b: Report on Forecast Capacity
- Schedule 12c: Report on Forecast Network Demand
- Schedule 12d: Report on Forecast Interruptions and Duration
- Schedule 14a: Mandatory Explanatory Notes on Forecast Information



Schedule 11a: Report on Forecast Capital Expenditure

									Company Name	Auro	ra Energy Limite	ed
									Planning Period		2021 – 31 March	
SCL	HEDULE 11a: REPORT ON FORECAST CAPITAL EXPENDITURE							7	r ramming r criou [
	chedule requires a breakdown of forecast expenditure on assets for the current disclosure year and a 10 year.	r planning period. The	forcesets should be	ancistant with the s	unnorting information	s cot out in the AMD	The forecast is to be	oversessed in both so	estant price and nom	sinal dollar torms. Als	required is a foreses	t of the value of
	chedule requires a breakdown of forecast expenditure on assets for the current disclosure year and a 10 years hissioned assets (i.e., the value of RAB additions)	r planning period. The	iorecasts sriouid be t	onsistent with the st	apporting information	i set out in the AMP.	The forecast is to be	expressed in both col	istant price and non	illiai dollar terms. Alsi	required is a forecas	it of the value of
	must provide explanatory comment on the difference between constant price and nominal dollar forecasts	of expenditure on asset	ts in Schedule 14a (N	landatory Explanator	y Notes).							
This is	nformation is not part of audited disclosure information.											
sch ref												
Jenrej												
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 ende		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
0	Tot year ende	31 Wai 21	31 Widi 22	31 Widi 23	31 IVIdi 24	31 Widi 23	31 Iviai 20	31 Widi 27	31 Widi 20	31 Widi 25	31 Ividi 30	31 Mai 31
9	11a(i): Expenditure on Assets Forecast	\$000 (in nominal dol	lars)									
10	Consumer connection	10,799	8,632	8,934	12,120	14,003	16,516	12,763	13,043	13,329	13,622	13,864
11	System growth	6,478	4,635	9,969	10,069	5,188	3,587	4,598	7,961	9,599	8,242	8,311
12	Asset replacement and renewal	41,441	59,106	65,264	64,923	60,326	53,403	47,005	48,375	45,254	45,008	45,808
13	Asset relocations	2,128	1,967	2,048	2,098	2,142	2,186	2,242	2,300	2,359	2,421	2,472
14 15	Reliability, safety and environment:	1,587	594	488	245	1,007	774	715	367	377	387	396
16	Quality of supply Legislative and regulatory	1,587	594	488	245	1,007	7/4	/15	367	3//	387	396
17	Other reliability, safety and environment	1						-		-		
18	Total reliability, safety and environment	1,587	594	488	245	1,007	774	715	367	377	387	396
19	Expenditure on network assets	62,432	74,934	86,703	89,455	82,666	76,466	67,323	72,047	70,920	69,680	70,851
20	Expenditure on non-network assets	3,490	6,086	3,125	3,009	2,506	2,360	2,418	2,740	2,644	2,599	2,652
21	Expenditure on assets	65,922	81,021	89,828	92,464	85,172	78,826	69,740	74,787	73,564	72,279	73,503
22												
23	plus Cost of financing	400	631	939	740	659	545	628	566	617	465	473
24	less Value of capital contributions	6,521	6,359	6,589	8,531	9,687	11,221	9,003	9,205	9,413	9,625	9,804
25	plus Value of vested assets											
26 27	Comited arranged to the foresteet	59,801	75,293	84,178	84,673	76,144	68,149	61,365	66,148	64,768	63,118	64,172
28	Capital expenditure forecast	59,601	75,293	64,176	84,073	70,144	08,149	01,303	00,148	04,708	03,118	04,172
29	Assets commissioned	63,718	82,718	73,727	91,256	79,840	72,481	61,091	66,233	63,800	66,645	67,844
			3-7:3				,	32,002			55/5.5	51,511
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 ende		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
	· ·											
32		\$000 (in constant pri			. 1			- 1	. 1			
33	Consumer connection	10,799	8,524	8,680	11,573	13,171	15,303	11,573	11,573	11,573	11,573	11,573
34 35	System growth Asset replacement and renewal	6,478 41,441	4,532 57,864	9,502 62,548	9,415 61,077	4,766 55,851	3,223 48,302	4,070 41,685	6,973 42,000	8,225 38,514	6,816 37,341	6,816 37,341
36	Asset relocations	2,128	1,917	1,952	1,952	1,952	1,952	1,952	1,952	1,952	1,952	1,952
37	Reliability, safety and environment:	2,120	1,517	1,552	1,552	1,552	2,552	2,552	2,332	2,332	2,552	2,552
38	Quality of supply	1,587	579	466	230	920	691	622	311	311	311	311
39	Legislative and regulatory	-	-	-	-	-	-	-	-	-	-	-
40	Other reliability, safety and environment	-	-	-	-	-	-	-	-	-	-	-
41	Total reliability, safety and environment	1,587	579	466	230	920	691	622	311	311	311	311
4.7		62,432	73,416	83,148	84,247	76,661	69,470	59,902	62,809	60,575	57,993	57,993
42	Expenditure on network assets											
43	Expenditure on non-network assets	3,490	5,934	2,986	2,821	2,306	2,127	2,127	2,354	2,219	2,127	2,127
43 44				2,986 86,134	2,821 87,068	2,306 78,966	2,127 71,598	2,127 62,029	2,354 65,163	2,219 62,794	2,127 60,120	2,127 60,120
43 44 45	Expenditure on non-network assets Expenditure on assets	3,490	5,934									
43 44 45 46	Expenditure on non-network assets Expenditure on assets Subcomponents of expenditure on assets (where known)	3,490	5,934									
43 44 45	Expenditure on non-network assets Expenditure on assets	3,490	5,934									



