Orion New Zealand Limited

Information for disclosure

for the year ended 31 March 2022

Electricity distribution
information disclosure
determination 2012

Approved 30 August 2022

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

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2022**

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

1(i): Expenditure metrics

	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)
Operational expenditure	19,603	301	90,196	5,478	28,292
Network	8,857	136	40,752	2,475	12,783
Non-network	10,746	165	49,444	3,003	15,509
Expenditure on assets	27,641	424	127,183	7,724	39,894
Network	26,978	414	124,133	7,539	38,937
Non-network	663	10	3,051	185	957

1(ii): Revenue metrics

	Revenue per GWh energy delivered to ICPs ($/GWh)	Revenue per average no. of ICPs ($/ICP)
Total consumer line charge revenue	70,234	1,078
Standard consumer line charge revenue	72,088	1,061
Non-standard consumer line charge revenue	27,626	251,990

1(iii): Service intensity measures

Demand density	61	*Maximum coincident system demand per km of circuit length (for supply) (kW/km)*
Volume density	279	*Total energy delivered to ICPs per km of circuit length (for supply) (MWh/km)*
Connection point density	18	*Average number of ICPs per km of circuit length (for supply) (ICPs/km)*
Energy intensity	15,353	*Total energy delivered to ICPs per average number of ICPs (kWh/ICP)*

1(iv): Composition of regulatory income

	($000)	% of revenue
Operational expenditure	64,307	27.48%
Pass-through and recoverable costs excluding financial incentives and wash-ups	68,483	29.27%
Total depreciation	45,534	19.46%
Total revaluations	81,111	34.66%
Regulatory tax allowance	18,075	7.72%
Regulatory profit/(loss) including financial incentives and wash-ups	118,056	50.45%
Total regulatory income	233,998	

1(v): Reliability

Interruption rate	13.45	*Interruptions per 100 circuit km*

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2022**

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 20	31 Mar 21	31 Mar 22
9	**ROI – comparable to a post tax WACC**	%	%	%
10	Reflecting all revenue earned	7.27%	4.74%	10.02%
11	Excluding revenue earned from financial incentives	6.71%	4.53%	10.00%
12	Excluding revenue earned from financial incentives and wash-ups	6.71%	4.53%	9.95%
13				
14	**Mid-point estimate of post tax WACC**	4.27%	3.72%	3.52%
15	25th percentile estimate	3.59%	3.04%	2.84%
16	75th percentile estimate	4.95%	4.40%	4.20%
17				
18				
19	**ROI – comparable to a vanilla WACC**			
20	Reflecting all revenue earned	7.70%	5.07%	10.32%
21	Excluding revenue earned from financial incentives	7.13%	4.86%	10.30%
22	Excluding revenue earned from financial incentives and wash-ups	7.13%	4.86%	10.25%
23				
24	**WACC rate used to set regulatory price path**	6.92%	4.23%	4.23%
25				
26	**Mid-point estimate of vanilla WACC**	4.69%	4.05%	3.82%
27	25th percentile estimate	4.01%	3.37%	3.14%
28	75th percentile estimate	5.37%	4.73%	4.50%
29				

30	**2(ii): Information Supporting the ROI**			($000)	
31					
32		Total opening RAB value	1,177,019		
33	*plus*	Opening deferred tax	(55,483)		
34	**Opening RIV**			1,121,536	
35					
36	**Line charge revenue**			230,403	
37					
38		Expenses cash outflow	132,790		
39	*add*	Assets commissioned	97,104		
40	*less*	Asset disposals	1,728		
41	*add*	Tax payments	10,204		
42	*less*	Other regulated income	3,595		
43	**Mid-year net cash outflows**			234,775	
44					
45	**Term credit spread differential allowance**			654	
46					
47		Total closing RAB value	1,307,972		
48	*less*	Adjustment resulting from asset allocation	0		
49	*less*	Lost and found assets adjustment	–		
50	*plus*	Closing deferred tax	(63,257)		
51	**Closing RIV**			1,244,715	
52					
53	**ROI – comparable to a vanilla WACC**				10.32%
54					
55		Leverage (%)			42%
56		Cost of debt assumption (%)			2.55%
57		Corporate tax rate (%)			28%
58					
59	**ROI – comparable to a post tax WACC**				10.02%
60					

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2022**

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

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	10.01%
Year-end ROI – comparable to a post tax WACC	9.71%

** 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	310	
Energy efficiency and demand incentive allowance		
Quality incentive adjustment	–	
Other financial incentives	–	
Financial incentives		310
Impact of financial incentives on ROI		0.02%
Input methodology claw-back	–	
CPP application recoverable costs	–	
Catastrophic event allowance	–	
Capex wash-up adjustment	733	
Transmission asset wash-up adjustment	–	
2013–15 NPV wash-up allowance	–	
Reconsideration event allowance	–	
Other wash-ups	–	
Wash-up costs		733
Impact of wash-up costs on ROI		0.05%

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2022**

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				
7		**3(i): Regulatory Profit**		**($000)**
8		**Income**		
9		Line charge revenue		230,403
10	*plus*	Gains / (losses) on asset disposals		(594)
11	*plus*	Other regulated income (other than gains / (losses) on asset disposals)		4,189
12				
13		**Total regulatory income**		233,998
14		**Expenses**		
15	*less*	Operational expenditure		64,307
16				
17	*less*	Pass-through and recoverable costs excluding financial incentives and wash-ups		68,483
18				
19		**Operating surplus / (deficit)**		101,208
20				
21	*less*	Total depreciation		45,534
22				
23	*plus*	Total revaluations		81,111
24				
25		**Regulatory profit / (loss) before tax**		136,785
26				
27	*less*	Term credit spread differential allowance		654
28				
29	*less*	Regulatory tax allowance		17,978
30				
31		**Regulatory profit/(loss) including financial incentives and wash-ups**		118,153
32				
33		**3(ii): Pass-through and Recoverable Costs excluding Financial Incentives and Wash-Ups**	**($000)**	
34		**Pass through costs**		
35		Rates	4,587	
36		Commerce Act levies	560	
37		Industry levies	767	
38		CPP specified pass through costs	–	
39		**Recoverable costs excluding financial incentives and wash-ups**		
40		Electricity lines service charge payable to Transpower	61,475	
41		Transpower new investment contract charges	975	
42		System operator services	–	
43		Distributed generation allowance	–	
44		Extended reserves allowance	–	
45		Other recoverable costs excluding financial incentives and wash-ups	119	
46		**Pass-through and recoverable costs excluding financial incentives and wash-ups**		68,483
47				

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2022**

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				
48	**3(iii): Incremental Rolling Incentive Scheme**		**($000)**	
49			**CY-1**	**CY**
50			**31 Mar 21**	**31 Mar 22**
51	Allowed controllable opex		64,154	66,488
52	Actual controllable opex		65,100	64,307
53				
54	Incremental change in year			3,127
55				
56			**Previous years' incremental change**	**Previous years' incremental change adjusted for inflation**
57	CY-5	31 Mar 17	(235)	
58	CY-4	31 Mar 18	1,600	
59	CY-3	31 Mar 19	(4,614)	
60	CY-2	31 Mar 20	n/a	
61	CY-1	31 Mar 21	(946)	
62	**Net incremental rolling incentive scheme**			–
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			–

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2022**

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

4(i): Regulatory Asset Base Value (Rolled Forward)

		RAB	RAB	RAB	RAB	RAB
	for year ended	**31 Mar 18**	**31 Mar 19**	**31 Mar 20**	**31 Mar 21**	**31 Mar 22**
		($000)	**($000)**	**($000)**	**($000)**	**($000)**
	Total opening RAB value	1,004,182	1,051,194	1,088,531	1,150,406	1,177,019
less	**Total depreciation**	38,762	40,616	43,007	43,559	45,534
plus	**Total revaluations**	11,011	15,577	27,543	17,435	81,111
plus	**Assets commissioned**	77,003	63,637	78,414	53,187	97,104
less	**Asset disposals**	996	1,378	1,074	449	1,728
plus	**Lost and found assets adjustment**	–	–	–	–	–
plus	**Adjustment resulting from asset allocation**	(1,245)	117	(0)	(0)	0
	Total closing RAB value	1,051,194	1,088,531	1,150,406	1,177,019	1,307,972

4(ii): Unallocated Regulatory Asset Base

		Unallocated RAB *		RAB	
		($000)	**($000)**	**($000)**	**($000)**
	Total opening RAB value		1,178,214		1,177,019
less					
	Total depreciation		45,555		45,534
plus					
	Total revaluations		81,194		81,111
plus					
	Assets commissioned (other than below)	71,445		71,445	
	Assets acquired from a regulated supplier	–		–	
	Assets acquired from a related party	25,659		25,659	
	Assets commissioned		97,104		97,104
less					
	Asset disposals (other than below)	1,403		1,403	
	Asset disposals to a regulated supplier	–		–	
	Asset disposals to a related party	325		325	
	Asset disposals		1,728		1,728
plus	**Lost and found assets adjustment**		–		–
plus	**Adjustment resulting from asset allocation**				0
	Total closing RAB value		1,309,229		1,307,972

