Orion New Zealand Limited

Information for disclosure

for the year ended 31 March 2021

Electricity distribution
information disclosure
determination 2012

Approved 31 August 2021

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Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2021**

SCHEDULE 1: ANALYTICAL RATIOS

This schedule calculates expenditure, revenue and service ratios from the information disclosed. The disclosed ratios may vary for reasons that are company specific and, as a result, must be interpreted with care. The Commerce Commission will publish a summary and analysis of information disclosed in accordance with the ID determination. This will include information disclosed in accordance with this and other schedules, and information disclosed under the other requirements of the determination.

This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

7 **1(i): Expenditure metrics**

sch ref		Expenditure per GWh energy delivered to ICPs ($/GWh)	Expenditure per average no. of ICPs ($/ICP)	Expenditure per MW maximum coincident system demand ($/MW)	Expenditure per km circuit length ($/km)	Expenditure per MVA of capacity from EDB-owned distribution transformers ($/MVA)
8						
9	**Operational expenditure**	20,052	311	104,238	5,607	29,295
10	Network	9,188	142	47,760	2,569	13,422
11	Non-network	10,865	168	56,478	3,038	15,872
12						
13	**Expenditure on assets**	25,113	389	130,544	7,022	36,688
14	Network	23,900	371	124,236	6,682	34,915
15	Non-network	1,213	19	6,308	339	1,773
16						

17 **1(ii): Revenue metrics**

sch ref		Revenue per GWh energy delivered to ICPs ($/GWh)	Revenue per average no. of ICPs ($/ICP)
18			
19	**Total consumer line charge revenue**	70,623	1,095
20	Standard consumer line charge revenue	72,292	1,075
21	Non-standard consumer line charge revenue	31,664	281,812
22			

23 **1(iii): Service intensity measures**

sch ref			
24			
25	Demand density	54	*Maximum coincident system demand per km of circuit length (for supply) (kW/km)*
26	Volume density	280	*Total energy delivered to ICPs per km of circuit length (for supply) (MWh/km)*
27	Connection point density	18	*Average number of ICPs per km of circuit length (for supply) (ICPs/km)*
28	Energy intensity	15,504	*Total energy delivered to ICPs per average number of ICPs (kWh/ICP)*
29			

30 **1(iv): Composition of regulatory income**

sch ref		($000)	% of revenue
31			
32	Operational expenditure	65,160	27.93%
33	Pass-through and recoverable costs excluding financial incentives and wash-ups	67,906	29.10%
34	Total depreciation	43,559	18.67%
35	Total revaluations	17,435	7.47%
36	Regulatory tax allowance	17,414	7.46%
37	Regulatory profit/(loss) including financial incentives and wash-ups	56,001	24.00%
38	**Total regulatory income**	233,331	
39			

40 **1(v): Reliability**

sch ref			
41			
42	Interruption rate	13.54	*Interruptions per 100 circuit km*

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SCHEDULE 2: REPORT ON RETURN ON INVESTMENT

This schedule requires information on the Return on Investment (ROI) for the EDB relative to the Commerce Commission's estimates of post tax WACC and vanilla WACC. EDBs must calculate their ROI based on a monthly basis if required by clause 2.3.3 of the ID Determination or if they elect to. If an EDB makes this election, information supporting this calculation must be provided in 2(iii).

EDBs must provide explanatory comment on their ROI in Schedule 14 (Mandatory Explanatory Notes).

This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref		CY-2	CY-1	Current Year CY
7	**2(i): Return on Investment**			
8		31 Mar 19	31 Mar 20	31 Mar 21
9	**ROI – comparable to a post tax WACC**	%	%	%
10	Reflecting all revenue earned	6.73%	7.27%	4.74%
11	Excluding revenue earned from financial incentives	6.42%	6.71%	4.53%
12	Excluding revenue earned from financial incentives and wash-ups	6.39%	6.71%	4.53%
13				
14	**Mid-point estimate of post tax WACC**	4.75%	4.27%	3.72%
15	25th percentile estimate	4.07%	3.59%	3.04%
16	75th percentile estimate	5.43%	4.95%	4.40%
17				
18				
19	**ROI – comparable to a vanilla WACC**			
20	Reflecting all revenue earned	7.24%	7.70%	5.07%
21	Excluding revenue earned from financial incentives	6.93%	7.13%	4.86%
22	Excluding revenue earned from financial incentives and wash-ups	6.90%	7.13%	4.86%
23				
24	**WACC rate used to set regulatory price path**	6.92%	6.92%	4.23%
25				
26	**Mid-point estimate of vanilla WACC**	5.26%	4.69%	4.05%
27	25th percentile estimate	4.58%	4.01%	3.37%
28	75th percentile estimate	5.94%	5.37%	4.73%
29				

sch ref					
30	**2(ii): Information Supporting the ROI**			($000)	
31					
32		Total opening RAB value	1,150,406		
33	*plus*	Opening deferred tax	(48,583)		
34	**Opening RIV**			1,101,823	
35					
36	**Line charge revenue**			229,490	
37					
38		Expenses cash outflow	133,067		
39	*add*	Assets commissioned	53,187		
40	*less*	Asset disposals	449		
41	*add*	Tax payments	10,514		
42	*less*	Other regulated income	3,841		
43	**Mid-year net cash outflows**			192,478	
44					
45	**Term credit spread differential allowance**			724	
46					
47		Total closing RAB value	1,177,019		
48	*less*	Adjustment resulting from asset allocation	(0)		
49	*less*	Lost and found assets adjustment	–		
50	*plus*	Closing deferred tax	(55,483)		
51	**Closing RIV**			1,121,536	
52					
53	**ROI – comparable to a vanilla WACC**				5.07%
54					
55		Leverage (%)			42%
56		Cost of debt assumption (%)			2.82%
57		Corporate tax rate (%)			28%
58					
59	**ROI – comparable to a post tax WACC**				4.74%
60					

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SCHEDULE 2: REPORT ON RETURN ON INVESTMENT

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EDBs must provide explanatory comment on their ROI in Schedule 14 (Mandatory Explanatory Notes).

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sch ref

2(iii): Information Supporting the Monthly ROI

Opening RIV	N/A

	Line charge revenue	Expenses cash outflow	Assets commissioned	Asset disposals	Other regulated income	Monthly net cash outflows
April						–
May						–
June						–
July						–
August						–
September						–
October						–
November						–
December						–
January						–
February						–
March						–
Total	–	–	–	–	–	–

Tax payments	N/A
Term credit spread differential allowance	N/A
Closing RIV	N/A
Monthly ROI – comparable to a vanilla WACC	N/A
Monthly ROI – comparable to a post tax WACC	N/A

2(iv): Year-End ROI Rates for Comparison Purposes

Year-end ROI – comparable to a vanilla WACC	4.69%
Year-end ROI – comparable to a post tax WACC	4.36%

** these year-end ROI values are comparable to the ROI reported in pre 2012 disclosures by EDBs and do not represent the Commission's current view on ROI.*

2(v): Financial Incentives and Wash-Ups

Net recoverable costs allowed under incremental rolling incentive scheme	–	
Purchased assets – avoided transmission charge	3,108	
Energy efficiency and demand incentive allowance		
Quality incentive adjustment	–	
Other financial incentives	–	
Financial incentives		3,108
Impact of financial incentives on ROI		0.21%
Input methodology claw-back	–	
CPP application recoverable costs	–	
Catastrophic event allowance	–	
Capex wash-up adjustment	–	
Transmission asset wash-up adjustment	–	
2013–15 NPV wash-up allowance	–	
Reconsideration event allowance	–	
Other wash-ups	–	
Wash-up costs		–
Impact of wash-up costs on ROI		–

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SCHEDULE 3: REPORT ON REGULATORY PROFIT

This schedule requires information on the calculation of regulatory profit for the EDB for the disclosure year. All EDBs must complete all sections and provide explanatory comment on their regulatory profit in Schedule 14 (Mandatory Explanatory Notes).
This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref				($000)
7		**3(i): Regulatory Profit**		($000)
8		**Income**		
9		Line charge revenue		229,490
10	*plus*	Gains / (losses) on asset disposals		(165)
11	*plus*	Other regulated income (other than gains / (losses) on asset disposals)		4,006
12				
13		**Total regulatory income**		233,331
14		**Expenses**		
15	*less*	Operational expenditure		65,160
16				
17	*less*	Pass-through and recoverable costs excluding financial incentives and wash-ups		67,906
18				
19		**Operating surplus / (deficit)**		100,264
20				
21	*less*	Total depreciation		43,559
22				
23	*plus*	Total revaluations		17,435
24				
25		**Regulatory profit / (loss) before tax**		74,139
26				
27	*less*	Term credit spread differential allowance		724
28				
29	*less*	Regulatory tax allowance		17,414
30				
31		**Regulatory profit/(loss) including financial incentives and wash-ups**		56,001
32				
33		**3(ii): Pass-through and Recoverable Costs excluding Financial Incentives and Wash-Ups**	($000)	
34		**Pass through costs**		
35		Rates	4,321	
36		Commerce Act levies	357	
37		Industry levies	769	
38		CPP specified pass through costs	–	
39		**Recoverable costs excluding financial incentives and wash-ups**		
40		Electricity lines service charge payable to Transpower	60,702	
41		Transpower new investment contract charges	1,646	
42		System operator services	–	
43		Distributed generation allowance	–	
44		Extended reserves allowance	–	
45		Other recoverable costs excluding financial incentives and wash-ups	110	
46		**Pass-through and recoverable costs excluding financial incentives and wash-ups**		67,906
47				

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This schedule requires information on the calculation of regulatory profit for the EDB for the disclosure year. All EDBs must complete all sections and provide explanatory comment on their regulatory profit in Schedule 14 (Mandatory Explanatory Notes).

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sch ref				
48	**3(iii): Incremental Rolling Incentive Scheme**		**($000)**	
49			**CY-1**	**CY**
50			**31 Mar 20**	**31 Mar 21**
51	Allowed controllable opex		–	64,154
52	Actual controllable opex		61,292	65,100
53				
54	Incremental change in year			–
55				
56			**Previous years' incremental change**	**Previous years' incremental change adjusted for inflation**
57	CY-5	31 Mar 16	2,425	(1,809)
58	CY-4	31 Mar 17	(235)	(252)
59	CY-3	31 Mar 18	1,600	1,691
60	CY-2	31 Mar 19	(4,614)	–
61	CY-1	31 Mar 20	–	(4,797)
62	**Net incremental rolling incentive scheme**			(5,168)
63				
64	**Net recoverable costs allowed under incremental rolling incentive scheme**			–
65	**3(iv): Merger and Acquisition Expenditure**			
70				**($000)**
66	Merger and acquisition expenditure			–
67				
68	*Provide commentary on the benefits of merger and acquisition expenditure to the electricity distribution business, including required disclosures in accordance with section 2.7, in Schedule 14 (Mandatory Explanatory Notes)*			
69	**3(v): Other Disclosures**			
70				**($000)**
71	Self-insurance allowance			–

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SCHEDULE 4: REPORT ON VALUE OF THE REGULATORY ASSET BASE (ROLLED FORWARD)

This schedule requires information on the calculation of the Regulatory Asset Base (RAB) value to the end of this disclosure year. This informs the ROI calculation in Schedule 2.
EDBs must provide explanatory comment on the value of their RAB in Schedule 14 (Mandatory Explanatory Notes). This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref				RAB	RAB	RAB	RAB	RAB
7	**4(i): Regulatory Asset Base Value (Rolled Forward)**							
8			for year ended	31 Mar 17	31 Mar 18	31 Mar 19	31 Mar 20	31 Mar 21
9				($000)	($000)	($000)	($000)	($000)
10		**Total opening RAB value**		986,595	1,004,182	1,051,194	1,088,531	1,150,406
11								
12	*less*	**Total depreciation**		37,063	38,762	40,616	43,007	43,559
13								
14	*plus*	**Total revaluations**		21,320	11,011	15,577	27,543	17,435
15								
16	*plus*	**Assets commissioned**		34,993	77,003	63,637	78,414	53,187
17								
18	*less*	**Asset disposals**		1,663	996	1,378	1,074	449
19								
20	*plus*	**Lost and found assets adjustment**		–	–	–	–	–
21								
22	*plus*	**Adjustment resulting from asset allocation**		–	(1,245)	117	(0)	(0)
23								
24		**Total closing RAB value**		1,004,182	1,051,194	1,088,531	1,150,406	1,177,019
25								

sch ref			Unallocated RAB *		RAB	
26	**4(ii): Unallocated Regulatory Asset Base**					
27						
28			($000)	($000)	($000)	($000)
29		**Total opening RAB value**		1,151,559		1,150,406
30	*less*					
31		**Total depreciation**		43,579		43,559
32	*plus*					
33		**Total revaluations**		17,452		17,435
34	*plus*					
35		Assets commissioned (other than below)	37,591		37,548	
36		Assets acquired from a regulated supplier	–		–	
37		Assets acquired from a related party	15,639		15,639	
38		**Assets commissioned**		53,230		53,187
39	*less*					
40		Asset disposals (other than below)	449		449	
41		Asset disposals to a regulated supplier	–		–	
42		Asset disposals to a related party	–		–	
43		**Asset disposals**		449		449
44						
45	*plus*	**Lost and found assets adjustment**		–		–
46						
47	*plus*	**Adjustment resulting from asset allocation**				(0)
48						
49		**Total closing RAB value**		1,178,214		1,177,019

50 ** The 'unallocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services without any allowance being made for the allocation of costs to services provided by the supplier that are not electricity distribution services. The RAB value represents the value of these assets after applying this cost allocation. Neither value includes works under construction.*

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SCHEDULE 4: REPORT ON VALUE OF THE REGULATORY ASSET BASE (ROLLED FORWARD)

This schedule requires information on the calculation of the Regulatory Asset Base (RAB) value to the end of this disclosure year. This informs the ROI calculation in Schedule 2.
EDBs must provide explanatory comment on the value of their RAB in Schedule 14 (Mandatory Explanatory Notes). This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref							
51							
52		**4(iii): Calculation of Revaluation Rate and Revaluation of Assets**					
53							
54		CPI_4					1,068
55		CPI_4^{-4}					1,052
56		Revaluation rate (%)					1.52%
57							
58			Unallocated RAB *		RAB		
59			($000)	($000)	($000)	($000)	
60		Total opening RAB value	1,151,559		1,150,406		
61	*less*	Opening value of fully depreciated, disposed and lost assets	4,086		4,086		
62							
63		Total opening RAB value subject to revaluation	1,147,473		1,146,320		
64		**Total revaluations**		17,452		17,435	
65							
66		**4(iv): Roll Forward of Works Under Construction**					
67			Unallocated works under construction		Allocated works under construction		
68		**Works under construction—preceding disclosure year**		35,339		35,339	
69	*plus*	Capital expenditure	79,569		79,526		
70	*less*	Assets commissioned	53,230		53,187		
71	*plus*	Adjustment resulting from asset allocation					
72		**Works under construction - current disclosure year**		61,678		61,678	
73							
74		Highest rate of capitalised finance applied				Nil	
75							

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SCHEDULE 4: REPORT ON VALUE OF THE REGULATORY ASSET BASE (ROLLED FORWARD)

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EDBs must provide explanatory comment on the value of their RAB in Schedule 14 (Mandatory Explanatory Notes). This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

76 4(v): Regulatory Depreciation

sch ref		Unallocated RAB * ($000)	Unallocated RAB * ($000)	RAB ($000)	RAB ($000)
79	Depreciation - standard	39,095		39,095	
80	Depreciation - no standard life assets	4,483		4,464	
81	Depreciation - modified life assets	–		–	
82	Depreciation - alternative depreciation in accordance with CPP	–		–	
83	**Total depreciation**		43,579		43,559
84					

85 4(vi): Disclosure of Changes to Depreciation Profiles

($000 unless otherwise specified)

sch ref	Asset or assets with changes to depreciation*	Reason for non-standard depreciation (text entry)	Depreciation charge for the period (RAB)	Closing RAB value under 'non-standard' depreciation	Closing RAB value under 'standard' depreciation
87	N/A				
88					
89					
90					
91					
92					
93					
94					

95 ** include additional rows if needed*

96 4(vii): Disclosure by Asset Category

($000 unless otherwise specified)

sch ref			Subtransmission lines	Subtransmission cables	Zone substations	Distribution and LV lines	Distribution and LV cables	Distribution substations and transformers	Distribution switchgear	Other network assets	Non-network assets	Total
99		**Total opening RAB value**	67,124	85,935	139,735	123,076	377,301	130,525	136,049	34,489	56,172	1,150,406
100	*less*	Total depreciation	2,485	2,498	6,872	5,047	12,619	3,750	5,558	1,446	3,285	43,559
101	*plus*	Total revaluations	1,020	1,307	2,122	1,871	5,737	1,983	2,065	524	804	17,435
102	*plus*	Assets commissioned	3,000	987	8,543	6,817	12,334	5,257	11,044	1,833	3,371	53,187
103	*less*	Asset disposals	12		100			65	187		86	449
104	*plus*	Lost and found assets adjustment									–	–
105	*plus*	Adjustment resulting from asset allocation	–	–	–	–	–	–	–	–	–	–
106	*plus*	Asset category transfers	–	–	–	–	–	–	–	–	–	–
107		**Total closing RAB value**	68,647	85,731	143,428	126,716	382,754	133,951	143,414	35,401	56,977	1,177,019
108												
109		**Asset Life**										
110		Weighted average remaining asset life	35.4	41.0	31.9	32.0	38.0	34.2	30.9	27.4	27.1	(years)
111		Weighted average expected total asset life	45.8	57.9	44.8	47.4	58.1	45.1	41.1	33.2	31.6	(years)