50													
50													
51			Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5	CY+6	CY+7	CY+8	CY+9	CY+10
52		for year ended	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	31 Mar 31
53	Difference between nominal and constant price forecasts		\$000	52 11101 22	51 11101 25	52 mai 24	51 Mui 25	51 11101 20	51 Mill 27	51 11101 25	51 Mai 25	52 11.01 50	51 1110. 51
54	Consumer connection		-	108	254	547	832	1,213	1,190	1,470	1,756	2,049	2,291
55	System growth		-	103	467	654	422	364	527	988	1,374	1,426	1,495
56	Asset replacement and renewal		-	1,242	2,716	3,846	4,475	5,101	5,320	6,375	6,740	7,667	8,467
57	Asset relocations		-	50	96	146	189	234	290	348	407	468	520
58	Reliability, safety and environment:												
59	Quality of supply		-	15	22	15	87	83	94	56	67	76	85
60	Legislative and regulatory		-	-	-	-	-	-	-	-	-	-	-
61	Other reliability, safety and environment		-	-	-	-	-	-	-	-	-	-	-
62	Total reliability, safety and environment		-	15	22	15	87	83	94	56	67	76	85
63	Expenditure on network assets		-	1,518	3,555	5,208	6,005	6,996	7,421	9,238	10,345	11,687	12,858
64	Expenditure on non-network assets		-	153	139	188	200	232	290	386	426	471	525
65	Expenditure on assets		-	1,671	3,694	5,396	6,206	7,228	7,711	9,624	10,770	12,158	13,383
66													
67			Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5					
		for year ended	31 Mar 21	31 Mar 22	31 Mar 23	31 Mar 24	31 Mar 25	31 Mar 26					
68	11a(ii): Consumer Connection												
69	Consumer types defined by EDB*		\$000 (in constant pr	ices)									
70	Consumer connections (gross)		10,799	8,524	8,680	11,573	13,171	15,303					
71													
72													
73													
74													
75	*include additional rows if needed	1			1								
76	Consumer connection expenditure		10,799	8,524	8,680	11,573	13,171	15,303					
77	less Capital contributions funding consumer connection		5,448	5,114	5,208	6,944	7,903	9,182					
78	Consumer connection less capital contributions	Į.	5,351	3,410	3,472	4,629	5,269	6,121					
79	11a(iii): System Growth												
80	Subtransmission		963		6.138	3.051	1						
81	Zone substations		1,635	1,816	989	3,805	1,587	32					
82	Distribution and LV lines		1,602	1,108	983	1,008	1,291	1,322					
83	Distribution and LV cables		1,172	811	720	738	944	967					
84	Distribution substations and transformers		508	351	312	320	409	419					
85	Distribution switchgear		567	392	348	356	456	467					
86	Other network assets		31	55	12	137	78	16					
87	System growth expenditure		6,478	4,532	9,502	9,415	4,766	3,223					
88	less Capital contributions funding system growth												
89	System growth less capital contributions		6,478	4,532	9,502	9,415	4,766	3,223					
90													