** 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.*

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2022**

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				1,142
55		CPI_4^{-4}				1,068
56		Revaluation rate (%)				6.93%
57						
58			**Unallocated RAB ***		**RAB**	
59			**($000)**	**($000)**	**($000)**	**($000)**
60		Total opening RAB value	1,178,214		1,177,019	
61	*less*	Opening value of fully depreciated, disposed and lost assets	6,390		6,390	
62						
63		Total opening RAB value subject to revaluation	1,171,824		1,170,629	
64		**Total revaluations**		81,194		81,111
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**		61,678		61,678
69	*plus*	Capital expenditure	87,033		87,033	
70	*less*	Assets commissioned	97,104		97,104	
71	*plus*	Adjustment resulting from asset allocation				
72		**Works under construction - current disclosure year**		51,607		51,607
73						
74		Highest rate of capitalised finance applied				Nil
75						
76		**4(v): Regulatory Depreciation**				
77			**Unallocated RAB ***		**RAB**	
78			**($000)**	**($000)**	**($000)**	**($000)**
79		Depreciation - standard	40,200		40,200	
80		Depreciation - no standard life assets	5,355		5,334	
81		Depreciation - modified life assets	–		–	
82		Depreciation - alternative depreciation in accordance with CPP	–		–	
83		**Total depreciation**		45,555		45,534

Company Name: **Orion New Zealand Limited**
For Year Ended: **31 March 2022**

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

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
86					
87	N/A				
88					
89					
90					
91					
92					
93					
94					

95 ** include additional rows if needed*

96 **4(vii): Disclosure by Asset Category**

97 **($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
98												
99		**Total opening RAB value**	68,647	85,731	143,428	126,716	382,754	133,951	143,414	35,401	56,977	1,177,019
100	*less*	Total depreciation	2,514	2,547	7,132	5,176	12,911	3,855	5,803	1,576	4,020	45,534
101	*plus*	Total revaluations	4,753	5,940	9,928	8,772	26,517	9,272	9,926	2,356	3,647	81,111
102	*plus*	Assets commissioned	3,301	1,905	16,044	9,319	30,183	9,879	20,213	3,825	2,435	97,104
103	*less*	Asset disposals	4		12	22		94	109	1,191	296	1,728
104	*plus*	Lost and found assets adjustment										–
105	*plus*	Adjustment resulting from asset allocation										–
106	*plus*	Asset category transfers										–
107		**Total closing RAB value**	74,183	91,029	162,256	139,609	426,543	149,153	167,641	38,815	58,743	1,307,972
108												
109		**Asset Life**										
110		Weighted average remaining asset life	35.2	40.4	31.8	32.0	37.8	34.0	31.2	26.2	26.0	(years)
111		Weighted average expected total asset life	45.7	57.8	44.6	47.3	58.0	45.1	41.2	32.5	31.3	(years)

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2022**

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**		136,785	
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	762		*
12		Amortisation of initial differences in asset values	15,223		
13		Amortisation of revaluations	5,457		
14				21,442	
15					
16	*less*	Total revaluations	81,111		
17		Income included in regulatory profit / (loss) before tax but not taxable	343		*
18		Discretionary discounts and customer rebates	–		
19		Expenditure or loss deductible but not in regulatory profit / (loss) before tax	59		*
20		Notional deductible interest	12,507		
21				94,020	
22					
23		**Regulatory taxable income**		64,207	
24					
25	*less*	Utilised tax losses	–		
26		Regulatory net taxable income		64,207	
27					
28		Corporate tax rate (%)	28%		
29		**Regulatory tax allowance**		17,978	
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	326,988		
37	*less*	Amortisation of initial differences in asset values	15,223		
38	*plus*	Adjustment for unamortised initial differences in assets acquired	–		
39	*less*	Adjustment for unamortised initial differences in assets disposed	279		
40		Closing unamortised initial differences in asset values		311,486	
41					
42		Opening weighted average remaining useful life of relevant assets (years)		21	
43					

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2022**

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				
44	**5a(iv): Amortisation of Revaluations**			**($000)**
45				
46		Opening sum of RAB values without revaluations	1,043,344	
47				
48		Adjusted depreciation	40,077	
49		Total depreciation	45,534	
50		Amortisation of revaluations		5,457
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**	(55,483)	
61				
62	*plus*	Tax effect of adjusted depreciation	11,222	
63				
64	*less*	Tax effect of tax depreciation	11,626	
65				
66	*plus*	Tax effect of other temporary differences*	(2,987)	
67				
68	*less*	Tax effect of amortisation of initial differences in asset values	4,262	
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	120	
73				
74	*plus*	Deferred tax cost allocation adjustment	(0)	
75				
76		**Closing deferred tax**		(63,257)
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**	470,318	
84	*less*	Tax depreciation	41,522	
85	*plus*	Regulatory tax asset value of assets commissioned	86,045	
86	*less*	Regulatory tax asset value of asset disposals	2,030	
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**		512,811

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2022**

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**		3,840
9			
10	**Market value of asset disposals**		325
11			
12	Service interruptions and emergencies	11,055	
13	Vegetation management	728	
14	Routine and corrective maintenance and inspection	5,536	
15	Asset replacement and renewal (opex)	995	
16	**Network opex**		18,314
17	Business support	480	
18	System operations and network support	7	
19	**Operational expenditure**		18,801
20	Consumer connection	7,187	
21	System growth	2,059	
22	Asset replacement and renewal (capex)	12,093	
23	Asset relocations	204	
24	Quality of supply	4,116	
25	Legislative and regulatory	–	
26	Other reliability, safety and environment	–	
27	**Expenditure on non-network assets**		–
28	**Expenditure on assets**		25,659
29	Cost of financing		–
30	Value of capital contributions		9
31	Value of vested assets		–
32	**Capital Expenditure**		25,650
33	**Total expenditure**		44,451
34			
35	**Other related party transactions**		4,845

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

sch ref	Name of related party	Nature of opex or capex service provided	Total value of transactions ($000)
38	Connetics Limited	Service interruptions and emergencies	11,055
39	Connetics Limited	Vegetation management	–
40	Connetics Limited	Routine and corrective maintenance and inspection	5,515
41	Connetics Limited	Asset replacement and renewal (opex)	995
42	Connetics Limited	Business support	476
43	Connetics Limited	System operations and network support	7
44	Connetics Limited	Consumer connection	6,779
45	Connetics Limited	System growth	2,059
46	Connetics Limited	Asset replacement and renewal (capex)	12,078
47	Connetics Limited	Asset relocations	181
48	Connetics Limited	Quality of supply	4,116
49	Connetics Limited	Expenditure on non-network assets	–
	Christchurch City Council	Asset replacement and renewal (capex)	6
	Christchurch City Council	Asset relocations	23
	Christchurch City Council	System growth	–
	Christchurch City Council	Expenditure on non-network assets	–
	Christchurch City Council	Routine and corrective maintenance and inspection	19
	Christchurch City Council	System operations and network support	–
	Christchurch City Council	Business support	4
	Selwyn District Council	Routine and corrective maintenance and inspection	–
	Selwyn District Council	Vegetation management	–
	Selwyn District Council	Asset replacement and renewal (capex)	9
	City Care Limited	Vegetation management	728
	City Care Limited	System growth	–
	City Care Limited	Asset replacement and renewal (capex)	–
50	City Care Limited	Routine and corrective maintenance and inspection	2
51	Christchurch International Airport	Consumer connection	408
52	**Total value of related party transactions**		44,460

53 ** include additional rows if needed*
54

Company Name **Orion New Zealand Limited**
For Year Ended **31 March 2022**

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

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
7									
8	**5c(i): Qualifying Debt (may be Commission only)**								
9									
10									
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)

sch ref			
17			
18	**5c(ii): Attribution of Term Credit Spread Differential**		
19			
20	**Gross term credit spread differential**		511,667
21			
22	Total book value of interest bearing debt	408,500,000	
23	Leverage	42%	
24	Average opening and closing RAB values	1,242,495	
25	**Attribution Rate (%)**		0%
26			
27	**Term credit spread differential allowance**		654

