Orion New Zealand Limited

Information for disclosure

for the year ended 31 March 2023

Electricity distribution
information disclosure
determination 2012

Approved 30 August 2023

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Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2023**

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 this ID determination. This will include information disclosed in accordance with this and other schedules, and information disclosed under the other requirements of this determination.

This information is part of audited disclosure information (as defined in section 1.4 of this 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	21,231	329	109,499	6,022	31,012
Network	8,395	130	43,296	2,381	12,262
Non-network	12,836	199	66,203	3,641	18,750
Expenditure on assets	35,709	553	184,167	10,129	52,159
Network	34,517	534	178,019	9,790	50,418
Non-network	1,192	18	6,148	338	1,741

1(ii): Revenue metrics

	Revenue per GWh energy delivered to ICPs ($/GWh)	Revenue per average no. of ICPs ($/ICP)
Total consumer line charge revenue	68,140	1,055
Standard consumer line charge revenue	70,145	1,038
Non-standard consumer line charge revenue	24,036	235,293

1(iii): Service intensity measures

Demand density	55	*Maximum coincident system demand per km of circuit length (for supply) (kW/km)*
Volume density	284	*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	15,477	*Total energy delivered to ICPs per average number of ICPs (kWh/ICP)*

1(iv): Composition of regulatory income

	($000)	% of revenue
Operational expenditure	71,706	30.54%
Pass-through and recoverable costs excluding financial incentives and wash-ups	69,704	29.68%
Total depreciation	50,427	21.47%
Total revaluations	86,682	36.91%
Regulatory tax allowance	12,478	5.31%
Regulatory profit/(loss) including financial incentives and wash-ups	116,332	49.54%
Total regulatory income	234,825	

1(v): Reliability

Interruption rate	13.48	*Interruptions per 100 circuit km*

Company Name	**Orion New Zealand Limited**
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SCHEDULE 2: REPORT ON RETURN ON INVESTMENT

This schedule requires information on the Return on Investment (ROI) for the EDB relative to the Commerce Commission's estimates of post tax WACC and vanilla WACC. EDBs must calculate their ROI based on a monthly basis if required by clause 2.3.3 of this 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).

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sch ref

2(i): Return on Investment

	CY-2	CY-1	Current Year CY
ROI – comparable to a post tax WACC	%	%	%
Reflecting all revenue earned	4.74%	10.02%	8.61%
Excluding revenue earned from financial incentives	4.53%	10.00%	8.53%
Excluding revenue earned from financial incentives and wash-ups	4.53%	9.95%	8.49%
Mid-point estimate of post tax WACC	3.72%	3.52%	4.88%
25th percentile estimate	3.04%	2.84%	4.20%
75th percentile estimate	4.40%	4.20%	5.56%
ROI – comparable to a vanilla WACC			
Reflecting all revenue earned	5.07%	10.32%	9.13%
Excluding revenue earned from financial incentives	4.86%	10.30%	9.05%
Excluding revenue earned from financial incentives and wash-ups	4.86%	10.25%	9.01%
WACC rate used to set regulatory price path	4.23%	4.23%	4.23%
Mid-point estimate of vanilla WACC	4.05%	3.82%	5.39%
25th percentile estimate	3.37%	3.14%	4.71%
75th percentile estimate	4.73%	4.50%	6.07%

2(ii): Information Supporting the ROI

			($000)	
	Total opening RAB value	1,307,972		
plus	Opening deferred tax	(63,257)		
Opening RIV			1,244,715	
Line charge revenue			230,137	
	Expenses cash outflow	141,410		
add	Assets commissioned	106,220		
less	Asset disposals	368		
add	Tax payments	5,390		
less	Other regulated income	4,688		
Mid-year net cash outflows			247,965	
Term credit spread differential allowance			861	
	Total closing RAB value	1,450,079		
less	Adjustment resulting from asset allocation	(0)		
less	Lost and found assets adjustment	–		
plus	Closing deferred tax	(70,345)		
Closing RIV			1,379,734	
ROI – comparable to a vanilla WACC				9.13%
	Leverage (%)			42%
	Cost of debt assumption (%)			4.38%
	Corporate tax rate (%)			28%
ROI – comparable to a post tax WACC				8.61%

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SCHEDULE 2: REPORT ON RETURN ON INVESTMENT

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sch ref

2(iii): Information Supporting the Monthly ROI

Opening RIV	N/A

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

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

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

Year-end ROI – comparable to a vanilla WACC	8.80%
Year-end ROI – comparable to a post tax WACC	8.29%

** 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	997	
Other financial incentives		
Financial incentives		1,307
Impact of financial incentives on ROI		0.08%
Input methodology claw-back		
CPP application recoverable costs		
Catastrophic event allowance		
Capex wash-up adjustment	755	
Transmission asset wash-up adjustment		
2013–15 NPV wash-up allowance		
Reconsideration event allowance		
Other wash-ups		
Wash-up costs		755
Impact of wash-up costs on ROI		0.04%

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For Year Ended	**31 March 2023**

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 this 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	230,137
10	*plus*	Gains / (losses) on asset disposals	(133)
11	*plus*	Other regulated income (other than gains / (losses) on asset disposals)	4,821
12			
13		**Total regulatory income**	234,825
14		**Expenses**	
15	*less*	Operational expenditure	71,706
16			
17	*less*	Pass-through and recoverable costs excluding financial incentives and wash-ups	69,704
18			
19		**Operating surplus / (deficit)**	93,415
20			
21	*less*	Total depreciation	50,427
22			
23	*plus*	Total revaluations	86,682
24			
25		**Regulatory profit / (loss) before tax**	129,670
26			
27	*less*	Term credit spread differential allowance	861
28			
29	*less*	Regulatory tax allowance	12,478
30			
31		**Regulatory profit/(loss) including financial incentives and wash-ups**	116,332
32			

sch ref			
33	**3(ii): Pass-through and Recoverable Costs excluding Financial Incentives and Wash-Ups**	**($000)**	
34	**Pass through costs**		
35	Rates	4872	
36	Commerce Act levies	595	
37	Industry levies	681	
38	CPP specified pass through costs		
39	**Recoverable costs excluding financial incentives and wash-ups**		
40	Electricity lines service charge payable to Transpower	62,696	
41	Transpower new investment contract charges	730	
42	System operator services		
43	Distributed generation allowance		
44	Extended reserves allowance		
45	Other recoverable costs excluding financial incentives and wash-ups	131	
46	**Pass-through and recoverable costs excluding financial incentives and wash-ups**		69,704
47			

Company Name	**Orion New Zealand Limited**
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SCHEDULE 3: REPORT ON REGULATORY PROFIT

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

48	**3(iii): Incremental Rolling Incentive Scheme**		**($000)**	
49			**CY-1**	**CY**
50				**31 Mar 23**
51	Allowed controllable opex		66,488	68,932
52	Actual controllable opex		64,307	71,706
53				
54	Incremental change in year			(4,955)
55				
56			**Previous years' incremental change**	**Previous years' incremental change adjusted for inflation**
57	CY-5	[year]	1,600	
58	CY-4	[year]	(4,614)	
59	CY-3	[year]	N/A	
60	CY-2	[year]	(1,006)	
61	CY-1	[year]	3,187	
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	

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

This schedule requires information on the calculation of the Regulatory Asset Base (RAB) value to the end of this disclosure year. This informs the ROI calculation in Schedule 2.
EDBs must provide explanatory comment on the value of their RAB in Schedule 14 (Mandatory Explanatory Notes). This information is part of audited disclosure information (as defined in section 1.4 of this 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 CY-4 ($000)	RAB CY-3 ($000)	RAB CY-2 ($000)	RAB CY-1 ($000)	RAB CY ($000)
	Total opening RAB value	1,051,194	1,088,531	1,150,406	1,177,019	1,307,972
less	**Total depreciation**	40,616	43,007	43,559	45,534	50,427
plus	**Total revaluations**	15,577	27,543	17,435	81,111	86,682
plus	**Assets commissioned**	63,637	78,414	53,187	97,104	106,220
less	**Asset disposals**	1,378	1074	449	1,728	368
plus	**Lost and found assets adjustment**	0	0	0	–	–
plus	**Adjustment resulting from asset allocation**	117	0	0	–	(0)
	Total closing RAB value	1,088,531	1,150,406	1,177,019	1,307,972	1,450,079

4(ii): Unallocated Regulatory Asset Base

		Unallocated RAB * ($000)	Unallocated RAB * ($000)	RAB ($000)	RAB ($000)
	Total opening RAB value		1,309,229		1,307,972
less					
	Total depreciation		50,446		50,427
plus					
	Total revaluations		86,766		86,682
plus					
	Assets commissioned (other than below)	60,871		60,871	
	Assets acquired from a regulated supplier				
	Assets acquired from a related party	45,349		45,349	
	Assets commissioned		106,220		106,220
less					
	Asset disposals (other than below)	368		368	
	Asset disposals to a regulated supplier				
	Asset disposals to a related party	0		0	
	Asset disposals		368		368
plus	**Lost and found assets adjustment**				
plus	**Adjustment resulting from asset allocation**				(0)
	Total closing RAB value		1,451,401		1,450,079

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

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

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sch ref						
51						
52	**4(iii): Calculation of Revaluation Rate and Revaluation of Assets**					
53						
54	CPI_4					1,218
55	CPI_4^{-4}					1,142
56	Revaluation rate (%)					6.65%
57						
58		**Unallocated RAB ***		**RAB**		
59		**($000)**	**($000)**	**($000)**	**($000)**	
60	Total opening RAB value	1,309,229		1,307,972		
61	*less* Opening value of fully depreciated, disposed and lost assets	5,460		5,460		
62						
63	Total opening RAB value subject to revaluation	1,303,769		1,302,512		
64	**Total revaluations**		86,766		86,682	
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**		51,607		51,607	
69	*plus* Capital expenditure	117,289		117,289		
70	*less* Assets commissioned	106,220		106,220		
71	*plus* Adjustment resulting from asset allocation					
72	**Works under construction - current disclosure year**		62,676		62,676	
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	44,711		44,711		
80	Depreciation - no standard life assets	5,735		5,716		
81	Depreciation - modified life assets					
82	Depreciation - alternative depreciation in accordance with CPP					
83	**Total depreciation**		50,446		50,427	
84						