91				Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
92			for year ended		31 Mar 22	31 Mar 23	31 Mar 24	31 Mar 25	31 Mar 26
			,						
93	11a(iv):	Asset Replacement and Renewal		000 (in constant pric	es)				
94		Subtransmission		4,717	587	10,357	4,189	3,558	5,003
95		Zone substations		9,771	11,070	8,834	12,281	11,848	6,931
96		Distribution and LV lines		19,410	35,243	29,903	29,765	25,604	24,252
97		Distribution and LV cables		2,232	5,158	2,566	2,805	2,690	3,501
98		Distribution substations and transformers		2,207	2,063	6,520	7,290	7,463	5,459
99		Distribution switchgear		2,960	3,462	4,193	4,232	4,197	2,741
100		Other network assets		144	281	175	515	490	415
101		set replacement and renewal expenditure		41,441	57,864	62,548	61,077	55,851	48,302
102		Capital contributions funding asset replacement and renewal							
103	Ass	set replacement and renewal less capital contributions	L	41,441	57,864	62,548	61,077	55,851	48,302
104									
405				Correct Vers C'	CY+1	CY+2	CY+3	CY+4	CY+5
105 106			f	Current Year CY 31 Mar 21	31 Mar 22	31 Mar 23	31 Mar 24	31 Mar 25	31 Mar 26
106			for year ended	21 IAIAL 51	21 INIAL 22	31 IVIAT 23	31 IVIAT 24	21 IAISL 52	31 IVIAL 70
107	11a(v)· A	Asset Relocations							
108		Project or programme*		000 (in constant pric	es)				
109	r	Asset relocations (gross)	Ì	2,128	1,917	1,952	1,952	1,952	1,952
110		reserve to the term (gross)		2,120	2,527	2,552	2,332	2,552	2,332
111									
112									
113									
114	•	*include additional rows if needed				,			
115		All other project or programmes - asset relocations							
116		set relocations expenditure		2,128	1,917	1,952	1,952	1,952	1,952
117	less	Capital contributions funding asset relocations		1,074	1,150	1,171	1,171	1,171	1,171
118		set relocations less capital contributions		1,054	767	781	781	781	781
119									
120				Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
121			for year ended	31 Mar 21	31 Mar 22	31 Mar 23	31 Mar 24	31 Mar 25	31 Mar 26
122		Quality of Supply							
123		Project or programme*	1	000 (in constant pric					
124		RSE		1,350	355	-	-	691	691
125		Future networks		236	224	466	230	230	-
126									
127									
128									
129		*include additional rows if needed	Г						
130		All other projects or programmes - quality of supply							
131		ality of supply expenditure		1,587	579	466	230	920	691
132		Capital contributions funding quality of supply							
133	Qu	ality of supply less capital contributions		1,587	579	466	230	920	691
134									



135			Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
136		for year ended	31 Mar 21	31 Mar 22	31 Mar 23	31 Mar 24	31 Mar 25	31 Mar 26
137	11a(vii): Legislative and Regulatory							
138 139	Project or programme*	ř	\$000 (in constant pr	rices)	Г			
140								
141								
142								
143 144	*include additional rows if needed	L						
145	All other projects or programmes - legislative and regulatory							
146	Legislative and regulatory expenditure		-	-	-	-	-	-
147 148	less Capital contributions funding legislative and regulatory Legislative and regulatory less capital contributions			_	-		_	
149	zegistative and regulatory less capital contributions	L						
150			Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
	11a(viii). Other Beliability Safety and Environment	for year ended	31 Mar 21	31 Mar 22	31 Mar 23	31 Mar 24	31 Mar 25	31 Mar 26
151 152	11a(viii): Other Reliability, Safety and Environment Project or programme*		\$000 (in constant pr	rices)				
153	roject or programme	[,,,,,					
154								
155 156								
157								
158	*include additional rows if needed							
159	All other projects or programmes - other reliability, safety and enviro	nment						
160 161	Other reliability, safety and environment expenditure less Capital contributions funding other reliability, safety and environmen	t	-	-	-	-	-	-
162	Other reliability, safety and environment less capital contributions		-	-	-	-	-	_
163								
164			Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
165		for year ended	31 Mar 21	31 Mar 22	31 Mar 23	31 Mar 24	31 Mar 25	31 Mar 26
166	11a(ix): Non-Network Assets							
167	Routine expenditure							
168 169	Project or programme*	ſ	\$000 (in constant pr 3,490	rices) 5,934	2,986	2,821	2,306	2,127
170	Non-network assets		5,490	5,934	2,986	2,821	2,306	2,127
171								
172								
173 174	*include additional rows if needed							
175	All other projects or programmes - routine expenditure							
176	Routine expenditure		3,490	5,934	2,986	2,821	2,306	2,127
177 178	Atypical expenditure							
178	Project or programme*							
180								
181								
182 183								
184	*include additional rows if needed	L						
185	All other projects or programmes - atypical expenditure							
186 187	Atypical expenditure		-	-	-	-	-	-
188	Expenditure on non-network assets		3,490	5,934	2,986	2,821	2,306	2,127