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2022**

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

sch ref	5d(i): Operating Cost Allocations	Arm's length deduction	Value allocated ($000s) Electricity distribution	Non-electricity distribution	Total	OVABAA allocation increase ($000s)
10	**Service interruptions and emergencies**					
11	Directly attributable		10,327			
12	Not directly attributable		–		–	
13	**Total attributable to regulated service**		10,327			
14	**Vegetation management**					
15	Directly attributable		4,825			
16	Not directly attributable		–		–	
17	**Total attributable to regulated service**		4,825			
18	**Routine and corrective maintenance and inspection**					
19	Directly attributable		12,558			
20	Not directly attributable		–		–	
21	**Total attributable to regulated service**		12,558			
22	**Asset replacement and renewal**					
23	Directly attributable		1,345			
24	Not directly attributable		–		–	
25	**Total attributable to regulated service**		1,345			
26	**System operations and network support**					
27	Directly attributable		20,094			
28	Not directly attributable		–		–	
29	**Total attributable to regulated service**		20,094			
30	**Business support**					
31	Directly attributable		15,123			
32	Not directly attributable		35	792	827	
33	**Total attributable to regulated service**		15,158			
34						
35	**Operating costs directly attributable**		64,272			
36	**Operating costs not directly attributable**	–	35	792	827	–
37	**Operational expenditure**		64,307			
38						

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2022**

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

sch ref		($000)
40	**Pass through and recoverable costs**	
41	**Pass through costs**	
42	Directly attributable	5,914
43	Not directly attributable	–
44	**Total attributable to regulated service**	5,914
45	**Recoverable costs**	
46	Directly attributable	62,569
47	Not directly attributable	–
48	**Total attributable to regulated service**	62,569
49		

50 5d(iii): Changes in Cost Allocations* †

sch ref				($000) CY-1	($000) Current Year (CY)
51					
52	**Change in cost allocation 1**				
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					
61	**Change in cost allocation 2**				
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					
70	**Change in cost allocation 3**				
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 2022**

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
10	**Subtransmission lines**	
11	Directly attributable	74,183
12	Not directly attributable	–
13	**Total attributable to regulated service**	74,183
14	**Subtransmission cables**	
15	Directly attributable	91,029
16	Not directly attributable	–
17	**Total attributable to regulated service**	91,029
18	**Zone substations**	
19	Directly attributable	162,256
20	Not directly attributable	–
21	**Total attributable to regulated service**	162,256
22	**Distribution and LV lines**	
23	Directly attributable	139,609
24	Not directly attributable	–
25	**Total attributable to regulated service**	139,609
26	**Distribution and LV cables**	
27	Directly attributable	426,543
28	Not directly attributable	–
29	**Total attributable to regulated service**	426,543
30	**Distribution substations and transformers**	
31	Directly attributable	149,153
32	Not directly attributable	–
33	**Total attributable to regulated service**	149,153
34	**Distribution switchgear**	
35	Directly attributable	167,641
36	Not directly attributable	–
37	**Total attributable to regulated service**	167,641
38	**Other network assets**	
39	Directly attributable	38,815
40	Not directly attributable	–
41	**Total attributable to regulated service**	38,815
42	**Non-network assets**	
43	Directly attributable	49,086
44	Not directly attributable	9,657
45	**Total attributable to regulated service**	58,743
46		
47	**Regulated service asset value directly attributable**	1,298,315
48	**Regulated service asset value not directly attributable**	9,657
49	**Total closing RAB value**	1,307,972

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

sch ref				($000) CY-1	Current Year (CY)
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	–	–
58	Rationale for change				
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	–	–
67	Rationale for change				
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	–	–
76	Rationale for change				

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 compone*

80 *† include additional rows if needed*

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2022**

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			($000)	($000)
7		**6a(i): Expenditure on Assets**	($000)	($000)
8		Consumer connection		35,353
9		System growth		12,752
10		Asset replacement and renewal		28,438
11		Asset relocations		1,389
12		Reliability, safety and environment:		
13		Quality of supply	2,209	
14		Legislative and regulatory	–	
15		Other reliability, safety and environment	8,362	
16		**Total reliability, safety and environment**		10,571
17		**Expenditure on network assets**		88,503
18		Expenditure on non-network assets		2,175
19				
20		**Expenditure on assets**		90,678
21	*plus*	Cost of financing		–
22	*less*	Value of capital contributions		3,645
23	*plus*	Value of vested assets		–
24				
25		**Capital expenditure**		87,033

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	720

30		**6a(iii): Consumer Connection**		
31		*Consumer types defined by EDB**	($000)	($000)
32		Subdivisions	7,834	
33		Large customers	2,241	
34		General connections	13,759	
35		Switchgear	7,896	
36		Transformers	3,623	
37		** include additional rows if needed*		
38		**Consumer connection expenditure**		35,353
39				
40	*less*	Capital contributions funding consumer connection expenditure	2,547	
41		**Consumer connection less capital contributions**		32,806

42		**6a(iv): System Growth and Asset Replacement and Renewal**		Asset Replacement and
43			System Growth	Renewal
44			($000)	($000)
45		Subtransmission	9,513	1,501
46		Zone substations	249	3,104
47		Distribution and LV lines	456	3,901
48		Distribution and LV cables	1,369	4,760
49		Distribution substations and transformers		3,394
50		Distribution switchgear		6,991
51		Other network assets	1,165	4,787
52		**System growth and asset replacement and renewal expenditure**	12,752	28,438
53	*less*	Capital contributions funding system growth and asset replacement and renewal	–	26
54		**System growth and asset replacement and renewal less capital contributions**	12,752	28,412
55				

56		**6a(v): Asset Relocations**		
57		*Project or programme**	($000)	($000)
58		NZTA and others	29	
59		CERA/SCIRT/Otakaro (Rebuild)	32	
60		Selwyn District Council	931	
61		Christchurch City Council	381	
62		Others	16	
63		** include additional rows if needed*		
64		All other projects or programmes - asset relocations		
65		**Asset relocations expenditure**		1,389
66	*less*	Capital contributions funding asset relocations	1,072	
67		**Asset relocations less capital contributions**		317

Company Name	Orion New Zealand Limited
For Year Ended	31 March 2022

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	109	
72		Norwood ZS 66kv	446	
73		Belfast ZS to Papanui ZS 66kV cable	33	
		Dunsandel ZS 66kV line bay	174	
		Milton ZS 66kV switchgear & building	70	
		Coleridge generator conn./reliability improvement	301	
		11kV Reinforcement	323	
74		LV network monitoring	720	
		Other	33	
75				
76		** include additional rows if needed*		
77		All other projects programmes - quality of supply		
78		**Quality of supply expenditure**		2,209
79	*less*	Capital contributions funding quality of supply		
80		**Quality of supply less capital contributions**		2,209
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		LV Ties replacement with Krone	31	
96		400V UG Supply Fuse Relocation Program	8,331	
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**		8,362
103	*less*	Capital contributions funding other reliability, safety and environment		
104		**Other reliability, safety and environment less capital contributions**		8,362
105				
106		**6a(ix): Non-Network Assets**		
107		**Routine expenditure**		
108		*Project or programme**	**($000)**	**($000)**
109		Vehicles and mobile plant	602	
110		Information solutions	999	
111		Sundry tools and equipment	248	
112		Sundry land and buildings	326	
113				
114		** include additional rows if needed*		
115		All other projects or programmes - routine expenditure	–	
116		**Routine expenditure**		2,175
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**		2,175

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2022**

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	10,327	
9	Vegetation management	4,825	
10	Routine and corrective maintenance and inspection	12,558	
11	Asset replacement and renewal	1,345	
12	**Network opex**		29,055
13	System operations and network support	20,094	
14	Business support	15,158	
15	**Non-network opex**		35,252
16			
17	**Operational expenditure**		64,307
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		2,495
23	** Direct billing expenditure by suppliers that directly bill the majority of their consumers*		

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2022**

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				
7	**7(i): Revenue**	**Target ($000) [1]**	**Actual ($000)**	**% variance**
8	Line charge revenue	228,835	230,403	1%
9	**7(ii): Expenditure on Assets**	**Forecast ($000) [2]**	**Actual ($000)**	**% variance**
10	Consumer connection	15,121	35,353	134%
11	System growth	18,172	12,752	(30%)
12	Asset replacement and renewal	25,468	28,438	12%
13	Asset relocations	2,735	1,389	(49%)
14	Reliability, safety and environment:			
15	Quality of supply	7,281	2,209	(70%)
16	Legislative and regulatory		–	–
17	Other reliability, safety and environment	7,298	8,362	15%
18	**Total reliability, safety and environment**	14,579	10,571	(27%)
19	**Expenditure on network assets**	76,075	88,503	16%
20	Expenditure on non-network assets	8,829	2,175	(75%)
21	Expenditure on assets	84,904	90,678	7%
22	**7(iii): Operational Expenditure**			
23	Service interruptions and emergencies	8,200	10,327	26%
24	Vegetation management	4,520	4,825	7%
25	Routine and corrective maintenance and inspection	12,940	12,558	(3%)
26	Asset replacement and renewal	2,475	1,345	(46%)
27	**Network opex**	28,135	29,055	3%
28	System operations and network support	17,695	20,094	14%
29	Business support	19,819	15,158	(24%)
30	**Non-network opex**	37,514	35,252	(6%)
31	**Operational expenditure**	65,649	64,307	(2%)
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	2,735	–	(100%)
35	Research and development	856	720	(16%)
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	2,569	2,495	(3%)
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	489	
GEN	excluding those classified as LIG,	Standard	211,589	2,345,380
IRR	Commercial irrigation	Standard	1,055	
MCC	Large commercial and industrial	Standard	522	798,319
LCC	Large capacity	Non-standard	15	136,820
		[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	213,654	3,143,699
		Non-standard consumer totals	15	136,820
		Total for all consumers	213,669	3,280,519