Company Name: **Orion New Zealand Limited**
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SCHEDULE 4: REPORT ON VALUE OF THE REGULATORY ASSET BASE (ROLLED FORWARD)

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

sch ref

85 **4(vi): Disclosure of Changes to Depreciation Profiles** **($000 unless otherwise specified)**

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

95 ** include additional rows if needed*

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

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
99		**Total opening RAB value**	74,183	91,029	162,256	139,609	426,543	149,153	167,641	38,815	58,743	1,307,972
100	*less*	Total depreciation	2,691	2,754	8,060	5,639	14,295	4,285	6,593	1,722	4,388	50,427
101	*plus*	Total revaluations	4,936	6,057	10,779	9,281	28,381	9,916	11,142	2,582	3,608	86,682
102	*plus*	Assets commissioned	4,579	9,797	13,950	12,376	27,865	11,835	19,611	2,819	3,388	106,220
103	*less*	Asset disposals	–	–	8	20	–	95	143	–	102	368
104	*plus*	Lost and found assets adjustment	–	–	–	–	–	–	–	–	–	–
105	*plus*	Adjustment resulting from asset allocation	–	–	–	–	–	–	–	–	–	–
106	*plus*	Asset category transfers	–	–	–	–	–	–	–	–	–	–
107		**Total closing RAB value**	81,007	104,129	178,917	155,607	468,494	166,524	191,658	42,494	61,249	1,450,079
108												
109		**Asset Life**										
110		Weighted average remaining asset life	34.9	39.8	31.7	32.2	38.3	34.3	32	25.3	26.01	(years)
111		Weighted average expected total asset life	45.6	57.7	43.8	47.1	57.8	45.1	41.5	31.6	32.1	(years)

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SCHEDULE 5a: REPORT ON REGULATORY TAX ALLOWANCE

This schedule requires information on the calculation of the regulatory tax allowance. This information is used to calculate regulatory profit/loss in Schedule 3 (regulatory profit). EDBs must provide explanatory commentary on the information disclosed in this schedule, in Schedule 14 (Mandatory Explanatory Notes).

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sch ref

5a(i): Regulatory Tax Allowance

			($000)	
	Regulatory profit / (loss) before tax		129,670	
plus	Income not included in regulatory profit / (loss) before tax but taxable			*
	Expenditure or loss in regulatory profit / (loss) before tax but not deductible	2,255		*
	Amortisation of initial differences in asset values	15,209		
	Amortisation of revaluations	8,721		
			26,185	
less	Total revaluations	86,682		
	Income included in regulatory profit / (loss) before tax but not taxable	1,310		*
	Discretionary discounts and customer rebates			
	Expenditure or loss deductible but not in regulatory profit / (loss) before tax	45		*
	Notional deductible interest	23,255		
			111,292	
	Regulatory taxable income		44,564	
less	Utilised tax losses			
	Regulatory net taxable income		44,564	
	Corporate tax rate (%)	28%		
	Regulatory tax allowance		12,478	

* Workings to be provided in Schedule 14

5a(ii): Disclosure of Permanent Differences

In Schedule 14, Box 5, provide descriptions and workings of items recorded in the asterisked categories in Schedule 5a(i).

5a(iii): Amortisation of Initial Difference in Asset Values

			($000)
	Opening unamortised initial differences in asset values	311,486	
less	Amortisation of initial differences in asset values	15,209	
plus	Adjustment for unamortised initial differences in assets acquired		
less	Adjustment for unamortised initial differences in assets disposed	195	
	Closing unamortised initial differences in asset values		296,082
	Opening weighted average remaining useful life of relevant assets (years)		20

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SCHEDULE 5a: REPORT ON REGULATORY TAX ALLOWANCE

This schedule requires information on the calculation of the regulatory tax allowance. This information is used to calculate regulatory profit/loss in Schedule 3 (regulatory profit). EDBs must provide explanatory commentary on the information disclosed in this schedule, in Schedule 14 (Mandatory Explanatory Notes).
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sch ref				
44	**5a(iv): Amortisation of Revaluations**			**($000)**
46		Opening sum of RAB values without revaluations	1,098,795	
48		Adjusted depreciation	41,706	
49		Total depreciation	50,427	
50		Amortisation of revaluations		8,721
52	**5a(v): Reconciliation of Tax Losses**			**($000)**
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)**
60		**Opening deferred tax**	(63,257)	
62	*plus*	Tax effect of adjusted depreciation	11,678	
64	*less*	Tax effect of tax depreciation	12,599	
66	*plus*	Tax effect of other temporary differences*	(1,920)	
68	*less*	Tax effect of amortisation of initial differences in asset values	4,259	
70	*plus*	Deferred tax balance relating to assets acquired in the disclosure year	–	
72	*less*	Deferred tax balance relating to assets disposed in the disclosure year	(12)	
74	*plus*	Deferred tax cost allocation adjustment	0	
76		**Closing deferred tax**		(70,345)
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).*		
81	**5a(viii): Regulatory Tax Asset Base Roll-Forward**			
82				**($000)**
83		**Opening sum of regulatory tax asset values**	512,811	
84	*less*	Tax depreciation	44,997	
85	*plus*	Regulatory tax asset value of assets commissioned	98,359	
86	*less*	Regulatory tax asset value of asset disposals	302	
87	*plus*	Lost and found assets adjustment		
88	*plus*	Adjustment resulting from asset allocation		
89	*plus*	Other adjustments to the RAB tax value	2,835	
90		**Closing sum of regulatory tax asset values**		568,706

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SCHEDULE 5b: REPORT ON RELATED PARTY TRANSACTIONS

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

sch ref

sch ref	5b(i): Summary—Related Party Transactions	($000)	($000)
8	**Total regulatory income**		2,810
9			
10	**Market value of asset disposals**		–
11			
12	Service interruptions and emergencies	13,380	
13	Vegetation management	577	
14	Routine and corrective maintenance and inspection	9,299	
15	Asset replacement and renewal (opex)	672	
16	**Network opex**		23,927
17	Business support	77	
18	System operations and network support	46	
19	**Operational expenditure**		24,050
20	Consumer connection	9,604	
21	System growth	2,233	
22	Asset replacement and renewal (capex)	16,509	
23	Asset relocations	1,057	
24	Quality of supply	9,490	
25	Legislative and regulatory	–	
26	Other reliability, safety and environment	6,456	
27	**Expenditure on non-network assets**		–
28	**Expenditure on assets**		45,349
29	Cost of financing		
30	Value of capital contributions		777
31	Value of vested assets		
32	**Capital Expenditure**		44,572
33	**Total expenditure**		68,622
34			
35	**Other related party transactions**		5,140

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	City Care	Vegetation management	577
39	Selwyn District Council	System growth	2
40	Selwyn District Council	Quality of supply	7
41	Selwyn District Council	Asset replacement and renewal (capex)	10
42	Christchurch City Council	System growth	4
43	Christchurch City Council	Routine and corrective maintenance and inspection	21
44	Christchurch City Council	Quality of supply	3
45	Christchurch City Council	Asset replacement and renewal (capex)	11
46	Christchurch City Council	Business support	6
47	Christchurch City Holdings Limited	Business support	15
48	Connetics	Asset relocations	1,057
49	Connetics	System growth	2,227
50	Connetics	Service interruptions and emergencies	13,380
	Connetics	Routine and corrective maintenance and inspection	9,278
	Connetics	Other reliability, safety and environment	6,456
	Connetics	Quality of supply	9,480
	Connetics	Asset replacement and renewal (opex)	672
	Connetics	Asset replacement and renewal (capex)	16,488
	Connetics	System operations and network support	46
51	Connetics	Business support	56
52	Connetics	Consumer connection	9,604
53	**Total value of related party transactions**		69,399

54 ** include additional rows if needed*

Company Name	Orion New Zealand Limited
For Year Ended	31 March 2023

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 this ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

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

sch ref	Issuing party	Issue date	Pricing date	Original tenor (in years)	Coupon rate (%)	Book value at issue date (NZD)	Book value at date of financial statements (NZD)	Term Credit Spread Difference	Debt issue cost readjustment
11	US Private Placement (USPP) 2018 Series A - NZD $45m	12/09/2018	27/07/2018	10	BKBM + margin	45,000,000	45,000,000	168,750	-45,000
12	US Private Placement (USPP) 2018 Series B - NZD $95m	12/09/2018	27/07/2018	12	BKBM + margin	95,000,000	95,000,000	498,750	-110,833
13	Christchurch City Holdings Limited - NZD $50m	20/10/2022	30/06/2032	10	BKBM + margin	50,000,000	50,000,000	187,500	-50,000
14	Christchurch City Holdings Limited - NZD $50m	20/03/2023	30/06/2031	8	BKBM + margin	50,000,000	50,000,000	112,500	-37,500
15									
16	** include additional rows if needed*						240,000,000	967,500	(243,333)

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

sch ref			
20	**Gross term credit spread differential**		724,167
22	Total book value of interest bearing debt	487,200,000	
23	Leverage	42%	
24	Average opening and closing RAB values	1,379,026	
25	**Attribution Rate (%)**		0%
27	**Term credit spread differential allowance**		861

Company Name	Orion New Zealand Limited
For Year Ended	31 March 2023

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 this ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

7 **5d(i): Operating Cost Allocations**

sch ref		Arm's length deduction	Value allocated ($000s) Electricity distribution services	Non-electricity distribution services	Total	OVABAA allocation increase ($000s)
10	**Service interruptions and emergencies**					
11	Directly attributable		10,680			
12	Not directly attributable				–	
13	**Total attributable to regulated service**		10,680			
14	**Vegetation management**					
15	Directly attributable		4,507			
16	Not directly attributable				–	
17	**Total attributable to regulated service**		4,507			
18	**Routine and corrective maintenance and inspection**					
19	Directly attributable		12,281			
20	Not directly attributable				–	
21	**Total attributable to regulated service**		12,281			
22	**Asset replacement and renewal**					
23	Directly attributable		884			
24	Not directly attributable				–	
25	**Total attributable to regulated service**		884			
26	**System operations and network support**					
27	Directly attributable		24,054			
28	Not directly attributable				–	
29	**Total attributable to regulated service**		24,054			
30	**Business support**					
31	Directly attributable		19,299			
32	Not directly attributable		274	1,377	1,651	
33	**Total attributable to regulated service**		19,573			
34						
35	**Operating costs directly attributable**		71,706			
36	**Operating costs not directly attributable**	–	274	1,377	1,651	–
37	**Operational expenditure**		71,980			
38						