Schedule 11b: Report on Forecast Operational Expenditure

									г			
									Company Name		ora Energy Limit 2021 – 31 Marc	
	HERLING 44h, DERORT ON FORECAST OPERATIONAL EVER	NDITUDE						AMP	Planning Period	1 April	2021 – 31 Wart	11 2031
This EDB:	HEDULE 11b: REPORT ON FORECAST OPERATIONAL EXPE schedule requires a breakdown of forecast operational expenditure for the disclosure year an s must provide explanatory comment on the difference between constant price and nominal of information is not part of audited disclosure information.	d a 10 year planning pe					he AMP. The forecas	st is to be expressed i	in both constant price	and nominal dollar	terms.	
:h re	f											
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 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	31 Mar 31
9	Operational Expenditure Forecast	\$000 (in nominal dol	llare)									
10	Service interruptions and emergencies	3,980	4,791	4.933	4,982	5,052	5.068	4,849	4.888	4,930	4,976	5,075
11	Vegetation management	5,834	5,234	5,346	4,013	4,035	4,016	4,146	4.033	4,271	4,342	4,428
12	Routine and corrective maintenance and inspection	9,005	10,537	10,401	10,762	9,973	10,195	9,763	9,354	9,051	9,894	10,092
13	Asset replacement and renewal	-	-	-	-	-	-	-	-	-	-	,
14	Network Opex	18,819	20,562	20,680	19,757	19,059	19,279	18,758	18,275	18,252	19,212	19,596
15	System operations and network support	13,832	16,291	18,258	17,697	18,195	18,223	18,872	18,918	19,426	19,951	20,35
16	Business support	14,491	15,222	16,619	16,439	16,652	17,030	17,507	17,985	18,476	18,980	19,360
17	Non-network opex	28,323	31,512	34,877	34,137	34,847	35,252	36,379	36,903	37,902	38,931	39,710
18	Operational expenditure	47,142	52,074	55,557	53,893	53,906	54,531	55,137	55,178	56,153	58,143	59,307
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 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	31 Mar 31
21		\$000 (in constant pri										
22	Service interruptions and emergencies	3,980	4,668	4,705	4,640	4,589	4,507	4,225	4,176	4,129	4,086	4,086
23	Vegetation management	5,834	5,100	5,099	3,737	3,666	3,571	3,612	3,445	3,577	3,565	3,565
24 25	Routine and corrective maintenance and inspection Asset replacement and renewal	9,005	10,261	9,906	10,006	9,048	9,052	8,490	7,975	7,565	8,108	8,108
26	Network Opex	18,819	20,029	19,710	18,383	17,303	17,130	16,328	15,596	15,271	15,759	15,759
27	System operations and network support	13,832	15.901	17,471	16,542	16,574	16.257	16,512	16.227	16.336	16,449	16,449
28	Business support	14,491	14,833	15,850	15,310	15,126	15,139	15,247	15,356	15,466	15,576	15,576
29	Non-network opex	28,323	30,734	33,321	31,851	31,700	31,396	31,759	31,584	31,802	32,025	32,025
30	Operational expenditure	47,142	50,763	53,031	50,234	49,002	48,526	48,087	47,180	47,073	47,784	47,784
31	Subcomponents of operational expenditure (where known)											
32	Energy efficiency and demand side management, reduction of											
33 34	energy losses Direct billing*											
35	Research and Development											
36	Insurance											
37	* Direct billing expenditure by suppliers that direct bill the majority of their consumers	,	<u>'</u>									
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 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	31 Mar 31
41	Difference between nominal and real forecasts	\$000										
41	Service interruptions and emergencies	Ş000	122	228	342	463	561	624	713	801	890	990
43	Vegetation management		134	228	276	370	445	533	588	694	777	864
44	Routine and corrective maintenance and inspection		276	495	756	925	1,143	1,273	1.379	1,485	1,786	1,984
45	Asset replacement and renewal	-	-	-	-	-	-,140	-,275	-,5.5		-,700	2,504
46	Network Opex	-	533	970	1,374	1,757	2,149	2,430	2,679	2,981	3,453	3,838
47	System operations and network support	-	389	786	1,155	1,621	1,965	2,360	2,691	3,090	3,502	3,902
48	Business support	-	389	770	1,130	1,526	1,891	2,259	2,629	3,010	3,404	3,784
49	Non-network opex		778	1,556	2,285	3,147	3,856	4,620	5,319	6,100	6,906	7,686
50	Operational expenditure		1,311	2,526	3,659	4,904	6,005	7,050	7,998	9,080	10,360	11,523



Schedule 12a: Report on Asset Condition

Company Name Aurora Energy Limited

AMP Planning Period 1 April 2021 – 31 March 2031

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.

repla	ced in the ne	ext 5 years. All information should	d be consistent with the information provided in the AMP and the ex	penditure on assets for	recast in Schedule	11a. All units rela	ating to cable and	d line assets, that	are expressed in	n km, refer to c	ircuit lengths.	
sch ref										f ! b b	- 4-1	
8	Voltage	Asset category	Asset class	Units	H1	H2	H3	rt of planning per	H5	Grade	Data accuracy	% of asset forecast to be replaced in
9				_						unknown	(1-4)	next 5 years
10	All	Overhead Line	Concrete poles / steel structure	No.	0.02%	0.01%	0.32%	18.15%	81.50%		3	0.23%
11	All	Overhead Line	Wood poles	No.	15.54%	6.31%	18.39%	29.45%	30.31%		3	18.05%
12	All	Overhead Line	Other pole types	No.							N/A	
13	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	0.55%	0.85%	20.44%	5.84%	72.31%		2	18.24%
14	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km							N/A	
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	-	-	-	1.82%	98.18%		3	-
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	-	-	66.46%	33.54%	-		3	33.15%
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	34.95%	-	37.13%	-	27.92%		3	-
18	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	-	50.00%	-	32.97%	17.02%		3	50.00%
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.	6.06%	-	30.30%	9.09%	54.55%		2	9.09%
25	HV	Zone substation Buildings	Zone substations 110kV+	No.							N/A	-
26	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	-	-	-	-	100.00%		3	-
27	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	46.00%	-	-	10.00%	44.00%		2	22.00%
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.	-	-	-	-	100.00%		3	-
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	19.15%	3.10%	11.27%	12.68%	53.80%		3	25.96%
34	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	31.58%	-	2.63%	18.42%	47.37%		2	28.95%