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)	Major customer Additional fixed charge (MCFXDA)
Unit charging basis (eg, days, kW of demand, kVA of capacity, etc.)	Connection	Connection	kW	kWh	kWh	kVAr	kW	kVAr	kW	Connection	Connection
LIG	51,736										
GEN		209,685	494,124	1,150,337,787	1,291,249,394	-					
IRR							76,375	23,657	48,232		
MCC										403	101
LCC											
Standard consumer totals	51,736	209,685	494,124	1,150,337,787	1,291,249,394	–	76,375	23,657	48,232	403	101
Non-standard consumer totals	–	–	–	–	–	–	–	–	–	–	–
Total for all consumers	51,736	209,685	494,124	1,150,337,787	1,291,249,394	–	76,375	23,657	48,232	403	101

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	$1,802		$1,860	($59)
GEN	excluding those classified as LIG,	Standard	$185,058		$136,991	$48,067
IRR	Commercial irrigation	Standard	$5,040		$4,177	$863
MCC	Large commercial and industrial	Standard	$34,723		$21,522	$13,201
LCC	Large capacity	Non-standard	$3,780		$2,132	$1,647
		[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	$226,623	–	$164,551	$62,073
		Non-standard consumer totals	$3,780	–	$2,132	$1,647
		Total for all consumers	$230,403	–	$166,683	$63,720

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)	Major customer Additional fixed charge (MCFXDA)
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	$/conn/day
LIG	1,802										
GEN		11,480	72,052	77,705	23,811						
IRR						0	6,093	-696.63569	-355.51997		
MCC										1,472	184.845
LCC											
Standard consumer totals	$1,802	$11,480	$72,052	$77,705	$23,811	–	$6,093	($697)	($356)	$1,472	$185
Non-standard consumer totals	–	–	–	–	–	–	–	–	–	–	–
Total for all consumers	$1,802	$11,480	$72,052	$77,705	$23,811	–	$6,093	($697)	($356)	$1,472	$185

8(iii): Number of ICPs directly billed

Number of directly billed ICPs at year end: 35

Company Name	Orion NZ Ltd
For Year Ended	31-Mar-22
Network / Sub-N	

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)	Add extra columns for additional billed quantities by price component as necessary
Switches	Connection	km	km	kVA	kVA	kVA	kVA	kVA	kVA	kVA	kVA	kVA	kVA	kVA	kVA	kW	kVAr	Invoice	Notice	Notice	
																10	3	359	1		
																4	-				
109	45	7	3	344,068	107,705	270,240	227,807									368	72	112			
								35,000	31,800	35,000	31,800	6,658	20,861	20,861	16,000						
109	45	7	3	344,068	107,705	270,240	227,807	–	–	–	–	–	–	–	–	381	75	471	1	–	
–	–	–	–	–	–	–	–	35,000	31,800	35,000	31,800	6,658	20,861	20,861	16,000	–	–	–	–	–	
109	45	7	3	344,068	107,705	270,240	227,807	35,000	31,800	35,000	31,800	6,658	20,861	20,861	16,000	381	75	471	1	–	

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)	Add extra columns for additional line charge revenues by price component as necessary
$/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	
																-0.24411	-0.02192	10.2	0.05		
																-0.09764	0				
132.48405	71.54056	9.0593	2.3433	1,494	14,770	10,199	6,394									-9.44662	-0.61057	3.36			
								300.05003	571.84503	442.95999	817.51708	381.38783	1,008	65.71216	192.32001						
$132	$72	$9	$2	$1,494	$14,770	$10,199	$6,394	–	–	–	–	–	–	–	–	($10)	($1)	$14	$0	–	
–	–	–	–	–	–	–	–	$300	$572	$443	$818	$381	$1,008	$66	$192	–	–	–	–	–	
$132	$72	$9	$2	$1,494	$14,770	$10,199	$6,394	$300	$572	$443	$818	$381	$1,008	$66	$192	($10)	($1)	$14	$0	–	

Company Name	Orion NZ Limited
For Year Ended	31-Mar-22
Network / Sub-	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

	Voltage	Asset category	Asset class	Units	Items at start of year (quantity)	Items at end of year (quantity)	Net change	Data accuracy (1–4)
8								
9	All	Overhead Line	Concrete poles / steel structure	No.	28,487	28,259	(228)	4
10	All	Overhead Line	Wood poles	No.	59,740	59,620	(120)	4
11	All	Overhead Line	Other pole types	No.	–		–	N/A
12	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	506	501	(5)	4
13	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	–	–	–	N/A
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	87	90	3	4
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	40	40	–	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	2	2	–	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.	78	80	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	114	1	4
27	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.			–	
28	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	332	322	(10)	4
29	HV	Zone substation switchgear	33kV RMU	No.			–	
30	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	49	48	(1)	4
31	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	27	27	–	4
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	693	694	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.	81	87	6	4
35	HV	Distribution Line	Distribution OH Open Wire Conductor	km	3,059	3,047	(12)	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	1,235	1,283	48	4
39	HV	Distribution Cable	Distribution UG PILC	km	1,530	1,524	(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.	60	64	4	4
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	771	736	(35)	4
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	9,239	9,229	(10)	4
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	–	–	–	4
45	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	4,762	4,886	124	4
46	HV	Distribution Transformer	Pole Mounted Transformer	No.	6,313	6,318	5	3
47	HV	Distribution Transformer	Ground Mounted Transformer	No.	5,553	5,655	102	3
48	HV	Distribution Transformer	Voltage regulators	No.	15	15	–	4
49	HV	Distribution Substations	Ground Mounted Substation Housing	No.	4,816	4,937	121	4
50	LV	LV Line	LV OH Conductor	km	1,748	1,739	(8)	2
51	LV	LV Cable	LV UG Cable	km	3,329	3,426	97	3
52	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	3,704	3,791	86	3
53	LV	Connections	OH/UG consumer service connections	No.	211,437	215,511	4,074	2
54	All	Protection	Protection relays (electromechanical, solid state and numeric	No.	2,787	2,779	(8)	4
55	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	535	595	60	4
56	All	Capacitor Banks	Capacitors including controls	No	6	6	–	4
57	All	Load Control	Centralised plant	Lot	46	45	(1)	4
58	All	Load Control	Relays	No	2,110	2,133	23	3
59	All	Civils	Cable Tunnels	km	1	1	–	4