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2023**

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 this ID determination), and so is subject to the assurance report required by section 2.8.

sch ref		($000)
39	**5d(ii): Other Cost Allocations**	
40	**Pass through and recoverable costs**	($000)
41	**Pass through costs**	
42	Directly attributable	6,147
43	Not directly attributable	
44	**Total attributable to regulated service**	6,147
45	**Recoverable costs**	
46	Directly attributable	63,557
47	Not directly attributable	
48	**Total attributable to regulated service**	63,557
49		

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

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

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2023**

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 this ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

5e(i): Regulated Service Asset Values

	Value allocated ($000s) Electricity distribution services
Subtransmission lines	
Directly attributable	81,007
Not directly attributable	
Total attributable to regulated service	81,007
Subtransmission cables	
Directly attributable	104,129
Not directly attributable	
Total attributable to regulated service	104,129
Zone substations	
Directly attributable	178,917
Not directly attributable	
Total attributable to regulated service	178,917
Distribution and LV lines	
Directly attributable	155,607
Not directly attributable	
Total attributable to regulated service	155,607
Distribution and LV cables	
Directly attributable	468,494
Not directly attributable	
Total attributable to regulated service	468,494
Distribution substations and transformers	
Directly attributable	166,524
Not directly attributable	
Total attributable to regulated service	166,524
Distribution switchgear	
Directly attributable	191,658
Not directly attributable	
Total attributable to regulated service	191,658
Other network assets	
Directly attributable	42,494
Not directly attributable	
Total attributable to regulated service	42,494
Non-network assets	
Directly attributable	50,986
Not directly attributable	10,263
Total attributable to regulated service	61,249
Regulated service asset value directly attributable	1,439,816
Regulated service asset value not directly attributable	10,263
Total closing RAB value	1,450,079

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

Change in asset value allocation 1

			($000) CY-1	($000) Current Year (CY)
Asset category		Original allocation		
Original allocator or line items		New allocation		
New allocator or line items		Difference	–	–

Rationale for change

Change in asset value allocation 2

			($000) CY-1	($000) Current Year (CY)
Asset category		Original allocation		
Original allocator or line items		New allocation		
New allocator or line items		Difference	–	–

Rationale for change

Change in asset value allocation 3

			($000) CY-1	($000) Current Year (CY)
Asset category		Original allocation		
Original allocator or line items		New allocation		
New allocator or line items		Difference	–	–

Rationale for change

** 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*

† include additional rows if needed

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2023**

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 this ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

sch ref			($000)	($000)
7		**6a(i): Expenditure on Assets**	($000)	($000)
8		Consumer connection		45,521
9		System growth		5,636
10		Asset replacement and renewal		33,441
11		Asset relocations		957
12		Reliability, safety and environment:		
13		Quality of supply	22,780	
14		Legislative and regulatory	–	
15		Other reliability, safety and environment	8,243	
16		**Total reliability, safety and environment**		31,023
17		**Expenditure on network assets**		116,577
18		Expenditure on non-network assets		4,026
19				
20		**Expenditure on assets**		120,603
21	*plus*	Cost of financing		–
22	*less*	Value of capital contributions		3,314
23	*plus*	Value of vested assets		–
24				
25		**Capital expenditure**		117,289

sch ref		($000)
26	**6a(ii): Subcomponents of Expenditure on Assets (where known)**	($000)
27	Energy efficiency and demand side management, reduction of energy losses	
28	Overhead to underground conversion	
29	Research and development	
	Cybersecurity (Commission only)	

sch ref			($000)	($000)
30		**6a(iii): Consumer Connection**		
31		*Consumer types defined by EDB**	($000)	($000)
32		Large customers	2,792	
33		General connections	19,657	
34		Subdivisions	6,859	
35		Transformers	5,400	
36		Switchgear	10,813	
37		** include additional rows if needed*		
38		**Consumer connection expenditure**		45,521
39				
40	*less*	Capital contributions funding consumer connection expenditure	2,604	
41		**Consumer connection less capital contributions**		42,917

sch ref			System Growth ($000)	Asset Replacement and Renewal ($000)
42		**6a(iv): System Growth and Asset Replacement and Renewal**		
45		Subtransmission	222	1,304
46		Zone substations		8,183
47		Distribution and LV lines		11,473
48		Distribution and LV cables	2,726	591
49		Distribution substations and transformers		2,218
50		Distribution switchgear		5,556
51		Other network assets	2,687	4,116
52		**System growth and asset replacement and renewal expenditure**	5,636	33,441
53	*less*	Capital contributions funding system growth and asset replacement and renewal	–	–
54		**System growth and asset replacement and renewal less capital contributions**	5,636	33,441
55				

sch ref			($000)	($000)
56		**6a(v): Asset Relocations**		
57		*Project or programme**	($000)	($000)
58		NZTA and others	467	
59		CERA/Otakaro (Rebuild)	31	
60		Selwyn District Council	33	
61		Christchurch City Council	426	
62		Others	0	
63		** include additional rows if needed*		
64		All other projects or programmes - asset relocations		
65		**Asset relocations expenditure**		957
66	*less*	Capital contributions funding asset relocations	709	
67		**Asset relocations less capital contributions**		247

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2023**

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 this ID determination), and so is subject to the assurance report required by section 2.8.

sch ref			($000)	($000)
68				
69	**6a(vi): Quality of Supply**			
70		*Project or programme**	**($000)**	**($000)**
71		Comms associated with Entec line switches	67	
72		Norwood ZS 66kV	3,144	
73		Dunsandel ZS 66kV line bay	341	
		Milton ZS 66kV switchgear & building	847	
		Bromley ZS to Milton ZS 66kV cable	16,443	
		LV network monitoring	969	
74		Non-scheduled HV Minor Projects	689	
75		Other	279	
76		** include additional rows if needed*		
77		All other projects programmes - quality of supply		
78	**Quality of supply expenditure**			22,780
79	*less*	Capital contributions funding quality of supply		
80	**Quality of supply less capital contributions**			22,780
81	**6a(vii): Legislative and Regulatory**			
82		*Project or programme**	**($000)**	**($000)**
83		No projects with this as the primary driver		
84				
85				
86				
87				
88		** include additional rows if needed*		
89		All other projects or programmes - legislative and regulatory		
90	**Legislative and regulatory expenditure**			–
91	*less*	Capital contributions funding legislative and regulatory		
92	**Legislative and regulatory less capital contributions**			–
93	**6a(viii): Other Reliability, Safety and Environment**			
94		*Project or programme**	**($000)**	**($000)**
95		400V UG Supply Fuse Relocation Program	8,011	
96		LV ties replacement with Krone	226	
97		Other	6	
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**			8,243
103	*less*	Capital contributions funding other reliability, safety and environment		
104	**Other reliability, safety and environment less capital contributions**			8,243
105				
106	**6a(ix): Non-Network Assets**			
107	**Routine expenditure**			
108		*Project or programme**	**($000)**	**($000)**
109		Vehicles and mobile plant	883	
110		Information solutions	2,527	
111		Sundry tools and equipment	353	
112		Sundry land and buildings	263	
113				
114		** include additional rows if needed*		
115		All other projects or programmes - routine expenditure		
116	**Routine expenditure**			4,026
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**			4,026

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2023**

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 this 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	10,680	
9	Vegetation management	4,507	
10	Routine and corrective maintenance and inspection	12,281	
11	Asset replacement and renewal	884	
12	**Network opex**		28,352
13	System operations and network support	24,054	
14	Business support	19,299	
15	**Non-network opex**		43,354
16			
17	**Operational expenditure**		71,706
18	**6b(ii): Subcomponents of Operational Expenditure (where known)**		
19	*EDBs' must disclose both a public version of this Schedule (excluding cybersecurity cost data) and a confidential version of this Schedule (including cybersecurity costs)*		
20	Energy efficiency and demand side management, reduction of energy losses		
21	Direct billing*		
22	Research and development		
23	Insurance		2,841
24	Cybersecurity (Commission only)		
25	** Direct billing expenditure by suppliers that directly bill the majority of their consumers*		

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2023**

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 this ID determination), and so is subject to the assurance report required by section 2.8. For the purpose of this audit, target revenue and forecast expenditures only need to be verified back to previous disclosures.

sch ref		Target ($000) [1]	Actual ($000)	% variance
7	**7(i): Revenue**			
8	Line charge revenue	232,935	230,137	(1%)
9	**7(ii): Expenditure on Assets**	**Forecast ($000) [2]**	**Actual ($000)**	**% variance**
10	Consumer connection	22,207	45,521	105%
11	System growth	14,358	5,636	(61%)
12	Asset replacement and renewal	32,234	33,441	4%
13	Asset relocations	7,560	957	(87%)
14	Reliability, safety and environment:			
15	Quality of supply	14,439	22,780	58%
16	Legislative and regulatory	–	–	–
17	Other reliability, safety and environment	15,264	8,243	(46%)
18	**Total reliability, safety and environment**	29,703	31,023	4%
19	**Expenditure on network assets**	106,062	116,577	10%
20	Expenditure on non-network assets	11,574	4,026	(65%)
21	Expenditure on assets	117,636	120,603	3%
22	**7(iii): Operational Expenditure**			
23	Service interruptions and emergencies	7,493	10,680	43%
24	Vegetation management	5,024	4,507	(10%)
25	Routine and corrective maintenance and inspection	15,457	12,281	(21%)
26	Asset replacement and renewal	2,401	884	(63%)
27	**Network opex**	30,375	28,352	(7%)
28	System operations and network support	18,246	24,054	32%
29	Business support	20,254	19,299	(5%)
30	**Non-network opex**	38,500	43,354	13%
31	**Operational expenditure**	68,875	71,706	4%
32	**7(iv): Subcomponents of Expenditure on Assets (where known)**			
33	Energy efficiency and demand side management, reduction of energy losses		–	–
34	Overhead to underground conversion	7,560	–	(100%)
35	Research and development	1,232	–	(100%)
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	2,879	2,841	(1%)
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.