3	6						Asse	t condition at sta	rt of planning pe	riod (percentag	e of units by gr	ade)	
3		Voltage	Asset category	Asset class	Units	Н1	H2	нз	Н4	Н5	Grade unknown	Data accuracy (1–4)	% of asset forecast to be replaced in next 5 years
3	9	HV	Zone Substation Transformer	Zone Substation Transformers	No.	10.45%	5.97%	23.88%	22.39%	37.31%		4	16.92%
4	0	HV	Distribution Line	Distribution OH Open Wire Conductor	km	2.27%	2.63%	8.34%	11.89%	74.87%		2	7.37%
4	1	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km							N/A	
4	2	HV	Distribution Line	SWER conductor	km	46.53%	_	18.07%	7.47%	27.93%		2	46.53%
4	3	HV	Distribution Cable	Distribution UG XLPE or PVC	km	0.21%	0.26%	1.52%	8.65%	89.36%		2	0.83%
4	4	HV	Distribution Cable	Distribution UG PILC	km	0.56%	0.64%	3.57%	8.45%	86.78%		2	2.05%
4	5	HV	Distribution Cable	Distribution Submarine Cable	km	-	100.00%	-	-	_		2	100.00%
4	6	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	-	-	-	2.04%	97.96%		2	-
4	1	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	55.56%	-	-	-	44.44%		2	55.56%
4	8	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	3.52%	3.12%	9.25%	13.00%	71.11%		2	6.94%
4	9	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	1.00%	-	-	-	99.00%		2	0.75%
5	0	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	8.14%	5.46%	13.43%	21.91%	51.05%		2	15.70%
5	1	HV	Distribution Transformer	Pole Mounted Transformer	No.	6.18%	4.98%	14.75%	16.13%	57.98%		2	10.73%
5	2	HV	Distribution Transformer	Ground Mounted Transformer	No.	0.23%	0.36%	2.02%	5.55%	91.84%		3	1.01%
5	3	HV	Distribution Transformer	Voltage regulators	No.	-	-	7.14%	-	92.86%		2	10.71%
5	4	HV	Distribution Substations	Ground Mounted Substation Housing	No.	-	-	50.00%	50.00%	-		1	-
5	5	LV	LV Line	LV OH Conductor	km	6.04%	2.89%	9.20%	15.11%	66.78%		2	9.88%
5	6	LV	LV Cable	LV UG Cable	km	0.27%	0.25%	1.52%	5.82%	92.14%		2	0.67%
5	7	LV	LV Streetlighting	LV OH/UG Streetlight circuit	km	3.82%	1.87%	6.24%	11.53%	76.55%		2	6.33%
5	8	LV	Connections	OH/UG consumer service connections	No.	4.25%	2.28%	7.28%	12.25%	73.95%		2	7.78%
5	9	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	48.63%	8.40%	19.53%	23.44%	-		2	43.55%
6	0	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	26.87%	-	38.81%	34.33%	-		2	13.43%
6	1	All	Capacitor Banks	Capacitors including controls	No.	-	-	-	-	100.00%		2	-
6	2	All	Load Control	Centralised plant	Lot	71.43%	-	-	-	28.57%		2	71.43%
6	3	All	Load Control	Relays	No.	15.57%	6.63%	38.27%	39.53%	-		2	-
6	4	All	Civils	Cable Tunnels	km							N/A	