Compan
For Year
Network

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)**

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	2013	2014	2015	2016
9																												
10	All	Overhead Line	Concrete poles / steel structure	No.	–	706	1,644	7,792	7,141	7,885	2,942	1	–	–	1	38	16	24	11	4	2	7	4	12	12	–	8	1
11	All	Overhead Line	Wood poles	No.	9	11	280	6,091	6,423	2,306	13,076	2,332	2,903	3,601	1,238	1,255	1,567	1,385	1,449	1,341	1,630	1,400	976	779	739	800	800	878
12	All	Overhead Line	Other pole types	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
13	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	–	–	56	84	123	49	40	3	1	41	12	–	16	13	–	21	–	7	–	12	1	0	3	4
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	2	5	18	21
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	–	–	–	5	26	9	–	–	–	0	–	–	–	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	13	2	–	1	2	–	2	–	1	2	4	1	4	1	4	–	2	–	1
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.	–	–	–	–	7	1	3	–	4	9	–	6	4	1	1	13	6	11	5	17	3	–	8	4
28	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
29	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	16	–	2	44	63	22	1	–	20	4	1	1	14	3	2	32	11	8	1	21	14	7	11	–
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	164	48	37	11	11	61	–	43	32	7	41	27	49	–	51	14	20	2	25	17
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	17	16	16	3	1	2	2	–	–	5	1	3	4	–	–	2	–	2	2	3	1
36	HV	Distribution Line	Distribution OH Open Wire Conductor	km	0	–	26	153	729	516	533	58	44	60	73	32	61	49	58	55	43	45	33	30	88	76	46	67
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	3	0	0	1	3	16	52	24	35	39	50	54	57	46	49	43	45	46	48	74	56	53	73	95
40	HV	Distribution Cable	Distribution UG PILC	km	30	37	135	381	394	304	196	15	11	11	2	2	0	0	1	1	1	1	0	0	0	0	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.	–	–	–	–	–	–	2	2	3	6	6	3	4	–	1	–	–	11	–	–	2	–	–	5
43	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	–	–	–	24	285	131	47	9	45	28	46	29	25	16	13	11	1	1	1	2	7	–	4	–
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	–	–	1	51	436	574	1,634	408	516	484	455	458	457	550	364	408	329	188	154	178	160	141	268	194
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.	–	–	–	146	887	770	484	133	142	122	127	55	35	80	66	62	80	95	82	125	76	159	151	140
47	HV	Distribution Transformer	Pole Mounted Transformer	No.	–	48	23	514	857	1,001	1,173	155	114	175	183	135	210	177	155	98	159	77	118	112	69	107	147	73
48	HV	Distribution Transformer	Ground Mounted Transformer	No.	2	31	120	675	884	826	608	87	67	121	105	77	89	93	105	109	109	64	91	128	75	167	207	140
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	109	521	798	689	645	62	78	81	52	61	56	67	71	85	72	58	66	78	104	145	133	165
51	LV	LV Line	LV OH Conductor	km	3	3	16	349	603	156	228	14	11	7	11	8	13	7	3	3	2	1	1	1	0	1	1	1
52	LV	LV Cable	LV UG Cable	km	8	2	13	207	500	606	443	43	81	73	56	73	84	89	62	65	56	26	31	41	64	86	101	116
53	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	0	2	4	411	668	488	552	43	77	66	52	66	69	87	50	58	55	24	29	41	93	92	98	129
54	LV	Connections	OH/UG consumer service connections	No.	–	–	–	99,315	73	5,842	27,523	2,687	2,417	2,506	2,603	3,145	3,559	3,366	3,271	3,417	2,823	2,109	2,313	1,807	2,188	3,748	5,724	6,419
55	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	–	–	–	57	271	118	7	3	20	86	172	65	107	186	79	93	82	119	97	107	192	84	113	139
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	8	10	8	8	4	8	13	47
57	All	Capacitor Banks	Capacitors including controls	No	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	–	–	–
58	All	Load Control	Centralised plant	Lot	–	–	–	–	–	7	–	–	–	3	1	18	1	2	2	2	–	–	1	2	1	1	1	1
59	All	Load Control	Relays	No	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	160	153
60	All	Civils	Cable Tunnels	km	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Orion NZ Limited

31-Mar-22

Entire Network

2017	2018	2019	2020	2021	2022	2023	2024	2025	No. with age unknown	Items at end of year	No. with default dates	Data accuracy (1–4)
–	4	4	–	–	–					28,259		3
1,023	1,002	1,297	1,091	1,158	780					59,620	7	3
–	–	–	–							–		N/A
0	16	–	–	1	2					501		4
										–		N/A
1	3	3	1	0	4					90		4
0	–	–	–	–	–					40		4
										–		N/A
–	–	–	–	–	–					2		4
										–		N/A
										–		N/A
										–		N/A
										–		N/A
										–		N/A
–	2	–	–	–	–					80		4
–	–	–	–	–	–					–		N/A
–	–	–	–	–	–					–		N/A
4	–	4	3	–	–					114		4
–	–	–	–	–	–					–		N/A
12	–	6	–	6	–					322	16	3
–	–	–	–	–	–					–		N/A
–	11	–	6	–	–					48		4
–	–	–	–	–	–					27		4
2	5	–	26	–	–					694		4
–	–	–	–	–	–					–		N/A
–	1	3	–	2	–					87		4
20	57	34	32	29	3					3,047		3
										–		N/A
–	–	–	–	–	–					86		3
57	69	64	43	38	50					1,283		4
1	1	0	–	0	1					1,524		4
										–		N/A
5	8	6	–	–	–					64		4
8	1	–	1	–	1					736		4
138	176	130	101	122	154					9,229		4
–	–	–	–	–	–					–		4
183	151	129	216	114	76					4,886	3	3
117	113	48	69	74	17					6,318	8	3
158	158	85	140	60	74					5,655	6	3
–	–	–	–	–	–					15		4
115	109	126	96	83	154					4,937		4
3	1	1	1	1	0				290	1,739		2
76	76	92	97	64	97					3,426		3
82	55	95	103	113	90					3,791		3
5,344	4,382	3,946	4,090	5,180	5,714					215,511	104,819	2
99	65	159	150	48	61					2,779		3
39	56	83	113	19	3				3	595		4
–	–	4	–	–	–					6		4
–	2	–	–	–	–					45		4
49	60	16	34	33	23				1,605	2,133		3
–	–	–	–	–	–					1		4

Company Name	Orion NZ Limited
For Year Ended	31-Mar-22
Network / Sub-network Nar	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

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	242	42	284
14	SWER (all SWER voltages)	86	2	88
15	22kV (other than SWER)	–	–	–
16	6.6kV to 11kV (inclusive—other than SWER)	3,047	2,805	5,852
17	Low voltage (< 1kV)	1,739	3,426	5,165
18	**Total circuit length (for supply)**	5,374	6,365	11,740
19				
20	Dedicated street lighting circuit length (km)	896	2,894	3,791
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)			91
22				

23	**Overhead circuit length by terrain (at year end)**	**Circuit length (km)**	**(% of total overhead length)**
24	Urban	1,663	31%
25	Rural	3,147	59%
26	Remote only	144	3%
27	Rugged only	183	3%
28	Remote and rugged	237	4%
29	Unallocated overhead lines	–	–
30	**Total overhead length**	5,374	100%
31			
32		**Circuit length (km)**	**(% of total circuit length)**
33	Length of circuit within 10km of coastline or geothermal areas (where knowr	1,897	16%
34		**Circuit length (km)**	**(% of total overhead length)**
35	Overhead circuit requiring vegetation management	5,374	100%

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2022**

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	**Location ***	**Number of ICPs served**	**Line charge revenue ($000)**
8			
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 2022**
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		8	
12	General		5,988	
13	Irrigation		4	
14	Major customer		12	
15	Large capacity		–	
16	** include additional rows if needed*			
17	**Connections total**		6,012	
18				
19	**Distributed generation**			
20	Number of connections made in year		1,053	**connections**
21	Capacity of distributed generation installed in year		15.13	**MVA**
22	**9e(ii): System Demand**			
23				
24			**Demand at time of maximum coincident demand (MW)**	
25	**Maximum coincident system demand**			
26	GXP demand		712	
27	Distributed generation output at HV and above	*plus*	1	
28	**Maximum coincident system demand**		713	
29	Net transfers to (from) other EDBs at HV and above	*less*	0	
30	**Demand on system for supply to consumers' connection points**		713	
31	**Electricity volumes carried**		**Energy (GWh)**	
32	Electricity supplied from GXPs		3,401	
33	Electricity exports to GXPs	*less*	0	
34	Electricity supplied from distributed generation	*plus*	15	
35	Net electricity supplied to (from) other EDBs	*less*	0.21	
36	**Electricity entering system for supply to consumers' connection points**		3,416	
37	Total energy delivered to ICPs	*less*	3,281	
38	**Electricity losses (loss ratio)**		135	4.0%
39				
40	**Load factor**		0.55	
41	**9e(iii): Transformer Capacity**			
42			**(MVA)**	
43	Distribution transformer capacity (EDB owned)		2,273	
44	Distribution transformer capacity (Non-EDB owned, estimated)		220	
45	**Total distribution transformer capacity**		2,493	
46				
47	**Zone substation transformer capacity**		1,159	

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2022**
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**		
9	**Interruptions by class**	**Number of interruptions**	
10	Class A (planned interruptions by Transpower)	–	
11	Class B (planned interruptions on the network)	578	
12	Class C (unplanned interruptions on the network)	999	
13	Class D (unplanned interruptions by Transpower)	1	
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)	1	
19	**Total**	1,579	
20			
21	**Interruption restoration**	**≤3Hrs**	**>3hrs**
22	Class C interruptions restored within	650	349
23			
24	**SAIFI and SAIDI by class**	**SAIFI**	**SAIDI**
25	Class A (planned interruptions by Transpower)	–	–
26	Class B (planned interruptions on the network)	0.07	24.9
27	Class C (unplanned interruptions on the network)	0.60	53.0
28	Class D (unplanned interruptions by Transpower)	0.00	0.1
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	1.4
34	**Total**	0.68	79.35
35			
36	**Normalised SAIFI and SAIDI**	**Normalised SAIFI**	**Normalised SAIDI**
37	Classes B & C (interruptions on the network)	0.68	71.2
38			