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	480	
GEN	Residential and commercial	Standard	216,147	2,397,809
IRR	Commercial irrigation	Standard	1,048	
MCC	Large commercial and industrial	Standard	537	832,765
LCC	Large capacity	Non-standard	15	146,839
		[Select one]		
		[Select one]		
		[Select one]		
		[Select one]		
		[Select one]		
		Standard consumer totals	218,212	3,230,574
		Non-standard consumer totals	15	146,839
		Total for all consumers	218,227	3,377,413

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

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	52,216										
GEN		214,249	500,673	1,173,991,576	1,327,005,656	–					
IRR							76,384	22,927	48,779		
MCC										411	109
LCC											
Standard consumer totals	52,216	214,249	500,673	1,173,991,576	1,327,005,656	–	76,384	22,927	48,779	411	109
Non-standard consumer totals	–	–	–	–	–	–	–	–	–	–	–
Total for all consumers	52,216	214,249	500,673	1,173,991,576	1,327,005,656	–	76,384	22,927	48,779	411	109

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	$1,864		$1,910	($46)
GEN	Residential and commercial	Standard	$184,632		$137,154	$47,478
IRR	Commercial irrigation	Standard	$4,972		$3,447	$1,525
MCC	Large commercial and industrial	Standard	$35,140		$21,981	$13,158
LCC	Large capacity	Non-standard	$3,529		$2,098	$1,432
		[Select one]	–			
		[Select one]	–			
		[Select one]	–			
		[Select one]	–			
		[Select one]	–			
		Standard consumer totals	$226,608	–	$164,492	$62,116
		Non-standard consumer totals	$3,529	–	$2,098	$1,432
		Total for all consumers	$230,137	–	$166,590	$63,548

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

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	$1,864										
GEN		$23,460	$66,885	$69,806	$24,470	–					
IRR							$5,989	($663)	($353)		
MCC										$1,501	$200
LCC											
Standard consumer totals	$1,864	$23,460	$66,885	$69,806	$24,470	–	$5,989	($663)	($353)	$1,501	$200
Non-standard consumer totals	–	–	–	–	–	–	–	–	–	–	–
Total for all consumers	$1,864	$23,460	$66,885	$69,806	$24,470	–	$5,989	($663)	($353)	$1,501	$200

Check: OK

8(iii): Number of ICPs directly billed

Number of directly billed ICPs at year end: 33

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2023**
Network / Sub-Network Name	**Entire network**

Major customer Fixed charge (MCFXD)	Major customer Additional fixed charge (MCFXDA)	Major customer Extra switches (EQESW)	Major customer 11kV Metering equipment (EQMET)	Major customer 11kV Underground cabling (EQUGC)	Major customer 11kV Overhead lines (EQOHL)	Major customer Transformer capacity (EQTFC)	Major customer Peak charge (MCCPD)	Major customer Nominated maximum demand (MCNMD)	Major customer Metered maximum demand (MCMMD)	Large capacity Operations, maintenance & administration (dedicated assets)	Large capacity Operations, maintenance & administration (shared assets)	Large capacity Asset charge (dedicated assets)	Large capacity Asset charge (shared assets)	Large capacity Interconnection charge (winter)	Large capacity Interconnection charge (summer)	Connection charge	Customer investment contract charge	30 - 750 kW generators Control period export (EXPCP1)	30 - 750 kW generators Control period export (EXPCP2)	Monthly invoice charge (INVFXD)	Failure to pay notice (INVFTP)	Default and termination notice (INVDAT)	*Add extra columns for additional billed quantities by price component as necessary*
Connection	Connection	Switches	Connection	km	km	kVA	kVA	kVA	kVA	kVA	kVA	kVA	kVA	kVA	kVA	kVA	kVA	kW	kVAr	Invoice	Notice	Notice	
																		–	–	384	3		
																		4	–				
411	109	111	47	7	3	357,222	113,915	283,218	239,405									287	71	120			
										35,000	32,550	35,000	32,550	5,596	21,987	21,987	–						
411	109	111	47	7	3	357,222	113,915	283,218	239,405	–	–	–	–	–	–	–	–	291	71	504	3	–	
–	–	–	–	–	–	–	–	–	–	35,000	32,550	35,000	32,550	5,596	21,987	21,987	–	–	–	–	–	–	
411	109	111	47	7	3	357,222	113,915	283,218	239,405	35,000	32,550	35,000	32,550	5,596	21,987	21,987	–	291	71	504	3	–	

Major customer Fixed charge (MCFXD)	Major customer Additional fixed charge (MCFXDA)	Major customer Extra switches (EQESW)	Major customer 11kV Metering equipment (EQMET)	Major customer 11kV Underground cabling (EQUGC)	Major customer 11kV Overhead lines (EQOHL)	Major customer Transformer capacity (EQTFC)	Major customer Peak charge (MCCPD)	Major customer Nominated maximum demand (MCNMD)	Major customer Metered maximum demand (MCMMD)	Large capacity Operations, maintenance & administration (dedicated assets)	Large capacity Operations, maintenance & administration (shared assets)	Large capacity Asset charge (dedicated assets)	Large capacity Asset charge (shared assets)	Large capacity Interconnection charge (winter)	Large capacity Interconnection charge (summer)	Connection charge	Customer investment contract charge	30 - 750 kW generators Control period export (EXPCP1)	30 - 750 kW generators Control period export (EXPCP2)	Monthly invoice charge (INVFXD)	Failure to pay notice (INVFTP)	Default and termination notice (INVDAT)	*Add extra columns for additional line charge revenues by price component as necessary*
$/conn/day	$/conn/day	$/switch/day	$/conn/day	$/km/day	$/km/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kW/yr	$/kVAr/yr	$/Invoice	$/Notice	$/Notice	
																		–	–	$11	$0		
																		($0)	–				
$1,501	$200	$130	$77	$10	$3	$1,382	$14,748	$10,968	$6,126									($7)	($1)	$4			
										$345	$648	$394	$711	$312	$1,033	$87	–						
$1,501	$200	$130	$77	$10	$3	$1,382	$14,748	$10,968	$6,126	–	–	–	–	–	–	–	–	($7)	($1)	$15	$0	–	
–	–	–	–	–	–	–	–	–	–	$345	$648	$394	$711	$312	$1,033	$87	–	–	–	–	–	–	
$1,501	$200	$130	$77	$10	$3	$1,382	$14,748	$10,968	$6,126	$345	$648	$394	$711	$312	$1,033	$87	–	($7)	($1)	$15	$0	–	

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2023**
Network / Sub-network Name	**Entire network**

SCHEDULE 9a: ASSET REGISTER

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

sch ref

8	**Voltage**	**Asset category**	**Asset class**	**Units**	**Items at start of year (quantity)**	**Items at end of year (quantity)**	**Net change**	**Data accuracy (1–4)**
9	All	Overhead Line	Concrete poles / steel structure	No.	28,259	27,749	(510)	4
10	All	Overhead Line	Wood poles	No.	59,620	59,633	13	4
11	All	Overhead Line	Other pole types	No.	–	–	–	N/A
12	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	501	500	(1)	4
13	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	–	–	–	N/A
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	90	96	6	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.	80	80	–	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.	114	126	12	4
27	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	–	–	–	N/A
28	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	322	322	–	4
29	HV	Zone substation switchgear	33kV RMU	No.	–	–	–	N/A
30	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	48	48	–	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.	694	691	(3)	4
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	–	–	–	N/A
34	HV	Zone Substation Transformer	Zone Substation Transformers	No.	87	81	(6)	4
35	HV	Distribution Line	Distribution OH Open Wire Conductor	km	3,047	3,047	0	3
36	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	–	–	–	N/A
37	HV	Distribution Line	SWER conductor	km	86	86	(0)	3
38	HV	Distribution Cable	Distribution UG XLPE or PVC	km	1,283	1,335	52	4
39	HV	Distribution Cable	Distribution UG PILC	km	1,524	1,521	(3)	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.	64	85	21	4
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	736	726	(10)	4
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	9,229	9,225	(4)	4
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	–	–	–	N/A
45	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	4,886	4,985	99	4
46	HV	Distribution Transformer	Pole Mounted Transformer	No.	6,318	6,334	16	3
47	HV	Distribution Transformer	Ground Mounted Transformer	No.	5,655	5,755	100	3
48	HV	Distribution Transformer	Voltage regulators	No.	15	15	–	4
49	HV	Distribution Substations	Ground Mounted Substation Housing	No.	4,937	5,004	67	4
50	LV	LV Line	LV OH Conductor	km	1,739	1,733	(6)	2
51	LV	LV Cable	LV UG Cable	km	3,426	3,546	120	3
52	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	3,791	3,872	81	3
53	LV	Connections	OH/UG consumer service connections	No.	215,511	220,689	5,178	2
54	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	2,779	2,804	25	4
55	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	595	606	11	4
56	All	Capacitor Banks	Capacitors including controls	No	6	6	–	4
57	All	Load Control	Centralised plant	Lot	45	44	(1)	4
58	All	Load Control	Relays	No	2,133	2,157	24	3
59	All	Civils	Cable Tunnels	km	1	1	–	4