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SCHEDULE 5a: REPORT ON REGULATORY TAX ALLOWANCE

This schedule requires information on the calculation of the regulatory tax allowance. This information is used to calculate regulatory profit/loss in Schedule 3 (regulatory profit). EDBs must provide explanatory commentary on the information disclosed in this schedule, in Schedule 14 (Mandatory Explanatory Notes).
This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref					
7	**5a(i): Regulatory Tax Allowance**				**($000)**
8		**Regulatory profit / (loss) before tax**			74,139
9					
10	*plus*	Income not included in regulatory profit / (loss) before tax but taxable	–	*	
11		Expenditure or loss in regulatory profit / (loss) before tax but not deductible	230	*	
12		Amortisation of initial differences in asset values	15,249		
13		Amortisation of revaluations	4,119		
14					19,599
15					
16	*less*	Total revaluations	17,435		
17		Income included in regulatory profit / (loss) before tax but not taxable	413	*	
18		Discretionary discounts and customer rebates	–		
19		Expenditure or loss deductible but not in regulatory profit / (loss) before tax	112	*	
20		Notional deductible interest	13,584		
21					31,543
22					
23		**Regulatory taxable income**			62,194
24					
25	*less*	Utilised tax losses	–		
26		Regulatory net taxable income			62,194
27					
28		Corporate tax rate (%)	28%		
29		**Regulatory tax allowance**			17,414
30					
31	*	Workings to be provided in Schedule 14			
32	**5a(ii): Disclosure of Permanent Differences**				
33		In Schedule 14, Box 5, provide descriptions and workings of items recorded in the asterisked categories in Schedule 5a(i).			
34	**5a(iii): Amortisation of Initial Difference in Asset Values**				**($000)**
35					
36		Opening unamortised initial differences in asset values	342,808		
37	*less*	Amortisation of initial differences in asset values	15,249		
38	*plus*	Adjustment for unamortised initial differences in assets acquired	–		
39	*less*	Adjustment for unamortised initial differences in assets disposed	571		
40		Closing unamortised initial differences in asset values			326,988
41					
42		Opening weighted average remaining useful life of relevant assets (years)			22
43					

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SCHEDULE 5a: REPORT ON REGULATORY TAX ALLOWANCE

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sch ref				
44	**5a(iv): Amortisation of Revaluations**			**($000)**
45				
46		Opening sum of RAB values without revaluations	1,030,009	
47				
48		Adjusted depreciation	39,440	
49		Total depreciation	43,559	
50		Amortisation of revaluations		4,119
51				
52	**5a(v): Reconciliation of Tax Losses**			**($000)**
53				
54		**Opening tax losses**	–	
55	*plus*	Current period tax losses	–	
56	*less*	Utilised tax losses	–	
57		**Closing tax losses**		–
58	**5a(vi): Calculation of Deferred Tax Balance**			**($000)**
59				
60		**Opening deferred tax**	(48,583)	
61				
62	*plus*	Tax effect of adjusted depreciation	11,043	
63				
64	*less*	Tax effect of tax depreciation	11,708	
65				
66	*plus*	Tax effect of other temporary differences*	(2,027)	
67				
68	*less*	Tax effect of amortisation of initial differences in asset values	4,270	
69				
70	*plus*	Deferred tax balance relating to assets acquired in the disclosure year	–	
71				
72	*less*	Deferred tax balance relating to assets disposed in the disclosure year	(61)	
73				
74	*plus*	Deferred tax cost allocation adjustment	0	
75				
76		**Closing deferred tax**		(55,483)
77				
78	**5a(vii): Disclosure of Temporary Differences**			
79		*In Schedule 14, Box 6, provide descriptions and workings of items recorded in the asterisked category in Schedule 5a(vi) (Tax effect of other temporary differences).*		
80				
81	**5a(viii): Regulatory Tax Asset Base Roll-Forward**			
82				**($000)**
83		**Opening sum of regulatory tax asset values**	465,570	
84	*less*	Tax depreciation	41,813	
85	*plus*	Regulatory tax asset value of assets commissioned	46,667	
86	*less*	Regulatory tax asset value of asset disposals	106	
87	*plus*	Lost and found assets adjustment	–	
88	*plus*	Adjustment resulting from asset allocation	–	
89	*plus*	Other adjustments to the RAB tax value	–	
90		**Closing sum of regulatory tax asset values**		470,318

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SCHEDULE 5b: REPORT ON RELATED PARTY TRANSACTIONS

This schedule provides information on the valuation of related party transactions, in accordance with clause 2.3.6 of the ID determination.
This information is part of audited disclosure information (as defined in clause 1.4 of the ID determination), and so is subject to the assurance report required by clause 2.8.

sch ref			
7	**5b(i): Summary—Related Party Transactions**	**($000)**	**($000)**
8	**Total regulatory income**		2,682
9			
10	**Market value of asset disposals**		–
11			
12	Service interruptions and emergencies	10,555	
13	Vegetation management	1,049	
14	Routine and corrective maintenance and inspection	4,648	
15	Asset replacement and renewal (opex)	730	
16	**Network opex**		16,982
17	Business support	2,469	
18	System operations and network support	56	
19	**Operational expenditure**		19,507
20	Consumer connection	4,584	
21	System growth	3,351	
22	Asset replacement and renewal (capex)	12,067	
23	Asset relocations	678	
24	Quality of supply	69	
25	Legislative and regulatory	–	
26	Other reliability, safety and environment	–	
27	**Expenditure on non-network assets**		38
28	**Expenditure on assets**		20,787
29	Cost of financing		–
30	Value of capital contributions		378
31	Value of vested assets		–
32	**Capital Expenditure**		20,409
33	**Total expenditure**		39,916
34			
35	**Other related party transactions**		4,562

36 5b(iii): Total Opex and Capex Related Party Transactions

37	**Name of related party**	**Nature of opex or capex service provided**	**Total value of transactions ($000)**
38	Connetics Limited	Service interruptions and emergencies	10,555
39	Connetics Limited	Vegetation management	–
40	Connetics Limited	Routine and corrective maintenance and inspection	4,619
41	Connetics Limited	Asset replacement and renewal (opex)	730
42	Connetics Limited	Business support	2,448
43	Connetics Limited	System operations and network support	56
44	Connetics Limited	Consumer connection	4,584
45	Connetics Limited	System growth	3,351
46	Connetics Limited	Asset replacement and renewal (capex)	12,056
47	Connetics Limited	Asset relocations	678
48	Connetics Limited	Quality of supply	69
49	Connetics Limited	Expenditure on non-network assets	38
	Christchurch City Council	Asset replacement and renewal (capex)	11
	Christchurch City Council	Asset relocations	–
	Christchurch City Council	System growth	–
	Christchurch City Council	Expenditure on non-network assets	–
	Christchurch City Council	Routine and corrective maintenance and inspection	24
	Christchurch City Council	System operations and network support	–
	Christchurch City Council	Business support	21
	Selwyn District Council	Routine and corrective maintenance and inspection	5
	Selwyn District Council	Vegetation management	–
	Selwyn District Council	Asset replacement and renewal (capex)	–
	City Care Limited	Vegetation management	1,049
	City Care Limited	System growth	–
	City Care Limited	Asset replacement and renewal (capex)	–
50	City Care Limited	Routine and corrective maintenance and inspection	–
51			–
52	**Total value of related party transactions**		40,294
53	** include additional rows if needed*		
54			

Company Name	**Orion New Zealand Limited**
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SCHEDULE 5c: REPORT ON TERM CREDIT SPREAD DIFFERENTIAL ALLOWANCE

This schedule is only to be completed if, as at the date of the most recently published financial statements, the weighted average original tenor of the debt portfolio (both qualifying debt and non-qualifying debt) is greater than five years.
This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

7

8 ## 5c(i): Qualifying Debt (may be Commission only)

9

sch ref	Issuing party	Issue date	Pricing date	Original tenor (in years)	Coupon rate (%)	Book value at issue date (NZD)	Book value at date of financial statements (NZD)	Term Credit Spread Difference	Debt issue cost readjustment
11	US Private Placement (USPP) 2018 Series A - NZD $45m	12/9/2018	27/7/2018	10.0	BKBM + margin	45,000,000	45,000,000	168,750	(45,000)
12	US Private Placement (USPP) 2018 Series B - NZD $95m	12/9/2018	27/7/2018	12.0	BKBM + margin	95,000,000	95,000,000	498,750	(110,833)
13									
14									
15									
16	** include additional rows if needed*						140,000,000	667,500	(155,833)

17

18 ## 5c(ii): Attribution of Term Credit Spread Differential

19

sch ref			
20	**Gross term credit spread differential**		511,667
21			
22	Total book value of interest bearing debt	345,350,000	
23	Leverage	42%	
24	Average opening and closing RAB values	1,163,713	
25	**Attribution Rate (%)**		0%
26			
27	**Term credit spread differential allowance**		724

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2021**

SCHEDULE 5d: REPORT ON COST ALLOCATIONS

This schedule provides information on the allocation of operational costs. EDBs must provide explanatory comment on their cost allocation in Schedule 14 (Mandatory Explanatory Notes), including on the impact of any reclassifications. This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref						
7	**5d(i): Operating Cost Allocations**					
8			Value allocated ($000s)			
9		Arm's length deduction	Electricity distribution services	Non-electricity distribution services	Total	OVABAA allocation increase ($000s)
10	**Service interruptions and emergencies**					
11	Directly attributable		10,043			
12	Not directly attributable		–		–	
13	**Total attributable to regulated service**		10,043			
14	**Vegetation management**					
15	Directly attributable		4,345			
16	Not directly attributable		–		–	
17	**Total attributable to regulated service**		4,345			
18	**Routine and corrective maintenance and inspection**					
19	Directly attributable		13,230			
20	Not directly attributable		–		–	
21	**Total attributable to regulated service**		13,230			
22	**Asset replacement and renewal**					
23	Directly attributable		2,238			
24	Not directly attributable		–		–	
25	**Total attributable to regulated service**		2,238			
26	**System operations and network support**					
27	Directly attributable		20,204			
28	Not directly attributable		–		–	
29	**Total attributable to regulated service**		20,204			
30	**Business support**					
31	Directly attributable		13,854			
32	Not directly attributable		1,247	356	1,603	
33	**Total attributable to regulated service**		15,101			
34						
35	**Operating costs directly attributable**		63,913			
36	**Operating costs not directly attributable**	–	1,247	356	1,603	–
37	**Operational expenditure**		65,160			
38						

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2021**

SCHEDULE 5d: REPORT ON COST ALLOCATIONS

This schedule provides information on the allocation of operational costs. EDBs must provide explanatory comment on their cost allocation in Schedule 14 (Mandatory Explanatory Notes), including on the impact of any reclassifications.
This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref		
39	**5d(ii): Other Cost Allocations**	
40	**Pass through and recoverable costs**	**($000)**
41	**Pass through costs**	
42	Directly attributable	5,447
43	Not directly attributable	–
44	**Total attributable to regulated service**	5,447
45	**Recoverable costs**	
46	Directly attributable	62,459
47	Not directly attributable	–
48	**Total attributable to regulated service**	62,459
49		

50	**5d(iii): Changes in Cost Allocations* †**				
51				**($000)**	
52	**Change in cost allocation 1**			**CY-1**	**Current Year (CY)**
53	Cost category		Original allocation		
54	Original allocator or line items		New allocation		
55	New allocator or line items		Difference	–	–
56					
57	Rationale for change				
58					
59					
60				**($000)**	
61	**Change in cost allocation 2**			**CY-1**	**Current Year (CY)**
62	Cost category		Original allocation		
63	Original allocator or line items		New allocation		
64	New allocator or line items		Difference	–	–
65					
66	Rationale for change				
67					
68					
69				**($000)**	
70	**Change in cost allocation 3**			**CY-1**	**Current Year (CY)**
71	Cost category		Original allocation		
72	Original allocator or line items		New allocation		
73	New allocator or line items		Difference	–	–
74					
75	Rationale for change				
76					
77					

78 ** a change in cost allocation must be completed for each cost allocator change that has occurred in the disclosure year. A movement in an allocator metric is not a change in allocator or component.*

79 *† include additional rows if needed*

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2021**

SCHEDULE 5e: REPORT ON ASSET ALLOCATIONS

This schedule requires information on the allocation of asset values. This information supports the calculation of the RAB value in Schedule 4.
EDBs must provide explanatory comment on their cost allocation in Schedule 14 (Mandatory Explanatory Notes), including on the impact of any changes in asset allocations. This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

7 5e(i): Regulated Service Asset Values

sch ref		Value allocated ($000s) Electricity distribution services
8		
9		
10	**Subtransmission lines**	
11	Directly attributable	68,647
12	Not directly attributable	–
13	**Total attributable to regulated service**	68,647
14	**Subtransmission cables**	
15	Directly attributable	85,731
16	Not directly attributable	–
17	**Total attributable to regulated service**	85,731
18	**Zone substations**	
19	Directly attributable	143,428
20	Not directly attributable	–
21	**Total attributable to regulated service**	143,428
22	**Distribution and LV lines**	
23	Directly attributable	126,716
24	Not directly attributable	–
25	**Total attributable to regulated service**	126,716
26	**Distribution and LV cables**	
27	Directly attributable	382,754
28	Not directly attributable	–
29	**Total attributable to regulated service**	382,754
30	**Distribution substations and transformers**	
31	Directly attributable	133,951
32	Not directly attributable	–
33	**Total attributable to regulated service**	133,951
34	**Distribution switchgear**	
35	Directly attributable	143,414
36	Not directly attributable	–
37	**Total attributable to regulated service**	143,414
38	**Other network assets**	
39	Directly attributable	35,400
40	Not directly attributable	–
41	**Total attributable to regulated service**	35,400
42	**Non-network assets**	
43	Directly attributable	47,930
44	Not directly attributable	9,047
45	**Total attributable to regulated service**	56,978
46		
47	**Regulated service asset value directly attributable**	1,167,971
48	**Regulated service asset value not directly attributable**	9,047
49	**Total closing RAB value**	1,177,019
50		

51 5e(ii): Changes in Asset Allocations* †

sch ref				($000) CY-1	($000) Current Year (CY)
52					
53	**Change in asset value allocation 1**				
54	Asset category		Original allocation		
55	Original allocator or line items		New allocation		
56	New allocator or line items		Difference	–	–
57					
58	Rationale for change				
59					
60					
61					
62	**Change in asset value allocation 2**				
63	Asset category		Original allocation		
64	Original allocator or line items		New allocation		
65	New allocator or line items		Difference	–	–
66					
67	Rationale for change				
68					
69					
70					
71	**Change in asset value allocation 3**				
72	Asset category		Original allocation		
73	Original allocator or line items		New allocation		
74	New allocator or line items		Difference	–	–
75					
76	Rationale for change				
77					
78					

79 ** a change in asset allocation must be completed for each allocator or component change that has occurred in the disclosure year. A movement in an allocator metric is not a change in allocator or comp*
80 *† include additional rows if needed*

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2021**

SCHEDULE 6a: REPORT ON CAPITAL EXPENDITURE FOR THE DISCLOSURE YEAR

This schedule requires a breakdown of capital expenditure on assets incurred in the disclosure year, including any assets in respect of which capital contributions are received, but excluding assets that are vested assets. Information on expenditure on assets must be provided on an accounting accruals basis and must exclude finance costs.
EDBs must provide explanatory comment on their expenditure on assets in Schedule 14 (Explanatory Notes to Templates).
This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref				
7		**6a(i): Expenditure on Assets**	**($000)**	**($000)**
8		Consumer connection		18,898
9		System growth		17,918
10		Asset replacement and renewal		33,503
11		Asset relocations		948
12		Reliability, safety and environment:		
13		Quality of supply	197	
14		Legislative and regulatory	–	
15		Other reliability, safety and environment	6,198	
16		**Total reliability, safety and environment**		6,394
17		**Expenditure on network assets**		77,661
18		Expenditure on non-network assets		3,943
19				
20		**Expenditure on assets**		81,604
21	*plus*	Cost of financing		–
22	*less*	Value of capital contributions		2,079
23	*plus*	Value of vested assets		–
24				
25		**Capital expenditure**		79,526
26		**6a(ii): Subcomponents of Expenditure on Assets (where known)**		**($000)**
27		Energy efficiency and demand side management, reduction of energy losses		N/A
28		Overhead to underground conversion		–
29		Research and development		N/A
30		**6a(iii): Consumer Connection**		
31		*Consumer types defined by EDB**	**($000)**	**($000)**
32		Subdivisions	4,359	
33		Large customers	2,187	
34		General connections	9,533	
35		Switchgear	553	
36		Transformers	2,266	
37		** include additional rows if needed*		
38		**Consumer connection expenditure**		18,898
39				
40	*less*	Capital contributions funding consumer connection expenditure	1,537	
41		**Consumer connection less capital contributions**		17,361
42		**6a(iv): System Growth and Asset Replacement and Renewal**		**Asset Replacement and**
43			**System Growth**	**Renewal**
44			**($000)**	**($000)**
45		Subtransmission	11,374	2,864
46		Zone substations	1,343	7,028
47		Distribution and LV lines	1,548	6,490
48		Distribution and LV cables	3,142	2,024
49		Distribution substations and transformers	–	1,554
50		Distribution switchgear	–	7,097
51		Other network assets	510	6,447
52		**System growth and asset replacement and renewal expenditure**	17,918	33,503
53	*less*	Capital contributions funding system growth and asset replacement and renewal	–	–
54		**System growth and asset replacement and renewal less capital contributions**	17,918	33,503
55				
56		**6a(v): Asset Relocations**		
57		*Project or programme**	**($000)**	**($000)**
58		NZTA and others	343	
59		CERA/SCIRT/Otakaro (Rebuild)	16	
60		Selwyn District Council	272	
61		Christchurch City Council	255	
62		Others	62	
63		** include additional rows if needed*		
64		All other projects or programmes - asset relocations		
65		**Asset relocations expenditure**		948
66	*less*	Capital contributions funding asset relocations	542	
67		**Asset relocations less capital contributions**		406