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2022**
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	0.01	0.9
43	Vegetation	0.09	5.4
44	Adverse weather	0.08	20.4
45	Adverse environment	0.00	0.9
46	Third party interference	0.05	4.6
47	Wildlife	0.01	0.7
48	Human error	0.07	1.6
49	Defective equipment	0.23	14.9
50	Cause unknown	0.06	3.6

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	0.00	0.0
58	Distribution lines (excluding LV)	0.04	13.6
69	Distribution cables (excluding LV)	0.00	0.9
60	Distribution other (excluding LV)	0.03	10.4

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

62

	Main equipment involved	SAIFI	SAIDI
63			
64	Subtransmission lines	0.03	1.6
65	Subtransmission cables	–	–
66	Subtransmission other	0.05	0.4
67	Distribution lines (excluding LV)	0.33	42.8
68	Distribution cables (excluding LV)	0.15	5.4
69	Distribution other (excluding LV)	0.04	2.9

70 **10(v): Fault Rate**

	Main equipment involved	Number of Faults	Circuit length (km)	Fault rate (faults per 100km)
71				
72	Subtransmission lines	10	501	2.00
73	Subtransmission cables	–	132	–
74	Subtransmission other	2		
75	Distribution lines (excluding LV)	642	3,134	20.49
76	Distribution cables (excluding LV)	82	2,807	2.92
77	Distribution other (excluding LV)	107		
78	**Total**	843		

Company	Orion New Zealand Limited
Year ended	31 March 2022

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 FY22 post-tax regulatory ROI was 10.0% (FY21: 4.7%; FY20: 7.3%). FY22's ROI includes a 6.93% CPI movement (FY21: 1.5%).

No items were reclassified in FY21 or FY22.

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):

	FY22 $m
Rental revenue and recovery of outgoings	2.1
Recoveries from third parties who cause to damage to our network	0.9
Other	1.2
Total	4.2

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:

	FY22 $m	FY21 $m	FY20 $m	FY19 $m	FY18 $m	FY17 $m	FY16 $m	FY15 $m	FY14 $m
Regulatory profit – as disclosed	118	56	81	74	72	78	63	81	51
Less quake insurance cash settlements	-	-	-	-	-	-	-	(24)	-
Less indexed asset revaluations	(81)	(17)	(28)	(16)	(11)	(21)	(5)	(1)	(13)
Add back loss on asset disposals	1	-	1	1	1	1	3	1	5
Add back identified quake related opex	-	-	-	-	-	-	-	-	-
Underlying regulatory profit	38	39	54	59	62	58	61	57	43

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 FY22, we estimate that we have charged customers $1.93m below our MAR for FY22. This amount is still subject to wash-ups as improved information becomes available. We will increase revenue by the final amount plus interest when setting delivery prices for FY24.

No items were reclassified in FY21 or FY22.

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 FY22 our RAB value increased as follows:

	FY22 $m
Opening RAB value	1,177
Add new assets commissioned	97
Add indexed asset revaluation (at CPI)	81
Less asset disposals at RAB value	(2)
Less depreciation and amortisation	(45)
Closing RAB value	1,308

Our $97m of commissioned assets in FY22 is significantly higher than FY21 ($53m). Our works under construction fell by $10m during the year with a number of significant projects commenced, but not completed in the prior year.

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

	FY22 $m
Taxable income that is not in regulatory profit before tax	-
Expenditure that is not deductible:	
Legal and entertainment expenses	0.8
	0.8
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	-
	0.4

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

	FY22 $m
Expenditure timing differences for tax deductibility	-
Insurance cash settlement proceeds – assessable for tax purposes	0.2
Finance lease payments – operating leases for tax purposes	(0.1)
Internal profits on capex – deductible for tax purposes	(1.1)
Capex – deductible for tax purposes	(1.9)
Net total	(2.9)

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 ($1.0m in FY22 out of total opex of $64m) we do not consider it necessary to put more complex recording systems in place – consistent with the proxy approach.

No items were reclassified in FY21 or FY22.

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 FY21 and FY22.

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:

- $89m (last year: $78m) for network assets
- $2m (last year: $4m) for non-network assets.

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

Schedule 6a(iv) discloses $13m of capex for system growth and $28m for asset replacement and renewal. Our major projects and programmes in these areas which exceeded $2m were

	System growth $m	**Replacement & renewal $m**
Supply fuse relocation		8
11kV switchgear replacement		5
11kV network circuit breaker replacement		3
Distribution pole replacement		4
Replacement of distribution transformers		2
LV, 11kV and subtransmission conductor and poles		2
Belfast to Marshland 66v cable	4	
Belfast zone substation	3	
Other projects and programmes	6	4
Total	13	28

No capex items were reclassified in FY22.

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 $1.3m of FY22 maintenance opex as asset replacement and renewal:

	FY22 $m
Retightening and cross-arm and insulator work on 11kV overhead lines	0.8
GElectric and Geomedia (GIS) software maintenance	0.3
Other	0.2
	1.3

There were no material atypical items of expenditure in FY22.

No items were reclassified during FY22.

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 $85m and actual capex at $91m. The key offsetting reasons for this overspend of $6m are:

	FY22 $m
Connections (customer-driven)	9
Subdivision extension	5
Transformers	2
Dunsandel to Norwood 66kV cable	(1)
Highfield to Norwood 66kV cable	(1)
Norwood zone substation	(2)
Belfast 66kV cable (postponed	(5)
Other (net)	(1)
Overspend relative to our AMP forecast	6

OPEX

Schedule 7(iii) discloses our AMP forecast opex of $65.6m and actual opex of $64.3m. This $1.3m underspend is due to a $1.0m overspend in network opex offset by a $2.3m favourable variance in non-network opex.

The key reasons for these two variances are:

Network opex	**FY22 $m**
Service interruptions and emergencies	2.1
Vegetation management	0.3
Routine and corrective maintenance and inspection	(0.4)
Asset replacement and renewal opex	(1.0)
Overspend relative to our AMP forecast	1.0

During FY22, after taking legal and regulatory advice, Orion made a payment to Connetics and two other emergency works service providers to maintain emergency response capability during the COVID-19 lockdown period. These payments totalled $0.7m.

Non-network opex	FY22 $m
Salaries and wages – increase in capitalised labour	2.0
Community engagement, sponsorship and communications	1.4
Commercial and regulatory	0.5
Consultancy	(0.5)
Salaries and wages	(0.3)
Strategic services	(1.2)
Other	0.4
Underspend relative to our AMP forecast	2.3

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 FY22.

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 target revenue, as disclosed in our "Methodology for deriving delivery prices" document, with billed revenue we have made the following adjustments:

- Capital contributions of $174k have been excluded from target revenue
- Irrigation rebates and export and generation credits totalling $1,063k have been excluded from billed revenue
- Invoice charges and fees associated with default and termination notices totalling $14k have been excluded from billed revenue

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

	Target $m	Actual $m	Difference $m
Distribution	165.8	166.7	0.9
Transmission	62.9	63.7	0.8
Delivery revenue	**228.7**	**230.4**	**1.7**

The main factor contributing to the difference between target and billed revenue was general connection (including streetlighting connections) peak charges which were $3.5m above target. This was the result of demand being 24 MW 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 FY22, we estimate that we have charged customers $1.93m below our MAR for FY22. This amount is still subject to wash-ups as improved information becomes available. We will recover the final amount plus interest when setting delivery prices for FY24.

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 2022

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	272
Christchurch City Council	4,573
Total	**4,845**

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

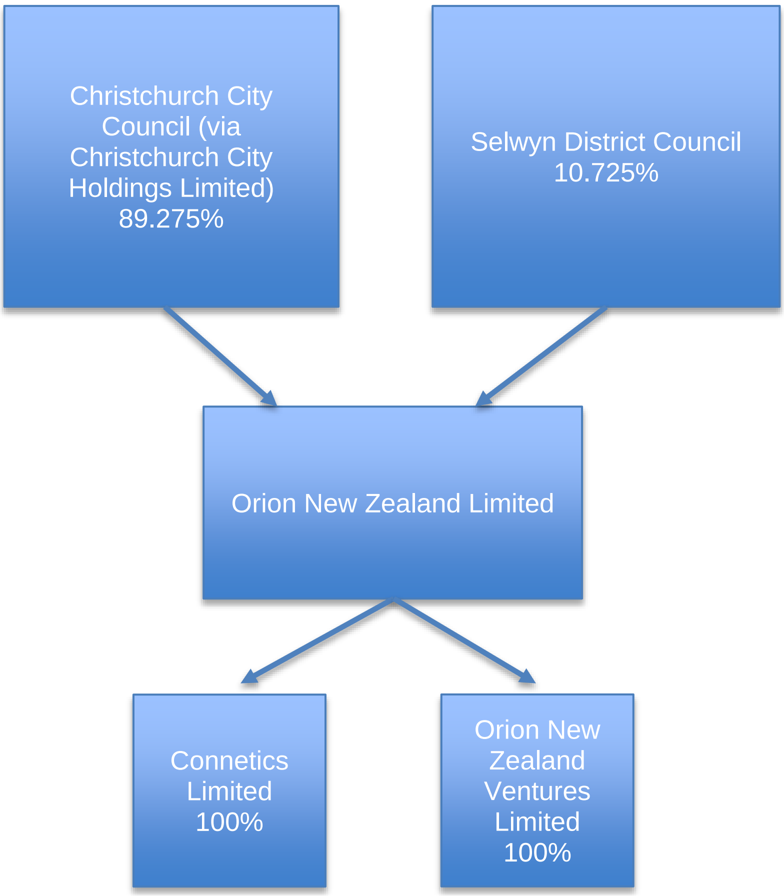
In FY22 the sum of Orion's opex and capex exceeded the Commission's $20m de minimis threshold (IDD 2.3.9(1)), and our total related party expenditure exceeded 10% of our total opex and capex, so we are required to make these related party disclosures.