Company Name
For Year Ended
Network / Sub-network Name

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

9	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
10	All	Overhead Line	Concrete poles / steel structure	No.	–	680	1,626	7,646	6,997	7,769	2,882	1	–	–	1	38	16	24	11	4	2	3	4	12	12	–	8	1
11	All	Overhead Line	Wood poles	No.	13	8	232	5,171	5,796	2,272	12,936	2,307	2,879	3,588	1,218	1,237	1,555	1,380	1,423	1,325	1,620	1,393	961	775	732	795	793	874
12	All	Overhead Line	Other pole types	No.																								
13	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	–	–	56	84	122	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.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0	–	–	–	–	–	–	–
26	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
27	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	–	–	–	1	8	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.	7	–	2	38	63	22	1	–	27	4	1	1	14	3	2	32	11	8	1	20	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	163	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.	–	–	–	13	16	15	3	1	2	2	–	–	5	1	3	4	–	–	2	–	2	2	4	1
36	HV	Distribution Line	Distribution OH Open Wire Conductor	km	–	–	26	150	721	510	526	58	44	59	73	32	61	48	57	55	42	46	33	30	88	76	46	66
37	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km																								
38	HV	Distribution Line	SWER conductor	km	–	–	1	1	13	15	33	8	–	0	–	3	4	1	2	0	3	–	1	–	–	–	–	–
39	HV	Distribution Cable	Distribution UG XLPE or PVC	km	1	0	0	1	3	16	52	24	34	39	50	54	57	46	49	43	45	46	49	74	57	53	73	96
40	HV	Distribution Cable	Distribution UG PILC	km	29	37	135	378	394	304	196	14	11	11	2	2	0	0	1	1	1	1	0	1	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.	–	–	–	–	–	–	1	2	3	5	6	3	3	–	1	–	–	11	–	–	2	–	–	4
43	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	–	–	–	20	281	133	47	9	45	28	45	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	–	1	49	432	569	1,607	398	504	479	455	454	454	546	361	404	329	188	149	177	159	138	268	193
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.	45	–	–	136	844	770	481	130	139	118	127	55	35	80	64	62	78	95	81	125	77	158	153	138
47	HV	Distribution Transformer	Pole Mounted Transformer	No.	–	47	22	498	830	989	1,160	154	116	175	183	136	205	178	154	98	159	77	118	112	69	105	147	73
48	HV	Distribution Transformer	Ground Mounted Transformer	No.	3	31	116	659	872	824	613	87	68	119	105	77	89	94	105	108	109	65	91	125	75	167	204	138
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	108	514	796	686	644	62	78	81	52	61	56	67	71	85	72	58	65	78	104	145	133	165
51	LV	LV Line	LV OH Conductor	km	4	3	16	347	599	155	227	14	11	7	10	8	13	7	3	3	2	1	1	1	0	1	1	1
52	LV	LV Cable	LV UG Cable	km	9	2	13	207	499	605	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	409	665	486	550	43	77	66	52	66	69	87	49	56	55	24	29	41	92	92	98	129
54	LV	Connections	OH/UG consumer service connections	No.	–	–	–	98,566	72	5,798	27,479	2,680	2,410	2,502	2,601	3,138	3,553	3,361	3,268	3,415	2,821	2,108	2,304	1,805	2,187	3,746	5,720	6,407
55	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	–	–	53	270	118	7	3	19	86	171	63	106	183	77	92	82	118	97	108	191	85	113	139	101
56	All	SCADA and communications	SCADA and communications equipment operating as a single syst	Lot	–	–	–	–	–	10	2	10	12	21	35	17	20	14	9	8	9	8	7	4	8	13	47	39
57	All	Capacitor Banks	Capacitors including controls	No	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	–	–	–	–
58	All	Load Control	Centralised plant	Lot	–	–	–	–	7	–	–	–	3	1	17	1	2	2	2	–	–	1	2	1	1	1	1	–
59	All	Load Control	Relays	No	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	160	153	49
60	All	Civils	Cable Tunnels	km	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Orion New Zealand Limited

31 March 2023

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)
–	8	4	–	–	–	–				27,749		3
1,016	1,001	1,290	1,091	1,275	1,261	1,416				59,633		3
										–		N/A
0	16	–	–	1	2	–				500		4
										–		N/A
1	3	3	1	0	8	2				96		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	–	3	–	14	–	–				126		4
–	–	–	–	–	–	–				–		N/A
21	–	6	–	6	–	–				322		3
–	–	–	–	–	–	–				–		N/A
–	11	–	6	–	–	–				48		4
–	–	–	–	–	–	–				27		4
2	3	–	26	–	–	–				691		4
–	–	–	–	–	–	–				–		N/A
–	1	2	–	2	–	–				81		4
20	57	34	32	29	15	16				3,047		3
										–		N/A
–	–	–	–	–	–	–				86		3
57	68	64	43	39	63	39				1,335		4
1	1	0	–	0	1	0				1,521		4
										–		N/A
5	10	6	1	8	8	6				85		4
8	–	–	–	–	–	–				726		4
137	175	131	101	124	149	93				9,225		4
–	–	–	–	–	–	–				–		N/A
183	152	129	220	131	125	54				4,985		3
116	113	49	72	82	90	7				6,334		3
157	156	89	143	69	163	34				5,755		3
–	–	–	–	–	–	–				15		4
115	109	126	96	84	127	108				5,004		4
3	1	1	1	1	0	1			290	1,733		2
77	76	92	101	64	100	112				3,546		3
82	57	95	103	112	99	81				3,872		3
5,326	4,248	3,920	4,057	5,099	5,155	6,943				220,689	104,027	2
65	157	151	48	80	19				2	2,804		3
57	83	113	29	26	2				3	606		4
–	4	–	–	–	–					6		4
2	–	–	–	–	–					44		4
60	16	34	33	23	24				1,605	2,157		3
–	–	–	–	–	–					1		4

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2023**
Network / Sub-network Name	**Entire network**

SCHEDULE 9c: REPORT ON OVERHEAD LINES AND UNDERGROUND CABLES

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

sch ref				
9				
10	**Circuit length by operating voltage (at year end)**	**Overhead (km)**	**Underground (km)**	**Total circuit length (km)**
11	> 66kV	–	–	–
12	50kV & 66kV	259	95	354
13	33kV	241	43	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	2,854	5,901
17	Low voltage (< 1kV)	1,733	3,546	5,279
18	**Total circuit length (for supply)**	5,367	6,540	11,907
19				
20	Dedicated street lighting circuit length (km)	894	2,978	3,872
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)			89
22				

sch ref			
23	**Overhead circuit length by terrain (at year end)**	**Circuit length (km)**	**(% of total overhead length)**
24	Urban	1,662	31%
25	Rural	3,141	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**	5,367	100%
31			
32		**Circuit length (km)**	**(% of total circuit length)**
33	Length of circuit within 10km of coastline or geothermal areas (where known)	1,888	16%
34		**Circuit length (km)**	**(% of total overhead length)**
35	Overhead circuit requiring vegetation management	5,367	100%

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2023**

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 *	Average number of ICPs in disclosure year	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 2023**
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

sch ref			
8	**9e(i): Consumer Connections and Decommissionings**		
9	*Number of ICPs connected during year by consumer type*		
10	*Consumer types defined by EDB**	**Number of connections (ICPs)**	
11	Streetlighting	12	
12	General	7,199	
13	Irrigation	5	
14	Major customer	17	
15	Large capacity	–	
16	** include additional rows if needed*		
17	**Connections total**	7,233	
18			
19	*Number of ICPs decommissioned during year by consumer type*		
20	*Consumer types defined by EDB**	**Number of decommissionings**	
21	Streetlighting	21	
22	General	2,109	
23	Irrigation	3	
24	Major customer	6	
25	Large capacity	–	
26	** include additional rows if needed*		
27	**Decommissionings total**	2,139	
28			
29	**Distributed generation**		
30	Number of connections made in year	1,535	**connections**
32	Capacity of distributed generation installed in year	16.15	**MVA**
33			
34	**9e(ii): System Demand**		
35			
36			
37	**Maximum coincident system demand**	**Demand at time of maximum coincident demand (MW)**	
38	GXP demand	655	
39	*plus* Distributed generation output at HV and above	0	
40	**Maximum coincident system demand**	655	
41	*less* Net transfers to (from) other EDBs at HV and above	0	
42	**Demand on system for supply to consumers' connection points**	655	
43	**Electricity volumes carried**	**Energy (GWh)**	
44	Electricity supplied from GXPs	3,501	
45	*less* Electricity exports to GXPs	0	
46	*plus* Electricity supplied from distributed generation	20	
47	*less* Net electricity supplied to (from) other EDBs	0	
48	**Electricity entering system for supply to consumers' connection points**	3,521	
49	*less* Total energy delivered to ICPs	3,377	
51	**Electricity losses (loss ratio)**	144	4.1%
52			
53	**Load factor**	0.61	
54	**9e(iii): Transformer Capacity**		
55		**(MVA)**	
56	Distribution transformer capacity (EDB owned)	2,312	
57	Distribution transformer capacity (Non-EDB owned, estimated)	216	
58	**Total distribution transformer capacity**	2,528	
59			
60	**Zone substation transformer capacity**	1,181	
61			

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2023**
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 this ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

8 **10(i): Interruptions**

sch ref		Number of interruptions
9	**Interruptions by class**	
10	Class A (planned interruptions by Transpower)	–
11	Class B (planned interruptions on the network)	642
12	Class C (unplanned interruptions on the network)	954
13	Class D (unplanned interruptions by Transpower)	2
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)	7
19	**Total**	1,605
20		

sch ref		≤3Hrs	>3hrs
21	**Interruption restoration**		
22	Class C interruptions restored within	634	320
23			

sch ref		SAIFI	SAIDI
24	**SAIFI and SAIDI by class**		
25	Class A (planned interruptions by Transpower)	–	–
26	Class B (planned interruptions on the network)	0.07	25.9
27	Class C (unplanned interruptions on the network)	0.51	43.4
28	Class D (unplanned interruptions by Transpower)	0.00	0.3
29	Class E (unplanned interruptions of EDB owned generation)	–	–
30	Class F (unplanned interruptions of generation owned by others)	–	–
31	Class G (unplanned interruptions caused by another disclosing entity)	–	–
32	Class H (planned interruptions caused by another disclosing entity)	–	–
33	Class I (interruptions caused by parties not included above)	0.00	0.1
34	**Total**	0.58	69.7
35			

sch ref		Normalised SAIFI	Normalised SAIDI
36	**Normalised SAIFI and SAIDI**		
37	Classes B & C (interruptions on the network)	0.58	69.3
38			

sch ref		SAIFI	SAIDI
39	**Transitional SAIDI and SAIDI (previous method)**		
40	*Where EDBs do not currently record their SAIFI and SAIDI values using the 'multi-count' approach, they shall continue to record their SAIFI and SAIDI values on the same basis that they employed as at 31 March 2023 as 'Transitional SAIFI' and 'Transitional SAIDI' values, in addition to their SAIFI and SAIDI values (Classes B & C) using the 'multi-count approach'.* ***This is a transitional reporting requirement that shall be in place for the 2024, 2025, and 2026 disclosure years.***		
41	Class B (planned interruptions on the network)	–	–
42	Class C (unplanned interruptions on the network)	–	–
43			

Company Name	**Orion New Zealand Limited**
For Year Ended	**31 March 2023**
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 this ID determination), and so is subject to the assurance report required by section 2.8.

