



# Orion New Zealand Limited

## Information for disclosure for the year ended 31 March 2020

### Electricity distribution information disclosure determination 2012

Approved 31 August 2020

Company Name **Orion New Zealand Limited**

For Year Ended **31 March 2020**

## SCHEDULE 1: ANALYTICAL RATIOS

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

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

sch ref

### 7 1(i): Expenditure metrics

	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	18,710	298	101,203	5,310	28,032
Network	8,361	133	45,226	2,373	12,527
Non-network	10,349	165	55,977	2,937	15,505
Expenditure on assets	20,885	332	112,969	5,927	31,292
Network	19,569	311	105,852	5,554	29,320
Non-network	1,316	21	7,117	373	1,971

### 17 1(ii): Revenue metrics

	Revenue per GWh energy delivered to ICPs (\$/GWh)	Revenue per average no. of ICPs (\$/ICP)
Total consumer line charge revenue	74,005	1,177
Standard consumer line charge revenue	75,880	1,156
Non-standard consumer line charge revenue	31,622	292,551

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

Demand density	52	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	15,903	Total energy delivered to ICPs per average number of ICPs (kWh/ICP)

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

	(\$000)	% of revenue
Operational expenditure	61,292	24.93%
Pass-through and recoverable costs excluding financial incentives and wash-ups	64,404	26.20%
Total depreciation	43,007	17.49%
Total revaluations	27,543	11.20%
Regulatory tax allowance	22,718	9.24%
Regulatory profit/(loss) including financial incentives and wash-ups	81,198	33.03%
<b>Total regulatory income</b>	<b>245,842</b>	

### 40 1(v): Reliability

Interruption rate	14.86	Interruptions per 100 circuit km
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Company Name **Orion New Zealand Limited**

For Year Ended **31 March 2020**

## SCHEDULE 2: REPORT ON RETURN ON INVESTMENT

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

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

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*sch ref*

	CY-2	CY-1	Current Year CY
	31 Mar 18	31 Mar 19	31 Mar 20
	%	%	%
<b>2(i): Return on Investment</b>			
<b>ROI – comparable to a post tax WACC</b>			
Reflecting all revenue earned	6.83%	6.73%	7.27%
Excluding revenue earned from financial incentives	6.46%	6.42%	6.71%
Excluding revenue earned from financial incentives and wash-ups	6.43%	6.39%	6.71%
<b>Mid-point estimate of post tax WACC</b>			
25th percentile estimate	5.04%	4.75%	4.27%
75th percentile estimate	5.72%	5.43%	4.95%
<b>ROI – comparable to a vanilla WACC</b>			
Reflecting all revenue earned	7.42%	7.24%	7.70%
Excluding revenue earned from financial incentives	7.05%	6.93%	7.13%
Excluding revenue earned from financial incentives and wash-ups	7.02%	6.90%	7.13%
<b>WACC rate used to set regulatory price path</b>	6.92%	6.92%	6.92%
<b>Mid-point estimate of vanilla WACC</b>			
25th percentile estimate	5.60%	5.26%	4.69%
75th percentile estimate	6.29%	5.94%	5.37%
<b>2(ii): Information Supporting the ROI</b>			
			(\$000)
Total opening RAB value	1,088,531		
plus Opening deferred tax	(44,559)		
<b>Opening RIV</b>		1,043,972	
<b>Line charge revenue</b>		242,435	
Expenses cash outflow	125,696		
add Assets commissioned	78,414		
less Asset disposals	1,074		
add Tax payments	18,694		
less Other regulated income	3,407		
<b>Mid-year net cash outflows</b>		218,323	
<b>Term credit spread differential allowance</b>		766	
Total closing RAB value	1,150,406		
less Adjustment resulting from asset allocation	(0)		
less Lost and found assets adjustment	–		
plus Closing deferred tax	(48,583)		
<b>Closing RIV</b>		1,101,823	
<b>ROI – comparable to a vanilla WACC</b>			7.70%
Leverage (%)			42%
Cost of debt assumption (%)			3.61%
Corporate tax rate (%)			28%
<b>ROI – comparable to a post tax WACC</b>			7.27%

Company Name **Orion New Zealand Limited**

For Year Ended **31 March 2020**

## SCHEDULE 2: REPORT ON RETURN ON INVESTMENT

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### 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						-
<b>Total</b>	-	-	-	-	-	-

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

6.75%

Year-end ROI – comparable to a post tax WACC

6.32%

\* 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

4,033

Purchased assets – avoided transmission charge

4,070

Energy efficiency and demand incentive allowance

-

Quality incentive adjustment

-

Other financial incentives

-

**Financial incentives**

8,103

**Impact of financial incentives on ROI**

0.57%

Input methodology claw-back

-

CPP application recoverable costs

-

Catastrophic event allowance

-

Capex wash-up adjustment

-

Transmission asset wash-up adjustment

-

2013–15 NPV wash-up allowance

-

Reconsideration event allowance

-

Company Name

Orion New Zealand Limited

For Year Ended

31 March 2020

## SCHEDULE 2: REPORT ON RETURN ON INVESTMENT

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

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

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118	Other wash-ups	-	
119	<b>Wash-up costs</b>		-
120			
121	<b>Impact of wash-up costs on ROI</b>		-

Company Name **Orion New Zealand Limited**For Year Ended **31 March 2020****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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<b>3(i): Regulatory Profit</b>		(\$000)
7	<b>Income</b>	
8	Line charge revenue	242,435
10	plus Gains / (losses) on asset disposals	(801)
11	plus Other regulated income (other than gains / (losses) on asset disposals)	4,208
12		
13	<b>Total regulatory income</b>	<b>245,842</b>
14	<b>Expenses</b>	
15	less Operational expenditure	61,292
16		
17	less Pass-through and recoverable costs excluding financial incentives and wash-ups	64,404
18		
19	<b>Operating surplus / (deficit)</b>	<b>120,146</b>
20		
21	less Total depreciation	43,007
22		
23	plus Total revaluations	27,543
24		
25	<b>Regulatory profit / (loss) before tax</b>	<b>104,682</b>
26		
27	less Term credit spread differential allowance	766
28		
29	less Regulatory tax allowance	22,718
30		
31	<b>Regulatory profit/(loss) including financial incentives and wash-ups</b>	<b>81,198</b>
32		
33	<b>3(ii): Pass-through and Recoverable Costs excluding Financial Incentives and Wash-Ups</b>	(\$000)
34	<b>Pass through costs</b>	
35	Rates	4,112
36	Commerce Act levies	516
37	Industry levies	566
38	CPP specified pass through costs	-
39	<b>Recoverable costs excluding financial incentives and wash-ups</b>	
40	Electricity lines service charge payable to Transpower	57,158
41	Transpower new investment contract charges	2,053
42	System operator services	-
43	Distributed generation allowance	-
44	Extended reserves allowance	-
45	Other recoverable costs excluding financial incentives and wash-ups	-
46	<b>Pass-through and recoverable costs excluding financial incentives and wash-ups</b>	<b>64,404</b>
47		

Company Name **Orion New Zealand Limited**For Year Ended **31 March 2020****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

		(\$000)	
		CY-1	CY
		31 Mar 19	31 Mar 20
48	<b>3(iii): Incremental Rolling Incentive Scheme</b>		
49			
50			
51	Allowed controllable opex	58,854	-
52	Actual controllable opex	59,678	61,929
53			
54	Incremental change in year		-
55			
56		Previous years' incremental change	Previous years' incremental change adjusted for inflation
57	CY-5 31 Mar 15	4,081	4,397
58	CY-4 31 Mar 16	2,425	(1,772)
59	CY-3 31 Mar 17	(235)	(247)
60	CY-2 31 Mar 18	1,600	1,656
61	CY-1 31 Mar 19	(4,614)	
62	<b>Net incremental rolling incentive scheme</b>		4,033
63			
64	<b>Net recoverable costs allowed under incremental rolling incentive scheme</b>		4,033
65	<b>3(iv): Merger and Acquisition Expenditure</b>		
66			(\$000)
67	Merger and acquisition expenditure		-
68	<i>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)</i>		
69	<b>3(v): Other Disclosures</b>		
70			(\$000)
71	Self-insurance allowance		-

Company Name **Orion New Zealand Limited**  
 For Year Ended **31 March 2020**

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

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

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7 8 9	4(i): Regulatory Asset Base Value (Rolled Forward)	for year ended				
		RAB 31 Mar 16 (\$000)	RAB 31 Mar 17 (\$000)	RAB 31 Mar 18 (\$000)	RAB 31 Mar 19 (\$000)	RAB 31 Mar 20 (\$000)
10	Total opening RAB value	907,756	986,595	1,004,182	1,051,194	1,088,531
11						
12	less Total depreciation	37,026	37,063	38,762	40,616	43,007
13						
14	plus Total revaluations	5,304	21,320	11,011	15,577	27,543
15						
16	plus Assets commissioned	113,616	34,993	77,003	63,637	78,414
17						
18	less Asset disposals	3,055	1,663	996	1,378	1,074
19						
20	plus Lost and found assets adjustment	-	-	-	-	-
21						
22	plus Adjustment resulting from asset allocation	-	-	(1,245)	117	(0)
23						
24	Total closing RAB value	986,595	1,004,182	1,051,194	1,088,531	1,150,406
25						

26 27 28	4(ii): Unallocated Regulatory Asset Base	Unallocated RAB *		RAB	
		(\$000)	(\$000)	(\$000)	(\$000)
29	Total opening RAB value		1,089,677		1,088,531
30	less				
31	Total depreciation		43,029		43,007
32	plus				
33	Total revaluations		27,572		27,543
34	plus				
35	Assets commissioned (other than below)	54,118		54,118	
36	Assets acquired from a regulated supplier	-		-	
37	Assets acquired from a related party	24,295		24,295	
38	Assets commissioned		78,414		78,414
39	less				
40	Asset disposals (other than below)	1,074		1,074	
41	Asset disposals to a regulated supplier	-		-	
42	Asset disposals to a related party	-		-	
43	Asset disposals		1,074		1,074
44					
45	plus Lost and found assets adjustment		-		-
46					
47	plus Adjustment resulting from asset allocation				(0)
48					
49	Total closing RAB value		1,151,559		1,150,406

\* 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.



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

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

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**4(iii): Calculation of Revaluation Rate and Revaluation of Assets**

CPI <sub>t</sub>	1,052
CPI <sub>t-4</sub>	1,026
Revaluation rate (%)	2.53%

	Unallocated RAB *		RAB	
	(\$000)	(\$000)	(\$000)	(\$000)
Total opening RAB value	1,089,677		1,088,531	
less Opening value of fully depreciated, disposed and lost assets	1,653		1,653	
Total opening RAB value subject to revaluation	1,088,024		1,086,878	
<b>Total revaluations</b>		27,572		27,543

**4(iv): Roll Forward of Works Under Construction**

	Unallocated works under construction		Allocated works under construction	
	(\$000)	(\$000)	(\$000)	(\$000)
Works under construction—preceding disclosure year		48,877		48,908
plus Capital expenditure	64,876		64,844	
less Assets commissioned	78,414		78,414	
plus Adjustment resulting from asset allocation				
<b>Works under construction - current disclosure year</b>		35,339		35,339
Highest rate of capitalised finance applied				Nil

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

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

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76 **4(v): Regulatory Depreciation**

	Unallocated RAB *		RAB	
	(\$000)	(\$000)	(\$000)	(\$000)
79 Depreciation - standard	37,244		37,244	
80 Depreciation - no standard life assets	5,785		5,763	
81 Depreciation - modified life assets	-		-	
82 Depreciation - alternative depreciation in accordance with CPP	-		-	
83 <b>Total depreciation</b>		43,029		43,007

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

(\$000 unless otherwise specified)

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				

\* include additional rows if needed

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

(\$000 unless otherwise specified)