Company Name: **Orion New Zealand Limited**

For Year Ended: **31 March 2021**

SCHEDULE 6a: REPORT ON CAPITAL EXPENDITURE FOR THE DISCLOSURE YEAR

This schedule requires a breakdown of capital expenditure on assets incurred in the disclosure year, including any assets in respect of which capital contributions are received, but excluding assets that are vested assets. Information on expenditure on assets must be provided on an accounting accruals basis and must exclude finance costs.
EDBs must provide explanatory comment on their expenditure on assets in Schedule 14 (Explanatory Notes to Templates).
This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref				
69	**6a(vi): Quality of Supply**			
70		*Project or programme**	**($000)**	**($000)**
71		Comms associated with Entec line switches	122	
72		Norwood ZS 66kv	74	
73				
74				
75				
76		** include additional rows if needed*		
77		All other projects programmes - quality of supply		
78	**Quality of supply expenditure**			197
79	*less*	Capital contributions funding quality of supply		
80	**Quality of supply less capital contributions**			197
81	**6a(vii): Legislative and Regulatory**			
82		*Project or programme**	**($000)**	**($000)**
83		No projects with this as the primary driver	–	
84				
85				
86				
87				
88		** include additional rows if needed*		
89		All other projects or programmes - legislative and regulatory		
90	**Legislative and regulatory expenditure**			–
91	*less*	Capital contributions funding legislative and regulatory		
92	**Legislative and regulatory less capital contributions**			–
93	**6a(viii): Other Reliability, Safety and Environment**			
94		*Project or programme**	**($000)**	**($000)**
95		400V UG Supply Fuse Relocation Program	6,079	
96		LV Ties replacement with Krone	119	
97				
98				
99				
100		** include additional rows if needed*		
101		All other projects or programmes - other reliability, safety and environment		
102	**Other reliability, safety and environment expenditure**			6,198
103	*less*	Capital contributions funding other reliability, safety and environment		
104	**Other reliability, safety and environment less capital contributions**			6,198
105				
106	**6a(ix): Non-Network Assets**			
107	**Routine expenditure**			
108		*Project or programme**	**($000)**	**($000)**
109		Vehicles and mobile plant	916	
110		Information solutions	2,542	
111		Sundry tools and equipment	211	
112		Sundry land and buildings	274	
113				
114		** include additional rows if needed*		
115		All other projects or programmes - routine expenditure	–	
116	**Routine expenditure**			3,943
117	**Atypical expenditure**			
118		*Project or programme**	**($000)**	**($000)**
119		N/A		
120				
121				
122				
123				
124		** include additional rows if needed*		
125		All other projects or programmes - atypical expenditure		
126	**Atypical expenditure**			–
127				
128	**Expenditure on non-network assets**			3,943

Company Name	**Orion New Zealand Limited**
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SCHEDULE 6b: REPORT ON OPERATIONAL EXPENDITURE FOR THE DISCLOSURE YEAR

This schedule requires a breakdown of operational expenditure incurred in the disclosure year.
EDBs must provide explanatory comment on their operational expenditure in Schedule 14 (Explanatory notes to templates). This includes explanatory comment on any atypical operational expenditure and assets replaced or renewed as part of asset replacement and renewal operational expenditure, and additional information on insurance.
This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref			
7	**6b(i): Operational Expenditure**	**($000)**	**($000)**
8	Service interruptions and emergencies	10,043	
9	Vegetation management	4,345	
10	Routine and corrective maintenance and inspection	13,230	
11	Asset replacement and renewal	2,238	
12	**Network opex**		29,855
13	System operations and network support	20,204	
14	Business support	15,101	
15	**Non-network opex**		35,305
16			
17	**Operational expenditure**		65,160
18	**6b(ii): Subcomponents of Operational Expenditure (where known)**		
19	Energy efficiency and demand side management, reduction of energy losses		–
20	Direct billing*		–
21	Research and development		–
22	Insurance		2,360
23	** Direct billing expenditure by suppliers that directly bill the majority of their consumers*		

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For Year Ended	**31 March 2021**

SCHEDULE 7: COMPARISON OF FORECASTS TO ACTUAL EXPENDITURE

This schedule compares actual revenue and expenditure to the previous forecasts that were made for the disclosure year. Accordingly, this schedule requires the forecast revenue and expenditure information from previous disclosures to be inserted.

EDBs must provide explanatory comment on the variance between actual and target revenue and forecast expenditure in Schedule 14 (Mandatory Explanatory Notes). This information is part of the audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8. For the purpose of this audit, target revenue and forecast expenditures only need to be verified back to previous disclosures.

sch ref		Target ($000) [1]	Actual ($000)	% variance
7	**7(i): Revenue**			
8	Line charge revenue	229,343	229,490	0%

sch ref		Forecast ($000) [2]	Actual ($000)	% variance
9	**7(ii): Expenditure on Assets**			
10	Consumer connection	9,635	18,898	96%
11	System growth	10,136	17,918	77%
12	Asset replacement and renewal	28,026	33,503	20%
13	Asset relocations	4,161	948	(77%)
14	Reliability, safety and environment:			
15	Quality of supply	5,646	197	(97%)
16	Legislative and regulatory	–	–	–
17	Other reliability, safety and environment	7,333	6,198	(15%)
18	**Total reliability, safety and environment**	12,979	6,394	(51%)
19	**Expenditure on network assets**	64,937	77,661	20%
20	Expenditure on non-network assets	6,955	3,943	(43%)
21	Expenditure on assets	71,892	81,604	14%
22	**7(iii): Operational Expenditure**			
23	Service interruptions and emergencies	7,922	10,043	27%
24	Vegetation management	4,000	4,345	9%
25	Routine and corrective maintenance and inspection	12,634	13,230	5%
26	Asset replacement and renewal	2,465	2,238	(9%)
27	**Network opex**	27,021	29,855	10%
28	System operations and network support	18,962	20,204	7%
29	Business support	17,573	15,101	(14%)
30	**Non-network opex**	36,535	35,305	(3%)
31	**Operational expenditure**	63,556	65,160	3%
32	**7(iv): Subcomponents of Expenditure on Assets (where known)**			
33	Energy efficiency and demand side management, reduction of energy losses	–	N/A	–
34	Overhead to underground conversion	4,161	–	(100%)
35	Research and development	–	N/A	–
36				
37	**7(v): Subcomponents of Operational Expenditure (where known)**			
38	Energy efficiency and demand side management, reduction of energy losses	–	–	–
39	Direct billing	–	–	–
40	Research and development	–	–	–
41	Insurance	2,245	2,360	5%
42				

43 *1 From the nominal dollar target revenue for the disclosure year disclosed under clause 2.4.3(3) of this determination*

44 *2 From the CY+1 nominal dollar expenditure forecasts disclosed in accordance with clause 2.6.6 for the forecast period starting at the beginning of the disclosure year (the second to last disclosure of Schedules 11a and 11b)*

SCHEDULE 8: REPORT ON BILLED QUANTITIES AND LINE CHARGE REVENUES

This schedule requires the billed quantities and associated line charge revenues for each price category code used by the EDB in its pricing schedules. Information is also required on the number of ICPs that are included in each consumer group or price category code, and the energy delivered to these ICPs.

sch ref

8(i): Billed Quantities by Price Component

Consumer group name or price category code	Consumer type or types (eg, residential, commercial etc.)	Standard or non-standard consumer group (specify)	Average no. of ICPs in disclosure year	Energy delivered to ICPs in disclosure year (MWh)
LIG	Streetlighting	Standard	500	
GEN	Residential and commercial	Standard	207,493	2,345,466
IRR	Commercial irrigation	Standard	1,066	
MCC	Large commercial and industrial	Standard	511	770,527
LCC	Large capacity	Non-standard	15	133,500
		[Select one]		
		[Select one]		
		[Select one]		
		[Select one]		
		[Select one]		

Add extra rows for additional consumer groups or price category codes as necessary

		Standard consumer totals	209,569	3,115,993
		Non-standard consumer totals	15	133,500
		Total for all consumers	209,584	3,249,494

Billed quantities by price component

Price component	Streetlighting Fixed charge (STFXD)	General Fixed charge (GENFXD)	Streetlighting/ general Peak charge (GENPK)	Streetlighting/ general/irrigation Weekday day volume (VOLWD)	Streetlighting/ general/irrigation Night and weekend (VOLNW)	General Low power factor charge (LOWPF)	Irrigation Capacity charge (ICCAP)	Irrigation Power factor correction capacitance (ICPFC)	Irrigation Interruptibility rebate (ICIRR)	Major customer Fixed charge (MCFXD)
Unit charging basis (eg, days, kW of demand, kVA of capacity, etc.)	Connection	Connection	kW	kWh	kWh	kVAr	kW	kVAr	kW	Connection
LIG	50,765									
GEN		205,294	471,596	1,146,788,282	1,296,130,820					
IRR							77,306	23,783	49,498	
MCC										400
LCC										
Standard consumer totals	50,765	205,294	471,596	1,146,788,282	1,296,130,820	–	77,306	23,783	49,498	400
Non-standard consumer totals	–	–	–	–	–	–	–	–	–	–
Total for all consumers	50,765	205,294	471,596	1,146,788,282	1,296,130,820	–	77,306	23,783	49,498	400

8(ii): Line Charge Revenues ($000) by Price Component

Consumer group name or price category code	Consumer type or types (eg, residential, commercial etc.)	Standard or non-standard consumer group (specify)	Total line charge revenue in disclosure year	Notional revenue foregone from posted discounts (if applicable)	Total distribution line charge revenue	Total transmission line charge revenue (if available)
LIG	Streetlighting	Standard	$1,847		$1,925	($78)
GEN	Residential and commercial	Standard	$182,387		$133,235	$49,152
IRR	Commercial irrigation	Standard	$5,226		$4,320	$906
MCC	Large commercial and industrial	Standard	$35,802		$22,278	$13,524
LCC	Large capacity	Non-standard	$4,227		$2,169	$2,058
		[Select one]	–			
		[Select one]	–			
		[Select one]	–			
		[Select one]	–			
		[Select one]	–			

Add extra rows for additional consumer groups or price category codes as necessary

		Standard consumer totals	$225,263	–	$161,758	$63,505
		Non-standard consumer totals	$4,227	–	$2,169	$2,058
		Total for all consumers	$229,490	–	$163,927	$65,563
				Check		OK

Line charge revenues ($000) by price component

Price component	Streetlighting Fixed charge (STFXD)	General Fixed charge (GENFXD)	Streetlighting/ general Peak charge (GENPK)	Streetlighting/ general/irrigation Weekday day volume (VOLWD)	Streetlighting/ general/irrigation Night and weekend (VOLNW)	General Low power factor charge (LOWPF)	Irrigation Capacity charge (ICCAP)	Irrigation Power factor correction capacitance (ICPFC)	Irrigation Interruptibility rebate (ICIRR)	Major customer Fixed charge (MCFXD)
Rate (eg, $ per day, $ per kWh, etc.)	$/conn/day	$/conn/day	$/kW/day	$/kWh	$/kWh	$/kVAr/day	$/kW/day	$/kVAr/day	$/kW/day	$/conn/day
LIG	$1,847									
GEN		$11,240	$70,919	$76,915	$23,304					
IRR							$6,317	($718)	($374)	
MCC										$1,458
LCC										
Standard consumer totals	$1,847	$11,240	$70,919	$76,915	$23,304	–	$6,317	($718)	($374)	$1,458
Non-standard consumer totals	–	–	–	–	–	–	–	–	–	–
Total for all consumers	$1,847	$11,240	$70,919	$76,915	$23,304	–	$6,317	($718)	($374)	$1,458

8(iii): Number of ICPs directly billed

Number of directly billed ICPs at year end	33

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2021**
Network / Sub-Network Name	**Entire network**

Major customer Additional fixed charge (MCFXDA)	Major customer Extra switches (EQESW)	Major customer 11kV Metering equipment (EQMET)	Major customer 11kV Underground cabling (EQUGC)	Major customer 11kV Overhead lines (EQOHL)	Major customer Transformer capacity (EQTFC)	Major customer Peak charge (MCCPD)	Major customer Nominated maximum demand (MCNMD)	Major customer Metered maximum demand (MCMMD)	Large capacity Operations, maintenance & administration (dedicated assets)	Large capacity Operations, maintenance & administration (shared assets)	Large capacity Asset charge (dedicated assets)	Large capacity Asset charge (shared assets)	Large capacity Interconnection charge (winter)	Large capacity Interconnection charge (summer)	Connection charge	Customer investment contract charge	30 - 750 kW generators Control period export (EXPCP1)	30 - 750 kW generators Control period export (EXPCP2)	Monthly invoice charge (INVFXD)	Failure to pay notice (INVFTP)	Default and termination notice (INVDAT)
Connection	Switches	Connection	km	km	kVA	kVA	kVA	kVA	kVA	kVA	kVA	kVA	kVA	kVA	kVA	kVA	kW	kVAr	Invoice	Notice	Notice
																	37	12	330	9	2
																	4	-			
93	107	41	7	3	334,033	112,343	262,494	226,792									409	106	108		
									35,000	31,720	35,000	31,720	6,172	19,642	19,642	16,000					
93	107	41	7	3	334,033	112,343	262,494	226,792	–	–	–	–	–	–	–	–	450	117	438	9	2
–	–	–	–	–	–	–	–	–	35,000	31,720	35,000	31,720	6,172	19,642	19,642	16,000	–	–	–	–	–
93	107	41	7	3	334,033	112,343	262,494	226,792	35,000	31,720	35,000	31,720	6,172	19,642	19,642	16,000	450	117	438	9	2

Add extra columns for additional billed quantities by price component as necessary

Major customer Additional fixed charge (MCFXDA)	Major customer Extra switches (EQESW)	Major customer 11kV Metering equipment (EQMET)	Major customer 11kV Underground cabling (EQUGC)	Major customer 11kV Overhead lines (EQOHL)	Major customer Transformer capacity (EQTFC)	Major customer Peak charge (MCCPD)	Major customer Nominated maximum demand (MCNMD)	Major customer Metered maximum demand (MCMMD)	Large capacity Operations, maintenance & administration (dedicated assets)	Large capacity Operations, maintenance & administration (shared assets)	Large capacity Asset charge (dedicated assets)	Large capacity Asset charge (shared assets)	Large capacity Interconnection charge (winter)	Large capacity Interconnection charge (summer)	Connection charge	Customer investment contract charge	30 - 750 kW generators Control period export (EXPCP1)	30 - 750 kW generators Control period export (EXPCP2)	Monthly invoice charge (INVFXD)	Failure to pay notice (INVFTP)	Default and termination notice (INVDAT)
$/conn/day	$/switch/day	$/conn/day	$/km/day	$/km/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kW/yr	$/kVAr/yr	$/Invoice	$/Notice	$/Notice
																	(1)	(0)	10	0	0
																	(0)	-			
$170	$128	$64	$9	$2	$1,451	$16,218	$10,003	$6,308									(11)	(1)	3		
									293	577	443	857	344	934	58	722					
$170	$128	$64	$9	$2	$1,451	$16,218	$10,003	$6,308	–	–	–	–	–	–	–	–	($12)	($1)	$13	$0	$0
–	–	–	–	–	–	–	–	–	$293	$577	$443	$857	$344	$934	$58	$722	–	–	–	–	–
$170	$128	$64	$9	$2	$1,451	$16,218	$10,003	$6,308	$293	$577	$443	$857	$344	$934	$58	$722	($12)	($1)	$13	$0	$0

Add extra columns for additional line charge revenues by price component as necessary

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2021**
Network / Sub-network Name	**Entire network**

SCHEDULE 9a: ASSET REGISTER

This schedule requires a summary of the quantity of assets that make up the network, by asset category and asset class. All units relating to cable and line assets, that are expressed in km, refer to circuit lengths.

sch ref

8	Voltage	Asset category	Asset class	Units	Items at start of year (quantity)	Items at end of year (quantity)	Net change	Data accuracy (1–4)
9	All	Overhead Line	Concrete poles / steel structure	No.	28,721	28,487	(234)	4
10	All	Overhead Line	Wood poles	No.	59,961	59,740	(221)	4
11	All	Overhead Line	Other pole types	No.	–		–	N/A
12	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	509	506	(3)	4
13	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	–	–	–	N/A
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	86	87	1	4
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	40	40	(0)	4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	–	–	–	N/A
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	1	2	1	4
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	–	–	–	N/A
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	–	–	–	N/A
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	–	–	–	N/A
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	–	–	–	N/A
22	HV	Subtransmission Cable	Subtransmission submarine cable	km	–	–	–	N/A
23	HV	Zone substation Buildings	Zone substations up to 66kV	No.	80	78	(2)	4
24	HV	Zone substation Buildings	Zone substations 110kV+	No.	–		–	N/A
25	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	–		–	N/A
26	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	113	113	–	4
27	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	–		–	
28	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	293	332	39	4
29	HV	Zone substation switchgear	33kV RMU	No.	–		–	
30	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	36	49	13	4
31	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	43	27	(16)	4
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	692	693	1	4
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	–		–	
34	HV	Zone Substation Transformer	Zone Substation Transformers	No.	82	81	(1)	4
35	HV	Distribution Line	Distribution OH Open Wire Conductor	km	3,070	3,059	(11)	3
36	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	–	–	–	N/A
37	HV	Distribution Line	SWER conductor	km	86	86	–	3
38	HV	Distribution Cable	Distribution UG XLPE or PVC	km	1,200	1,235	35	4
39	HV	Distribution Cable	Distribution UG PILC	km	1,536	1,530	(6)	4
40	HV	Distribution Cable	Distribution Submarine Cable	km	–	–	–	N/A
41	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	62	60	(2)	4
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	813	771	(42)	4
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	9,254	9,239	(15)	4
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	3	–	(3)	4
45	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	4,694	4,762	68	4
46	HV	Distribution Transformer	Pole Mounted Transformer	No.	6,444	6,313	(131)	3
47	HV	Distribution Transformer	Ground Mounted Transformer	No.	5,308	5,553	245	3
48	HV	Distribution Transformer	Voltage regulators	No.	15	15	–	4
49	HV	Distribution Substations	Ground Mounted Substation Housing	No.	4,751	4,816	65	4
50	LV	LV Line	LV OH Conductor	km	1,754	1,748	(7)	2
51	LV	LV Cable	LV UG Cable	km	3,262	3,329	67	3
52	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	3,600	3,704	105	3
53	LV	Connections	OH/UG consumer service connections	No.	207,333	211,437	4,104	2
54	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	2,717	2,787	70	4
55	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	452	535	83	4
56	All	Capacitor Banks	Capacitors including controls	No	6	6	–	4
57	All	Load Control	Centralised plant	Lot	45	46	1	4
58	All	Load Control	Relays	No	2,122	2,110	(12)	3
59	All	Civils	Cable Tunnels	km	1	1	–	4