44 **10(ii): Class C Interruptions and Duration by Cause**

		SAIFI	SAIDI
46	**Cause**		
47	Lightning	0.00	0.4
48	Vegetation	0.07	4.5
49	Adverse weather	0.05	9.4
50	Adverse environment	0.00	0.8
51	Third party interference	0.07	4.6
52	Wildlife	0.01	1.1
53	Human error	0.02	1.2
54	Defective equipment	0.24	18.7
55	Cause unknown	0.04	2.7

		SAIFI	SAIDI
57	**Breakdown of third party interference**		
58	Dig-in	0.01	0.5
59	Overhead contact	0.02	1.1
60	Vandalism	0.01	0.5
61	Vehicle damage	0.02	1.9
62	Other	0.01	0.5

64 **10(iii): Class B Interruptions and Duration by Main Equipment Involved**

		SAIFI	SAIDI
66	**Main equipment involved**		
67	Subtransmission lines	–	–
68	Subtransmission cables	–	–
69	Subtransmission other	–	–
70	Distribution lines (excluding LV)	0.04	13.7
71	Distribution cables (excluding LV)	0.00	0.1
72	Distribution other (excluding LV)	0.03	12.0

73 **10(iv): Class C Interruptions and Duration by Main Equipment Involved**

		SAIFI	SAIDI
75	**Main equipment involved**		
76	Subtransmission lines	0.02	3.0
77	Subtransmission cables	–	–
78	Subtransmission other	0.01	0.3
79	Distribution lines (excluding LV)	0.30	31.2
80	Distribution cables (excluding LV)	0.12	5.7
81	Distribution other (excluding LV)	0.05	3.2

82 **10(v): Fault Rate**

		Number of Faults	Circuit length (km)	Fault rate (faults per 100km)
83	**Main equipment involved**			
84	Subtransmission lines	2	500	0.40
85	Subtransmission cables	–	138	–
86	Subtransmission other	2		
87	Distribution lines (excluding LV)	637	3,134	20.33
88	Distribution cables (excluding LV)	75	2,856	2.63
89	Distribution other (excluding LV)	94		
90	**Total**	810		

Company	Orion New Zealand Limited
Year ended	31 March 2023

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 FY23 post-tax regulatory ROI was 8.8% (FY22: 10.01%; FY21: 4.7%). FY23's ROI includes a 6.65% CPI movement (FY22: 6.93%).

No items were reclassified in FY22 or FY23.

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):

	FY23 $m
Rental revenue and recovery of outgoings	2.3
Recoveries from third parties who cause to damage to our network	1.2
Other	1.3
Total	4.8

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:

	FY23 $m	**FY22 $m**	**FY21 $m**	**FY20 $m**	**FY19 $m**	**FY18 $m**
Regulatory profit – as disclosed	116	118	56	81	74	72
Less indexed asset revaluations	(87)	(81)	(17)	(28)	(16)	(11)
Add back loss on asset disposals	-	1	-	1	1	1
Underlying regulatory profit	29	38	39	54	59	62

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 FY23, we estimate that we have charged customers $13.5m below our MAR for FY23. 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 FY25.

No items were reclassified in FY22 or FY23.

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 FY23 our RAB value increased as follows:

	FY23 $m
Opening RAB value	1,308
Add new assets commissioned	106
Add indexed asset revaluation (at CPI)	87
Less asset disposals at RAB value	(1)
Less depreciation and amortisation	(50)
Closing RAB value	1,450

Our $106m of commissioned assets in FY23 is significantly higher than FY21 ($97m) due to CPI based cost increases and growth in our capex to support expansion and decarbonisation.

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

	FY23 $m
Taxable income that is not in regulatory profit before tax	-
Expenditure that is not deductible:	
Accounting on land disposal	0.2
Legal and entertainment expenses	0.6
Tax capital gain on allocation of insurance proceeds	1.5
	2.3
Income that is not taxable	
Tax capital gain on allocation of insurance proceeds	1.3
Deductible expenditure that is not in regulatory profit before tax:	
Costs to obtain land easements	-
	1.3

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

	FY23 $m
Expenditure timing differences for tax deductibility	0.3
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	(0.7)
Capex – deductible for tax purposes	(1.6)
Net total	(1.9)

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 ($1.4m in FY23 out of total opex of $71m) we do not consider it necessary to put more complex recording systems in place – consistent with the proxy approach.

No items were reclassified in FY22 or FY23.

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 FY22 and FY23.

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:

- $116m (last year: $89m) for network assets
- $4m (last year: $2m) for non-network assets.

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

Schedule 6a(iv) discloses $6m of capex for system growth and $33m for asset replacement and renewal. Our major projects and programmes in these areas which exceeded $2m were

	System growth $m	**Replacement & renewal $m**
Distribution poles replacement		6
400V orange tagged poles		5
Zone sub relay replacement		4
11kV zone circuit breaker replacement		4
11kV switchgear replacement		3
Purchase of sundry land		2
LV reinforcement	4	
Shands Road land purchase	1	
Other projects and programs	1	9
Total	6	33

No capex items were reclassified in FY23.

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 $0.9m of FY23 maintenance opex as asset replacement and renewal:

	FY23 $m
Retightening and cross-arm and insulator work on 11kV overhead lines	0.8
Other	0.1
	0.9

There were no material atypical items of expenditure in FY23.

No items were reclassified during FY23.

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 $118m and actual capex at $121m. The key offsetting reasons for this overspend of $3m are:

	FY23 $m
Connections (customer-driven)	11
Bromley ZS to Milton ZS 66kV cable	4
Milton ZS 66kV switchgear and building	(2)
Fuse relocation program	(3)
Asset relocations	(7)
Overspend relative to our AMP forecast	3

OPEX

Schedule 7(iii) discloses our AMP forecast opex of $68.9m and actual opex of $71.7m. This $2.8m overspend is due to a $2.0m underspend in network opex offset by a $4.8m unfavourable variance in non-network opex.

The key reasons for these two variances are:

Network opex	FY23 $m
Routine and corrective maintenance and inspection	3.2
Asset replacement and renewal opex	1.5
Vegetation management	0.5
Service interruptions and emergencies	(3.2)
Underspend relative to our AMP forecast	2.0

Non-network opex	FY23 $m
Bad debts	0.3
Recruitment expenses	0.3
Consultancy	0.3
Property	0.3
Insurance	0.2
Salaries and wages	0.2
Contract staff	0.6
Other	2.6
Overspend relative to our AMP forecast	4.8

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 FY23.

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 $104.8k have been excluded from target revenue
- Irrigation rebates and export and generation credits totalling $1,016.8k have been excluded from billed revenue
- Invoice charges and fees associated with default and termination notices totalling $15.2k 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	169.1	167.6	(1.5)
Transmission	63.7	63.5	(0.2)
Delivery revenue	**232.8**	**231.1**	**(1.7)**

The main factor contributing to the difference between target and billed revenue was general connection (including streetlighting connections) peak charges which were $1.7m below target. This was the result of demand being 12 MW lower 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 FY23, we estimate that we have charged customers $13.4m below our MAR for FY23. 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 FY25.

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. The SAIDI figures disclosed for information disclosure (ID) purposes for FY 23 differs slightly from those disclosed in our audited annual report. SAIFI values are identical. ID SAIDI is disclosed as actual 69.7 (annual report: 69.3) and normalised SAIDI 69.3 (annual report: 63.25). The difference due to more accurate data available, and reclassification of an event, at the time of completion of the IDs.

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
- 5.0% 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 ensure 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 2023

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	298
Christchurch City Council	4,842
Total	**5,140**

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

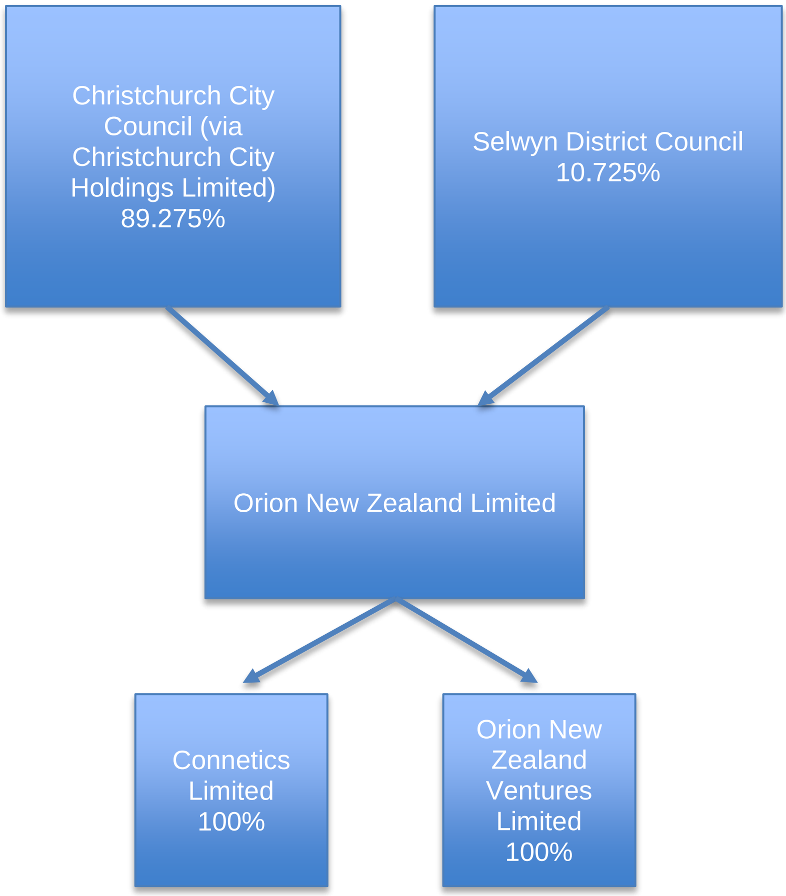
In FY23 the sum of Orion's opex and capex exceeded the Commission's $20m de minimis threshold (IDD 2.3.9(1)), and our total related party expenditure exceeded 10% of our total opex and capex, so we are required to make these related party disclosures.