	Subtransmission lines	Subtransmission cables	Zone substations	Distribution and LV lines	Distribution and LV cables	Distribution substations and transformers	Distribution switchgear	Other network assets	Non-network assets	Total
98 <b>Total opening RAB value</b>	64,479	83,342	129,673	119,033	357,689	121,450	124,460	32,963	55,441	1,088,531
99 less Total depreciation	2,411	2,388	6,450	4,996	12,006	3,520	5,200	1,330	4,705	43,007
100 plus Total revaluations	1,626	2,112	3,275	3,011	9,063	3,073	3,146	835	1,401	27,543
101 plus Assets commissioned	3,703	2,869	13,500	6,030	22,555	9,685	13,902	2,022	4,149	78,414
102 less Asset disposals	273	-	264	2	-	162	259	1	113	1,074
103 plus Lost and found assets adjustment	-	-	-	-	-	-	-	-	-	-
104 plus Adjustment resulting from asset allocation	-	-	-	-	-	-	-	-	-	-
105 plus Asset category transfers	-	-	-	-	-	-	-	-	-	-
106 <b>Total closing RAB value</b>	67,124	85,935	139,735	123,076	377,301	130,525	136,049	34,489	56,172,4180	1,150,406
107										
108 <b>Asset Life</b>										
109 Weighted average remaining asset life	35.5	41.6	31.8	32.1	37.7	33.8	30.3	28.6	30.9	(years)
110 Weighted average expected total asset life	45.8	58.3	45.3	47.6	58.3	45.1	40.9	33.6	27.1	(years)
111										

### SCHEDULE 5a: REPORT ON REGULATORY TAX ALLOWANCE

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

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<b>5a(i): Regulatory Tax Allowance</b>		<b>(\$000)</b>
	<b>Regulatory profit / (loss) before tax</b>	<b>104,682</b>
10	<i>plus</i> Income not included in regulatory profit / (loss) before tax but taxable	-
11	Expenditure or loss in regulatory profit / (loss) before tax but not deductible	226
12	Amortisation of initial differences in asset values	15,279
13	Amortisation of revaluations	4,923
		<b>20,428</b>
16	<i>less</i> Total revaluations	27,543
17	Income included in regulatory profit / (loss) before tax but not taxable	-
18	Discretionary discounts and customer rebates	-
19	Expenditure or loss deductible but not in regulatory profit / (loss) before tax	127
20	Notional deductible interest	16,303
		<b>43,972</b>
	<b>Regulatory taxable income</b>	<b>81,137</b>
25	<i>less</i> Utilised tax losses	-
	<b>Regulatory net taxable income</b>	<b>81,137</b>
28	Corporate tax rate (%)	28%
	<b>Regulatory tax allowance</b>	<b>22,718</b>

\* 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	358,748
37	<i>less</i> Amortisation of initial differences in asset values	15,279
38	<i>plus</i> Adjustment for unamortised initial differences in assets acquired	-
39	<i>less</i> Adjustment for unamortised initial differences in assets disposed	661
	Closing unamortised initial differences in asset values	<b>342,808</b>
42	Opening weighted average remaining useful life of relevant assets (years)	<b>23</b>

### SCHEDULE 5a: REPORT ON REGULATORY TAX ALLOWANCE

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

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44	<b>5a(iv): Amortisation of Revaluations</b>		(\$000)
45			
46	Opening sum of RAB values without revaluations	990,682	
47			
48	Adjusted depreciation	38,084	
49	Total depreciation	43,007	
50	Amortisation of revaluations		4,923
51			
52	<b>5a(v): Reconciliation of Tax Losses</b>		(\$000)
53			
54	Opening tax losses	-	
55	plus Current period tax losses	-	
56	less Utilised tax losses	-	
57	Closing tax losses		-
58	<b>5a(vi): Calculation of Deferred Tax Balance</b>		(\$000)
59			
60	Opening deferred tax	(44,559)	
61			
62	plus Tax effect of adjusted depreciation	10,664	
63			
64	less Tax effect of tax depreciation	11,504	
65			
66	plus Tax effect of other temporary differences*	1,077	
67			
68	less Tax effect of amortisation of initial differences in asset values	4,278	
69			
70	plus Deferred tax balance relating to assets acquired in the disclosure year	-	
71			
72	less Deferred tax balance relating to assets disposed in the disclosure year	(17)	
73			
74	plus Deferred tax cost allocation adjustment	0	
75			
76	Closing deferred tax		(48,583)
77			
78	<b>5a(vii): Disclosure of Temporary Differences</b>		
79	<i>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).</i>		
80			
81	<b>5a(viii): Regulatory Tax Asset Base Roll-Forward</b>		
82			(\$000)
83	Opening sum of regulatory tax asset values	432,464	
84	less Tax depreciation	41,085	
85	plus Regulatory tax asset value of assets commissioned	74,257	
86	less Regulatory tax asset value of asset disposals	67	
87	plus Lost and found assets adjustment	-	
88	plus Adjustment resulting from asset allocation	-	
89	plus Other adjustments to the RAB tax value	-	
90	Closing sum of regulatory tax asset values		465,570

### SCHEDULE 5b: REPORT ON RELATED PARTY TRANSACTIONS

This schedule provides information on the valuation of related party transactions, in accordance with clause 2.3.6 of the ID determination.

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

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	(\$000)	(\$000)
<b>5b(i): Summary—Related Party Transactions</b>		
Total regulatory income		2,650
Market value of asset disposals		–
Service interruptions and emergencies	8,986	
Vegetation management	1,031	
Routine and corrective maintenance and inspection	4,711	
Asset replacement and renewal (opex)	569	
<b>Network opex</b>		<b>15,297</b>
Business support	286	
System operations and network support	75	
<b>Operational expenditure</b>		<b>15,658</b>
Consumer connection	3,968	
System growth	3,776	
Asset replacement and renewal (capex)	10,628	
Asset relocations	1,417	
Quality of supply	61	
Legislative and regulatory	–	
Other reliability, safety and environment	–	
<b>Expenditure on non-network assets</b>		<b>12</b>
<b>Expenditure on assets</b>		<b>19,862</b>
Cost of financing		–
Value of capital contributions		111
Value of vested assets		–
<b>Capital Expenditure</b>		<b>19,751</b>
<b>Total expenditure</b>		<b>35,409</b>
Other related party transactions		4,336

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

Name of related party	Nature of opex or capex service provided	Total value of transactions (\$000)
Connetics Limited	Service interruptions and emergencies	8,986
Connetics Limited	Vegetation management	–
Connetics Limited	Routine and corrective maintenance and inspection	4,688
Connetics Limited	Asset replacement and renewal (opex)	569
Connetics Limited	Business support	251
Connetics Limited	System operations and network support	75
Connetics Limited	Consumer connection	3,968
Connetics Limited	System growth	3,776
Connetics Limited	Asset replacement and renewal (capex)	10,615
Connetics Limited	Asset relocations	1,314
Connetics Limited	Quality of supply	61
Connetics Limited	Expenditure on non-network assets	12
Christchurch City Council	Asset replacement and renewal (capex)	12
Christchurch City Council	Asset relocations	103
Christchurch City Council	System growth	–
Christchurch City Council	Expenditure on non-network assets	–
Christchurch City Council	Routine and corrective maintenance and inspection	19
Christchurch City Council	System operations and network support	–
Christchurch City Council	Business support	35
Selwyn District Council	Routine and corrective maintenance and inspection	3

Company Name

Orion New Zealand Limited

For Year Ended

31 March 2020

**SCHEDULE 5b: REPORT ON RELATED PARTY TRANSACTIONS**

This schedule provides information on the valuation of related party transactions, in accordance with clause 2.3.6 of the ID determination.

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

sch ref

	Selwyn District Council	Vegetation management	-
	Selwyn District Council	Asset replacement and renewal (capex)	-
	City Care Limited	Vegetation management	1,031
	City Care Limited	System growth	-
50	City Care Limited	Asset replacement and renewal (capex)	1
51	City Care Limited	Routine and corrective maintenance and inspection	1
52	<b>Total value of related party transactions</b>		<b>35,520</b>

\* include additional rows if needed

**SCHEDULE 5c: REPORT ON TERM CREDIT SPREAD DIFFERENTIAL ALLOWANCE**

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

sch ref

7  
8  
9

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

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
US Private Placement (USPP) 2018 Series A - NZD \$45m	12/9/2018	27/7/2018	10.0	BKBM + margin	45,000,000	45,000,000	168,750	(45,000)
US Private Placement (USPP) 2018 Series B - NZD \$95m	12/9/2018	27/7/2018	12.0	BKBM + margin	95,000,000	95,000,000	498,750	(110,833)
* include additional rows if needed						140,000,000	667,500	(155,833)

16

17

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

18  
19  
20  
21  
22  
23  
24  
25  
26  
27

Gross term credit spread differential		511,667
Total book value of interest bearing debt	314,200,000	
Leverage	42%	
Average opening and closing RAB values	1,119,469	
Attribution Rate (%)		0%
Term credit spread differential allowance		766

**SCHEDULE 5d: REPORT ON COST ALLOCATIONS**

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

sch ref

		Value allocated (\$000s)			OVABAA allocation increase (\$000s)
		Arm's length deduction	Electricity distribution services	Non-electricity distribution services	
7	<b>5d(i): Operating Cost Allocations</b>				
8					
9					
10	<b>Service interruptions and emergencies</b>				
11	Directly attributable		9,355		
12	Not directly attributable		-		
13	<b>Total attributable to regulated service</b>		9,355		
14	<b>Vegetation management</b>				
15	Directly attributable		4,397		
16	Not directly attributable		-		
17	<b>Total attributable to regulated service</b>		4,397		
18	<b>Routine and corrective maintenance and inspection</b>				
19	Directly attributable		11,819		
20	Not directly attributable		-		
21	<b>Total attributable to regulated service</b>		11,819		
22	<b>Asset replacement and renewal</b>				
23	Directly attributable		1,820		
24	Not directly attributable		-		
25	<b>Total attributable to regulated service</b>		1,820		
26	<b>System operations and network support</b>				
27	Directly attributable		19,850		
28	Not directly attributable		-		
29	<b>Total attributable to regulated service</b>		19,850		
30	<b>Business support</b>				
31	Directly attributable		14,051		
32	Not directly attributable		-		
33	<b>Total attributable to regulated service</b>		14,051		
34					
35	<b>Operating costs directly attributable</b>		61,292		
36	<b>Operating costs not directly attributable</b>	-	-	-	-
37	<b>Operational expenditure</b>		61,292		
38					



**SCHEDULE 5d: REPORT ON COST ALLOCATIONS**

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

sch ref

39 **5d(ii): Other Cost Allocations**

40 **Pass through and recoverable costs**

(\$000)

41 **Pass through costs**

42	Directly attributable	5,193
43	Not directly attributable	-
44	<b>Total attributable to regulated service</b>	5,193

45 **Recoverable costs**

46	Directly attributable	59,211
47	Not directly attributable	-
48	<b>Total attributable to regulated service</b>	59,211

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

51 (\$000)

			CY-1	Current Year (CY)
52	<b>Change in cost allocation 1</b>			
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			

60 (\$000)

			CY-1	Current Year (CY)
61	<b>Change in cost allocation 2</b>			
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			

69 (\$000)

			CY-1	Current Year (CY)
70	<b>Change in cost allocation 3</b>			
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			

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

**SCHEDULE 5e: REPORT ON ASSET ALLOCATIONS**

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

sch ref

7	5e(i): Regulated Service Asset Values		Value allocated (\$000s) Electricity distribution services
8			
9			
10	<b>Subtransmission lines</b>		
11	Directly attributable		67,124
12	Not directly attributable		-
13	<b>Total attributable to regulated service</b>		67,124
14	<b>Subtransmission cables</b>		
15	Directly attributable		85,935
16	Not directly attributable		-
17	<b>Total attributable to regulated service</b>		85,935
18	<b>Zone substations</b>		
19	Directly attributable		139,735
20	Not directly attributable		-
21	<b>Total attributable to regulated service</b>		139,735
22	<b>Distribution and LV lines</b>		
23	Directly attributable		123,076
24	Not directly attributable		-
25	<b>Total attributable to regulated service</b>		123,076
26	<b>Distribution and LV cables</b>		
27	Directly attributable		377,301
28	Not directly attributable		-
29	<b>Total attributable to regulated service</b>		377,301
30	<b>Distribution substations and transformers</b>		
31	Directly attributable		130,525
32	Not directly attributable		-
33	<b>Total attributable to regulated service</b>		130,525
34	<b>Distribution switchgear</b>		
35	Directly attributable		136,049
36	Not directly attributable		-
37	<b>Total attributable to regulated service</b>		136,049
38	<b>Other network assets</b>		
39	Directly attributable		34,489
40	Not directly attributable		-
41	<b>Total attributable to regulated service</b>		34,489
42	<b>Non-network assets</b>		
43	Directly attributable		47,249
44	Not directly attributable		8,923
45	<b>Total attributable to regulated service</b>		56,172
46			
47	<b>Regulated service asset value directly attributable</b>		1,141,483
48	<b>Regulated service asset value not directly attributable</b>		8,923
49	<b>Total closing RAB value</b>		1,150,406
50			