SCHEDULE 9b: ASSET AGE PROFILE

This schedule requires a summary of the age profile (based on year of installation) of the assets that make up the network, by asset category and asset class. All units relating to cable and line assets, that are expressed in km, refer to circuit lengths.

sch ref

8 **Disclosure Year (year ended)** 31 March 2021

Number of assets at disclosure year end by installation date

sch ref	Voltage	Asset category	Asset class	Units	pre-1940	1940 –1949	1950 –1959	1960 –1969	1970 –1979	1980 –1989	1990 –1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
9																								
10	All	Overhead Line	Concrete poles / steel structure	No.	–	708	1,654	7,878	7,194	7,947	2,956	1	–	–	1	38	16	24	11	4	2	7	4	13
11	All	Overhead Line	Wood poles	No.	9	8	299	6,588	6,760	2,334	13,157	2,346	2,917	3,621	1,246	1,263	1,573	1,393	1,457	1,347	1,637	1,406	980	783
12	All	Overhead Line	Other pole types	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
13	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	–	–	56	84	128	49	40	3	1	41	13	–	16	13	–	21	–	7	–	12
14	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km																				
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	–	–	–	–	–	–	9	–	5	2	2	0	3	0	2	3	0	1	3	1
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	–	–	–	5	26	9	–	–	–	0	–	–	–	0	0	0	–	0	0	–
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km																				
18	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	–	–	–	–	2	0	–	–	–	–	–	–	–	–	–	–	–	–	–	–
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km																				
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km																				
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km																				
22	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km																				
23	HV	Subtransmission Cable	Subtransmission submarine cable	km																				
24	HV	Zone substation Buildings	Zone substations up to 66kV	No.	1	–	4	8	25	12	2	–	1	2	–	2	–	1	2	4	1	4	1	4
25	HV	Zone substation Buildings	Zone substations 110kV+	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
26	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
27	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	–	–	–	2	8	1	3	–	4	9	–	6	4	1	1	13	6	11	5	16
28	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
29	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	16	–	2	51	63	22	1	–	20	4	1	1	14	3	2	32	11	9	1	21
30	HV	Zone substation switchgear	33kV RMU	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
31	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	–	–	–	–	–	–	–	–	6	–	–	–	5	9	–	6	–	3	2	–
32	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	–	–	–	2	9	13	1	1	–	1	–	–	–	–	–	–	–	–	–	–
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	–	–	–	1	165	48	37	11	11	61	–	43	34	7	41	26	49	–	52	13
34	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
35	HV	Zone Substation Transformer	Zone Substation Transformers	No.	–	–	1	15	16	16	3	1	2	2	–	–	5	1	3	3	–	–	2	–
36	HV	Distribution Line	Distribution OH Open Wire Conductor	km	–	–	27	155	739	523	540	59	44	60	73	32	61	49	58	55	42	45	33	29
37	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km																				
38	HV	Distribution Line	SWER conductor	km	–	–	1	1	13	15	33	8	–	–	–	3	4	1	2	0	3	–	1	–
39	HV	Distribution Cable	Distribution UG XLPE or PVC	km	1	0	0	1	2	16	51	25	35	40	50	54	58	47	49	43	46	45	48	75
40	HV	Distribution Cable	Distribution UG PILC	km	29	37	135	382	397	305	198	14	11	11	2	2	0	0	1	1	1	1	0	0
41	HV	Distribution Cable	Distribution Submarine Cable	km																				
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	–	–	–	–	–	1	2	2	3	5	6	3	3	–	1	–	–	10	–	–
43	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	–	–	–	40	304	134	47	9	45	28	46	29	25	16	13	11	1	1	1	2
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	–	–	1	56	448	594	1,694	417	521	499	469	464	460	557	367	416	331	192	155	180
45	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
46	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	3	–	–	156	926	774	486	129	142	123	129	54	34	80	66	62	81	94	82	125
47	HV	Distribution Transformer	Pole Mounted Transformer	No.	8	51	23	535	888	1,027	1,178	156	117	175	184	138	216	182	156	98	161	77	119	110
48	HV	Distribution Transformer	Ground Mounted Transformer	No.	7	32	125	700	891	828	613	87	68	121	105	77	89	94	105	109	110	64	92	129
49	HV	Distribution Transformer	Voltage regulators	No.	–	–	–	3	1	–	5	–	–	–	–	2	1	–	–	–	2	–	1	–
50	HV	Distribution Substations	Ground Mounted Substation Housing	No.	38	20	112	539	802	693	648	62	78	81	52	61	56	67	71	85	72	58	66	79
51	LV	LV Line	LV OH Conductor	km	3	3	16	351	604	156	229	14	11	7	11	8	13	7	3	3	2	1	1	1
52	LV	LV Cable	LV UG Cable	km	9	2	13	207	501	608	443	43	81	73	56	73	84	89	62	65	56	26	30	41
53	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	0	2	4	412	670	490	554	43	77	66	52	66	69	87	51	58	55	24	29	41
54	LV	Connections	OH/UG consumer service connections	No.	–	–	–	100,205	73	5,897	27,586	2,694	2,423	2,509	2,611	3,148	3,566	3,370	3,274	3,421	2,831	2,113	2,314	1,817
55	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	–	–	–	78	278	126	10	3	19	103	181	69	110	199	79	93	81	119	97	109
56	All	SCADA and communications	SCADA and communications equipment operating as a single syst	Lot	–	–	–	–	–	–	9	5	13	15	24	41	19	20	15	12	9	9	8	8
57	All	Capacitor Banks	Capacitors including controls	No	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
58	All	Load Control	Centralised plant	Lot	–	–	–	–	–	7	–	–	–	3	1	18	1	2	3	2	–	–	1	2
59	All	Load Control	Relays	No	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
60	All	Civils	Cable Tunnels	km	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2021**
Network / Sub-network Name	**Entire network**

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	No. with age unknown	Items at end of year (quantity)	No. with default dates	Data accuracy (1–4)
12	–	8	1	–	4	4	–	–						28,487		3
742	809	806	880	1,026	1,006	1,305	1,092	950						59,740	7	3
–	–	–	–	–	–	–	–							–		N/A
1	0	3	4	0	16	–	–	–						506		4
														–		N/A
2	5	18	21	1	3	3	1	0						87		4
0	–	–	–	0	–	–	–	–						40		4
														–		N/A
–	–	–	–	–	–	–	–	–						2		4
														–		N/A
														–		N/A
														–		N/A
														–		N/A
														–		N/A
–	2	–	1	–	1	–	–	–						78		4
–	–	–	–	–	–	–	–	–						–		N/A
–	–	–	–	–	–	–	–	–						–		N/A
3	–	8	4	4	–	4	–	–						113		4
–	–	–	–	–	–	–	–	–						–		N/A
14	7	11	–	12	–	8	–	6						332	16	3
–	–	–	–	–	–	–	–	–						–		N/A
–	–	–	–	–	11	–	7	–						49		4
–	–	–	–	–	–	–	–	–						27		4
20	2	25	17	1	3	–	26	–						693		4
–	–	–	–	–	–	–	–	–						–		N/A
2	2	3	1	–	1	2	–	–						81		4
88	76	46	67	20	57	34	29	19						3,059		3
														–		N/A
–	–	–	–	–	–	–	–	–						86		3
56	53	73	96	58	70	65	43	36						1,235		4
0	0	0	0	1	1	0	–	0						1,530		4
														–		N/A
2	–	–	4	5	7	6	–	–						60		4
7	–	4	–	8	–	–	–	–						771		4
160	142	268	194	139	178	134	99	104						9,239		4
–	–	–	–	–	–	–	–	–						–		4
77	159	153	140	182	148	126	194	37						4,762	3	3
67	107	146	72	116	107	48	44	7						6,313	8	3
75	167	206	141	159	157	72	127	3						5,553	6	3
–	–	–	–	–	–	–	–	–						15		4
104	145	134	165	115	109	126	96	82						4,816		4
0	1	1	1	3	1	1	1	1					294	1,748		2
64	86	101	116	76	76	92	97	60						3,329		3
93	92	98	129	82	55	94	99	111						3,704		3
2,190	3,751	5,740	6,432	5,375	4,405	3,964	4,191	5,537						211,437	105,753	2
196	84	115	144	98	67	156	125	48						2,787		3
4	7	12	46	39	52	79	76	2					11	535		4
2	–	–	–	–	–	4	–	–						6		4
1	1	1	1	–	2	–	–	–						46		4
–	–	160	153	49	60	16	34	33					1,605	2,110		3
–	–	–	–	–	–	–	–							1		4

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2021**
Network / Sub-network Name	**Entire network**

SCHEDULE 9c: REPORT ON OVERHEAD LINES AND UNDERGROUND CABLES

This schedule requires a summary of the key characteristics of the overhead line and underground cable network. All units relating to cable and line assets, that are expressed in km, refer to circuit lengths.

sch ref

		Overhead (km)	Underground (km)	Total circuit length (km)
9				
10	**Circuit length by operating voltage (at year end)**	**Overhead (km)**	**Underground (km)**	**Total circuit length (km)**
11	> 66kV	–	–	–
12	50kV & 66kV	259	91	350
13	33kV	247	38	285
14	SWER (all SWER voltages)	86	2	88
15	22kV (other than SWER)	–	–	–
16	6.6kV to 11kV (inclusive—other than SWER)	3,059	2,763	5,822
17	Low voltage (< 1kV)	1,748	3,329	5,077
18	**Total circuit length (for supply)**	5,399	6,223	11,622
19				
20	Dedicated street lighting circuit length (km)	901	2,804	3,704
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)			89
22				

		Circuit length (km)	(% of total overhead length)
23	**Overhead circuit length by terrain (at year end)**	**Circuit length (km)**	**(% of total overhead length)**
24	Urban	1,679	31%
25	Rural	3,156	58%
26	Remote only	143	3%
27	Rugged only	183	3%
28	Remote and rugged	238	4%
29	Unallocated overhead lines	–	–
30	**Total overhead length**	5,399	100%
31			
32		**Circuit length (km)**	**(% of total circuit length)**
33	Length of circuit within 10km of coastline or geothermal areas (where known)	1,902	16%
34		**Circuit length (km)**	**(% of total overhead length)**
35	Overhead circuit requiring vegetation management	5,399	100%

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2021**

SCHEDULE 9d: REPORT ON EMBEDDED NETWORKS

This schedule requires information concerning embedded networks owned by an EDB that are embedded in another EDB's network or in another embedded network.

sch ref

sch ref	Location *	Number of ICPs served	Line charge revenue ($000)
9	Rakaia Gorge Embedded Network, upper Rakaia river	2	4
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			

26 ** Extend embedded distribution networks table as necessary to disclose each embedded network owned by the EDB which is embedded in another EDB's network or in another embedded network*

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2021**
Network / Sub-network Name	**Entire network**

SCHEDULE 9e: REPORT ON NETWORK DEMAND

This schedule requires a summary of the key measures of network utilisation for the disclosure year (number of new connections including distributed generation, peak demand and electricity volumes conveyed).

sch ref				
8	**9e(i): Consumer Connections**			
9	*Number of ICPs connected in year by consumer type*			
10	*Consumer types defined by EDB**		**Number of connections (ICPs)**	
11	Streetlighting		27	
12	General		5,768	
13	Irrigation		4	
14	Major customer		8	
15	Large capacity		–	
16	** include additional rows if needed*			
17	**Connections total**		5,807	
18				
19	**Distributed generation**			
20	Number of connections made in year		507	**connections**
21	Capacity of distributed generation installed in year		9.73	**MVA**
22	**9e(ii): System Demand**			
23				
24				
25	**Maximum coincident system demand**		**Demand at time of maximum coincident demand (MW)**	
26	GXP demand		623	
27	Distributed generation output at HV and above	*plus*	2	
28	**Maximum coincident system demand**		625	
29	Net transfers to (from) other EDBs at HV and above	*less*	0	
30	**Demand on system for supply to consumers' connection points**		625	
31	**Electricity volumes carried**		**Energy (GWh)**	
32	Electricity supplied from GXPs		3,372	
33	Electricity exports to GXPs	*less*	0	
34	Electricity supplied from distributed generation	*plus*	12	
35	Net electricity supplied to (from) other EDBs	*less*	0	
36	**Electricity entering system for supply to consumers' connection points**		3,384	
37	Total energy delivered to ICPs	*less*	3,249	
38	**Electricity losses (loss ratio)**		134	4.0%
39				
40	**Load factor**		0.62	
41	**9e(iii): Transformer Capacity**			
42			**(MVA)**	
43	Distribution transformer capacity (EDB owned)		2,224	
44	Distribution transformer capacity (Non-EDB owned, estimated)		220	
45	**Total distribution transformer capacity**		2,444	
46				
47	**Zone substation transformer capacity**		1,149	

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2021**
Network / Sub-network Name	**Entire network**

SCHEDULE 10: REPORT ON NETWORK RELIABILITY

This schedule requires a summary of the key measures of network reliability (interruptions, SAIDI, SAIFI and fault rate) for the disclosure year. EDBs must provide explanatory comment on their network reliability for the disclosure year in Schedule 14 (Explanatory notes to templates). The SAIFI and SAIDI information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

8 10(i): Interruptions

sch ref	Interruptions by class	Number of interruptions
10	Class A (planned interruptions by Transpower)	–
11	Class B (planned interruptions on the network)	671
12	Class C (unplanned interruptions on the network)	897
13	Class D (unplanned interruptions by Transpower)	3
14	Class E (unplanned interruptions of EDB owned generation)	–
15	Class F (unplanned interruptions of generation owned by others)	–
16	Class G (unplanned interruptions caused by another disclosing entity)	–
17	Class H (planned interruptions caused by another disclosing entity)	–
18	Class I (interruptions caused by parties not included above)	3
19	**Total**	1,574
20		

sch ref	Interruption restoration	≤3Hrs	>3hrs
22	Class C interruptions restored within	671	226
23			

sch ref	SAIFI and SAIDI by class	SAIFI	SAIDI
25	Class A (planned interruptions by Transpower)	–	–
26	Class B (planned interruptions on the network)	0.09	27.7
27	Class C (unplanned interruptions on the network)	0.50	29.7
28	Class D (unplanned interruptions by Transpower)	0.00	0.2
29	Class E (unplanned interruptions of EDB owned generation)	–	–
30	Class F (unplanned interruptions of generation owned by others)	–	–
31	Class G (unplanned interruptions caused by another disclosing entity)	–	–
32	Class H (planned interruptions caused by another disclosing entity)	–	–
33	Class I (interruptions caused by parties not included above)	0.00	0.0
34	**Total**	0.60	57.65
35			

sch ref	Normalised SAIFI and SAIDI	Normalised SAIFI	Normalised SAIDI
37	Classes B & C (interruptions on the network)	0.60	57.4
38			

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2021**
Network / Sub-network Name	**Entire network**

SCHEDULE 10: REPORT ON NETWORK RELIABILITY

This schedule requires a summary of the key measures of network reliability (interruptions, SAIDI, SAIFI and fault rate) for the disclosure year. EDBs must provide explanatory comment on their network reliability for the disclosure year in Schedule 14 (Explanatory notes to templates). The SAIFI and SAIDI information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

39
10(ii): Class C Interruptions and Duration by Cause

40

	Cause	SAIFI	SAIDI
41			
42	Lightning	0.00	0.7
43	Vegetation	0.07	4.8
44	Adverse weather	–	–
45	Adverse environment	–	–
46	Third party interference	0.04	3.1
47	Wildlife	0.04	2.3
48	Human error	0.05	1.0
49	Defective equipment	0.23	12.7
50	Cause unknown	0.08	5.1

51

52
10(iii): Class B Interruptions and Duration by Main Equipment Involved

53

	Main equipment involved	SAIFI	SAIDI
54			
55	Subtransmission lines	–	–
56	Subtransmission cables	–	–
57	Subtransmission other	–	–
58	Distribution lines (excluding LV)	0.06	16.6
69	Distribution cables (excluding LV)	0.00	0.4
60	Distribution other (excluding LV)	0.04	10.7

61
10(iv): Class C Interruptions and Duration by Main Equipment Involved

62

	Main equipment involved	SAIFI	SAIDI
63			
64	Subtransmission lines	0.05	2.5
65	Subtransmission cables	–	–
66	Subtransmission other	–	–
67	Distribution lines (excluding LV)	0.24	18.4
68	Distribution cables (excluding LV)	0.15	5.5
69	Distribution other (excluding LV)	0.07	3.2

70
10(v): Fault Rate

	Main equipment involved	Number of Faults	Circuit length (km)	Fault rate (faults per 100km)
71				
72	Subtransmission lines	8	506	1.58
73	Subtransmission cables	–	129	–
74	Subtransmission other	–		
75	Distribution lines (excluding LV)	570	3,145	18.12
76	Distribution cables (excluding LV)	58	2,765	2.10
77	Distribution other (excluding LV)	129		
78	**Total**	765		

Company	Orion New Zealand Limited
Year ended	31 March 2021

Schedule 14 Mandatory Explanatory Notes

1. This schedule requires EDBs to provide explanatory notes to information provided in accordance with clauses 2.3.1, 2.4.21, 2.4.22, and subclauses 2.5.1(1)(f), and 2.5.2(1)(e).