In FY22 we spent a total of:

	2022	2021
	$m	$m
Opex (from IDD schedule 6b(i), row 17)	64	65
Capex (from IDD schedule 6a(i), row 20)	91	80
Total expenditure	**155**	**145**

Orion's expenditure with related parties in FY22, as disclosed in IDD schedule 5b, amounted to $44m (FY21: $40m), around 29% (FY21: 28%) of our overall capex and opex. This includes $5m 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%)
- RBL PropertyLimited (CCHL 100%)
- EcoCentral Limited (CCHL 100%)
- Development Christchurch Limited (CCHL 100%)
- Venues Otautahi 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)
- Central Plains Water Trust (established by the CCC and SDC)
- CMUA Project Delivery Limited (CCC 100%)
- Otahahi Community Housing Trust (administratered by CCC)
- CORDE 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 lockdowns period and the ongoing impact of COVID, we continued this new practice for some works while migrating back to competitive tendering where possible, and where this did not have a detrimental impact on the viability of suppliers. The work was 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 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.

At the end of the financial year we had PwC review our procurement with Connetics. As there has been no material change in the Orion, Connetics relationship, the relationship would be deemed to still be appropriate.

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 FY22 to ensure that these contracts operate on an arms-length basis. The following contracts have been reviewed by PwC:

- Project Management Office (PMO) where Connetics managed some projects for Orion. During FY22 these projects were for works engaged and contracted directly between Orion and the Service Provider.

- 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 FY22 Orion engaged PwC to perform a review of the arrangements in place for FY22, 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 FY22, 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 $0.5m (FY21: $1.2m). A consistent approach to this payment was applied to other emergency contractors. These circumstances have not changed but will be reviewed during FY23.
- 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 FY22 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 FY22 Orion engaged PwC to perform a review of the arrangements in place. PwC considered that the contract meets the arms-length standard and this arrangement was in place for FY22.

- design work, which uses a schedule of rates. Orion uses several other design consultants as well. In FY22 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 remained in place in FY22 and PwC have reassessed these and still achieve arms length outcomes.

During FY22 Orion paid Connetics $43.3m (FY21: $42.2m) for opex and capex. Refer to schedule 5b (iii) of our FY22 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 FY22.

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 retains 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 FY22 Orion paid CCC $4.6m (2021: $4.3m) for rates (including rates collected on behalf of Environment Canterbury) and a further $0.06m (2021 $0.05m) for other opex and capex.

During FY22 Orion paid SDC $0.3m (2021: $0.2m) for rates (including rates collected on behalf of Environment Canterbury) and a further $0.01m (2021: $0.2m) for other opex and capex.

Refer to schedule 5b (iii) of our FY22 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 SDC 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

- 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 FY22 Orion paid City Care $0.7m (2021: $1.0m) for opex and capex - refer to schedule 5b (iii) of our FY22 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
- support best practice Health and Safety practice with our Service Providers
- 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 source tendered to multiple approved service providers during FY22. 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 conduct closed tenders from approved service providers for virtually all works above $20,000 that are business as usual.

For major projects where we are able to engage the wider market, Orion uses competitive tenders. Examples include 66kv cable supply, civil works for 66kv cable installation, Zone Substation buildings.

For connections works (Livening Agent) we conducted 20 competitive tenders. Connetics were awarded 4.

In FY22 we called for tenders for 183 projects totalling $39m (FY21: 280 projects totalling $32m). Of these, 74 were awarded to Connetics (FY21: 82) and four were awarded to City Care (FY21: eight).

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.

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.

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.

For Network tendering, most of the works were awarded under "yours-to-lose" as per the Service Providers market share; except for example a). that was competitive tender.

a) Competitive Tender 2022/164E Norwood Zone Substation Design, FY22 was awarded to Connetics on a lowest conforming tender.
b) Sole Source 2022/028E Pole replacement Package 4, FY22 was awarded to Independent Lines after receiving a tendered price.
c) Sole Source 2022/106E Pole Replacement Package 9 FY22 was awarded to Lemacon after receiving a tendered price.
d) Sole Source 2022/027E Pole Replacement Package 2 FY22 was awarded to Connetics after receiving a tendered price.
e) Sole Source 2022/110E Supply Fuse Relocation Work Pack12 FY22 was awarded to Connetics after receiving a tendered price.
f) Sole Source 2022/160E Supply Fuse Relocation Work Pack12 FY22 was awarded to Power Jointing Ltd after receiving a tendered price.

For Property Works tendering all works were awarded from competitive tender during FY22. Of the 11 tenders only one was awarded to a related party.

a. Competitive Tender 2022/063E LV Tree Cutting Zone 2 Area J. Awarded to City Care by lowest conforming tender.

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 but is currently being replaced with a wider stock management agreement that maintains the existing structure for able supply.

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 2022 Asset Management Plan for further information.

Orion New Zealand Limited

Maps of anticipated expenditure and network constraints

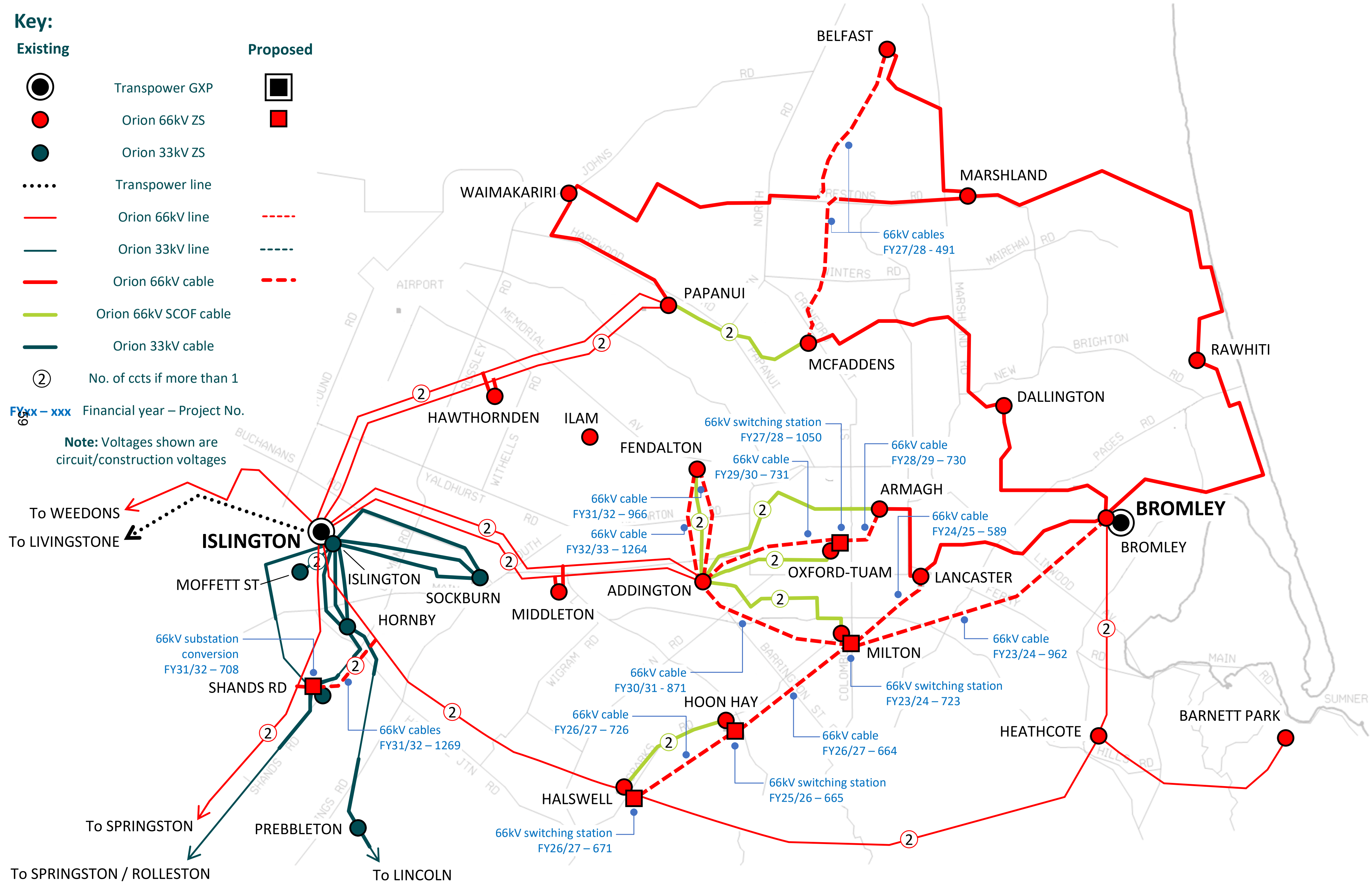
for the ten year period beginning 1 April 2022