51	5e(ii): Changes in Asset Allocations* †			
52			(\$000)	
53	Change in asset value allocation 1		CY-1	Current Year (CY)
54	Asset category		Original allocation	
55	Original allocator or line items		New allocation	
56	New allocator or line items		Difference	-
57				
58	Rationale for change			
59				
60				
61				
62	Change in asset value allocation 2		CY-1	Current Year (CY)
63	Asset category		Original allocation	
64	Original allocator or line items		New allocation	
65	New allocator or line items		Difference	-
66				
67	Rationale for change			
68				
69				
70				
71	Change in asset value allocation 3		CY-1	Current Year (CY)
72	Asset category		Original allocation	
73	Original allocator or line items		New allocation	
74	New allocator or line items		Difference	-
75				
76	Rationale for change			
77				
78				

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

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

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

sch ref

7	<b>6a(i): Expenditure on Assets</b>		(\$000)	(\$000)
8	Consumer connection			15,598
9	System growth			13,521
10	Asset replacement and renewal			33,238
11	Asset relocations			1,561
12	Reliability, safety and environment:			
13	Quality of supply	146		
14	Legislative and regulatory	-		
15	Other reliability, safety and environment	43		
16	<b>Total reliability, safety and environment</b>			189
17	<b>Expenditure on network assets</b>			64,108
18	Expenditure on non-network assets			4,310
19				
20	<b>Expenditure on assets</b>			68,418
21	plus Cost of financing			-
22	less Value of capital contributions			3,574
23	plus Value of vested assets			-
24				
25	<b>Capital expenditure</b>			64,844
26	<b>6a(ii): Subcomponents of Expenditure on Assets (where known)</b>			(\$000)
27	Energy efficiency and demand side management, reduction of energy losses			N/A
28	Overhead to underground conversion			1,434
29	Research and development			N/A
30	<b>6a(iii): Consumer Connection</b>			
31	<i>Consumer types defined by EDB*</i>		(\$000)	(\$000)
32	Subdivisions		3,903	
33	Large customers		2,892	
34	General connections		6,667	
35	Switchgear		1,305	
36	Transformers		832	
37	<i>* include additional rows if needed</i>			
38	<b>Consumer connection expenditure</b>			15,598
39				
40	less Capital contributions funding consumer connection expenditure		1,372	
41	<b>Consumer connection less capital contributions</b>			14,226
42	<b>6a(iv): System Growth and Asset Replacement and Renewal</b>			
43			System Growth	Asset Replacement and Renewal
44			(\$000)	(\$000)
45	Subtransmission		4,309	1,957
46	Zone substations		3,341	3,474
47	Distribution and LV lines		1,403	5,564
48	Distribution and LV cables		3,310	9,445
49	Distribution substations and transformers		17	2,556
50	Distribution switchgear		-	6,090
51	Other network assets		1,142	4,152
52	<b>System growth and asset replacement and renewal expenditure</b>		13,521	33,238
53	less Capital contributions funding system growth and asset replacement and renewal		934	32
54	<b>System growth and asset replacement and renewal less capital contributions</b>		12,587	33,206
55				
56	<b>6a(v): Asset Relocations</b>			
57	<i>Project or programme*</i>		(\$000)	(\$000)
58	NZTA and others		798	
59	CERA/SCIRT/Otakaro (Rebuild)		114	
60	Selwyn District Council		7	
61	Christchurch City Council		523	
62	Others		119	
63	<i>* include additional rows if needed</i>			
64	All other projects or programmes - asset relocations			
65	<b>Asset relocations expenditure</b>			1,561
66	less Capital contributions funding asset relocations		1,236	
67	<b>Asset relocations less capital contributions</b>			325

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

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

sch ref

68				
69	<b>6a(vi): Quality of Supply</b>			
70	<i>Project or programme*</i>		(\$000)	(\$000)
71	Rural township reliability improvements		61	
72	Frankleigh St Reinforcement		8	
73	Comms associated with Entec line switches		78	
74				
75				
76	<i>* include additional rows if needed</i>			
77	All other projects programmes - quality of supply			
78	<b>Quality of supply expenditure</b>			146
79	less Capital contributions funding quality of supply			
80	<b>Quality of supply less capital contributions</b>			146
81	<b>6a(vii): Legislative and Regulatory</b>			
82	<i>Project or programme*</i>		(\$000)	(\$000)
83	No projects with this as the primary driver		-	
84				
85				
86				
87				
88	<i>* include additional rows if needed</i>			
89	All other projects or programmes - legislative and regulatory			
90	<b>Legislative and regulatory expenditure</b>			-
91	less Capital contributions funding legislative and regulatory			
92	<b>Legislative and regulatory less capital contributions</b>			-
93	<b>6a(viii): Other Reliability, Safety and Environment</b>			
94	<i>Project or programme*</i>		(\$000)	(\$000)
95	400V UG Supply Fuse Relocation Program		43	
96				
97				
98				
99				
100	<i>* include additional rows if needed</i>			
101	All other projects or programmes - other reliability, safety and environment			
102	<b>Other reliability, safety and environment expenditure</b>			43
103	less Capital contributions funding other reliability, safety and environment			
104	<b>Other reliability, safety and environment less capital contributions</b>			43
105				
106	<b>6a(ix): Non-Network Assets</b>			
107	<b>Routine expenditure</b>			
108	<i>Project or programme*</i>		(\$000)	(\$000)
109	Vehicles and mobile plant		1,186	
110	Information solutions		1,373	
111	Sundry tools and equipment		466	
112	Sundry land and buildings		1,285	
113				
114	<i>* include additional rows if needed</i>			
115	All other projects or programmes - routine expenditure		-	
116	<b>Routine expenditure</b>			4,310
117	<b>Atypical expenditure</b>			
118	<i>Project or programme*</i>		(\$000)	(\$000)
119	N/A			
120				
121				
122				
123				
124	<i>* include additional rows if needed</i>			
125	All other projects or programmes - atypical expenditure			
126	<b>Atypical expenditure</b>			-
127				
128	<b>Expenditure on non-network assets</b>			4,310

**SCHEDULE 6b: REPORT ON OPERATIONAL EXPENDITURE FOR THE DISCLOSURE YEAR**

This schedule requires a breakdown of operational expenditure incurred in the disclosure year.

EDBs must provide explanatory comment on their operational expenditure in Schedule 14 (Explanatory notes to templates). This includes explanatory comment on any atypical operational expenditure and assets replaced or renewed as part of asset replacement and renewal operational expenditure, and additional information on insurance.

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

sch ref

		(\$000)	(\$000)
7	<b>6b(i): Operational Expenditure</b>		
8	Service interruptions and emergencies	9,355	
9	Vegetation management	4,397	
10	Routine and corrective maintenance and inspection	11,819	
11	Asset replacement and renewal	1,820	
12	<b>Network opex</b>		27,391
13	System operations and network support	19,850	
14	Business support	14,051	
15	<b>Non-network opex</b>		33,901
16			
17	<b>Operational expenditure</b>		61,292
18	<b>6b(ii): Subcomponents of Operational Expenditure (where known)</b>		
19	Energy efficiency and demand side management, reduction of energy losses		–
20	Direct billing*		–
21	Research and development		–
22	Insurance		2,132
23	* Direct billing expenditure by suppliers that directly bill the majority of their consumers		

## SCHEDULE 7: COMPARISON OF FORECASTS TO ACTUAL EXPENDITURE

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

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

sch ref

	Target (\$000) <sup>1</sup>	Actual (\$000)	% variance
<b>7(i): Revenue</b>			
Line charge revenue	244,970	242,435	(1%)
<b>7(ii): Expenditure on Assets</b>	<b>Forecast (\$000) <sup>2</sup></b>	<b>Actual (\$000)</b>	<b>% variance</b>
Consumer connection	12,669	15,598	23%
System growth	17,799	13,521	(24%)
Asset replacement and renewal	32,064	33,238	4%
Asset relocations	1,288	1,561	21%
Reliability, safety and environment:			
Quality of supply	554	146	(74%)
Legislative and regulatory	–	–	–
Other reliability, safety and environment	–	43	–
<b>Total reliability, safety and environment</b>	<b>554</b>	<b>189</b>	<b>(66%)</b>
<b>Expenditure on network assets</b>	<b>64,374</b>	<b>64,108</b>	<b>(0%)</b>
Expenditure on non-network assets	5,433	4,310	(21%)
Expenditure on assets	69,807	68,418	(2%)
<b>7(iii): Operational Expenditure</b>			
Service interruptions and emergencies	8,990	9,355	4%
Vegetation management	3,950	4,397	11%
Routine and corrective maintenance and inspection	13,140	11,819	(10%)
Asset replacement and renewal	2,115	1,820	(14%)
<b>Network opex</b>	<b>28,195</b>	<b>27,391</b>	<b>(3%)</b>
System operations and network support	20,161	19,850	(2%)
Business support	18,093	14,051	(22%)
<b>Non-network opex</b>	<b>38,254</b>	<b>33,901</b>	<b>(11%)</b>
<b>Operational expenditure</b>	<b>66,449</b>	<b>61,292</b>	<b>(8%)</b>
<b>7(iv): Subcomponents of Expenditure on Assets (where known)</b>			
Energy efficiency and demand side management, reduction of energy losses	–	N/A	–
Overhead to underground conversion	1,288	1,434	11%
Research and development	–	N/A	–
<b>7(v): Subcomponents of Operational Expenditure (where known)</b>			
Energy efficiency and demand side management, reduction of energy losses	–	–	–
Direct billing	–	–	–
Research and development	–	–	–
Insurance	2,065	2,132	3%

<sup>1</sup> From the nominal dollar target revenue for the disclosure year disclosed under clause 2.4.3(3) of this determination

<sup>2</sup> 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)







Company Name	Orion New Zealand Limited
For Year Ended	31 March 2020
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

	Voltage	Asset category	Asset class	Units	Items at start of year (quantity)	Items at end of year (quantity)	Net change	Data accuracy (1-4)
8	All	Overhead Line	Concrete poles / steel structure	No.	29,028	28,721	(307)	4
9	All	Overhead Line	Wood poles	No.	59,988	59,961	(27)	4
10	All	Overhead Line	Other pole types	No.	-	-	-	N/A
11	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	511	509	(3)	4
12	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	-	-	-	N/A
13	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	88	86	(2)	4
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	40	40	-	4
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	-	-	-	N/A
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	2	1	(2)	4
17	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	-	-	-	N/A
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	-	-	-	N/A
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	-	-	-	N/A
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	-	-	-	N/A
21	HV	Subtransmission Cable	Subtransmission submarine cable	km	-	-	-	N/A
22	HV	Zone substation Buildings	Zone substations up to 66kV	No.	80	80	-	4
23	HV	Zone substation Buildings	Zone substations 110kV+	No.	-	-	-	N/A
24	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	-	-	-	N/A
25	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	112	113	1	4
26	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	-	-	-	N/A
27	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	381	293	(88)	4
28	HV	Zone substation switchgear	33kV RMU	No.	-	-	-	N/A
29	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	30	36	6	4
30	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	49	43	(6)	4
31	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	704	692	(12)	4
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	-	-	-	N/A
33	HV	Zone Substation Transformer	Zone Substation Transformers	No.	86	82	(4)	4
34	HV	Distribution Line	Distribution OH Open Wire Conductor	km	3,076	3,070	(7)	3
35	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	-	-	-	N/A
36	HV	Distribution Line	SWER conductor	km	88	86	(2)	3
37	HV	Distribution Cable	Distribution UG XLPE or PVC	km	1,158	1,200	42	4
38	HV	Distribution Cable	Distribution UG PILC	km	1,545	1,536	(9)	4
39	HV	Distribution Cable	Distribution Submarine Cable	km	-	-	-	N/A
40	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	59	62	3	4
41	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	872	813	(59)	4
42	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	9,261	9,254	(7)	3
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	14	3	(11)	4
44	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	4,592	4,694	102	4
45	HV	Distribution Transformer	Pole Mounted Transformer	No.	6,432	6,444	12	4
46	HV	Distribution Transformer	Ground Mounted Transformer	No.	5,233	5,308	75	4
47	HV	Distribution Transformer	Voltage regulators	No.	15	15	-	4
48	HV	Distribution Substations	Ground Mounted Substation Housing	No.	4,667	4,751	84	4
49	LV	LV Line	LV OH Conductor	km	1,762	1,754	(8)	2
50	LV	LV Cable	LV UG Cable	km	3,182	3,262	80	3
51	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	3,511	3,600	89	3
52	LV	Connections	OH/UG consumer service connections	No.	204,294	207,333	3,039	2
53	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	2,701	2,717	16	4
54	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	385	452	67	4
55	All	Capacitor Banks	Capacitors including controls	No.	6	6	-	4
56	All	Load Control	Centralised plant	Lot	45	45	-	4
57	All	Load Control	Relays	No.	2,088	2,122	34	3
58	All	Civils	Cable Tunnels	km	1	1	-	4
59								