2. This schedule is mandatory—EDBs must provide the explanatory comment specified below, in accordance with clause 2.7.1. Information provided in boxes 1 to 11 of this schedule is part of the audited disclosure information, and so is subject to the assurance requirements specified in section 2.8.

3. Schedule 15 (Voluntary Explanatory Notes to Schedules) provides for EDBs to give additional explanation of disclosed information should they elect to do so.

Return on Investment

4. In the box below, comment on return on investment as disclosed in Schedule 2. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 1: Comment on return on investment (ROI)

Following the Canterbury earthquakes of 2010 and 2011, we applied for and were granted a Customised Price Path (CPP) for the period 1 April 2014 to 31 March 2019. The Commission used a WACC rate of 6.92% to set our CPP.

Our financial performance for the period of the CPP, as well as the three prior years, was significantly affected by the Canterbury quakes, including:

- higher capex
- higher opex
- lower network delivery revenues in FY11 to FY14 – due to quake effects on demand
- higher network delivery revenues in FY15 to FY19 – due to our CPP price resets
- quake insurance cash settlement revenues (affected disclosures in FY15, FY13 and FY12).

In FY20 the Commerce Commission allowed us to roll forward our CPP revenue allowance, less the claw-back of our earthquake recovery costs. This one-year extension brings us into line with other price and quality controlled EDBs for the start of the DPP period effective 1 April 2020. While the Commission didn't specifically allow a WACC for the extension, our prices were underpinned by the 6.92% carried-forward from our CPP. For this reason we have disclosed the WACC rate used to set our regulatory price path for FY20 at 6.92% in schedule 2.

The Commission determined price paths for price and quality controlled EDBs from 1 April 2020 using a WACC of 4.23%. The reduction in revenue due to the lower WACC has translated to a reduction in our profit and therefore in our ROI.

Our FY21 post-tax regulatory ROI was 4.7% (FY20: 7.3%; FY19: 6.7%). FY21's ROI includes a 1.5% CPI movement (FY20: 2.5%).

No items were reclassified in FY21 or FY20.

Regulatory Profit (Schedule 3)

5. In the box below, comment on regulatory profit for the disclosure year as disclosed in Schedule 3. This comment must include-

5.1 a description of material items included in other regulated income (other than gains / (losses) on asset disposals), as disclosed in 3(i) of Schedule 3

5.2 information on reclassified items in accordance with subclause 2.7.1(2).

Box 2: Comment on regulatory profit

Other regulated income included (pre-tax):

	FY21 $m
Rental revenue and recovery of outgoings	2.0
Recoveries from third parties who cause to damage to our network	1.0
Other	1.0
Total	4.0

Some significant items have affected regulatory profit in recent years. Our high-level summary to normalise for these to derive "underlying regulatory profit" is as follows – all figures post-tax:

	FY21 $m	FY20 $m	FY19 $m	FY18 $m	FY17 $m	FY16 $m	FY15 $m	FY14 $m	FY13 $m
Regulatory profit – as disclosed	56	81	74	72	78	63	81	51	49
Less quake insurance cash settlements	-	-	-	-	-	-	(24)	-	(2)
Less indexed asset revaluations	(17)	(28)	(16)	(11)	(21)	(5)	(1)	(13)	(7)
Add back loss on asset disposals	-	1	1	1	1	3	1	5	2
Add back identified quake related opex	-	-	-	-	-	-	-	-	-
Underlying regulatory profit	39	54	59	62	58	61	57	43	42

Our underlying profit dropped between FY19 and FY20 due to the removal of the claw-back of earthquake recovery costs from FY20's revenue – refer also to box 1.

Our underlying profit fell significantly between FY20 and FY21 as the Commerce Commission significantly reduced the WACC rate used for the five-year regulatory period beginning 1 April 2020.

We are permitted to receive a maximum allowable revenue (MAR) for our electricity distribution services under the Commission's default price path regime. Due to differences between quantity estimates used in price setting and actual quantities which arose during FY21, we estimate that we have charged customers $2.18m above our MAR for FY21. This amount is still subject to wash-ups as improved information becomes available. We will offset the final amount plus interest when setting delivery prices for FY23.

No items were reclassified in FY20 or FY21.

Merger and acquisition expenses (3(iv) of Schedule 3)

6. If the EDB incurred merger and acquisitions expenditure during the disclosure year, provide the following information in the box below-

   6.1 information on reclassified items in accordance with subclause 2.7.1(2)

   6.2 any other commentary on the benefits of the merger and acquisition expenditure to the EDB.

Box 3: Comment on merger and acquisition expenditure

Not applicable

Value of the Regulatory Asset Base (Schedule 4)

7. In the box below, comment on the value of the regulatory asset base (rolled forward) in Schedule 4. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 4: Comment on the value of the regulatory asset base (rolled forward)

During FY21 our RAB value increased as follows:

	FY21 $m
Opening RAB value	1,150
Add new assets commissioned	53
Add indexed asset revaluation (at CPI)	18
Less asset disposals at RAB value	-
Less depreciation and amortisation	(44)
Closing RAB value	1,177

Our $53m of commissioned assets in FY21 is significantly lower than FY20 ($78m). Our works under construction grew by $28m during the year with a number of significant projects commenced, but not completed, during the year. Delays in the arrival of materials due to COVID-19 has contributed to this increase.

Regulatory tax allowance: disclosure of permanent differences (5a(i) of Schedule 5a)

8. In the box below, provide descriptions and workings of the material items recorded in the following asterisked categories of 5a(i) of Schedule 5a-

   8.1 Income not included in regulatory profit / (loss) before tax but taxable;

   8.2 Expenditure or loss in regulatory profit / (loss) before tax but not deductible;

   8.3 Income included in regulatory profit / (loss) before tax but not taxable;

   8.4 Expenditure or loss deductible but not in regulatory profit / (loss) before tax.

Box 5: Regulatory tax: permanent differences

	FY21 $m
Taxable income that is not in regulatory profit before tax	-
Expenditure that is not deductible:	
Legal and entertainment expenses	0.2
	0.2
Income that is not taxable	
Tax capital gain on allocation of insurance proceeds	0.4
Deductible expenditure that is not in regulatory profit before tax:	
Costs to obtain land easements	0.1
	0.5

Regulatory tax allowance: disclosure of temporary differences (5a(vi) of Schedule 5a)

9. In the box below, provide descriptions and workings of material items recorded in the asterisked category 'Tax effect of other temporary differences' in 5a(vi) of Schedule 5a.

Box 6: Regulatory tax: temporary differences

	FY21 $m
Expenditure timing differences for tax deductibility	(0.2)
Insurance cash settlement proceeds – assessable for tax purposes	0.4
Finance lease payments – operating leases for tax purposes	(0.2)
Internal profits on capex – deductible for tax purposes	(0.5)
Capex – deductible for tax purposes	(1.5)
Net total	(2.0)

Cost allocation (Schedule 5d)

10. In the box below, comment on cost allocation as disclosed in Schedule 5d. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 7: Comment on cost allocation

We have two wholly-owned subsidiary companies:

- Connetics Limited, an electricity construction and maintenance company
- Orion NZ Ventures Limited, which holds a minor legacy investment in a US venture capital fund.

Both are *ring fenced*, with no shared assets and minimal shared costs. Any shared costs are charged to the relevant subsidiary on an arms-length basis, with the revenue treated as regulatory income by Orion. The income received from the lease of the depot by Connetics is recognised as other regulated income as part of rental income in Schedule 3.

In FY21 Orion commenced some operations at a group level, in line with a new Group Strategy and purpose – *Powering a clean and brighter future*. In advancing our strategy we have undertaken a small number of activities which fall outside electricity distribution services, or where our existing electricity distribution customers do not receive all of the benefits which arise from the expenditure. We have either “ring-fenced” those activities “out” or apportioned common costs where our team work on multiple activities, in order to derive the operational costs we have attributed to our electricity distribution business.

For most of the activities where we have apportioned costs to non-distribution activities, we have assessed 25% as a general rule of the amount to be attributed to non-distribution activities. This is management’s retrospective assessment of the value derived from these activities by existing electricity distribution customers, as discussed with our auditors and advisers. We have not used timesheets to apportion these activities throughout the year and have instead used a proxy assessment which reflects management’s judgements. Given the very limited extent of our non-distribution activities ($0.4m in FY21 out of total opex of $66m) we do not consider it necessary to put more complex recording systems in place – consistent with the proxy approach.

No items were reclassified in FY20 or FY21.

Asset allocation (Schedule 5e)

11. In the box below, comment on asset allocation as disclosed in Schedule 5e. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 8: Comment on asset allocation

During FY18 we re-allocated two groups of assets from electricity distribution services to non-electricity distribution services, and therefore excluded their values from our RAB.

Firstly, based on advice from PwC we assigned $0.9m of land not currently in use at our Waterloo Rd depot to non-electricity distribution activities.

Secondly, based on the Commerce Commission's Open letter (dated 9 May 2018) we re-allocated the values of EV chargers (other than those at our head office site) to non-electricity distribution activities. We excluded FY18 expenditure related to EV chargers from EDB expenditure values. We submitted to the Commission that our expenditure to date has been immaterial (less than 0.1% of our RAB) and is intended to help us understand what impacts EVs will have on our network, as well as to "seed" and encourage the update of EVs. The Mar 17 value of EV chargers re-allocated to non-electricity distribution assets at the end of FY18 was $0.3m. We also did not assign additional FY18 expenditure to RAB.

In FY19 we reassessed the value of EV chargers we removed in FY18, following our response to the Commission's 2018 technology-related s53ZD notice. Clarifying the boundary between the network assets and the charger/plinth assets has resulted in us reassigning $0.1m of assets previously classified outside RAB as now being part of our RAB.

We made no further changes to asset allocation in FY20 or FY21.

Capital Expenditure for the Disclosure Year (Schedule 6a)

12. In the box below, comment on expenditure on assets for the disclosure year, as disclosed in Schedule 6a. This comment must include-

    12.1 a description of the materiality threshold applied to identify material projects and programmes described in Schedule 6a;

    12.2 information on reclassified items in accordance with subclause 2.7.1(2).

Box 9: Comment on capex

Schedule 6a discloses our capex spend (not necessarily commissioned) as follows:

- $78m (last year: $64m) for network assets
- $4m (last year: $3m) for non-network assets.

Schedules 6a(iii), and 6a(v) to 6a(viii) disclose the large items for each category.

Schedule 6a(iv) discloses $18m of capex for system growth and $34m for asset replacement and renewal. Our major projects and programmes in these areas which exceeded $2m were

	System growth $m	**Replacement & renewal $m**
Replacement of distribution transformers		6
LV, 11kV and subtransmission conductor and poles		6
11kV network circuit breaker replacement		4
Supply fuse relocation		3
11kV switchgear replacement		3
LV switchgear replacement		2
Hawthornden zone substation	3	
Belfast zone substation	4	
Belfast to Marshland 66v cable	4	
Other projects and programmes	7	10
Total	18	34

No capex items were reclassified in FY21.

Operational Expenditure for the Disclosure Year (Schedule 6b)

13. In the box below, comment on operational expenditure for the disclosure year, as disclosed in Schedule 6b. This comment must include-

    13.1 Commentary on assets replaced or renewed with asset replacement and renewal operational expenditure, as reported in 6b(i) of Schedule 6b;

    13.2 Information on reclassified items in accordance with subclause 2.7.1(2);

    13.3 Commentary on any material atypical expenditure included in operational expenditure disclosed in Schedule 6b, a including the value of the expenditure the purpose of the expenditure, and the operational expenditure categories the expenditure relates to.

Box 10: Comment on operational expenditure for the disclosure year

Schedule 6b(i) discloses $2.2m of FY21 maintenance opex as asset replacement and renewal:

	FY21 $m
Retightening and cross-arm and insulator work on 11kV overhead lines	1.7
66kV underground cable joint refurbishment	0.2
Other	0.3
	2.2

There were no material atypical items of expenditure in FY21.

No items were reclassified during FY21.

Variance between forecast and actual expenditure (Schedule 7)

14. In the box below, comment on variance in actual to forecast expenditure for the disclosure year, as reported in Schedule 7. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 11: Comment on the variance between forecast and actual capex and opex

CAPEX

Schedule 7(ii)) discloses our AMP forecast capex at $72m and actual capex at $82m. The key offsetting reasons for this overspend of $10m are:

	FY21 $m
Asset relocations (customer-driven)	(3)
Belfast zone substation (deferred from FY20)	1
Hawthornden zone substation	1
Marshland zone substation (delayed from FY20)	1
Replacements	4
Connections and extensions (customer-driven)	9
Other (net)	(3)
Overspend relative to our AMP forecast	10

OPEX

Schedule 7(iii) discloses our AMP forecast opex of $63.5m and actual opex of $65.2m. This $1.7m overspend is due to a $2.8m overspend in network opex offset by a $1.1m favourable variance in non-network opex.

The key reasons for these two variances are:

Network opex	**FY21 $m**
Routine and corrective maintenance and inspection	0.6
Asset replacement and renewal opex	(0.2)
Service interruptions and emergencies	2.1
Vegetation management	0.3
Overspend relative to our AMP forecast	2.8

During FY21, after taking legal and regulatory advice, Orion made a payment to Connetics and another emergency works service provider to maintain emergency response capability during the COVID-19 lockdown period. These payments totalled $1.4m.

Non-network opex	**FY21 $m**
Salaries and wages	(1.1)
Community engagement, sponsorship and communications	0.8
Consultancy	0.6
Salaries and wages – increase in capitalised labour	0.7
Commercial and regulatory	0.4
Other	0.3
Underspend relative to our AMP forecast	1.1

From FY18 onwards we capitalise an assessment of the salaries and wages of Orion employees associated with planning and administering capex projects. We made this change for financial reporting, tax and regulatory disclosure purposes.

No opex items were reclassified during FY21.

Information relating to revenues and quantities for the disclosure year

15. In the box below provide-

    15.1 a comparison of the target revenue disclosed before the start of the disclosure year, in accordance with clause 2.4.1 and subclause 2.4.3(3) to total billed line charge revenue for the disclosure year, as disclosed in Schedule 8; and

    15.2 explanatory comment on reasons for any material differences between target revenue and total billed line charge revenue.

Box 12: Comment on revenue for the disclosure year

In order to compare revenue with target revenue (as disclosed in our "Methodology for deriving delivery prices" document) on a like-for-like basis, we have added-back irrigation rebates and export and generation credits ($1.1m) to actual revenue and made some other minor adjustments to billed revenue.

The following table shows target and billed revenue after allowing for the adjustments detailed above:

	Target $m	Actual $m	Difference $m
Distribution	163.7	165.0	1.3
Transmission	65.5	65.6	0.1
Delivery revenue	**229.2**	**230.6**	**1.4**

The main factor contributing to the difference between target and billed revenue was general connection (including streetlighting and irrigation connections) volume charges which were $1.4m above target, as a result of our delivery volumes being 27 GWh higher than forecast.

As noted in box 2 above, we are permitted to receive a maximum allowable revenue (MAR) for our electricity distribution services under the Commission's default price path regime. Due to differences between quantity estimates used in price setting and actual quantities which arose during FY21, we estimate that we have charged customers $2.18m above our MAR for FY21. This amount is still subject to wash-ups as improved information becomes available. We will offset the final amount plus interest when setting delivery prices for FY23.

Network Reliability for the Disclosure Year (Schedule 10)

16. In the box below, comment on network reliability for the disclosure year, as disclosed in Schedule 10.

Box 13: Comment on network reliability for the disclosure year
In particular, where successive interruptions occur (including where a group of customers may be turned off to allow another area to be restored) the outage times are recorded separately for each group affected. Successive interruptions are recorded against the same incident when they occur during the restoration period, or are recorded as a separate incident when they occur after the initial incident has been fully restored. Customers who form part of a planned interruption but were not notified are separated out under a different incident and are record as unplanned. Our reliability information in Schedule 10 has been prepared on a basis consistent with the previous year's disclosure.

Insurance cover

17. In the box below, provide details of any insurance cover for the assets used to provide electricity distribution services, including-

    17.1 The EDB's approaches and practices in regard to the insurance of assets used to provide electricity distribution services, including the level of insurance;

    17.2 In respect of any self insurance, the level of reserves, details of how reserves are managed and invested, and details of any reinsurance.

Box 14: Comment on our insurance cover

A summary of our insurance cover is as follows.

We insure our corporate and network buildings and our key substations for their respective estimated replacement values, subject to natural disaster deductibles as follows:

- 1.0% of insured value for post-2004 buildings
- 2.5% of insured value for pre-2004 buildings
- 10.0% of insured value for pre-1935 buildings.

We also insure our other corporate assets and key liability risks.

Our business interruption indemnity period is 18 months.

We have two key uninsured risks that are economically uninsurable for our industry:

- damage to our overhead lines and underground cables – for example, due to a major earthquake
- general lost revenues – for example, due to significant depopulation following a catastrophic event.