Region A – urban network

Region B – rural network

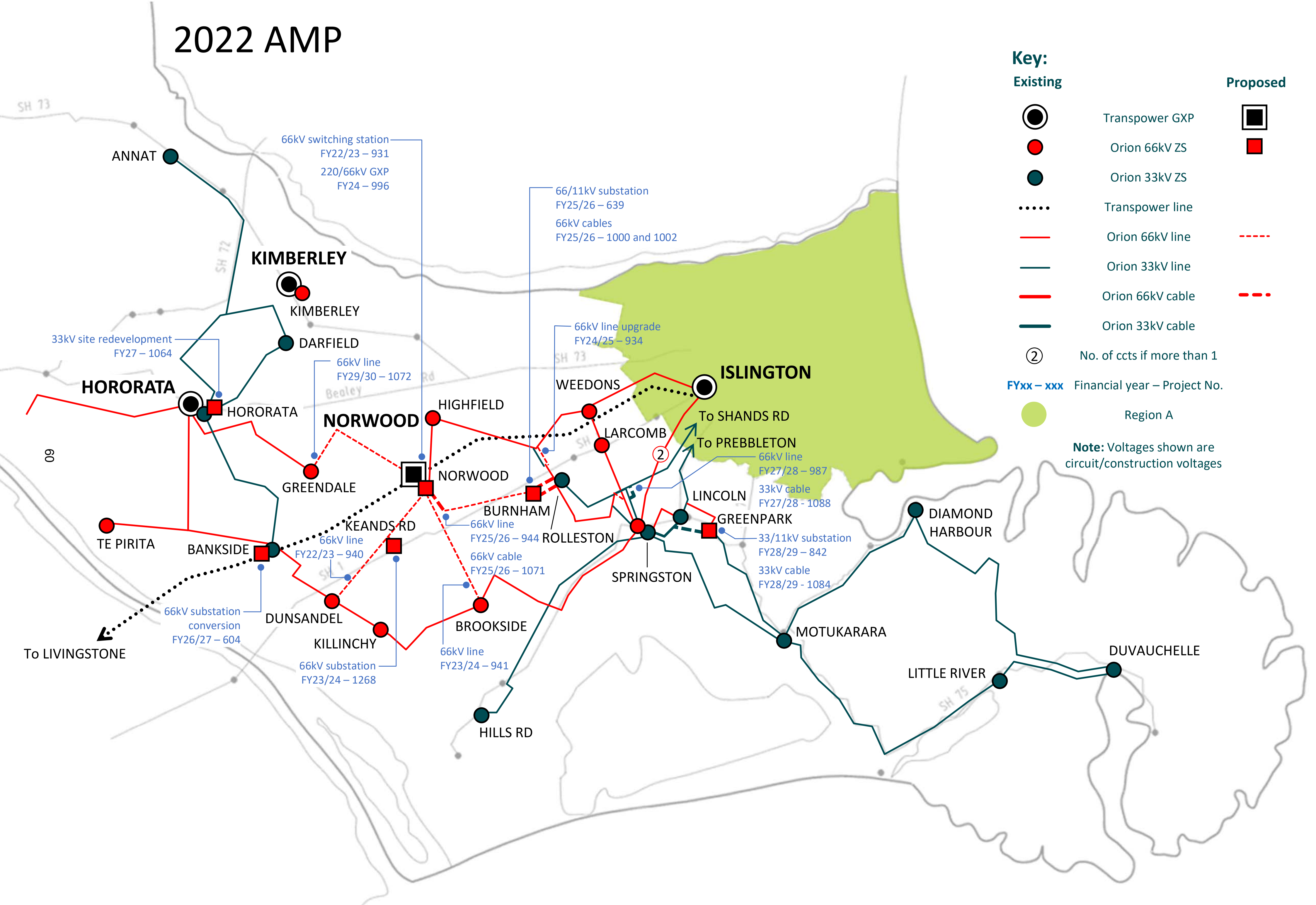
Orion New Zealand Ltd
565 Wairakei Road
PO Box 13896
Christchurch 8141
+64 3 363 9898
oriongroup.co.nz

2022 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
No. of ccts if more than 1
FYxx – xxx Financial year – Project No.
Note: Voltages shown are circuit/construction voltages
BELFAST
MARSHLAND
WAIMAKARIRI
PAPANUI
MCFADDENS
RAWHITI
DALLINGTON
HAWTHORNDEN
ILAM
FENDALTON
ARMAGH
BROMLEY
BROMLEY
OXFORD-TUAM
LANCASTER
ADDINGTON
ISLINGTON
ISLINGTON
MOFFETT ST
SOCKBURN
HORNBY
MIDDLETON
MILTON
HOON HAY
SHANDS RD
HALSWELL
HEATHCOTE
BARNETT PARK
PREBBLETON
To WEEDONS
To LIVINGSTONE
To SPRINGSTON
To SPRINGSTON / ROLLESTON
To LINCOLN
66kV cables FY27/28 - 491
66kV switching station FY27/28 – 1050
66kV cable FY28/29 – 730
66kV cable FY29/30 – 731
66kV cable FY31/32 – 966
66kV cable FY24/25 – 589
66kV cable FY32/33 – 1264
66kV cable FY23/24 – 962
66kV cable FY30/31 - 871
66kV switching station FY23/24 – 723
66kV cable FY26/27 – 726
66kV cable FY26/27 – 664
66kV switching station FY25/26 – 665
66kV switching station FY26/27 – 671
66kV substation conversion FY31/32 – 708
66kV cables FY31/32 – 1269

2022 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
HIGHFIELD
GREENDALE
TE PIRITA
BANKSIDE
KEANDS RD
DUNSANDEL
KILLINCHY
BROOKSIDE
BURNHAM
ROLLESTON
WEEDONS
LARCOMB
ISLINGTON
To SHANDS RD
To PREBBLETON
LINCOLN
GREENPARK
SPRINGSTON
DIAMOND HARBOUR
MOTUKARARA
LITTLE RIVER
DUVAUCHELLE
HILLS RD
To LIVINGSTONE
66kV switching station FY22/23 – 931
220/66kV GXP FY24 – 996
66/11kV substation FY25/26 – 639
66kV cables FY25/26 – 1000 and 1002
66kV line upgrade FY24/25 – 934
33kV site redevelopment FY27 – 1064
66kV line FY29/30 – 1072
66kV line FY27/28 – 987
33kV cable FY27/28 - 1088
33/11kV substation FY28/29 – 842
33kV cable FY28/29 - 1084
66kV line FY25/26 – 944
66kV cable FY25/26 – 1071
66kV line FY22/23 – 940
66kV substation conversion FY26/27 – 604
66kV substation FY23/24 – 1268
66kV line FY23/24 – 941
SH 73
SH 72
SH 75

Orion

Certification for year-end disclosures

We, Paul Jason Munro and Michael Earl Sang 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.

Paul Jason Munro

Director

Michael Earl Sang

Director

30 August 2022

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 2022 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 2022 (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; • checking the SAIDI and SAIFI ratios were correctly calculated in accordance with the Determination and the IM Determination; • obtaining 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 a value not greater than 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.

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.
	The procedures we have carried out to satisfy ourselves that related-party transactions are appropriately valued at arm's-length included:
	
	• 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 a value not greater than arm's length, by ensuring they were derived from previously confirmed arm's length transactions or to other appropriate reliable evidence;
	
	• 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 a value not greater than arm's-length value for related-party transactions for:
	
	  ○ a significant lease;
	  ○ the major emergency works contract;
	  ○ the cable management contract;
	  ○ network storage and supply; and
	  ○ design work;
	
	• a 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,

Key assurance matter	How our procedures addressed the key assurance matter
	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 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 and Audit New Zealand and its 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
30 August 2022