**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		Disclosure Year (year ended)	Number of assets at disclosure year end by installation date																				
		31 March 2020	pre-1940	1940	1950	1960	1970	1980	1990	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
Voltage	Asset category	Asset class	Units	1940	1950	1960	1970	1980	1990	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
All	Overhead Line	Concrete poles / steel structure	No.	-	716	1,668	7,983	7,249	7,991	2,963	1	-	-	1	38	16	24	11	4	2	7	5	13
All	Overhead Line	Wood poles	No.	-	1	422	7,371	7,155	2,366	13,248	2,362	2,933	3,634	1,251	1,272	1,585	1,394	1,464	1,354	1,644	1,415	989	787
All	Overhead Line	Other pole types	No.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	-	-	58	84	129	49	40	3	1	41	13	-	16	13	-	21	-	7	-	12
HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	-	-	-	-	-	-	9	-	5	2	2	0	3	0	2	3	0	1	3	1
HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	-	-	-	-	-	-	-	-	-	0	-	-	0	0	0	-	0	0	-	-
HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	-	-	-	5	26	9	-	-	-	0	-	-	-	-	-	-	-	-	-	-
HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	-	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HV	Subtransmission Cable	Subtransmission submarine cable	km	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HV	Zone substation Buildings	Zone substations up to 66kV	No.	1	-	4	10	25	12	2	-	1	2	-	2	-	1	2	4	1	4	1	4
HV	Zone substation Buildings	Zone substations 110kV+	No.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	-	-	-	5	8	1	3	-	4	9	-	6	4	1	1	14	6	11	5	16
HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	-	-	2	45	61	22	1	-	20	4	1	-	14	2	-	28	11	9	1	20
HV	Zone substation switchgear	33kV RMU	No.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	-	-	-	-	-	-	-	-	-	-	-	-	5	9	-	6	-	3	2	-
HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	-	-	-	4	15	13	1	1	8	1	-	-	-	-	-	-	-	-	-	-
HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	-	-	-	1	191	47	38	11	11	61	-	42	34	7	41	26	49	-	52	13
HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HV	Zone Substation Transformer	Zone Substation Transformers	No.	-	-	1	15	16	16	3	1	2	2	-	-	5	1	3	4	-	-	2	-
HV	Distribution Line	Distribution OH Open Wire Conductor	km	0	-	27	155	746	527	563	59	44	59	73	33	61	49	58	55	42	45	33	30
HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HV	Distribution Line	SWER conductor	km	-	-	1	1	13	15	33	8	-	-	-	3	4	1	2	0	3	-	1	-
HV	Distribution Cable	Distribution UG XLPE or PVC	km	1	0	0	2	2	16	52	25	34	40	50	54	58	47	50	44	46	46	49	76
HV	Distribution Cable	Distribution UG PILC	km	29	37	136	384	400	305	198	14	12	11	2	2	0	0	1	1	1	1	0	0
HV	Distribution Cable	Distribution Submarine Cable	km	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionaliser:	No.	-	-	-	-	-	2	2	2	3	5	6	3	3	-	1	-	-	11	-	-
HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	-	-	-	44	339	134	47	9	45	32	46	29	25	16	13	11	1	-	1	2
HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	-	-	3	67	465	609	1,731	422	525	502	470	472	463	561	369	420	334	193	156	181
HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	-	-	-	182	954	783	497	135	143	123	131	56	34	81	67	63	79	96	81	126
HV	Distribution Transformer	Pole Mounted Transformer	No.	-	52	24	561	964	1,074	1,233	155	118	176	181	138	215	182	157	98	160	77	120	113
HV	Distribution Transformer	Ground Mounted Transformer	No.	2	33	127	701	848	792	555	87	70	121	105	79	89	94	106	108	109	65	91	129
HV	Distribution Transformer	Voltage regulators	No.	-	-	-	3	1	-	5	-	-	-	-	1	1	-	-	1	2	-	1	-
HV	Distribution Substations	Ground Mounted Substation Housing	No.	38	20	116	539	808	694	651	62	78	82	52	61	56	68	71	85	71	58	67	79
LV	LV Line	LV OH Conductor	km	2	3	16	352	607	157	231	14	11	7	11	8	13	7	3	3	2	1	1	1
LV	LV Cable	LV UG Cable	km	9	2	13	209	502	607	444	43	81	73	56	73	85	89	62	65	55	26	31	41
LV	LV Street lighting	LV OH/UG Streetlight circuit	km	0	2	4	413	672	491	556	43	77	67	52	66	69	87	51	58	55	24	29	42
LV	Connections	OH/UG consumer service connections	No.	-	-	-	100,868	74	6,024	27,666	2,702	2,431	2,513	2,614	3,154	3,568	3,374	3,275	3,424	2,844	2,117	2,322	1,822
All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	-	-	-	89	314	135	10	3	18	111	182	71	118	210	86	98	93	122	101	108
All	SCADA and communications	SCADA and communications equipment operating as a single sys	Lot	-	-	-	-	-	-	9	5	11	16	24	41	19	21	16	13	9	9	8	8
All	Capacitor Banks	Capacitors including controls	No.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	Load Control	Centralised plant	Lot	-	-	-	-	7	-	-	-	-	3	1	18	1	2	3	2	-	-	1	2
All	Load Control	Relays	No.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	Civils	Cable Tunnels	km	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-

Company Name	Orion New Zealand Limited
For Year Ended	31 March 2020
Network / Sub-network Name	Entire network

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	No. with age unknown	Items at end of year (quantity)	No. with default dates	Data accuracy (1-4)
12	-	8	1	-	4	4	-							28,721		4
746	813	815	880	1,041	998	1,299	722							59,961		4
-	-	-	-	-	-	-	-							-		N/A
1	0	3	4	0	16	-	-							509		4
-	-	-	-	-	-	-	-							-		N/A
2	5	18	21	1	3	3	-							86		4
0	-	-	-	0	-	-	-							40		4
-	-	-	-	-	-	-	-							-		N/A
-	-	-	-	-	-	-	-							1		4
-	-	-	-	-	-	-	-							-		N/A
-	-	-	-	-	-	-	-							-		N/A
-	-	-	-	-	-	-	-							-		N/A
-	-	-	-	-	-	-	-							-		N/A
-	2	-	1	-	1	-	-							80		4
-	-	-	-	-	-	-	-							-		N/A
-	-	-	-	-	-	-	-							-		N/A
4	-	7	4	2	-	2	-							113		4
-	-	-	-	-	-	-	-							-		N/A
14	7	11	-	12	-	8	-							293		4
-	-	-	-	-	-	-	-							-		N/A
-	-	-	-	-	11	-	-							36		4
-	-	-	-	-	-	-	-							43		4
20	2	25	17	1	3	-	-							692		4
-	-	-	-	-	-	-	-							-		N/A
2	2	3	1	-	1	2	-							82		4
88	77	47	66	22	57	34	18							3,070		3
-	-	-	-	-	-	-	-							-		N/A
-	-	-	-	-	-	-	-							86		3
57	53	73	96	58	69	65	37							1,200		4
0	0	0	0	1	1	0	0							1,536		4
-	-	-	-	-	-	-	-							-		N/A
2	-	-	4	5	7	6	-							62		4
7	-	4	-	8	-	-	-							813		4
163	143	271	195	141	177	135	86							9,254		4
-	-	-	-	-	-	-	-							3		4
77	160	149	145	180	145	107	100							4,694		4
67	107	143	72	114	96	36	11							6,444		4
75	168	201	141	158	154	62	38							5,308		4
-	-	-	-	-	-	-	-							15		4
105	145	135	165	115	109	126	95							4,751		4
0	1	1	1	3	1	1	1						294	1,754		2
64	86	101	116	76	76	92	86							3,262		3
93	92	98	129	82	55	96	97							3,600		3
2,197	3,760	5,747	6,438	5,388	4,419	4,015	4,577							207,333	106,464	2
198	84	114	137	91	63	102	59							2,717		3
4	7	12	46	38	45	57	34							452		4
2	-	-	-	-	-	4	-							6		4
1	1	1	1	-	1	-	-							45		4
-	-	160	153	49	60	16	34						1,650	2,122		3
-	-	-	-	-	-	-	-							1		4

Company Name **Orion New Zealand Limited**

For Year Ended **31 March 2020**

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	<b>Circuit length by operating voltage (at year end)</b>	<b>Overhead (km)</b>	<b>Underground (km)</b>	<b>Total circuit length (km)</b>
11	> 66kV	–	–	–
12	50kV & 66kV	259	91	350
13	33kV	249	36	286
14	SWER (all SWER voltages)	86	2	88
15	22kV (other than SWER)	–	–	–
16	6.6kV to 11kV (inclusive—other than SWER)	3,070	2,733	5,803
17	Low voltage (< 1kV)	1,754	3,262	5,016
18	<b>Total circuit length (for supply)</b>	<b>5,419</b>	<b>6,124</b>	<b>11,543</b>
19				
20	Dedicated street lighting circuit length (km)	902	2,697	3,600
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)			87
22				
23	<b>Overhead circuit length by terrain (at year end)</b>	(% of total)		
24	Urban	<b>Circuit length (km)</b>	<b>overhead length</b>	
25	Rural	1,693	31%	
26	Remote only	3,162	58%	
27	Rugged only	143	3%	
28	Remote and rugged	184	3%	
29	Unallocated overhead lines	238	4%	
30	<b>Total overhead length</b>	<b>5,419</b>	<b>100%</b>	
31				
32		(% of total circuit length)		
33	Length of circuit within 10km of coastline or geothermal areas (where known)	<b>Circuit length (km)</b>	<b>length</b>	
		1,909	17%	
34		(% of total overhead length)		
35	Overhead circuit requiring vegetation management	<b>Circuit length (km)</b>	<b>overhead length</b>	
		5,419	100%	

**SCHEDULE 9d: REPORT ON EMBEDDED NETWORKS**

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

*sch ref*

sch ref	Location *	Number of ICPs served	Line charge revenue (\$000)
8			
9	Rakaia Gorge Embedded Network, upper Rakaia river	2	7
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 2020