In FY23 we spent a total of:

	2023	2022
	$m	$m
Opex (from IDD schedule 6b(i), row 17)	71	64
Capex (from IDD schedule 6a(i), row 20)	121	91
Total expenditure	**192**	**155**

Orion's expenditure with related parties in FY23, as disclosed in IDD schedule 5b, amounted to $69m (FY22: $44m), around 36% (FY22: 29%) 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 material 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%)
- 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%)
- CMUA Project Delivery Limited known as Te Kaha Project Delivery Limited (CCC 100%)
- Sicon Limited trading as CORDE (SDC 100%)

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, Venues Otautahi 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.

City Care provides a range of property, construction and maintenance services including vegetation management.

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 practice.

Based on our experiences during the COVID lockdowns period and the ongoing impact of COVID, we continued this new practice, with work allocated to our service providers on the basis of their work levels using a rolling average over the last three years. We consider that this move incentivises quality, safety and capability development. Our service providers' achievements in these areas 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 FY22 financial year we had PwC review our procurement with Connetics. As there has been no material change in the Orion - Connetics relationship during FY23 we assess that remains 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 were been reviewed by PwC:

- Project Management Office (PMO) where Connetics managed some projects for Orion. During FY23 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 in FY 22 was $0.5m (FY21: $1.2m). A consistent approach to this payment was applied to other emergency contractors. These circumstances have not changed 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 and FY23

- 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. This contract applied to FY23 and FY23.

These contracts remained in place in FY23.

During FY23 Orion paid Connetics $68.7m (FY22: $43.3m) for opex and capex. Refer to schedule 5b (iii) of our FY23 Information Disclosures for additional information. Our overall capex had gone up significantly year on year, and connetics PMO now invoices work to Orion that formally would have been invoiced to Orion directly by the service providers. This amounted to $16m in 2023 (2022 nil).

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 FY23.

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 FY23 Orion paid CCC $4.8m (2022: $4.6m) for rates (including rates collected on behalf of Environment Canterbury) and a further $0.04m (2022 $0.06m) for other opex and capex.

During FY23 Orion paid SDC $0.3m (2022: $0.3m) for rates (including rates collected on behalf of Environment Canterbury) and a further $0.01m (2022: $0.01m) for other opex and capex.

Refer to schedule 5b (iii) of our FY23 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 and interest on inter company borrowings

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 FY23 Orion paid City Care $0.6m (2022: $0.7m) for opex and capex - refer to schedule 5b (iii) of our FY23 Information Disclosures for additional information.

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

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

4. Summary of procurement policy and practices

We seek to:

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

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

- procurement policy, which articulates how we seek to maximise the overall benefits that can be delivered through its procurement activity, enabling us to deliver value for money and ensure lawfulness, fairness and integrity at all times
- delegations of authority policy, through which we establish clear responsibility, authority, scope and involvement in all operational decision making, and maintain adequate control of the business while at the same time empowering employees with adequate responsibility to make decisions
- reporting serious wrongdoing (whistleblower) policy, which aims to facilitate the prompt reporting and investigation of suspected or actual serious wrongdoing, protect those who report serious wrongdoing, and set out our procedure to receive and deal with reported serious wrongdoing
- conflict of interest policy, which aims to ensure that all Orion directors and employees understand and effectively identify, disclose and manage actual or potential conflicts of interest
- fraud and theft policy, which states our commitment to the prevention, deterrence, detection and investigation of fraud and theft, as these will undermine our activities and damage our reputation and the reputation of all of our stakeholders, including our employees and our shareholders
- Matatika – code of ethics, which states the ethical standards required of all Orion directors and employees
- Procurement Manual, provides guidance on the expectations and procedures involved with the procurement of all goods and services (to be updated FY24).
- 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 tendered to multiple approved service providers during FY23. 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	3	5
Livening agent	1	-	6	7
Design	1	-	4	5

Our procurement method is to source tenders from approved service providers for virtually all works based on the table below. In FY23 we called for tenders for 127 projects totalling $34m (FY22: 193 projects totalling $39m). Of these, 51 were awarded to Connetics (FY22: 74) All these 127 projects were procured through the Project Management Office (PMO). We also called for 27 tenders for property (Vegetation Management) totalling $3.2m and seven were awarded to City Care totalling $320k (FY22: four).

For Works <50,000	For Works $50,000 - $500,000	For Works >$500,000
• If more than one price is sought, the lowest price accepted will not require further analysis • Where T&M is ordered o An estimate shall be recorded by considering an individuals experience in these works o When an invoice is received, the person responsible shall assess it against the estimate and will only approve in full where they believe that it is representative of good value. Approval will be evidence of the experienced	• Preference will be given to tendering • Where a tender is called, the price accepted shall be after analysis of fair value. Acceptance of the price will represent this analysis having occurred. • Where T&M is used o An estimate shall be recorded by considering an individuals experience in these works. A document shall record considerations in the estimate o When an invoice is received, the approver shall compare this to the estimate stored and if necessary, any	• Where there is more than one service provider capable of providing the works, then a tender shall be called. o When the tender is received, a fully documented approval shall be made. This will include what was the budget, scope and what was asked for. It will compare any relevant recent works and record any accepted differences. It will consider any project risks and opportunities

individuals use of good judgement	comparable works. A post invoice justification shall be created to record any difference and reasoning. The approval of the invoice shall deem acceptance by the experienced individual.	o The document set shall also include all tender clarifications as these are justifications. o Only once this is complete will an award be made.

- T &M = time and materials

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 below $50k, a job manager will seek quoted prices from approved service providers or sole-source from a service provider, either on a quoted or time and materials basis.

5. Example of procurement policy in practice

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.

For Network tendering in FY22/23 construction works were procured through the PMO utilising various procurement methods; including, Competitive tender, Sole Source and time and materials utilising contract rates.

- Competitive Tender 2022/080E Norwood Civil & Electrical Works, FY23 was awarded to Connetics on a lowest conforming tender.
- Competitive Tender 2022/080E Annat to Deans Rd line refurbishment FY23 was procured through the PMO and awarded to Independent Line Services on a lowest conforming tender.
- Time and Materials 2022/080E Overhead line structure assessments is a specialist service and was undertaken by Connetics utilising the schedule of rates provided in the 2022/080E master service agreement with the PMO.
- Sole Source 2022/080E LV Monitoring – WMAC installs FY23 was sole sourced by the PMO to Independent Lines Services.
- Purchase of materials 2014/045E Supply of Magnefix was purchased through Connetics Network Storage and Supply services
- Sole Source 2022/080E 11kV & 400V Switchgear Replacements was procured through the PMO and awarded to Ventia

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.

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 2023 Asset Management Plan for further information.

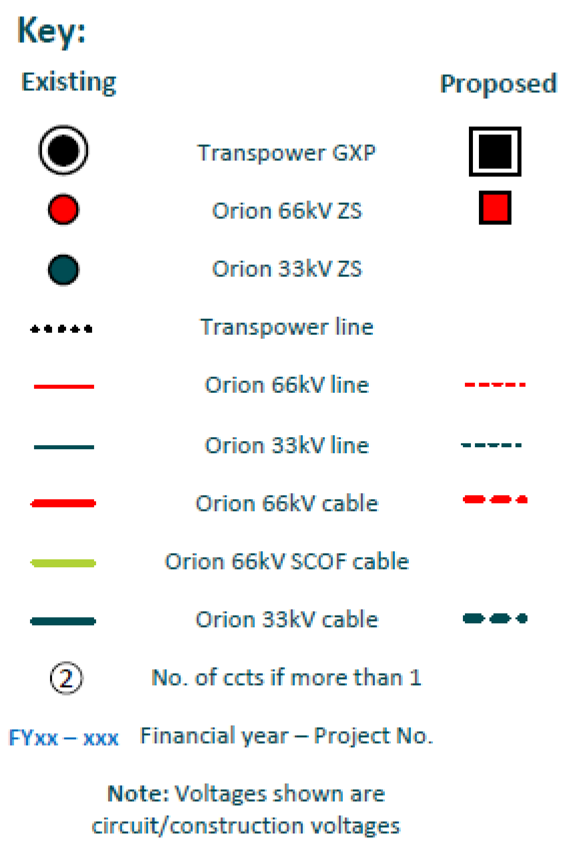
Orion New Zealand Limited

Maps of anticipated expenditure and network constraints

for the ten year period beginning 1 April 2023

Region A – urban network

Region B – rural network



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2023 Region A capex and opex projects