Schedule 12b: Report on Forecast Capacity

								Company Name	Aurora Energy Limited
								AMP Planning Period	1 April 2021 – 31 March 2031
E 12b: REPORT ON FORECAST CAPACI' equires a breakdown of current and forecast capacity and utili late to the operation of the network in its normal steady state	ation for each zone substation	and current distribu	ition transformer capac	ity. The data provided	should be consistent	with the information	n provided in the AM	IP. Information provided in this	
(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
Alexandra	11		N-1 switched		73%	15		No constraint within +5 years	
Andersons Bay	15	18		5	84%	18		No constraint within +5 years	
Arrowtown									Subtransmission prevents use of full firm capacity. Minor reconfiguration of transformers planned for RY22. Subtransm
1 11	10	12	N-1 switched	2	84%	12	91%	Subtransmission circuit	upgrade project planned in RY24.
Berwick	2	-	N	2	-	-	-	No constraint within +5 years	
Camphill	6	-	N	2	-	-	-	No constraint within +5 years	
Cardrona	3	-	N	1	-	-	-	Transformer	Load growth may occur with proposed expansion of the ski fie
Carisbrook	12	23	N-1	6	53%	23	68%	No constraint within +5 years	
Clyde/Earnscleugh	4	-	N		-	-		No constraint within +5 years	
Commonage	11		N-1 switched	6	63%	17	65%	No constraint within +5 years	
Coronet Peak	5		N	2	-	-	-	No constraint within +5 years	
Corstorphine	13		N-1	6	55%	23		No constraint within +5 years	
Cromwell	13	23	N-1 switched	-	55%	24	62%	No constraint within +5 years	
Dalefield	2	-	N	1	-	-	-	No constraint within +5 years	
Earnscleugh		-	N	-		-	-	No constraint within +5 years	Earnscleugh provides short term partial back up to Clyde/Earn while we reinforce the network to provide back-up from Alexa
East Taieri	16	24	N-1 switched	4	67%	24	71%	No constraint within +5 years	
Ettrick	2	-	N	2	-	-	-	No constraint within +5 years	
Fernhill	6	10	N-1 switched	4	59%	10	70%	No constraint within +5 years	We will monitor growth at Frankton to ensure that our plan to the smaller 15MVA transformer at this site in RY29 remains
Frankton	17	15	N-1	6	111%	15	130%	Transformer	appropriate.
Green Island	14	18	N-1	6	78%	18	82%	No constraint within +5 years	
Halfway Bush	13	18	N-1	6	72%	24	55%	No constraint within +5 years	
Kaikorai Valley	10	23	N-1	4	43%	23	44%	No constraint within +5 years	
Lauder Flat	1		N	1	-	-	-	No constraint within +5 years	
Lindis Crossing	7	-	N	4		-		Transformer	The exact level of further irrigation load growth at Lindis Cross uncertain, we will monitor and respond accordingly.
Mosgiel	7	12	N-1 switched	3	56%	12	64%	No constraint within +5 years	
North City	16	28	N-1	6	55%	28	56%	No constraint within +5 years	Excludes the new hospital connection. Similarly the cost to re North City zone substation (if required) has not been included financial forecasts.
North East Valley	10	18		4	57%	18	59%	No constraint within +5 years	
Omakau	3		N	2			-	Transformer	Planned upgrade and move to new location in RY24.
Outram	3		N	2			-	No constraint within +5 years	
Port Chalmers	7	10		3	72%	10	76%	No constraint within +5 years	
Queensberry	3	10	N	2	, 270	10	. 370	No constraint within +5 years	
Queenstown	13	20	N-1 switched	6	67%	20	77%	No constraint within +5 years	
Remarkables	13		N N		3776	20	- 7776	No constraint within +5 years	
Roxburgh	2		N N	1		-	-	No constraint within +5 years No constraint within +5 years	
Smith St	14	18	14		77%	18	78%	No constraint within +5 years No constraint within +5 years	
South City	14	18		6	81%	18			
South City St Kilda				6				No constraint within +5 years	
or viida	14	23	N-1	6	62%	23	63%	No constraint within +5 years	It is proposed to relieve the Wanaka constraint by the installat transformer capacity at Riverbank in RY28. We will monitor g
Wanaka	24	24	N-1	1	102%	24	117%	Transformer	Wanaka.
Ward St	9	23		6	40%	23		No constraint within +5 years	
	12		N-1	· ·	65%	18		No constraint within +5 years	