Network / Sub-network Name

Entire network

**SCHEDULE 9e: REPORT ON NETWORK DEMAND**

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

sch ref

8	<b>9e(i): Consumer Connections</b>		
9	Number of ICPs connected in year by consumer type		
10	Consumer types defined by EDB*	Number of connections (ICPs)	
11	Streetlighting	8	
12	General	4,762	
13	Irrigation	6	
14	Major customer	10	
15	Large capacity	-	
16	* include additional rows if needed		
17	<b>Connections total</b>	4,786	
18			
19	<b>Distributed generation</b>		
20	Number of connections made in year	514	connections
21	Capacity of distributed generation installed in year	9.31	MVA
22	<b>9e(ii): System Demand</b>		
23			
24		Demand at time of maximum coincident demand (MW)	
25	<b>Maximum coincident system demand</b>		
26	GXP demand	604	
27	plus Distributed generation output at HV and above	2	
28	<b>Maximum coincident system demand</b>	606	
29	less Net transfers to (from) other EDBs at HV and above	0	
30	<b>Demand on system for supply to consumers' connection points</b>	606	
31	<b>Electricity volumes carried</b>	Energy (GWh)	
32	Electricity supplied from GXPs	3,408	
33	less Electricity exports to GXPs	0	
34	plus Electricity supplied from distributed generation	11	
35	less Net electricity supplied to (from) other EDBs	0	
36	<b>Electricity entering system for supply to consumers' connection points</b>	3,419	
37	less Total energy delivered to ICPs	3,276	
38	<b>Electricity losses (loss ratio)</b>	143	4.2%
39			
40	<b>Load factor</b>	0.64	
41	<b>9e(iii): Transformer Capacity</b>		
42		(MVA)	
43	Distribution transformer capacity (EDB owned)	2,186	
44	Distribution transformer capacity (Non-EDB owned, estimated)	228	
45	<b>Total distribution transformer capacity</b>	2,414	
46			
47	<b>Zone substation transformer capacity</b>	1,149	

Company Name	Orion New Zealand Limited
For Year Ended	31 March 2020
Network / Sub-network Name	Entire network

## SCHEDULE 10: REPORT ON NETWORK RELIABILITY

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

sch ref

10(i): Interruptions		Number of interruptions	
8	<b>10(i): Interruptions</b>		
9	<b>Interruptions by class</b>		
10	Class A (planned interruptions by Transpower)	1	
11	Class B (planned interruptions on the network)	747	
12	Class C (unplanned interruptions on the network)	962	
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)	3	
19	<b>Total</b>	<b>1,715</b>	
20			
21	<b>Interruption restoration</b>	<b>≤3Hrs</b>	<b>&gt;3hrs</b>
22	Class C interruptions restored within	664	298
23			
24	<b>SAIFI and SAIDI by class</b>	<b>SAIFI</b>	<b>SAIDI</b>
25	Class A (planned interruptions by Transpower)	0.00	0.1
26	Class B (planned interruptions on the network)	0.07	22.2
27	Class C (unplanned interruptions on the network)	0.60	45.6
28	Class D (unplanned interruptions by Transpower)	0.00	0.0
29	Class E (unplanned interruptions of EDB owned generation)	–	–
30	Class F (unplanned interruptions of generation owned by others)	–	–
31	Class G (unplanned interruptions caused by another disclosing entity)	–	–
32	Class H (planned interruptions caused by another disclosing entity)	–	–
33	Class I (interruptions caused by parties not included above)	0.00	0.0
34	<b>Total</b>	<b>0.66</b>	<b>68.0</b>
35			
36	<b>Normalised SAIFI and SAIDI</b>	<b>Normalised SAIFI</b>	<b>Normalised SAIDI</b>
37	Classes B & C (interruptions on the network)	0.66	67.8
38			

Company Name	Orion New Zealand Limited
For Year Ended	31 March 2020
Network / Sub-network Name	Entire network

## SCHEDULE 10: REPORT ON NETWORK RELIABILITY

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

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

Cause	SAIFI	SAIDI
Lightning	0.02	1.0
Vegetation	0.07	5.8
Adverse weather	0.04	6.7
Adverse environment	0.00	0.1
Third party interference	0.07	5.5
Wildlife	0.02	2.2
Human error	0.01	0.2
Defective equipment	0.27	19.5
Cause unknown	0.08	4.7

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

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	–	–
Subtransmission cables	–	–
Subtransmission other	–	–
Distribution lines (excluding LV)	0.04	13.9
Distribution cables (excluding LV)	0.00	0.7
Distribution other (excluding LV)	0.02	7.6

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

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	0.03	1.1
Subtransmission cables	–	–
Subtransmission other	0.00	0.1
Distribution lines (excluding LV)	0.32	32.4
Distribution cables (excluding LV)	0.15	7.3
Distribution other (excluding LV)	0.10	4.7

### 10(v): Fault Rate

Main equipment involved	Number of Faults	Circuit length (km)	Fault rate (faults per 100km)
Subtransmission lines	9	509	1.77
Subtransmission cables	–	127	–
Subtransmission other	1		
Distribution lines (excluding LV)	626	3,156	19.83
Distribution cables (excluding LV)	54	2,735	1.97
Distribution other (excluding LV)	109		
<b>Total</b>	<b>799</b>		



Company	Orion New Zealand Limited
Year ended	31 March 2020

## 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, has been 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.

Our FY20 post-tax regulatory ROI was 7.3% (FY19: 6.7%; FY18: 6.8%). FY20's ROI includes a 2.5% CPI movement (FY19: 1.5%).

No items were reclassified in FY19.

*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):

	<b>FY20 \$m</b>
Rental revenue and recovery of outgoings	2.0
Recoveries from third parties who cause to damage to our network	1.0
Other	1.2
<b>Total</b>	<u>4.2</u>

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

	<b>FY20 \$m</b>	<b>FY19 \$m</b>	<b>FY18 \$m</b>	<b>FY17 \$m</b>	<b>FY16 \$m</b>	<b>FY15 \$m</b>	<b>FY14 \$m</b>	<b>FY13 \$m</b>	<b>FY12 \$m</b>
Regulatory profit – as disclosed	81	74	72	78	63	81	51	49	62
Less quake insurance cash settlements	-	-	-	-	-	(24)	-	(2)	(21)
Less indexed asset revaluations	(28)	(16)	(11)	(21)	(5)	(1)	(13)	(7)	(13)
Add back loss on asset disposals	1	1	1	1	3	1	5	2	2
Add back identified quake related opex	-	-	-	-	-	-	-	-	10
<b>Underlying regulatory profit</b>	<u>54</u>	<u>59</u>	<u>62</u>	<u>58</u>	<u>61</u>	<u>57</u>	<u>43</u>	<u>42</u>	<u>40</u>

We expected our underlying profit to reduce between FY19 and FY20 as the Commerce Commission reduced our FY20 revenue due to the removal of the claw-back of earthquake recovery costs.

No items were reclassified in FY19 or FY20.

*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 FY20 our RAB value increased as follows:

	<b>FY20 \$m</b>
Opening RAB value	1,089
Add new assets commissioned	78
Add indexed asset revaluation (at CPI)	28
Less asset disposals at RAB value	(1)
Less depreciation and amortisation	(43)
Closing RAB value	<u>1,150</u>

Our \$78m of commissioned assets in FY20 is significantly higher than FY19 (\$63m). In part this is due to a \$13m reduction in works under construction as we completed a number of significant projects during the year.

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

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

- 8.1 Income not included in regulatory profit / (loss) before tax but taxable;
- 8.2 Expenditure or loss in regulatory profit / (loss) before tax but not deductible;
- 8.3 Income included in regulatory profit / (loss) before tax but not taxable;
- 8.4 Expenditure or loss deductible but not in regulatory profit / (loss) before tax.

<b>Box 5: Regulatory tax: permanent differences</b>	
	<b>FY20 \$m</b>
<b>Taxable income that is not in regulatory profit before tax</b>	-
<b>Expenditure that is not deductible:</b>	
Substation development costs expensed	0.1
Legal and entertainment expenses	0.1
	<hr/> 0.2 <hr/>
<b>Income that is not taxable</b>	-
<b>Deductible expenditure that is not in regulatory profit before tax:</b>	
Costs to obtain land easements	0.1
	<hr/> 0.1 <hr/>

*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.

<b>Box 6: Regulatory tax: temporary differences</b>	
	<b>FY20 \$m</b>
Expenditure timing differences for tax deductibility	0.6
Insurance cash settlement proceeds – assessable for tax purposes	0.1
Finance lease payments – operating leases for tax purposes	(0.2)
Internal profits on capex – deductible for tax purposes	(0.3)
Capex – deductible for tax purposes	(1.3)
Net total	<hr/> (1.1) <hr/>

*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.

No items were reclassified in FY19 or FY20.

*Asset allocation (Schedule 5e)*

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

**Box 8: Comment on asset allocation**

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

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

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

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

We made no further changes to asset allocation in FY20.

*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:

- \$64m (last year: \$72m) for network assets
- \$3m (last year: \$3m) for non-network assets.

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

Schedule 6a(iv) discloses \$14m of capex for system growth and \$33m for asset replacement and renewal. Our major projects and programmes in these areas which exceeded \$2m were

	<b>System growth \$m</b>	<b>Replacement &amp; renewal \$m</b>
Supply fuse relocation		7
LV, 11kV and subtransmission conductor and poles		6
11kV network circuit breaker replacement		3
11kV switchgear replacement		3
11kV zone circuit breaker replacement		2
LV switchgear replacement		2
Replacement of distribution transformers		2
Marshland zone substation	2	
Dunsandel zone substation upgrade	2	
Other projects and programmes	10	8
<b>Total</b>	<b>14</b>	<b>33</b>

No capex items were reclassified in FY20.

*Operational Expenditure for the Disclosure Year (Schedule 6b)*

13. In the box below, comment on operational expenditure for the disclosure year, as disclosed in Schedule 6b. This comment must include-
- 13.1 Commentary on assets replaced or renewed with asset replacement and renewal operational expenditure, as reported in 6b(i) of Schedule 6b;
  - 13.2 Information on reclassified items in accordance with subclause 2.7.1(2);
  - 13.3 Commentary on any material atypical expenditure included in operational expenditure disclosed in Schedule 6b, a including the value of the expenditure the purpose of the expenditure, and the operational expenditure categories the expenditure relates to.

**Box 10: Comment on operational expenditure for the disclosure year**

Schedule 6b(i) discloses \$2.7m of FY20 maintenance opex as asset replacement and renewal:

	<b>FY20 \$m</b>
Retightening and cross-arm and insulator work on 11kV overhead lines	1.2
66kV underground cable joint refurbishment	0.1
Other	0.5
	<hr style="width: 50px; margin-left: auto; margin-right: 0;"/> 1.8 <hr style="width: 50px; margin-left: auto; margin-right: 0;"/>

There were no material atypical items of expenditure in FY20.

No items were reclassified during FY20.

*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 \$70m and actual capex at \$68m. The key offsetting reasons for this underspend of \$2m are:

	<b>FY20 \$m</b>
Belfast zone sub (deferred to future year)	4
Marshland zone substation (delayed)	3
Lyttelton tunnel 11kV (delayed start from FY19)	(1)
Replacements	(2)
Connections and extensions (customer-driven)	(3)
Other (net)	1
Underspend relative to our AMP forecast	<u>2</u>

**OPEX**

Schedule 7(iii) discloses our AMP forecast opex of \$66.4m and actual opex of \$61.3m. Of this \$5.2m underspend, \$0.8m is due to network opex and \$4.4m is due to non-network opex.

The key reasons for these two variances are:

	<b>FY20 \$m</b>
<b>Network opex</b>	
Routine and corrective maintenance and inspection	1.3
Asset replacement and renewal opex	0.3
Service interruptions and emergencies	(0.4)
Vegetation management	(0.4)
Underspend relative to our AMP forecast	<u>0.8</u>

	FY20 \$m
<b>Non-network opex</b>	
Salaries and wages	0.9
Community engagement, sponsorship and communications	0.8
Consultancy	0.6
Salaries and wages – increase in capitalised labour	0.5
Commercial and regulatory	0.3
Other	1.3
Underspend relative to AMP forecast	<u>4.4</u>

From FY18 we have changed our accounting treatment and now 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 reporting purposes, and have continued to do so in FY19 and FY20.

No opex items were reclassified during FY20.

*Information relating to revenues and quantities for the disclosure year*

15. In the box below provide-

- 15.1 a comparison of the target revenue disclosed before the start of the disclosure year, in accordance with clause 2.4.1 and subclause 2.4.3(3) to total billed line charge revenue for the disclosure year, as disclosed in Schedule 8; and
- 15.2 explanatory comment on reasons for any material differences between target revenue and total billed line charge revenue.