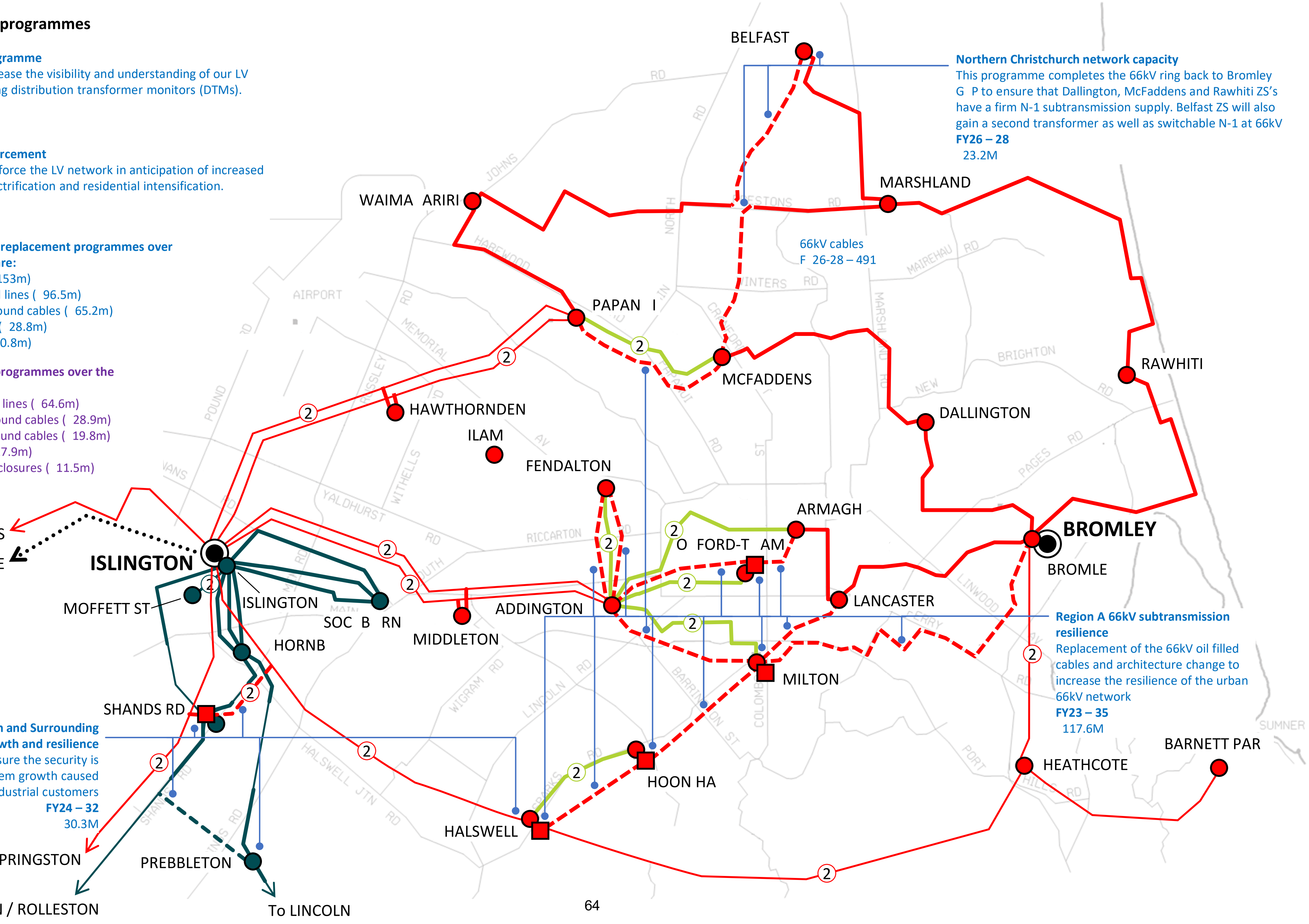
Network wide programmes

LV monitoring programme
Programme to increase the visibility and understanding of our LV network by installing distribution transformer monitors (DTMs).
FY24 – 26
3.9M

Proactive LV reinforcement
Programme to reinforce the LV network in anticipation of increased demand due to electrification and residential intensification.
FY24 – 33
45.8M

The top five capex replacement programmes over the next 10 years are:
- Switchgear (153m)
- 400Voverhead lines (96.5m)
- 400V underground cables (65.2m)
- Transformers (28.8m)
- Protection (20.8m)

The top five opex programmes over the next 10 years are:
- 400Voverhead lines (64.6m)
- 400V underground cables (28.9m)
- 11kV underground cables (19.8m)
- Switchgear (17.9m)
- Buildings enclosures (11.5m)

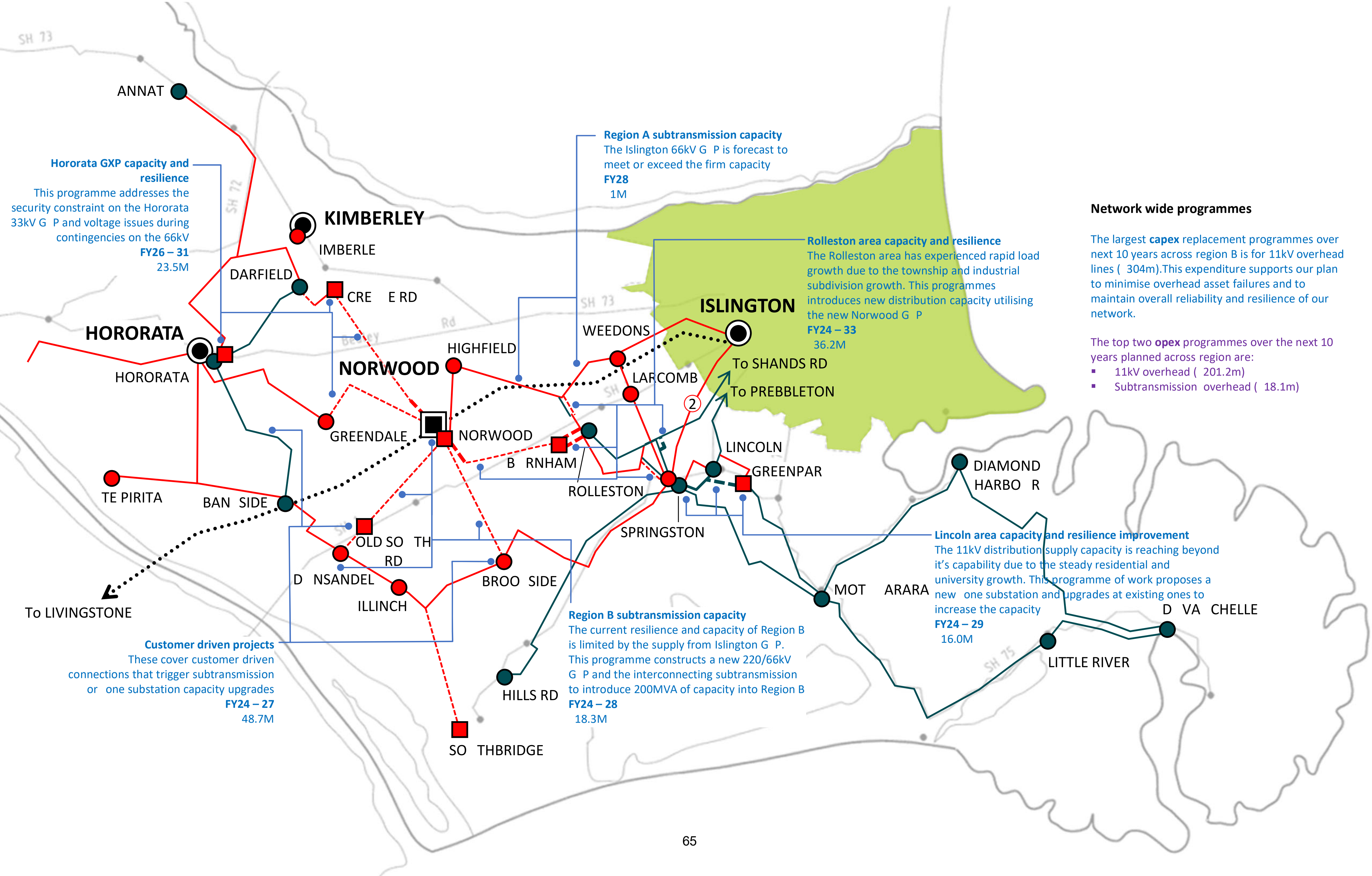


Northern Christchurch network capacity
This programme completes the 66kV ring back to Bromley G P to ensure that Dallington, McFaddens and Rawhiti ZS's have a firm N-1 subtransmission supply. Belfast ZS will also gain a second transformer as well as switchable N-1 at 66kV
FY26 – 28
23.2M

Region A 66kV subtransmission resilience
Replacement of the 66kV oil filled cables and architecture change to increase the resilience of the urban 66kV network
FY23 – 35
117.6M

Southwest Christchurch and Surrounding areas' growth and resilience
Programme to ensure the security is maintained for the system growth caused by new residential and industrial customers
FY24 – 32
30.3M

2023 Region B capex and opex projects



Hororata GXP capacity and resilience
This programme addresses the security constraint on the Hororata 33kV G P and voltage issues during contingencies on the 66kV
FY26 – 31
23.5M

Region A subtransmission capacity
The Islington 66kV G P is forecast to meet or exceed the firm capacity
FY28
1M

Rolleston area capacity and resilience
The Rolleston area has experienced rapid load growth due to the township and industrial subdivision growth. This programmes introduces new distribution capacity utilising the new Norwood G P
FY24 – 33
36.2M

Network wide programmes

The largest **capex** replacement programmes over next 10 years across region B is for 11kV overhead lines (304m).This expenditure supports our plan to minimise overhead asset failures and to maintain overall reliability and resilience of our network.

The top two **opex** programmes over the next 10 years planned across region are:

- 11kV overhead (201.2m)
- Subtransmission overhead (18.1m)

Lincoln area capacity and resilience improvement
The 11kV distribution supply capacity is reaching beyond it's capability due to the steady residential and university growth. This programme of work proposes a new one substation and upgrades at existing ones to increase the capacity
FY24 – 29
16.0M

Region B subtransmission capacity
The current resilience and capacity of Region B is limited by the supply from Islington G P. This programme constructs a new 220/66kV G P and the interconnecting subtransmission to introduce 200MVA of capacity into Region B
FY24 – 28
18.3M

Customer driven projects
These cover customer driven connections that trigger subtransmission or one substation capacity upgrades
FY24 – 27
48.7M

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*, dated 26 May 2023.

Paul Jason Munro

Director

Michael Earl Sang

Director

30 August 2023

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 2023 as required by the Electricity Distribution Information Disclosure Determination 2012 (consolidated 6 July 2023)

The Orion New Zealand Limited (the Company) is required to disclose certain information under the Electricity Distribution Information Disclosure Determination 2012 (consolidated 6 July 2023) (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, Dereck Ollsson, 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 2023 (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 (consolidated 20 May 2020) (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 9 June 2023 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 assurance 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 thresholds against	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

Key assurance matter	How our procedures addressed the key assurance matter
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.	and 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.

Key assurance matter	How our procedures addressed the key assurance matter
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 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 assurance 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.	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. 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; • 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. 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.

Dereck Ollsson
Audit New Zealand
On behalf of the Auditor-General
Christchurch, New Zealand
30 August 2023