Schedule 12c: Report on Forecast Network Demand

	•							
					Company Name	Auro	ra Energy Limite	d
					Planning Period		021 – 31 March	
COL	IEDIUE 430. DEDORT ON FORECAST NETWORK DEMAND			Alvir	Plumming Periou	I April 2	OZI – SI Walcii	2031
	HEDULE 12C: REPORT ON FORECAST NETWORK DEMAND							
	schedule requires a forecast of new connections (by consumer type), peak demand and energy volu mptions used in developing the expenditure forecasts in Schedule 11a and Schedule 11b and the ca			he forecasts should b	e consistent with the	e supporting informat	on set out in the AMI	P as well as the
assui	inplions used in developing the experioliture forecasts in schedule 11a and schedule 11b and the ca	pacity and utilisation for ecasts in sche	dule 12b.					
sch ref								
	42 (1) 0							
7	12c(i): Consumer Connections							
8	Number of ICPs connected in year by consumer type		Current Year CY	CY+1	Number of co	onnections CY+3	CY+4	CY+5
10		for year ended	31 Mar 21	31 Mar 22	31 Mar 23	31 Mar 24	31 Mar 25	31 Mar 26
11	Consumer types defined by EDB*	·						
12	Residential		822	1,257	1,257	1,257	1,257	1,257
13	Load Group 0		14	5	5	5	5	5
14	Load Group 0A		4	12	12	12	12	12
15	Load Group 1A		19	15	15	15	15	15
	Load Group 1		(60)	92	92	92	92	92
	Load Group 2		146	110	110	110	110	110
1	Load Group 3	-	1	4	4	4	4	4
	Load Group 3A	-	1	3	3	3	3	3
	Load Group 4	-	2	2	2	2	2	2
16	Load Group 5 Street Lighting & DUML	-	- 3	-	-	-	-	-
17	Connections total		952	1,500	1,500	1,500	1,500	1,500
18	*include additional rows if needed	۲	332	2,500	2,500	1,500	1,500	1,500
19	Distributed generation	_						
20	Number of connections		1,404	1,597	1,774	1,951	2,128	2,305
21	Capacity of distributed generation installed in year (MVA)	L	1	1	1	1	1	1
22	12c/ii) System Domand							
22	12c(ii) System Demand		Current Year CY	CY+1	CY+2	CY+3	CY+4	CY+5
24	Maximum coincident system demand (MW)	for year ended	31 Mar 21	31 Mar 22	31 Mar 23	31 Mar 24	31 Mar 25	31 Mar 26
25	GXP demand	· · · · · · · · · · · · · · · · · · ·	241	243	245	248	250	252
26	plus Distributed generation output at HV and above		58	59	60	60	61	62
27	Maximum coincident system demand		299	302	305	308	311	314
28	less Net transfers to (from) other EDBs at HV and above		0	(0)	(0)	(0)	(0)	(0)
29	Demand on system for supply to consumers' connection points	L	299	302	305	308	311	314
30	Electricity volumes carried (GWh)							
31	Electricity volumes carried (GWN) Electricity supplied from GXPs	Г	1,084	1,094	1,103	1,112	1,121	1,130
32	less Electricity exports to GXPs	<u> </u>	57	57	58	58	59	59
33	plus Electricity supplied from distributed generation	-	366	366	369	372	375	378
34	less Net electricity supplied to (from) other EDBs		1	(0)	(0)	(0)	(0)	(0)
35	Electricity entering system for supply to ICPs		1,392	1,403	1,414	1,426	1,437	1,449
36	less Total energy delivered to ICPs		1,306	1,316	1,327	1,337	1,348	1,359
37	Losses		86	87	88	88	89	90
38			E20/	E20/	F20/	F20/	F20/	E20/
	Load factor Loss ratio		53% 6.2%	53% 6.2%	53% 6.2%	53% 6.2%	53% 6.2%	53% 6.2%



Schedule 12d: Report on Forecast Interruptions and Duration

Company Name AMP Planning Period	
Network / Sub-network Name	Total Network
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.	

9	sch rej 8 9 10	f for year ended	Current Year CY 31 Mar 21	CY+1 31 Mar 22	<i>CY+2</i> 31 Mar 23	<i>CY+3</i> 31 Mar 24	<i>CY+4</i> 31 Mar 25	<i>CY+5</i> 31 Mar 26
ı	11	Class B (planned interruptions on the network)	196.0	196.0	196.0	196.0	196.0	196.0
ı	12	Class C (unplanned interruptions on the network)	124.9	142.0	142.0	142.0	142.0	142.0
	13	13 SAIFI						
1	14	Class B (planned interruptions on the network)	1.11	1.11	1.11	1.11	1.11	1.11
1	15	Class C (unplanned interruptions on the network)	2.07	2.26	2.26	2.26	2.26	2.26

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Company Name	Aurora Energy Limited
AMP Planning Period	1 April 2021 – 31 March 2031
Network / Sub-network Name	Dunedin Sub-network

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 re, 8 9 10	f for year ended SAIDI	Current Year CY 31 Mar 21	<i>CY+1</i> 31 Mar 22	<i>CY+2</i> 31 Mar 23	<i>CY+3</i> 31 Mar 24	<i>CY+4</i> 31 Mar 25	<i>CY+5</i> 31 Mar 26
11	Class B (planned interruptions on the network)	117.6	117.6	117.6	117.6	117.6	117.6
12	Class C (unplanned interruptions on the network)	50.0	56.8	56.8	56.8	56.8	56.8
13	SAIFI						
14	Class B (planned interruptions on the network)	0.66	0.66	0.66	0.66	0.66	0.66
15	Class C (unplanned interruptions on the network)	0.83	0.90	0.90	0.90	0.90	0.90



Company Name
AMP Planning Period
Network / Sub-network Name

AMP Planning Period
Central Otago Sub-network

With the supporting information set out in the AMP as well as the assumed impact of planned and

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 rej 8 9 10	f for year ended SAIDI	Current Year CY 31 Mar 21	<i>CY+1</i> 31 Mar 22	<i>CY+2</i> 31 Mar 23	<i>CY+3</i> 31 Mar 24	<i>CY+4</i> 31 Mar 25	<i>CY+5</i> 31 Mar 26
11	Class B (planned interruptions on the network)	78.4	78.4	78.4	78.4	78.4	78.4
12	Class C (unplanned interruptions on the network)	75.0	85.2	85.2	85.2	85.2	85.2
13	SAIFI						
14	Class B (planned interruptions on the network)	0.44	0.44	0.44	0.44	0.44	0.44
15	Class C (unplanned interruptions on the network)	1.24	1.36	1.36	1.36	1.36	1.36



Schedule 14a: Mandatory Explanatory Notes on Forecast Information

(In this Schedule, clause references are to the Electricity Distribution Information Disclosure Determination 2012 – as amended and consolidated 3 April 2018.)