**Box 12: Comment on revenue for the disclosure year**

In order to compare revenue with target revenue (as disclosed in our “Methodology for deriving delivery prices” document) on a like-for-like basis, we have added back irrigation rebates and export and generation credits (totalling \$1.4m) to actual revenue and made some other minor adjustments to target revenue.

The following table shows our restated target and actual revenue after allowing for these adjustments:

	<b>Target \$m</b>	<b>Actual \$m</b>	<b>Difference \$m</b>
Distribution	182.3	181.8	(0.5)
Transmission	62.5	61.9	(0.6)
<b>Delivery revenue</b>	<b>244.8</b>	<b>243.7</b>	<b>(1.1)</b>

The main factor contributing to the difference between target and billed revenue was general connection peak charges which were \$1.0m below target. This was the result of peak demand being 6.5MW below forecast.

*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**

The normalisation approach required under this information disclosure yields the normalised SAIFI and SAIDI given in Schedule 10. These results differ from the normalised results calculated under Orion’s DPP.

In summary:

	<b>DPP assessed normalised results</b>	<b>Information Disclosure normalised results</b>	<b>DPP limit</b>
<b>SAIDI</b>	67.3	67.8	73.4
<b>SAIFI</b>	0.66	0.66	0.87

The difference results from the application of different boundary values when normalising the results for major event days.

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.

*Insurance cover*

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

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

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

**Box 14: Comment on our insurance cover**

A summary of our insurance cover is as follows.

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

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

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

Our business interruption indemnity period is 18 months.

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

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

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

*Amendments to previously disclosed information*

18. In the box below, provide information about amendments to previously disclosed information in accordance with clause 2.12.1 in the last 7 years, including:
- 18.1 a description of each error; and
  - 18.2 for each error, reference to the web address where the disclosure made in accordance with clause 2.12.1 is publicly disclosed.

**Box 15: Disclosure of amendment to previously disclosed information**

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

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 almost 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.

Company Name	Orion New Zealand Limited
For Year Ended	31 March 2020

## Schedule 15 Voluntary Explanatory Notes

- This schedule enables EDBs to provide, should they wish to-
  - 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;
  - information on any substantial changes to information disclosed in relation to a prior disclosure year, as a result of final wash-ups.
- 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.
- 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:

$$\begin{aligned}
 & (\text{allowed opex FY16} - \text{actual opex FY16}) - (\text{allowed opex FY15} - \text{actual opex FY15}) \\
 & = (\$58,104k - \$55,679k) - (\$54,909k - \$50,828k) \\
 & = (\$1,656k).
 \end{aligned}$$

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.

#### 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	238
Christchurch City Council	<u>4,098</u>
<b>Total</b>	<b><u>4,336</u></b>

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

Our:

- kWh volume-based revenues for general connections, streetlighting connections and irrigation connections and
- kW peak-demand-based revenues for general and streetlighting connections

are calculated from total energy volumes injected into our electricity distribution network, measured at Transpower GXP's and other embedded generation points, minus loss-adjusted half-hourly metered major customer and large capacity connection revenues. Revenues for the latter two categories are calculated and charged separately.

It is not possible to accurately apportion the kWh or the kWh chargeable volumes between general, streetlighting and irrigation connection categories. In any case, we apply the same volume and peak demand prices to all three categories.

General connections represent 99% of the number of connections on our network. For information disclosure purposes, we have disclosed all quantities and revenues for the three categories in 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

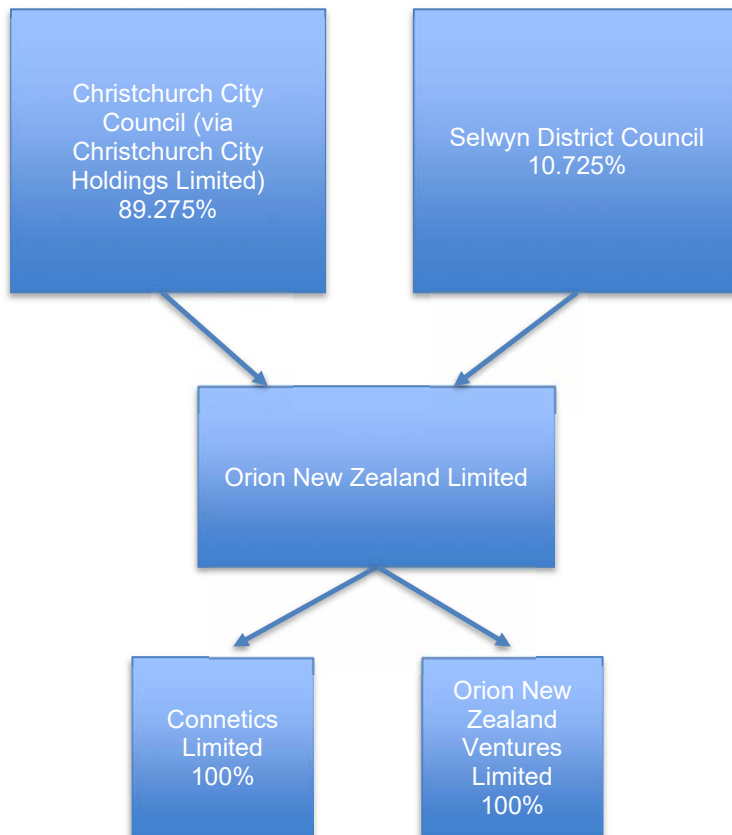
In FY20 the sum of Orion’s opex and capex exceeded the Commission’s \$20m de minimis threshold (IDD 2.3.9(1)), and our total related party expenditure exceeded 10% of our total opex and capex, so we are required to make these related party disclosures.

In FY20 we spent a total of:

	2020	2019
	\$m	\$m
Opex (from IDD schedule 6b(i), row 17)	61	60
Capex (from IDD schedule 6a(i), row 20)	68	75
<b>Total expenditure</b>	<b>129</b>	<b>135</b>

Orion’s expenditure with related parties in FY20, as disclosed in IDD schedule 5b, amounted to \$35m (FY19: \$40m), around 27% (FY19: 31%) of our overall capex and opex. This includes \$4m of rates paid to related parties in both years.

**3. Clause 2.3.8 Diagram or description of related party transactions**



Orion is owned by:

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

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

Orion has two wholly-owned subsidiaries:

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

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

These related parties include:

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

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

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

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

## **Business relationships with Connetics Limited**

Orion established Connetics as a standalone company in 1996 in order to introduce competition to maintenance and construction works. A significant amount of the revenue which Connetics receives from Orion is the result of successful tenders awarded on a lowest-price conforming tender basis. We seek tenders from multiple approved contractors for virtually all works above \$20,000.

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

- emergency response works, which uses a schedule of rates. Orion has also negotiated contracts with unrelated parties for similar works, although as our largest contractor with expertise in a diverse range of fields the largest single emergency response work contract is with Connetics. During FY19 Orion engaged PwC to perform a review of the arrangements in place for FY19, and also to review the basis for a three-year extension of the contract. PwC considered that Connetics' margins are reasonable, and the contract meets the arms-length test
- cable supply. As discussed in section 7 below, Orion has negotiated a contract with Connetics to provide cable to all contractors working on its network to ensure the cable is of an appropriate standard. Connetics' contracting section is charged at the same rates as external parties – which helps keep a competitive market for construction services. During FY19 PwC reviewed the arrangements and concluded that the risk that Connetics earns excessive margins on the cable supply contract that help it subsidise work in other markets is low
- network storage and supply. This requires Connetics to provide certain minimum levels of emergency spares and to manage Orion-owned equipment – such as transformers and switchgear. During FY19 Orion engaged PwC to perform a review of the arrangements in place. PwC considered that the contract meets the arms-length standard
- design work, which uses a schedule of rates. Orion uses several other design consultants as well. Orion engaged PwC to perform a review of the intercompany arrangements. PwC determined that rates charged are comparable with those charged by other design contractors and the contract meets the arms-length standard.

These contracts remain in place in FY20 and we have therefore not needed to have them reassessed for FY20.

During FY20 Orion paid Connetics \$34.3m (FY19: \$35.5m) for opex and capex. Refer to schedule 5b (iii) of our FY20 Information Disclosures for additional information.

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

A key exception to this is the provision by Orion of a depot for Connetics' use in Islington. The rental on the property has been negotiated on an arms-length basis with both parties taking independent advice. During FY18 Orion engaged PwC to perform a review of the arrangements. PwC confirmed that the lease contract and negotiations reflect arms-length principles. The lease remained in place for FY20.

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

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

### **Business relationships with CCC, SDC and CCHL**

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

During FY20 Orion paid CCC \$4.1m (2019: \$3.9m) for rates (including rates collected on behalf of Environment Canterbury) and a further \$0.2m (2019: \$0.2m) for other opex and capex.

During FY20 Orion paid SDC \$0.2m (2019: \$0.2m) for rates (including rates collected on behalf of Environment Canterbury) and a further \$0.2m (2019: \$0.2m) for other opex and capex.

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

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

Orion also invoices SDC and CCC for:

- a service to the CCC and Meridian for managing a database containing the number/types of streetlights, charged to both parties on an arms-length basis
- contributions towards asset relocations. As Roding Authorities, the Councils and NZTA can require Orion to relocate assets we have in the road reserve on a like for like basis. Under the Electricity Act Orion can negotiate with the council (and with NZTA) to contribute towards the cost of these projects. We require a more significant contribution where the assets are placed underground instead of replacing overhead with overhead. Orion determines a charge based on the actual costs of the project, considering the age and condition of the assets being removed and any improvement in capacity or improved functionality of the new assets. This is consistent with how we work with unrelated parties
- contributions towards discretionary asset undergrounding. We negotiate with the council using the principles discussed in the previous bullet point to agree a contribution towards the costs of this work. In FY20 we did not undertake any discretionary undergrounding projects for either council. In FY19 we undertook two discretionary undergrounding projects for SDC (CCC: nil), where overhead assets approximately halfway through their useful lives were replaced with underground assets. SDC contributed a substantial share of the replacement costs, which we treated as a capital contribution. 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 contractor.

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

**Business relationships with other CCC and SDC-controlled entities:**

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

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

City Care provides tree cutting services to Orion following a successful tender awarded on a lowest-price conforming tender basis. Such tenders are sourced from multiple parties. In addition, City Care provides some other services to Orion but generally these are provided as a subcontractor to another contractor. During FY20 Orion paid City Care \$1.0m (2019: \$1.0m) for opex and capex - refer to schedule 5b (iii) of our FY20 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 competition 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
- contract delivery guide, a procedural document which details the processes that we use in seeking and managing competitive tenders for contracted works
- 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-authorized service providers for our network works. These contractors must show competence in the specialised areas of work and comply with relevant legislation – eg, Health, safety and environmental responsibilities.

It is in Orion’s best interest to encourage open, effective and sustainable competition between eligible suppliers. This approach ensures a competitive market, ongoing skill development and a resilient contractor 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 arms-length – that is, no differently from any other contractor in our tendering processes.

All large Orion projects are tendered to multiple approved contractors, and are awarded on a lowest-price conforming tender basis. Orion has no in-house construction or maintenance team.

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

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

Our preferred procurement method is to seek tenders from multiple approved contractors for virtually all works above \$20,000. In FY20 we called for tenders for 168 projects totalling \$32m (FY19: 268 projects totalling \$35m). Of these, 96 were awarded to Connetics (FY19: 80) and two were awarded to City Care (FY19: four). In addition, in FY20 :

- we sole-sourced six projects from Connetics in FY20 at a total cost of \$0.3m
- we sole-sourced eight projects from Connetics in FY20 due to the requirement for specialist skills. These amounted to \$0.6m..



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 contractors.

For works with an estimated cost of between \$5,000 and \$20,000, a job manager will seek a minimum of two quoted prices from approved contractors. In FY20 we had just over 600 around projects in this category (FY19: 900). Of these, 161 were awarded to Connetics (FY19: 132) and one was awarded to City Care (FY19: six).

For minor works with an estimated cost of below \$5,000, a job manager can sole-source from a contractor, either on a quoted or time and materials basis. In FY20 we had around 5,700 projects in this category (FY19: 8,000). Of these, around two fifths were awarded to Connetics and nine were awarded to City Care (FY19: one quarter and 14, respectively).