We continue to insure our key risks where it is economic to do so, in line with good industry practice.

Amendments to previously disclosed information

18. In the box below, provide information about amendments to previously disclosed information in accordance with clause 2.12.1 in the last 7 years, including:

    18.1 a description of each error; and

    18.2 for each error, reference to the web address where the disclosure made in accordance with clause 2.12.1 is publicly disclosed.

Box 15: Disclosure of amendment to previously disclosed information

We have made no amendments to previously disclosed information to correct errors. We have identified some immaterial errors in prior year disclosures – refer Schedule 15.

Company Name	Orion New Zealand Limited
For Year Ended	31 March 2021

Schedule 15 Voluntary Explanatory Notes

1. This schedule enables EDBs to provide, should they wish to-

   1.1 additional explanatory comment to reports prepared in accordance with clauses 2.3.1, 2.4.21, 2.4.22, 2.5.1 and 2.5.2;

   1.2 information on any substantial changes to information disclosed in relation to a prior disclosure year, as a result of final wash-ups.

2. Information in this schedule is not part of the audited disclosure information, and so is not subject to the assurance requirements specified in section 2.8.

3. Provide additional explanatory comment in the box below.

Voluntary other comments on disclosed information

Schedule 3(iii)

In our FY17 disclosures we identified an error with previously disclosed information.

In FY16, we disclosed $2,425k in row 54 as the incremental change in FY16. This amount was the difference between our allowed controllable opex for FY16 ($58,104k) and our actual controllable opex for FY16 ($55,679k).

However, the incremental change for FY16 should have been calculated as:

(allowed opex FY16 - actual opex FY16) - (allowed opex FY15 - actual opex FY15)

= ($58,104k - $55,679k) - ($54,909k - $50,828k)

= ($1,656k).

We have carried forward the incorrect amount of $2,425k in our subsequent disclosures. This error has no impact on any other disclosed information.

However, the column *Previous years' incremental change adjusted for inflation* records the inflation-adjusted corrected value.

In preparing our FY21 disclosures we identified that we had transposed the value entered in actual controllable opex for FY20. The value was entered in our FY20 disclosures as $61,929k but should have been $61,292k – consistent with FY20's schedule 6b.We have corrected the value in FY21's disclosures. This error has no impact on any other disclosed information. Orion was not assigned an allowed controllable opex for FY20.

Schedule 5a(viii)

In our FY19 disclosures we identified two immaterial errors with our FY18 disclosures in Schedule 5a(viii), the regulatory tax roll-forward.

In FY18 we agreed with the IRD that we would capitalise $2.6m of internal labour per annum from FY16 to FY19 inclusive. Our regulatory tax commissioned assets for FY18 were reduced by the reversal of the provision we included within our FY17 commissioned asset disclosure, but at the time our asset register report was run the correct additions for FY16 and FY17 had not been included. This error understated our commissioned tax assets for FY18 by $5.2m.

We hold some tax assets and asset offsets outside our asset register, in a schedule managed by our tax advisors. The tax depreciation impact of these adjustments was incorrectly added to tax depreciation rather than subtracted. This error overstated our tax depreciation by $5.8m. This overstatement is partially offset by $0.6m of tax depreciation on the assets described in the last paragraph, so the net overstatement of tax depreciation was $5.2m.

The cumulative effect of both of these errors was that our FY18 closing regulatory tax asset value was understated by $10.4m (2.5%). If corrected, tax depreciation, commissioned tax assets and closing tax asset values would have changed respectively as follows: 42,233 to 37,061; 62,189 to 67,402 and 400,020 to 410,406.

Tax depreciation expense from schedule 5a(viii) flows into schedule 5a(vi) – the calculation of deferred tax balance. If adjusted, schedule 5a(vi) row 64 (tax effect of tax depreciation) would have changed from 11,825 to 10,377 and closing deferred tax liability would change from 43,149 to 41,701. If this flowed through to the calculation of ROIs in schedule 2, our disclosed ROIs would have dropped by 0.01% - our ROI comparable to a post-tax WACC reflecting all revenue earned would have fallen from 6.83% to 6.82%.

As this impact is immaterial we adjusted these errors within our FY19 disclosures without adjusting opening balances. Note that these errors only affected our regulatory tax values, not our RAB values.

Schedule 5b (iii)

Our Other related party transactions disclosed in row 35 of schedule 5b are rates levied by our shareholders, as follows:

	$000
Selwyn District Council	247
Christchurch City Council	4,315
Total	**4,562**

We have attached a separate disclosure schedule which provides additional disclosures about transactions with our related parties, as required by following the Commission's *Input methodologies review – related party transactions*, published 21 December 2017.

Schedule 8

The volume charges applied to general, streetlighting and irrigation connections and the peak demand charges applied to general and streetlighting connections are calculated from total energy volumes injected into the network, measured at Transpower GXPs and other embedded generation points, less loss adjusted half-hourly metered major customer and large capacity connection volumes. As we cannot accurately apportion this volume between the general, streetlighting and irrigation connection categories we apply the same volume and peak demand prices.

As the general connection category represents 99% of the connections on our network, we have decided for disclosure reporting, for the reason explained above, to include all billed quantities and revenues associated with the general, streetlighting and irrigation volume and the general and streetlighting peak demand price components under the general connection category.

Schedule 9a and 9b

An error in a factor used in the calculation of our lengths of our low voltage cable network and streetlighting cable network resulted in a small understatement of the total length of these assets by 1.5% in our FY17 disclosures. This small variation partially offset the normal annual growth in these asset lengths. While it would be normal to expect to observe reductions in quantities of older assets in the age profile, in FY18, as a result of the correction of this factor, the age profile showed small increases in quantities for old assets in rows 52 and 53. We have not restated/corrected this information in our FY17 disclosures because the error is not material.

Schedule 9b

In FY17 we identified and disclosed an error with previously disclosed information. In FY15 and FY16 we had 111,581 and 111,569 consumer service connections respectively where we used default dates to develop our age profile. Due to transposition errors, we did not disclose these quantities in the default date column in schedule 9b in either year. We have not restated/corrected this information in our FY15 and FY16 disclosures because the error is not material.

Schedule 10 - comment on network reliability for the disclosure year

Our reliability information in Schedule 10 has been prepared on a basis consistent with the previous year's disclosure. In particular, when one event has resulted in successive interruptions which individually exceed one minute, we treat each of the successive interruptions as a separate incident in the determination of our SAIFI and SAIDI.

Additional related party disclosures

In accordance with clauses 2.3.8 – 2.3.18 of the Electricity Distribution Information Disclosure Determination 2012.

1. Introduction

This document discloses additional information to meet the related party disclosure requirements of the Electricity Distribution Information Disclosure Determination 2012 (IDD).

The IDD requires Orion to publicly disclose:

Description	IDD reference
• Diagram or description of related party transactions	2.3.8
• Report on related party transactions	Schedule 5b
• Summary of procurement policy for procurement from related parties	2.3.10
• Example of procurement policy in practice	2.3.12(1)
• Representative transactions	2.3.12(3) & (5)
• Policies or procedures that require or have the effect of requiring purchase	2.3.12(2)
• Testing of arms-length representative transactions	2.3.12(4)
• Map of anticipated expenditure and network constraints	2.3.13 – 2.3.16
• Full disclosure of procurement policy*	2.3.11

*disclose to the Commission only

2. Threshold analysis

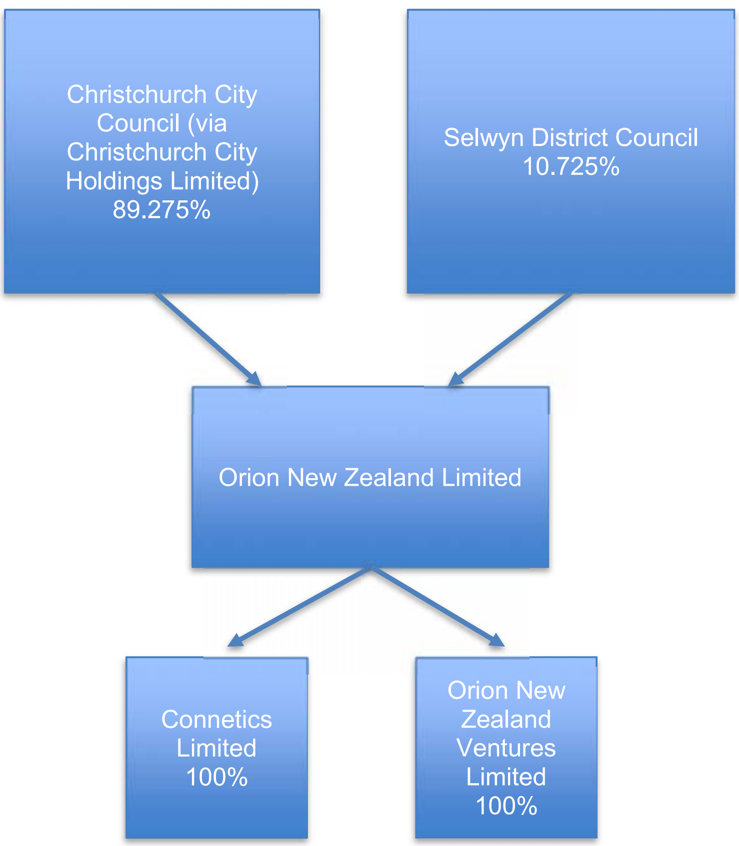
In FY21 the sum of Orion’s opex and capex exceeded the Commission’s $20m de minimis threshold (IDD 2.3.9(1)), and our total related party expenditure exceeded 10% of our total opex and capex, so we are required to make these related party disclosures.

In FY21 we spent a total of:

	2021	2020
	$m	$m
Opex (from IDD schedule 6b(i), row 17)	65	61
Capex (from IDD schedule 6a(i), row 20)	80	68
Total expenditure	**145**	**129**

Orion's expenditure with related parties in FY21, as disclosed in IDD schedule 5b, amounted to $40m (FY20: $35m), around 28% (FY20: 27%) of our overall capex and opex. This includes $4m of rates paid to related parties in both years.

3. Clause 2.3.8 Diagram or description of related party transactions



Orion is owned by:

- Christchurch City Holdings Limited (CCHL) – 89.275%
- Selwyn District Council (SDC) – 10.725%.

CCHL is in turn owned 100% by the Christchurch City Council (CCC).

Orion has two wholly-owned subsidiaries:

- Connetics Limited, which undertakes the construction and maintenance of overhead and underground lines and associated equipment required for the delivery of utility and infrastructure services. Connetics was established in 1996
- Orion New Zealand Ventures Limited, which holds Orion's long-term investment in a US-based technology fund (now in its final stage of settlement).

CCC and SDC both have subsidiary companies and other related parties with which Orion also transacts business.

These related parties include:

- Christchurch International Airport Limited (CCHL 75%)
- Lyttelton Port Company Limited (CCHL 100%)
- Enable Services Limited (CCHL 100%)
- City Care Limited (CCHL 100%)
- Red Bus Limited (CCHL 100%)
- EcoCentral Limited (CCHL 100%)
- Development Christchurch Limited (CCHL 100%)
- Vbase Ltd (CCC 100%)
- Civic Building Ltd (CCC 100%)
- ChristchurchNZ Holdings Ltd (CCC 100%)
- Transwaste Canterbury Ltd (CCC 38.9%)
- Riccarton Bush Trust (CCC appoints five of eight members)
- Rod Donald Banks Peninsula Trust (administered by CCC)
- Christchurch Agency for Energy Trust (administered by CCC) *deregistered 31 May 2020*
- Central Plains Water Trust (established by the CCC and SDC)
- Sicon Limited (SDC 100%)
- Tramway Reserve Trust (administered by SDC)
- Selwyn District Charitable Trust (administered by SDC).

Orion also has relationships with a large number of related parties where our directors, as Orion key management personnel, are either key management personnel or shareholders. These related parties are listed in our annual report, available on our website (oriongroup.co.nz).

However, other than for Connetics, CCC, SDC and City Care, our transactions with our related parties are infrequent and immaterial. Where transactions do occur with these other related parties, they are provided on an arms-length basis. Orion provides delivery services to many of these entities, although in most cases the service is provided through an interposed retailer rather than invoiced and negotiated directly. Lyttelton Port is billed directly as a major customer, but pricing is identical with the methodology and assessment periods applied to all other Orion major customers. A number of CCC sites, Vbase sites, City Care and Christchurch International Airport are also major customers but are charged on a basis consistent with all other major customers and are not invoiced directly by Orion.

For this reason, we have not provided additional analysis on these related parties, but instead focus our disclosures around Connetics, CCC, SDC and City Care as these are more material.

Business relationships with Connetics Limited

Orion established Connetics as a standalone company in 1996 in order to introduce competition to maintenance and construction works.

Historically, Connetics and our other service providers have been awarded much of their work on a lowest-price conforming tender basis – for virtually all works above $20,000. As a result of COVID we moved from a multi-party competitive tendering model to a sole-source tendering model on a "yours-to-lose" basis with our service providers – to ensure the viability and resilience of our service providers. Criteria included historical market share, value for money and capacity and capability to undertake the work. We received regulatory advice from PwC and legal advice as part of this change in procurement practise.

Based on our experiences during the COVID period we continued this new practice, with work allocated to our service providers on the basis of their work levels using a rolling average over the last three years. We consider that this move incentivises quality, safety and capability development. Our service providers' achievements in these areas will drive sustainability and efficiency over the long term, delivering our works in a way that is more sustainable for our industry and is in the long-term interest of our customers. We also received regulatory advice from PwC and legal advice as part of this change in procurement practice.

We will develop this model further in FY22.

At the end of the financial year we had PwC review our procurement with Connetics. PwC considers that Orion maintained the arm's length principle during FY21 on its tendered works.

In addition to the tendered works above, Orion has negotiated certain contracts with Connetics which cover circumstances where the tender approach does not work satisfactorily. We had PwC review each of these contracts in FY19 to ensure that these contracts operate on an arms-length basis. These contracts cover:

- emergency response works, which uses a schedule of rates. Orion has also negotiated contracts with unrelated parties for similar works, although as our largest service provider with expertise in a diverse range of fields the largest single emergency response work contract is with Connetics. During FY19 Orion engaged PwC to perform a review of the arrangements in place for FY19, and also to review the basis for a three-year extension of the contract. PwC considered that Connetics' margins are reasonable, and the contract meets the arms-length test. During FY21, after taking legal and regulatory advice, Orion made a payment to Connetics and another emergency works service provider to maintain emergency response capability during the COVID-19 lockdown period. The payment to Connetics was $1.207m

- cable supply. As discussed in section 7 below, Orion has negotiated a contract with Connetics to provide cable to all service providers working on its network to ensure the cable is of an appropriate standard. Connetics' contracting section is charged at the same rates as external parties – which helps keep a competitive market for construction services. During FY19 PwC reviewed the arrangements and concluded that the risk that Connetics earns excessive margins on the cable supply contract that help it subsidise work in other markets is low

- network storage and supply. This requires Connetics to provide certain minimum levels of emergency spares and to manage Orion-owned equipment – such as transformers and switchgear. During FY19 Orion engaged PwC to perform a review of the arrangements in place. PwC considered that the contract meets the arms-length standard

- design work, which uses a schedule of rates. Orion uses several other design consultants as well. In FY19 Orion engaged PwC to perform a review of the intercompany arrangements. PwC determined that rates charged are comparable with those charged by other design service providers and the contract meets the arms-length standard.

These contracts remain in place in FY21 and we have therefore not needed to have them reassessed for FY21.

During FY21 Orion paid Connetics $39.1m (FY20: $34.3m) for opex and capex. Refer to schedule 5b (iii) of our FY21 Information Disclosures for additional information.

Connetics has its own management, IT and support infrastructure. Accordingly, Orion charges to Connetics for services performed are minimal.

A key exception to this is the provision by Orion of a depot for Connetics' use in Islington. The rental on the property has been negotiated on an arms-length basis with both parties taking independent advice. During FY18 Orion engaged PwC to perform a review of the arrangements. PwC confirmed that the lease contract and negotiations reflect arms-length principles. The lease remained in place for FY21. During FY21, after taking legal and regulatory advice, Orion provided $153,000 of rent relief to Connetics due to the impact of COVID-19.

Orion provides debt funding to Connetics via an intercompany loan, repayable on demand, at a margin above the 90-day bank bill FRA rate intended to replicate genuine funding costs that Connetics would face as a standalone business.

As our former contracting division, Connetics has a wider range of skills than our other more specialist providers but doesn't compete in all market segments. This is discussed further in the next section.

Business relationships with CCC, SDC and CCHL

Orion pays rates to both CCC and SDC on an arms-length basis consistent with the Local Government (Rating) Act 2002. Orion also pays other council fees – eg, licenses, resource consents – on an arms-length basis based on the Council's posted terms and conditions.

During FY21 Orion paid CCC $4.3m (2020: $4.1m) for rates (including rates collected on behalf of Environment Canterbury) and a further $0.05m (2020: $0.2m) for other opex and capex.

During FY21 Orion paid SDC $0.2m (2020: $0.2m) for rates (including rates collected on behalf of Environment Canterbury) and a further $0.0m (2019: $0.2m) for other opex and capex.

Refer to schedule 5b (iii) of our FY20 Information Disclosures for additional information.

Orion invoices the CCC and SDC for delivery services through electricity retailers using standard terms and conditions.