- 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

Differences between constant and nominal forecasts are a direct output of our escalation approach. Our expenditure forecasts have been set out in constant 2021 dollars and escalated to nominal dollars using a set of price indices. Each expenditure category has price indices specific to that category. Price indices for each expenditure category reflect a combination of labour and materials prices. Forecast labour and materials prices were sourced from a variety of sources.

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

Our approach for operational expenditure is equivalent to the approach for capital expenditure, described above.



APPENDIX B. DISCLOSURE REQUIREMENTS

This compliance matrix provides a look-up reference for each of the relevant Information Disclosure requirements that apply to an AMP Update. The reference numbers are consistent with the clause numbers in the Electricity Distribution Information Disclosure Determination (2012) (consolidated April 2018).

Table B.1: Disclosure requirements checklist

Information Disclosure Requirement	Determination Reference	AMP Update Reference
Subject to clause 2.6.4, an EDB may elect to complete and publicly disclose an AMP update, as described under clause 2.6.5, before the start of a disclosure year, instead of an AMP, as described under clause 2.6.1(1), unless the start of that disclosure year is-	Clause 2.6.3	On 18 December 2020, Aurora Energy was granted an exemption from publishing a full AMP in 2021 given the large amount of
one year after the start of the DPP regulatory period; or	Clause 2.6.3(1)	information provided to stakeholders as partof its CPP proposal and subsequent
two years before the start of the next DPP regulatory period.	Clause 2.6.3(1)	consultation process.
An EDB must not complete and publicly disclose an AMP update instead of an AMP if it has not previously publicly disclosed an AMP under clause 2.6.1.	Clause 2.6.4	Aurora Energy's most recent, previous disclosure was its 2020 AMP.
For the purpose of clause 2.6.3, the AMP update must—	Clause 2.6.5	
Relate to the electricity distribution services supplied by the EDB;	Clause 2.6.5(1)	Section 1.1
Identify any material changes to the network development plans disclosed in the last AMP under clause 11 of Attachment A or in the last AMP update disclosed under this clause;	Clause 2.6.5(2)	Section 2
Identify any material changes to the lifecycle asset management (maintenance and renewal) plans disclosed in the last AMP pursuant to clause 12 of Attachment A or in the last AMP update disclosed under this section;	Clause 2.6.5(3)	Section 2
Provide the reasons for any 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;	Clause 2.6.5(4)	Section 2



Information Disclosure Requirement	Determination Reference	AMP Update Reference
Identify any changes to the asset management practices of the EDB that would affect a Schedule 13 Report on Asset Management Maturity disclosure; and	Clause 2.6.5(5)	There have been no material changes to asset management practices (since the publication of our 2020 AMP in June 2020) that would affect our Report on Asset Management Maturity disclosure.
Contain the information set out in the schedules described in clause 2.6.6.	Clause 2.6.5(6)	Appendix A
Every EDB must—	Clause 2.6.6	
Before the start of each disclosure year, complete and publicly disclose each of the following reports by inserting all information relating to the electricity distribution services supplied by the EDB for the disclosure years provided for in the following reports—	Clause 2.6.6(1)	
the Report on Forecast Capital Expenditure in Schedule 11a;	Clause 2.6.6(1)(a)	Appendix A
the Report on Forecast Operational Expenditure in Schedule 11b;	Clause 2.6.6(1)(b)	Appendix A
the Report on Asset Condition in Schedule 12a;	Clause 2.6.6(1)(c)	Appendix A
the Report on Forecast Capacity in Schedule 12b;	Clause 2.6.6(1)(d)	Appendix A
the Report on Forecast Network Demand in Schedule 12c;	Clause 2.6.6(1)(e)	Appendix A
the Report on Forecast Interruptions and Duration in Schedule 12d;	Clause 2.6.6(1)(f)	Appendix A
If the EDB has sub-networks, complete and publicly disclose the Report on Forecast Interruptions and Duration set out in Schedule 12d by inserting all information relating to the electricity distribution services supplied by the EDB in relation to each sub-network for the disclosure years provided for in the report.	Clause 2.6.6(2)	Appendix A
Before the start of each disclosure year, every EDB must complete and publicly disclose the Mandatory Explanatory Notes on Forecast Information in Schedule 14a by inserting all relevant information relating to information disclosed in accordance with clause 2.6.6.	Clause 2.7.2	Appendix A



APPENDIX C. DIRECTOR'S CERTIFICATE

Certification for Year-beginning Disclosures Pursuant to Clause 2.9.1 of Section 2.9

We Stephen Richard Thompson and Margaret Patricia Devlin, being directors of Aurora Energy Limited certify that, having made all reasonable enquiry, to the best of our knowledge:

- a) the following attached information of Aurora Energy 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 Aurora Energy Limited's corporate vision and strategy and are documented in retained records.

Anhor.	5
Director	Director
30 March 2021	30 March 2021
Date	Date