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

## **5. Example of procurement policy in practice**

Some examples of our procurement policy in practice follow.

- a) Tender 2020/138E - 11kV Switchgear Replacement - Hoon Hay zone substation (\$1.3m). We sought tenders from Connetics and other unrelated parties. All contractors provided conforming tenders. Connetics was awarded the contract as it provided the lowest tender price
- b) Tender 2020/058E - 33/11kV Line Refurbishment, Hororata zone substation - Homebush School Lane (\$0.3m). We sought tenders from Connetics and one other unrelated party. Both contractors provided conforming tenders. The other contractor was awarded the contract as it provided the lowest tender price
- c) Tender 2020/194E- HV Safety Cut - Shands Rd (\$0.1m). We sought tenders from City Care and two other unrelated parties. All contractors provided conforming tenders. City Care was awarded the contract as it provided the lowest tender price
- d) Tender 2020/117E - HV Safety Cut - Darfield/Kimberly (\$0.3m). We sought tenders from City Care and two other unrelated parties. Two contractors provided conforming tenders and one contractor declined to tender. An unrelated party awarded the contract as it provided the lowest conforming tender price
- e) Quote to swap distribution transformer, estimated cost above \$5,000 and below \$20,000. Quotes sought from Connetics and one other contractor. The job was awarded to Connetics due to the lower quoted price provided
- f) Quote to carry out Coleridge scheduled maintenance repairs required, estimated cost above \$5,000 and below \$20,000. Quotes sought from Connetics and one other contractor. The job was awarded to the other contractor due to the lower quoted price provided
- g) Quote to remove a willow hedge, estimated cost above \$5,000 and below \$20,000. Quotes sought from City Care and one other contractor. The job was awarded to City Care due to the lower quoted price provided

- h) Following an emergency repair, Connetics was instructed to straighten pole and replace the 7/18 conductor. Orion's job manager chose Connetics from amongst our contractor pool. The job was undertaken on a time and materials basis using a negotiated schedule of rates, and cost \$3,404.27. Our job manager considered that the hours and materials used were reasonable given his extensive experience
- i) Following an emergency repair, an unrelated party was instructed to replace a boundary box. The same Orion job manager as in example (h) chose the contractor from amongst our contractor pool. The job was undertaken on a time and materials basis using a negotiated schedule of rates, and cost \$3,323.04. Our job manager considered that the hours and materials used were reasonable given his extensive experience
- j) 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 contractors. We have also had independent reviews completed to ensure that other contracts – such as the cable management agreement we have with Connetics – are consistent with an arms-length approach.

## **6. Representative transactions and testing of those transactions**

As noted above, we test the basis of all of our transactions regularly and do not differentiate between our related and unrelated parties. We:

- continually test our significant transactions through our tendering system or by comparing two or more quotes
- 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 contractors.

## **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 contractors. Orion also works with Connetics to ensure cable stocks on hand are sufficient for Orion projects given often substantial lead times. This contract applies until 30 September 2020 but will likely be renegotiated with Connetics.

Other than this arrangement, we have no policies or procedures that have the effect of requiring purchase from our related parties. Customers who require a new connection can choose a contractor from a schedule of contractors who are approved to operate on Orion's network. Developers, including subdividers, can also choose from a range of contractors, 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 contractors, and award the contract to the lowest price conforming tenderer.

Connetics will generally be an approved tenderer for many of these projects, but the tender process will determine the successful contractor. 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 Asset Management Plan Update 2020 for further information.

## Orion New Zealand Limited

# Maps of anticipated expenditure and network constraints

for the ten year period beginning 1 April 2020

Region A – urban network

Region B – rural network

# Region A capex and opex projects

**KEY**

<b>Existing</b>	<b>Proposed</b>
2	No. of ccts if more than 1

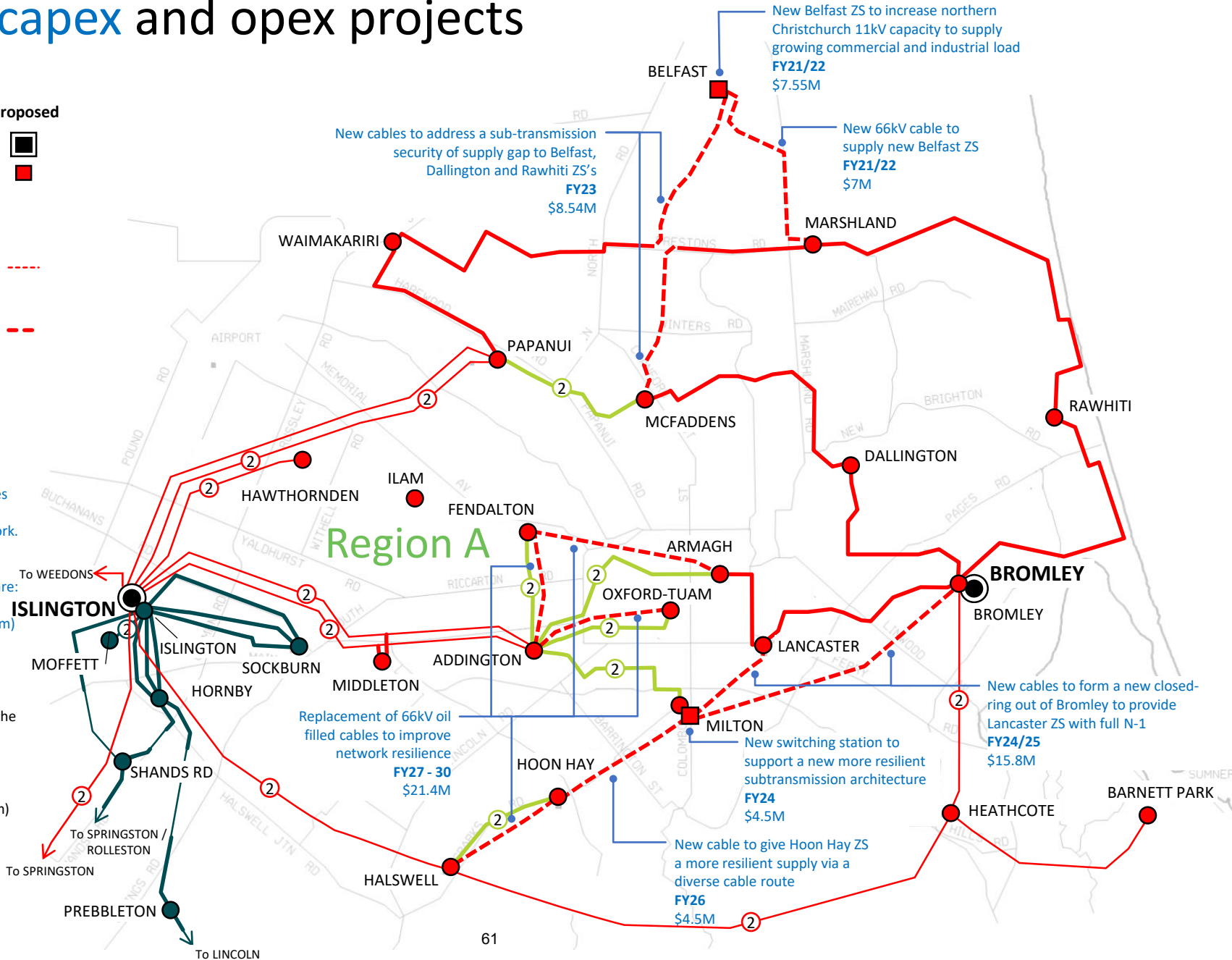
Across Region A we have programmes to continually improve the safety, reliability and resilience of our network.

The top five **capex** replacement programmes over the next 10 years are:

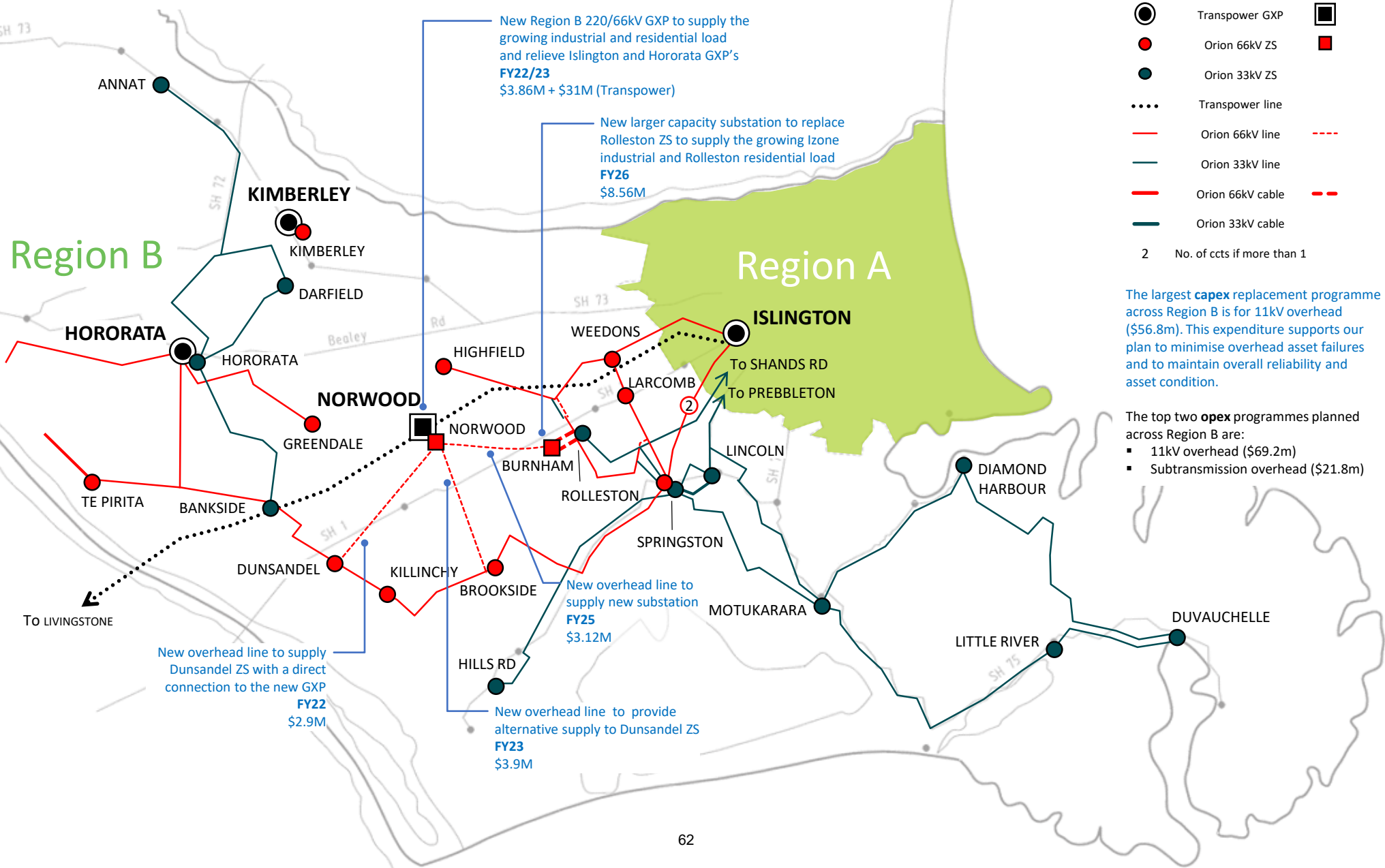
- Switchgear (\$89.0m)
- 400V underground cables (\$52.8m)
- 400V overhead lines (\$45.1m)
- Protection (\$27.5m)
- Transformers (\$20.2m)

The top five **opex** programmes over the next 10 years are:

- 400V overhead (\$35.8m)
- 400V underground (\$26.7m)
- 11kV underground (\$21.2m)
- Buildings and enclosures (\$14.2m)
- Switchgear (\$11.5m)



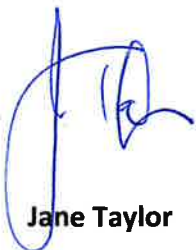
# Region B capex and opex projects



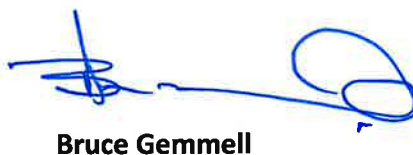
## Certification for year-end disclosures

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

- a) the information prepared for the purposes of clauses 2.3.1, 2.3.2, 2.4.21, 2.4.22, 2.5.1, 2.5.2 and 2.7.1 of the Electricity Distribution Information Disclosure Determination 2012 in all material respects complies with that determination; and
- b) the historical information used in the preparation of Schedules 8, 9a, 9b, 9c, 9d, 9e, 10 and 14 has been properly extracted from Orion New Zealand Limited's accounting and other records sourced from its financial and non-financial systems, and that sufficient appropriate records have been retained
- c) in respect of information concerning assets, costs and revenues valued or disclosed in accordance with clause 2.3.6 of the Electricity Distribution Information Disclosure Determination 2012 and clauses 2.2.11(1)(g) and 2.2.11(5) of the Electricity Distribution Services Input Methodologies Determination 2012, we are satisfied that –
  - i. the costs and values of assets or goods or services acquired from a related party comply, in all material respects, with clauses 2.3.6(1) and 2.3.6(3) of the Electricity Distribution Information Disclosure Determination 2012 and clauses 2.2.11(1)(g) and 2.2.11(5)(a)-2.2.11(5)(b) of the Electricity Distribution Services Input Methodologies Determination 2012; and
  - ii. the value of assets or goods or services sold or supplied to a related party comply, in all material respects, with clause 2.3.6(2) of the Electricity Distribution Information Disclosure Determination 2012
- d) the SAIDI and SAIFI information has been reported consistently with the Commerce Commission's *Information Disclosure exemption: Disclosure and auditing of reliability information within Schedule 10*, dated 9 April 2020.