Orion also invoices SDC and CCC for:

- a service to the CCC and Meridian for managing a database containing the number/types of streetlights, charged to both parties on an arms-length basis

- contributions towards asset relocations. As Roading Authorities, the Councils and NZTA can require Orion to relocate assets we have in the road reserve on a like for like basis. Under the Electricity Act Orion can negotiate with the council (and with NZTA) to contribute towards the cost of these projects. We require a more significant contribution where the assets are placed underground instead of replacing overhead with overhead. Orion determines a charge based on the actual costs of the project, considering the age and condition of the assets being removed and any improvement in capacity or improved functionality of the new assets. This is consistent with how we work with unrelated parties

- contributions towards discretionary asset undergrounding. We negotiate with the council using the principles discussed in the previous bullet point to agree a contribution towards the costs of this work. In FY21 we undertook two discretionary undergrounding projects for CCC totaling $0.2m and one project for SDC for $0.1m. In FY20 we did not undertake any discretionary undergrounding projects for either council This is consistent with how we work with unrelated parties

- new connections to the network, using the same price schedule as for unrelated parties

- repair costs when the activities of these parties lead to damage to Orion's network. These repairs are invoiced on an identical basis to other damage caused by third parties – a cost recovery of repair costs undertaken by our emergency works service provider.

Orion pays the CCC's share of its dividend to CCHL, but otherwise has no transactions with CCHL.

Business relationships with other CCC and SDC-controlled entities:

Orion negotiates with all the CCC and SDC controlled entities on an arm's length basis, ie, as though they were unrelated.

Orion provides delivery services through electricity retailers using standard terms and conditions. Orion invoices Lyttelton Port Company directly for delivery services on the same terms and conditions as for other major customers.

City Care provides tree cutting services to Orion following a successful tender awarded on a lowest-price conforming tender basis. Such tenders are sourced from multiple parties. In addition, City Care provides some other services to Orion but generally these are provided as a subcontractor to another contractor. During FY21 Orion paid City Care $1.0m (2020: $1.0m) for opex and capex - refer to schedule 5b (iii) of our FY21 Information Disclosures for additional information.

Orion invoices City Care and Enable and their contractors for repair costs when the activities of these companies lead to damage to Orion's network. These repairs are invoiced on an identical basis to other damage caused by third parties.

As noted above, Orion has limited interaction with the other CCC and SDC-controlled or associated entities.

4. Summary of procurement policy and practices

We seek to:

- procure goods and services which are fit for purpose
- achieve best value for money over whole-of-life
- encourage open, effective and sustainable arm's length relationships between eligible suppliers
- ensure any purchases from related parties are genuinely arms-length transactions
- behave ethically and have fair and transparent procurement processes that are free from fraud and impropriety
- comply with all applicable legal and contractual obligations
- effectively mitigate and/or manage any potential conflicts of interest in an open and acceptable manner
- treat related and unrelated parties consistently.

Our purchasing occurs in a framework supported by a number of policies and procedures, including our:

- procurement policy, which articulates how we seek to maximise the overall benefits that can be delivered through its procurement activity, enabling us to deliver value for money and ensure lawfulness, fairness and integrity at all times
- delegations of authority policy, through which we establish clear responsibility, authority, scope and involvement in all operational decision making, and maintain adequate control of the business while at the same time empowering employees with adequate responsibility to make decisions
- reporting serious wrongdoing (whistleblower) policy, which aims to facilitate the prompt reporting and investigation of suspected or actual serious wrongdoing, protect those who report serious wrongdoing, and set out our procedure to receive and deal with reported serious wrongdoing
- conflict of interest policy, which aims to ensure that all Orion directors and employees understand and effectively identify, disclose and manage actual or potential conflicts of interest
- fraud and theft policy, which states our commitment to the prevention, deterrence, detection and investigation of fraud and theft, as these will undermine our activities and damage our reputation and the reputation of all of our stakeholders, including our employees and our shareholders
- Matatika – code of ethics, which states the ethical standards required of all Orion directors and employees
- Procurement Manual, provides guidance on the expectations and procedures involved with the procurement of all goods and services.
- environmental sustainability policy, which outlines our commitment to environmental and social responsibility in our operations, and
- processes published within our asset management plan.

We utilise Orion-authorised service providers for our network works. These service providers must show competence in the specialised areas of work and comply with relevant legislation – eg, Health, safety and environmental responsibilities.

It is in the best interests of Orion and our customers best interest to encourage open, effective and sustainable arm's-length relationships with suppliers. This approach ensures a competitive market, ongoing skill development and a resilient service provider pool available to support our business.

Orion established Connetics as a standalone company in 1996 to introduce competition to maintenance and construction works. Connetics is treated at arm's-length – that is, no differently from any other service provider in our tendering processes.

All large Orion projects were sole sourced tendered to multiple approved service providers during FY21. Orion has no in-house construction or maintenance team.

We have a number of service providers in each of our network construction and maintenance activities, as follows:

Category of Work	Authorised Service Providers			
	Related Party			Total Number of Authorised Service Providers
	Connetics	City Care	Non-related Parties	
Underground works	1	-	2	3
Overhead works	1	-	3	4
Substation works	1	-	5	6
Property works	-	-	8	8
Vegetation management	-	1	4	5
Livening agent	1	-	6	7
Design	1	-	4	5

Our procurement method is to sole source tenders from approved service providers for virtually all works above $20,000. In FY21 we called for tenders for 280 projects totalling $40m (FY20: 168 projects totalling $32m). Of these, 82 were awarded to Connetics (FY20: 96) and eight were awarded to City Care (FY20: two).

We evaluated the projects sole tendered to Connetics based on either schedule of rates or previous jobs to ensure pricing was at arms-length. We also sole tender to other approved service providers .

For works with an estimated cost of between $5,000 and $20,000, a job manager will seek quoted prices from approved service providers. In FY21 we had just over 1,000 projects in this category (FY20: 600). Of these, 302 were awarded to Connetics (FY20: 161) and one was awarded to City Care (FY20: one).

For minor works with an estimated cost of below $5,000, a job manager can sole-source from a service provider, either on a quoted or time and materials basis. In FY21 we had around 3,400 projects in this category (FY20: 5,700). Of these, around one seventh were awarded to Connetics and seven were awarded to City Care (FY20: two fifths and 9, respectively).

For low value works (below the $5,000 threshold) the manager assesses the reasonableness of the price given their knowledge of the requirements and similar and recent works undertaken.

5. Example of procurement policy in practice

Some examples of our procurement policy in practice follow.

a) Sole source 2019/156E - During Covid-19 Lockdown *Pole Replacement, Area 8 - FY21* was awarded to Connetics on a Measure and Value basis.
b) Sole source 2019/167E- During Covid-19 Lockdown Pole Replacement, Area 15 - FY21 was awarded to Lemacon on a Measure and Value basis.
c) Sole source 2019/156E – Transitioning out of Covid-19 Lockdown *WP96 - Supply Fuse Relocation Project - Camrose Pl, Solway Av, Glenside Av, Dalrye Pl* was awarded to Connetics on a Measure and Value basis, having received a price estimate.
d) Sole source 2019/157E - Transitioning out of Covid-19 Lockdown *WP98 - Supply Fuse Relocation Project - Gerald Pl, Yardley St, Wyatt Pl* was awarded to Independent Lines Services on a Measure and Value basis, having received a price estimate.
e) Sole source 2021/080E - Under Covid-19 restriction level 1, but with the real possibility of returning to an elevated restriction level *WP102 - Supply Fuse Relocation Project - West Watson Ave, Warren Cres, Charles Upham Ave, Grigg Pl, Harling Ave* was awarded to Connetics on a Fixed Price basis
f) Sole source 2021/117E - Under Covid-19 restriction level 1, but with the real possibility of returning to an elevated restriction level *HV Safety Cut - Hororata 113* was awarded to City Care on a Fixed Price basis
g) Sole source 2021/013E - Under Covid-19 restriction level 1, but with the real possibility of returning to an elevated restriction level LV Tree Cutting Zone 1 Area E was awarded to TreeTech on a Fixed Price basis
h) In some cases, it is not practical to establish multiple competing tenders given the size of our market and the limited range of participants. For example, we have negotiated emergency works contracts with several providers, including Connetics, and we have had these independently assessed. Such contracts rely on a schedule of rates and our job managers assess the reasonableness of the time and materials used in completing tasks undertaken by our service providers. We have also had independent reviews completed to ensure that other contracts – such as the cable management agreement we have with Connetics – are consistent with an arms-length approach.

6. Representative transactions and testing of those transactions

As noted above, we test the basis of all our transactions regularly and do not differentiate between our related and unrelated parties. Our experienced teams assess the reasonableness of prices received from all of our service providers. We:

- continually test our significant transactions using management's judgement and by comparing with recent similar works

- make assessments of untendered minor works by assessing the reasonableness of the quoted price or estimate

- have engaged PwC to assess the reasonableness of the schedules of rates negotiated with Connetics and with other unrelated service providers.

7. Policies or procedures that require or have the effect of requiring purchase

As discussed in section 3 above, Orion requires that all cable to be installed on our network is sourced from Connetics. This requirement ensures that cable installed meets certain technical specifications and quality standards, so that the cable lasts for the design life of the asset. Orion engineers form part of the selection panel when choosing suppliers to provide cable. Connetics' supply group sells cable to Connetics' contracting group on an identical basis to all other service providers. Orion also works with Connetics to ensure cable stocks on hand are sufficient for Orion projects given often substantial lead times. This contract applies until 30 September 2020 but will likely be renegotiated with Connetics.

Other than this arrangement, we have no policies or procedures that have the effect of requiring purchase from our related parties. Customers who require a new connection can choose a provider from a schedule of service providers who are approved to operate on Orion's network. Developers, including subdividers, can also choose from a range of service providers, and Orion will connect the assets provided that the assets meet Orion's technical specifications.

8. Map of anticipated expenditure and network constraints

These are attached as an appendix to this document. Region A is primarily Orion's urban network and region B the rural network. Orion will generally tender this work with approved service providers as for all its major projects.

Connetics will generally be an approved tenderer for many of these projects, but the tender process will determine the successful service provider. In some projects and programmes – for example, vegetation and property management – Connetics does not take part in the tender rounds. As noted in section 7, it is likely that for some years Orion will require that cable to be used in the projects is sourced from Connetics.

IDD clauses 2.3.13 (3) and (4) require Orion to disclose where projects address possible future network equipment constraints and their location, where the response to the constraints would involve one of the ten largest opex or capex projects in the planning period. Notation on the map identifies the major reason for the each of our identified projects. In summary:

- in Region A, our projects will:
    - add capacity in northern Christchurch to address constraints
    - improve security of supply in northern and eastern Christchurch
    - improve resilience as we replace older 66kV oil-filled cables
- in Region B, our projects will address the ongoing load growth in the Rolleston and Dunsandel areas through the establishment of a new point of supply at Norwood and extensive associated works.

Refer to section 6 of our 2021 Asset Management Plan for further information.

9. Full disclosure of procurement policy

IDD clause 2.3.11 requires Orion to disclose to the Commission:

- its current policy in respect of the procurement of assets or goods or services from any related party; or
- alternative documentation which is equivalent to a procurement policy in respect of the procurement of assets or goods or services from any related party.

Our procurement policies make no distinction between related and unrelated parties.

We are currently updating our procurement documentation and copies of the policies which applied during the year and our overall framework are attached. We have also attached additional policies and procedural documents which provide more information about our procurement culture and environment.

Attached are our:

- procurement policy
- delegations of authority policy
- reporting serious wrongdoing (whistleblower) policy
- conflict of interest policy
- fraud and theft policy
- Matatika – code of ethics
- environmental sustainability policy
- contract delivery guide (replaced by Procurement manual on 26 February 2021)
- sensitive expenditure policy

We consider that these policies and procedures contain Orion intellectual property and ask that the Commerce Commission treats this as confidential and does not release this information to any other party.

Orion New Zealand Limited

Maps of anticipated expenditure and network constraints

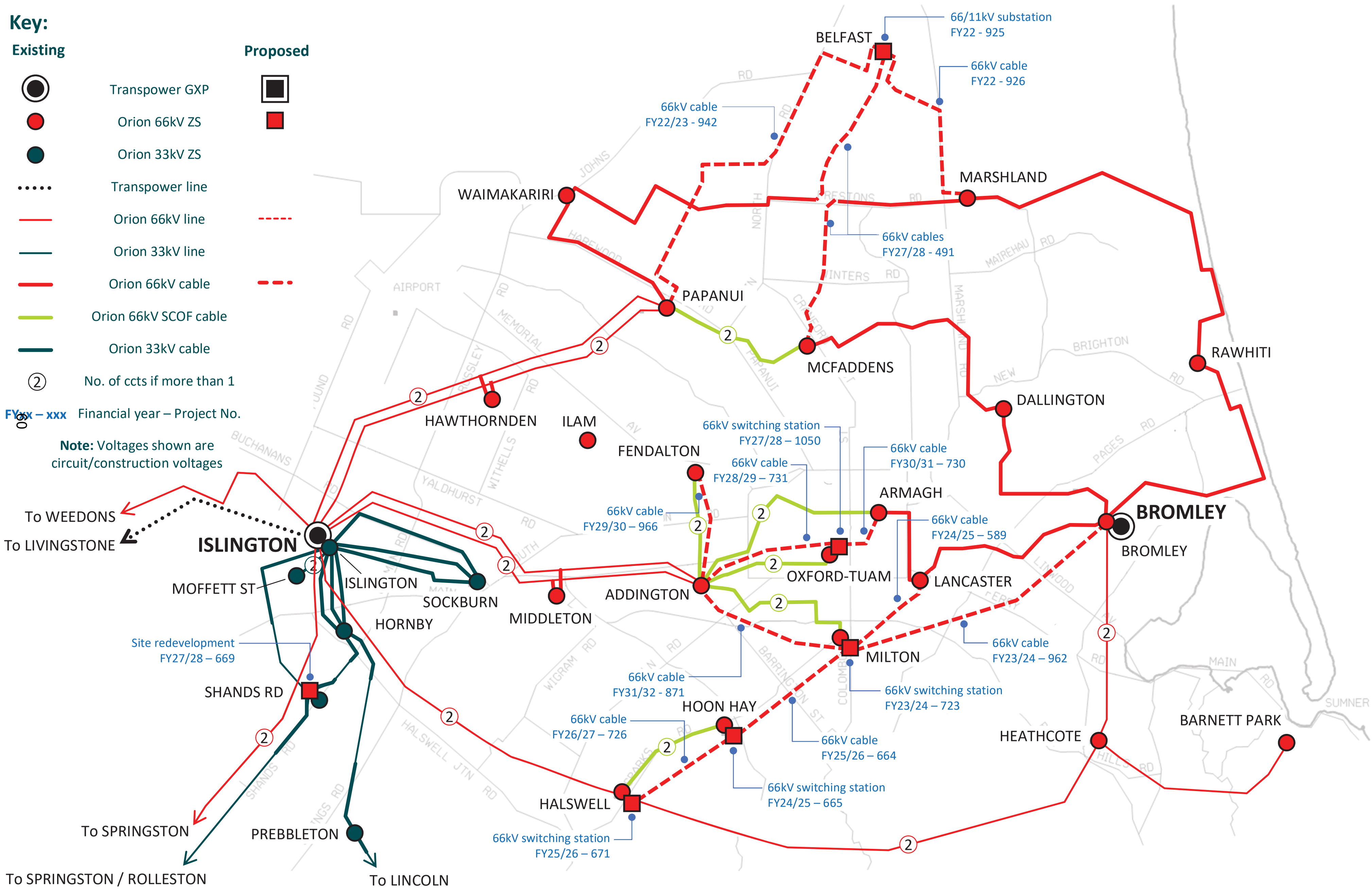
for the ten year period beginning 1 April 2021

Region A – urban network

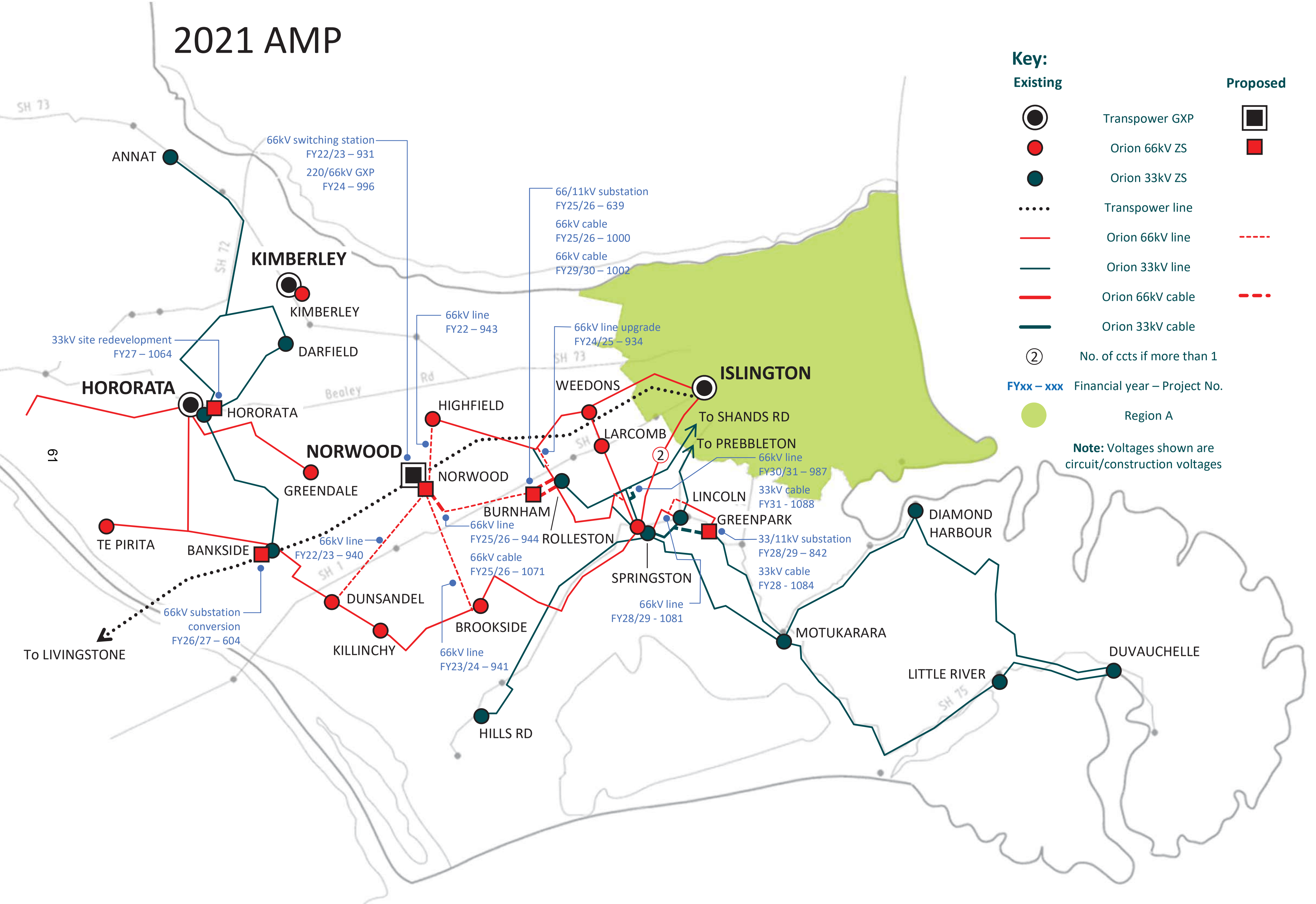
Region B – rural network

Orion New Zealand Ltd
565 Wairakei Road
PO Box 13896
Christchurch 8141
+64 3 363 9898
oriongroup.co.nz