Jane Taylor



Bruce Gemmell

31 August 2020

## Independent Assurance Report

### To the directors of Orion New Zealand Limited and the Commerce Commission

The Auditor-General is the auditor of Orion New Zealand Limited (the Company). The Auditor-General has appointed me, John Mackey, using the staff and resources of Audit New Zealand, to provide an opinion, on his behalf, on:

- Whether the information (“the Disclosure Information”) required to be disclosed in accordance with the Electricity Distribution Information Disclosure Determination 2012, as amended by the Information Disclosure exemption: Disclosure and auditing of reliability information within schedule 10, issued by the Commerce Commission on 9 April 2020 (“the Information Disclosure Determination, as amended”) for the disclosure year ended 31 March 2020, has been prepared, in all material respects, in accordance with the Information Disclosure Determination, as amended.

The Disclosure Information required to be reported by the Company, and audited by the Auditor-General, under the Information Disclosure Determination, as amended, is in schedules 1 to 4, 5a to 5g, 6a and 6b, and 7, the disclosure that shows the connection between the Electricity Distribution Business (EDB) and the related parties with which it has had related party transactions in the disclosure year, the disclosure of the EDB’s related party procurement policy, the disclosures about related party transactions required under clause 2.3.12 of the Information Disclosure Determination, the system average interruption duration index (“SAIDI”) and system average interruption frequency index (“SAIFI”) information disclosed in schedule 10 and the explanatory notes in boxes 1 to 11, in schedule 14.

- Whether the Company’s basis for valuation of related party transactions (“the Related Party Transaction Information”) for the disclosure year ended 31 March 2020, has been prepared, in all material respects, in accordance with clause 2.3.6 of the Information Disclosure Determination, as amended, and clauses 2.2.11(1)(g) and 2.2.11(5) of the Electricity Distribution Services Input Methodologies Determination 2012 (“the Input Methodologies Determination”).

### Opinion

In our opinion:

- as far as appears from an examination of them, 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 and has been sourced, where appropriate, from the Company’s financial and non-financial systems;
- the Disclosure Information complies, in all material respects, with the Information Disclosure Determination, as amended; and



- the Related Party Transaction Information complies, in all material respects, with the Information Disclosure Determination, as amended, and the Input Methodologies Determination.

In forming our opinion, we have obtained sufficient recorded evidence and all the information and explanations we have required.

### **Basis of opinion**

We conducted our engagement in accordance with the International Standard on Assurance Engagements (New Zealand) 3000 (Revised): *Assurance Engagements Other Than Audits or Reviews of Historical Financial Information* and the Standard on Assurance Engagements 3100 (Revised): *Compliance Engagements* issued by the New Zealand Auditing and Assurance Standards Board. Copies of these standards are available on the External Reporting Board's website.

These standards require that we comply with ethical requirements and plan and perform our assurance engagement to provide reasonable assurance about whether the Disclosure Information has been prepared, in all material respects, with the Information Disclosure Determination, as amended, and about whether the Related Party Transaction Information has been prepared, in all material respects, with the Information Disclosure Determination, as amended, and the Input Methodologies Determination. Reasonable assurance is a high level of assurance.

We have performed procedures to obtain evidence about the amounts and disclosures in the Disclosure Information, and the basis of valuation in the Related Party Transaction Information. The procedures selected depend on our judgement, including the assessment of the risks of material misstatement of the Disclosure Information and the Related Party Transaction Information, whether due to fraud, error or non-compliance with the Information Disclosure Determination, as amended, or the Input Methodologies Determination. In making those risk assessments, we considered internal control relevant to the Company's preparation of the Disclosure Information and the Related Party Transaction Information in order to design procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.

### **Scope and inherent limitations**

Because of the inherent limitations of a reasonable assurance engagement, and the test basis of the procedures performed, it is possible that fraud, error or non-compliance may occur and not be detected.

We did not examine every transaction, adjustment or event underlying the Disclosure Information or the Related Party Transaction Information, nor do we guarantee complete accuracy of the Disclosure Information or the Related Party Transaction Information. Also we did not evaluate the security and controls over the electronic publication of the Disclosure Information or the Related Party Transaction Information.

The opinion expressed in this independent assurance report has been formed on the above basis.

## 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 audit, 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
<p><b>Accuracy of the number and duration of electricity outages</b></p> <p>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.</p> <p>This is a key audit matter because information on the frequency and duration of outages is an important measure of the reliability of electricity supply. Relatively small inaccuracies can have a significant impact on the reliability thresholds against which the Company's performance is assessed.</p> <p>There can also be significant consequences if the Company breaches the reliability thresholds.</p> <p>The Commission has issued an Exemption notice which, if it applies, excludes the assurance report from coverage of the information, in schedule 10 of the ID determination, for any issues arising out of the EDB'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.</p>	<p>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.</p> <p>Our procedures to assess the adequacy of the Company's methods to identify and record electricity outages and their duration included:</p> <ul style="list-style-type: none"> <li>• review and testing of the overall control environment;</li> <li>• use of IT auditors to specifically test the reliability of the automated processes used to record the details of interruptions to supply;</li> <li>• obtaining internal and external information on interruptions to supply to gain assurance that all interruptions to supply were recorded. Internal and external information sources included works orders for contractors, media reports and Board minutes;</li> <li>• confirming the interruptions to supply information used in the SAIDI and SAIFI calculations was appropriately extracted from the automated system;</li> <li>• testing a sample of interruptions to supply to source records to conclude whether they were correctly categorised;</li> <li>• checked the SAIDI and SAIFI ratios were correctly calculated in accordance with the Information Disclosure Determination, as amended, and the Input Methodologies Determination;</li> <li>• obtained explanations for all significant variances to forecast; and</li> <li>• testing the accuracy of the number of connections to the Electricity Authority's register.</li> </ul> <p>With respect to the Exemption, we:</p> <ul style="list-style-type: none"> <li>• 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;</li> </ul>

Key assurance matter	How our procedures addressed the key assurance matter
	<ul style="list-style-type: none"> <li>• compared this to the documented process that the Company followed in the previous year; and</li> <li>• 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, was the same for both years.</li> </ul> <p>Having carried out these procedures, and in assessed the likelihood of reported electricity outages and their duration being materially misstated in the Disclosure Information, we have no matters to report.</p>
<p><b>Valuation of related-party transactions at arm’s-length</b></p> <p>The Information Disclosure Determination, as amended and the Input Methodologies 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.</p> <p>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.</p> <p>This is a key audit matter because the requirement involve 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.</p>	<p>We have obtained an understanding of the Company’s approach to identifying and valuing related-party transactions at arm’s-length in accordance with the Information Disclosure Determination, as amended and the Input Methodologies Determination. We confirmed the approach used is in accordance with the Information Disclosure Determination, as amended and the Input Methodologies Determination.</p> <p>The procedures we have carried out to satisfy ourselves that related-party transactions are appropriately valued at arm’s-length included:</p> <ul style="list-style-type: none"> <li>• Testing the completeness of the related-parties identified through review of Board minutes, review of Companies Office records, and related-parties identified through detailed testing of transactions and balances in the annual financial statements audit.</li> <li>• Reviewing the appropriateness of procurement policies, especially with related parties, for the different categories of procurement transactions.</li> <li>• Testing samples of transactions, with related parties for the different categories of procurement for compliance with policies. This included reviewing tender evaluations, and quotes obtained to ensure transactions are at arm’s length.</li> <li>• Confirming that opinions obtained by the Company from external experts, with the appropriate knowledge and expertise in the prior year still remain appropriate, , on the reasonableness of the approach adopted to determine arm’s-length value for related-party transactions for: <ul style="list-style-type: none"> <li>○ a significant lease;</li> <li>○ the major emergency works contract;</li> </ul> </li> </ul>

Key assurance matter	How our procedures addressed the key assurance matter
	<ul style="list-style-type: none"> <li>○ the cable management contract;</li> <li>○ network storage and supply; and</li> <li>○ design work.</li> <li>● Comparison of sales transactions for undergrounding of overhead lines against the depreciated fair value of the replaced assets.</li> <li>● Confirming the material accuracy of related party values disclosed, and compliance of their calculation with the Information Disclosure Determination and the Input Methodologies Determination.</li> </ul> <p>Our review of the external expert's work included assessment of the appropriateness of the expert's approach, the reasonableness of the assumptions applied, and the conclusion reached. We also assessed the expert's competence, and objectivity.</p> <p>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.</p> <p>No matters arose from carrying out the above procedures.</p>

### **Directors' responsibility for the preparation of the Disclosure Information and Related Party Transaction Information**

The directors of the Company are responsible for:

- the preparation of the Disclosure Information in accordance with the Information Disclosure Determination, as amended; and
- the Related Party Transaction Information in accordance with the Information Disclosure Determination, as amended, and the Input Methodologies Determination.

The directors are responsible for such internal control as the directors determine is necessary to enable the preparation of the Disclosure Information and the Related Party Transaction Information that are free from material misstatement.

### **Our responsibility for the audit of the Disclosure Information and the Related Party Transaction Information**

Our responsibility is to express an opinion on whether:

- the Disclosure Information has been prepared, in all material respects, in accordance with the Information Disclosure Determination, as amended; and

- the Related Party Transaction Information has been prepared, in all material respects, in accordance with the Information Disclosure Determination, as amended, and the Input Methodologies Determination.

### **Independence and quality control**

When carrying out the engagement, 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 (Revised) issued by the New Zealand Auditing and Assurance Standards Board;
- the independence requirements specified in the Information Disclosure Determination, as amended; and
- the Auditor-General's quality control requirements, which incorporate the quality control requirements of Professional and Ethical Standard 3 (Amended) issued by the New Zealand Auditing and Assurance Standards Board.

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

### **Use of this report**

This independent assurance report has been prepared solely for the directors of the Company and for the Commerce Commission for the purpose of providing those parties with reasonable assurance about whether the Disclosure Information has been prepared, in all material respects, in accordance with the Information Disclosure Determination, as amended, and whether the Related Party Transaction Information has been prepared, in all material respects, in accordance with the Information Disclosure Determination, as amended, and the Input Methodologies Determination. We disclaim any assumption of responsibility for any reliance on this report to any person other than the directors of the Company or the Commerce Commission, or for any other purpose than that for which it was prepared.



John Mackey  
Audit New Zealand  
On behalf of the Auditor-General  
Christchurch, New Zealand  
31 August 2020