2021 AMP


Key:
Existing
Proposed
Transpower GXP
Orion 66kV ZS
Orion 33kV ZS
Transpower line
Orion 66kV line
Orion 33kV line
Orion 66kV cable
Orion 66kV SCOF cable
Orion 33kV cable
2 No. of ccts if more than 1
FYxx – xxx Financial year – Project No.
Note: Voltages shown are circuit/construction voltages
BELFAST
66/11kV substation FY22 - 925
66kV cable FY22 - 926
66kV cable FY22/23 - 942
MARSHLAND
WAIMAKARIRI
66kV cables FY27/28 - 491
PAPANUI
MCFADDENS
RAWHITI
DALLINGTON
HAWTHORNDEN
ILAM
FENDALTON
66kV switching station FY27/28 – 1050
66kV cable FY30/31 – 730
66kV cable FY28/29 – 731
ARMAGH
66kV cable FY29/30 – 966
66kV cable FY24/25 – 589
BROMLEY
BROMLEY
To WEEDONS
To LIVINGSTONE
ISLINGTON
OXFORD-TUAM
LANCASTER
MOFFETT ST
ISLINGTON
SOCKBURN
ADDINGTON
MIDDLETON
HORNBY
66kV cable FY23/24 – 962
Site redevelopment FY27/28 – 669
MILTON
66kV switching station FY23/24 – 723
66kV cable FY31/32 - 871
SHANDS RD
HOON HAY
BARNETT PARK
66kV cable FY26/27 – 726
HEATHCOTE
66kV cable FY25/26 – 664
66kV switching station FY24/25 – 665
HALSWELL
To SPRINGSTON
PREBBLETON
66kV switching station FY25/26 – 671
To SPRINGSTON / ROLLESTON
To LINCOLN

2021 AMP



Key:
Existing
Proposed
Transpower GXP
Orion 66kV ZS
Orion 33kV ZS
Transpower line
Orion 66kV line
Orion 33kV line
Orion 66kV cable
Orion 33kV cable
No. of ccts if more than 1
FYxx – xxx
Financial year – Project No.
Region A
Note: Voltages shown are circuit/construction voltages
ANNAT
KIMBERLEY
KIMBERLEY
DARFIELD
HORORATA
HORORATA
NORWOOD
NORWOOD
GREENDALE
TE PIRITA
BANKSIDE
To LIVINGSTONE
HIGHFIELD
WEEDONS
LARCOMB
ISLINGTON
To SHANDS RD
To PREBBLETON
BURNHAM
ROLLESTON
SPRINGSTON
LINCOLN
GREENPARK
DUNSANDEL
KILLINCHY
BROOKSIDE
HILLS RD
MOTUKARARA
DIAMOND HARBOUR
LITTLE RIVER
DUVAUCHELLE
66kV switching station FY22/23 – 931
220/66kV GXP FY24 – 996
33kV site redevelopment FY27 – 1064
66kV line FY22 – 943
66/11kV substation FY25/26 – 639
66kV cable FY25/26 – 1000
66kV cable FY29/30 – 1002
66kV line upgrade FY24/25 – 934
66kV line FY30/31 – 987
33kV cable FY31 - 1088
33/11kV substation FY28/29 – 842
33kV cable FY28 - 1084
66kV line FY28/29 - 1081
66kV line FY25/26 – 944
66kV cable FY25/26 – 1071
66kV line FY22/23 – 940
66kV substation conversion FY26/27 – 604
66kV line FY23/24 – 941
SH 73
SH 72
SH 1
SH 75
Bealey
Rd

Certification for year-end disclosures

We, Deborah Jane Taylor and Bruce Donald Gemmell, being directors of Orion New Zealand Limited certify that, having made all reasonable enquiry, to the best of our knowledge-

a) the information prepared for the purposes of clauses 2.3.1, 2.3.2, 2.4.21, 2.4.22, 2.5.1, 2.5.2 and 2.7.1 of the Electricity Distribution Information Disclosure Determination 2012 in all material respects complies with that determination; and

b) the historical information used in the preparation of Schedules 8, 9a, 9b, 9c, 9d, 9e, 10 and 14 has been properly extracted from Orion New Zealand Limited's accounting and other records sourced from its financial and non-financial systems, and that sufficient appropriate records have been retained

c) in respect of information concerning assets, costs and revenues valued or disclosed in accordance with clause 2.3.6 of the Electricity Distribution Information Disclosure Determination 2012 and clauses 2.2.11(1)(g) and 2.2.11(5) of the Electricity Distribution Services Input Methodologies Determination 2012, we are satisfied that –

   i. the costs and values of assets or goods or services acquired from a related party comply, in all material respects, with clauses 2.3.6(1) and 2.3.6(3) of the Electricity Distribution Information Disclosure Determination 2012 and clauses 2.2.11(1)(g) and 2.2.11(5)(a)-2.2.11(5)(b) of the Electricity Distribution Services Input Methodologies Determination 2012; and

   ii. the value of assets or goods or services sold or supplied to a related party comply, in all material respects, with clause 2.3.6(2) of the Electricity Distribution Information Disclosure Determination 2012

d) the SAIDI and SAIFI information has been reported consistently with the Commerce Commission's *Information Disclosure exemption: Disclosure and auditing of reliability information within Schedule 10*, dated 17 May 2021.

Deborah Jane Taylor

Bruce Donald Gemmell

23 August 2021

Independent Assurance Report

To the directors of Orion New Zealand Limited and to the Commerce Commission on the disclosure information for the disclosure year ended 31 March 2021 as required by the electricity distribution information disclosure determination 2012

The Orion New Zealand Limited (the Company) is required to disclose certain information under the Electricity Distribution Information Disclosure Determination 2012 (the Determination) and to procure an assurance report by an independent auditor in terms of section 2.8.1 of the Determination.

The Auditor-General is the auditor of the Company.

The Auditor-General has appointed me, John Mackey, using the staff and resources of Audit New Zealand, to undertake a reasonable assurance engagement, on his behalf, on whether the information prepared by the Company for the disclosure year ended 31 March 2021 (the Disclosure Information) complies, in all material respects, with the Determination.

The Disclosure Information that falls within the scope of the assurance engagement are:

- Schedules 1 to 4, 5a to 5g, 6a and 6b, 7, 10 and 14 (limited to the explanatory notes in boxes 1 to 11) of the Determination.
- Clause 2.3.6 of the Determination and clauses 2.2.11(1)(g) and 2.2.11(5) of the Electricity Distribution Services Input Methodologies Determination 2012 (the IM Determination), in respect of the basis for valuation of related party transactions (the Related Party Transaction Information).

This assurance report should be read in conjunction with the Commerce Commission's Information Disclosure exemption, issued to all electricity distribution businesses on 17 May 2021 under clause 2.11 of the Determination. The Commerce Commission granted an exemption from the requirement that the assurance report, in respect of the information in schedule 10 of the Determination, must take into account any issues arising out of the Company's recording of SAIDI, SAIFI, and number of interruptions due to successive interruptions.

Opinion

In our opinion, in all material respects:

- as far as appears from an examination, proper records to enable the complete and accurate compilation of the Disclosure Information have been kept by the Company;

- as far as appears from an examination, the information used in the preparation of the Disclosure Information has been properly extracted from the Company's accounting and other records, sourced from the Company's financial and non-financial systems;
- the Disclosure Information complies, in all material respects, with the Determination; and
- the basis for valuation of related party transactions complies with the Determination and the IM Determination.

Basis for opinion

We conducted our engagement in accordance with the Standard on Assurance Engagements (SAE) 3100 (Revised) Assurance Engagements on Compliance, issued by the New Zealand Auditing and Assurance Standards Board. An engagement conducted in accordance with SAE (NZ) 3100 (Revised) requires that we comply with the International Standard on Assurance Engagements (New Zealand) 3000 (Revised) Assurance Engagements Other Than Audits or Reviews of Historical Financial Information.

We have obtained sufficient recorded evidence and explanations that we required to provide a basis for our opinion.

Key assurance matters

Key assurance matters are those matters that, in our professional judgement, required significant attention when carrying out the assurance engagement during the current disclosure year. These matters were addressed in the context of our compliance engagement, and in forming our opinion. We do not provide a separate opinion on these matters.

Key assurance matter	How our procedures addressed the key assurance matter
Accuracy of the number and duration of electricity outages The Company has automated systems to identify outages and to record the duration of outages. This outage information is used to report the Company's Report on Network Reliability in schedule 10. If this information is inaccurate then the measures of the reliability of the network could be materially misstated. This is a key audit matter because information on the frequency and duration of outages is an important measure of the reliability of electricity supply. Relatively small inaccuracies can have a significant impact on the reliability	We have obtained an understanding of the Company's system to record electricity outages, and their duration. This included review of the Company's definition of interruptions, planned interruptions and major event days. Our procedures to assess the adequacy of the Company's methods to identify and record electricity outages and their duration included: • review and testing of the overall control environment; • use of IT auditors to specifically test the reliability of the automated processes used to record the details of interruptions to supply; • obtaining internal and external information on interruptions to supply to gain assurance that interruptions to supply were recorded. Internal and

Key assurance matter	How our procedures addressed the key assurance matter
thresholds against which the Company's performance is assessed. There can also be significant consequences if the Company breaches the reliability thresholds. The Commerce Commission has issued an Exemption notice which excludes the assurance report from coverage of the information, in schedule 10 of the Determination, for any issues arising out of the Company's recording of SAIDI, SAIFI and number of interruptions due to successive interruptions. We need to ensure that the Company meets the criteria for the Exemption to apply, including that it makes the necessary disclosures so the exclusion to the assurance opinion applies.	external information sources included works orders for contractors, media reports and Board minutes; • confirming the interruptions to supply information used in the SAIDI and SAIFI calculations was appropriately extracted from the automated system; • testing a sample of interruptions to supply to source records to conclude whether they were correctly categorised; • checked the SAIDI and SAIFI ratios were correctly calculated in accordance with the Determination and the IM Determination; • obtained explanations for all significant variances to forecast; and • testing the accuracy of the number of connections to the Electricity Authority's register. With respect to the Exemption, we: • obtained and documented our understanding of the Company's methods by which electricity outages and their duration are recorded where an outage event results in successive interruptions of supply; • compared this to the documented process that the Company followed in the previous year; and • identified potential incidences of successive interruptions of supply to ensure that the Company's methods, by which electricity outages and their duration are recorded where an outage event results in successive interruptions of supply, were the same for both years. Having carried out these procedures, and assessed the likelihood of reported electricity outages and their duration being materially misstated in the Disclosure Information, we have no matters to report.
Valuation of related-party transactions at arm's-length The Determination and the IM Determination place a requirement on the Company to value related-party procurement transactions at a value not greater than arm's-length. In other words, the value at which a transaction, with the same terms and conditions, would be	We have obtained an understanding of the Company's approach to identifying and valuing related-party transactions at arm's-length in accordance with the Determination and the IM Determination. We confirmed the approach used is in accordance with the Determination and the IM Determination. The procedures we have carried out to satisfy ourselves that related-party transactions are appropriately valued at arm's-length included:

Key assurance matter	How our procedures addressed the key assurance matter

entered into between a willing seller and a willing buyer who are unrelated and who are acting independently of each other and pursuing their own best interests.
 	
In the absence of an active market for related-party transactions, assignment of an objective arm's-length value to a related-party transaction is difficult.
 	
This is a key audit matter because the requirement involves considerable judgement by Company personnel. In turn, verification of the appropriate assignment of an objective arm's-length valuation to related-party transactions, requires the exercise of significant professional judgement by the auditor.
	• testing the completeness of the related-parties identified through review of minutes, review of Companies Office records, and related-parties identified through detailed testing of transactions and balances in the annual financial statements audit;
	• reviewing the appropriateness of procurement policies, especially with related parties, for the different categories of procurement transactions;
	• testing samples of transactions, with related parties for the different categories of procurement, for compliance with policies. This included reviewing the internal pricing estimates used as a basis of determining whether sole tender/quote jobs awarded, were at arm's length by ensuring they were derived from previously confirmed arm's length transactions;
	• confirming that opinions obtained by the Company from external experts, with the appropriate knowledge and expertise in the prior year, still remain appropriate, on the reasonableness of the approach adopted to determine arm's-length value for related-party transactions for:
	    o a significant lease;
	    o the major emergency works contract;
	    o the cable management contract;
	    o network storage and supply; and
	    o design work.
	• comparison of sales transactions for undergrounding of overhead lines against the depreciated fair value of the replaced assets; and
	• confirming the material accuracy of related party values disclosed, and compliance of their calculation with the Determination and the IM Determination.
	
	Our review of the external expert's work included assessment of the appropriateness of the expert's approach, the reasonableness of the assumptions applied, and the conclusion reached. We also assessed the expert's competence, and objectivity.
	
	The total variance between our estimates and the Company's estimates of its arm's length values assigned to

Key assurance matter	How our procedures addressed the key assurance matter
	related party transactions was not considered to be material.

Directors' responsibilities

The Directors of the Company are responsible in accordance with the Determination for:

- the preparation of the Disclosure Information; and
- the Related Party Transaction Information.

The Directors of the Company are also responsible for the identification of risks that may threaten compliance with the schedules and clauses identified above and controls which will mitigate those risks and monitor ongoing compliance.

Auditor's responsibilities

Our responsibilities in terms of clauses 2.8.1(1)(b)(vi) and (vii), 2.8.1(1)(c) and 2.8.1(1)(d) are to express an opinion on whether:

- As far as appears from an examination, the information used in the preparation of the audited Disclosure Information has been properly extracted from the Company's accounting and other records, sourced from its financial and non-financial systems.
- As far as appears from an examination, proper records to enable the complete and accurate compilation of the audited Disclosure Information required by the Determination have been kept by the Company and, if not, the records not so kept.
- The Company complied, in all material respects, with the Determination in preparing the audited Disclosure Information.
- The Company's basis for valuation of related party transactions in the disclosure year has complied, in all material respects, with clause 2.3.6 of the Determination and clauses 2.2.11(1)(g) and 2.2.11(5) of the IM Determination.

To meet these responsibilities, we planned and performed procedures in accordance with SAE (NZ) 3100 (Revised), to obtain reasonable assurance about whether the Company has complied, in all material respects, with the Disclosure Information (which includes the Related Party Transaction Information) required to be audited by the Determination.

An assurance engagement to report on the Company's compliance with the Determination involves performing procedures to obtain evidence about the compliance activity and controls implemented to meet the requirements. The procedures selected depend on our judgement, including the identification and assessment of the risks of material non-compliance with the requirements.

Inherent limitations

Because of the inherent limitations of an assurance engagement, together with the internal control structure, it is possible that fraud, error or non-compliance with the Determination may occur and not be detected. A reasonable assurance engagement throughout the disclosure year does not provide assurance on whether compliance with the Determination will continue in the future.

Restricted use

This report has been prepared for use by the Directors of the Company and the Commerce Commission in accordance with clause 2.8.1(1)(a) of the Determination and is provided solely for the purpose of establishing whether the compliance requirements have been met. We disclaim any assumption of responsibility for any reliance on this report to any person other than the Directors of the Company and the Commerce Commission, or for any other purpose than that for which it was prepared.

Independence and quality control

We complied with the Auditor-General's:

- independence and other ethical requirements, which incorporate the independence and ethical requirements of Professional and Ethical Standard 1 issued by the New Zealand Auditing and Assurance Standards Board; and

- quality control requirements, which incorporate the quality control requirements of Professional and Ethical Standard 3 (Amended) issued by the New Zealand Auditing and Assurance Standards Board.

The Auditor-General, and his employees, may deal with the Company and its subsidiaries on normal terms within the ordinary course of trading activities of the Company. Other than any dealings on normal terms within the ordinary course of trading activities of the Company, this engagement, the assurance engagement on Default Price-Quality Path and the annual audit of the Company's financial statements and performance information, we have no relationship with or interests in the Company and its subsidiaries.

John Mackey
Audit New Zealand
On behalf of the Auditor-General
Christchurch, New Zealand
26 August 2021