Orion New Zealand Limited

Information for disclosure

for the year ended 31 March 2018

Electricity distribution
information disclosure
determination 2012

Approved 17 August 2018

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Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2018**

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

sch ref	1(i): Expenditure metrics	Expenditure per GWh energy delivered to ICPs ($/GWh)	Expenditure per average no. of ICPs ($/ICP)	Expenditure per MW maximum coincident system demand ($/MW)	Expenditure per km circuit length ($/km)	Expenditure per MVA of capacity from EDB-owned distribution transformers ($/MVA)
9	**Operational expenditure**	17,086	271	86,886	4,775	25,721
10	Network	8,005	127	40,708	2,237	12,051
11	Non-network	9,081	144	46,178	2,538	13,670
12						
13	**Expenditure on assets**	23,987	381	121,975	6,704	36,108
14	Network	18,705	297	95,119	5,228	28,158
15	Non-network	5,281	84	26,856	1,476	7,950

1(ii): Revenue metrics

sch ref		Revenue per GWh energy delivered to ICPs ($/GWh)	Revenue per average no. of ICPs ($/ICP)
19	**Total consumer line charge revenue**	79,365	1,260
20	Standard consumer line charge revenue	80,917	1,242
21	Non-standard consumer line charge revenue	34,127	299,348

1(iii): Service intensity measures

sch ref			
25	Demand density	55	*Maximum coincident system demand per km of circuit length (for supply) (kW/km)*
26	Volume density	279	*Total energy delivered to ICPs per km of circuit length (for supply) (MWh/km)*
27	Connection point density	18	*Average number of ICPs per km of circuit length (for supply) (ICPs/km)*
28	Energy intensity	15,875	*Total energy delivered to ICPs per average number of ICPs (kWh/ICP)*

1(iv): Composition of regulatory income

sch ref		($000)	% of revenue
32	Operational expenditure	54,207	21.29%
33	Pass-through and recoverable costs excluding financial incentives and wash-ups	76,809	30.17%
34	Total depreciation	38,762	15.23%
35	Total revaluations	11,011	4.33%
36	Regulatory tax allowance	23,517	9.24%
37	Regulatory profit/(loss) including financial incentives and wash-ups	72,278	28.39%
38	**Total regulatory income**	254,561	

1(v): Reliability

sch ref			
42	Interruption rate	12.99	*Interruptions per 100 circuit km*

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2018**

SCHEDULE 2: REPORT ON RETURN ON INVESTMENT

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

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

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

2(i): Return on Investment

	CY-2 31 Mar 16 %	CY-1 31 Mar 17 %	Current Year CY 31 Mar 18 %
ROI – comparable to a post tax WACC			
Reflecting all revenue earned	6.30%	7.76%	6.83%
Excluding revenue earned from financial incentives	5.80%	7.29%	6.46%
Excluding revenue earned from financial incentives and wash-ups	5.77%	7.25%	6.43%
Mid-point estimate of post tax WACC	5.37%	4.77%	5.04%
25th percentile estimate	4.66%	4.05%	4.36%
75th percentile estimate	6.09%	5.48%	5.72%
ROI – comparable to a vanilla WACC			
Reflecting all revenue earned	6.95%	8.30%	7.42%
Excluding revenue earned from financial incentives	6.45%	7.83%	7.05%
Excluding revenue earned from financial incentives and wash-ups	6.42%	7.80%	7.02%
WACC rate used to set regulatory price path	6.92%	6.92%	6.92%
Mid-point estimate of vanilla WACC	6.02%	5.31%	5.60%
25th percentile estimate	5.30%	4.59%	4.92%
75th percentile estimate	6.74%	6.03%	6.29%

2(ii): Information Supporting the ROI

			($000)	
	Total opening RAB value	1,004,182		
plus	Opening deferred tax	(39,439)		
Opening RIV			964,743	
Line charge revenue			251,787	
	Expenses cash outflow	131,015		
add	Assets commissioned	77,003		
less	Asset disposals	996		
add	Tax payments	19,807		
less	Other regulated income	2,774		
Mid-year net cash outflows			224,055	
Term credit spread differential allowance			–	
	Total closing RAB value	1,051,194		
less	Adjustment resulting from asset allocation	(1,245)		
less	Lost and found assets adjustment	–		
plus	Closing deferred tax	(43,149)		
Closing RIV			1,009,289	
ROI – comparable to a vanilla WACC				7.42%
	Leverage (%)			44%
	Cost of debt assumption (%)			4.80%
	Corporate tax rate (%)			28%
ROI – comparable to a post tax WACC				6.83%

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SCHEDULE 2: REPORT ON RETURN ON INVESTMENT

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

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sch ref

2(iii): Information Supporting the Monthly ROI

Opening RIV	N/A

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

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

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

Year-end ROI – comparable to a vanilla WACC	6.68%
Year-end ROI – comparable to a post tax WACC	6.09%

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

2(v): Financial Incentives and Wash-Ups

Net recoverable costs allowed under incremental rolling incentive scheme	–	
Purchased assets – avoided transmission charge	4,827	
Energy efficiency and demand incentive allowance	–	
Quality incentive adjustment	–	
Other financial incentives	–	
Financial incentives		4,827
Impact of financial incentives on ROI		0.37%
Input methodology claw-back	–	
Recoverable customised price-quality path costs	440	
Catastrophic event allowance	–	
Capex wash-up adjustment	–	
Transmission asset wash-up adjustment	–	
2013–2015 NPV wash-up allowance	–	
Reconsideration event allowance	–	
Other wash-ups	–	
Wash-up costs		440
Impact of wash-up costs on ROI		0.03%

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For Year Ended	**31 March 2018**

SCHEDULE 3: REPORT ON REGULATORY PROFIT

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

sch ref			
7		**3(i): Regulatory Profit**	**($000)**
8		**Income**	
9		Line charge revenue	251,787
10	*plus*	Gains / (losses) on asset disposals	(722)
11	*plus*	Other regulated income (other than gains / (losses) on asset disposals)	3,496
12			
13		**Total regulatory income**	254,561
14		**Expenses**	
15	*less*	Operational expenditure	54,207
16			
17	*less*	Pass-through and recoverable costs excluding financial incentives and wash-ups	76,809
18			
19		**Operating surplus / (deficit)**	123,546
20			
21	*less*	Total depreciation	38,762
22			
23	*plus*	Total revaluations	11,011
24			
25		**Regulatory profit / (loss) before tax**	95,795
26			
27	*less*	Term credit spread differential allowance	–
28			
29	*less*	Regulatory tax allowance	23,517
30			
31		**Regulatory profit/(loss) including financial incentives and wash-ups**	72,278
32			

33	**3(ii): Pass-through and Recoverable Costs excluding Financial Incentives and Wash-Ups**	**($000)**	
34	**Pass through costs**		
35	Rates	3,699	
36	Commerce Act levies	376	
37	Industry levies	668	
38	CPP specified pass through costs	–	
39	**Recoverable costs excluding financial incentives and wash-ups**		
40	Electricity lines service charge payable to Transpower	69,839	
41	Transpower new investment contract charges	2,076	
42	System operator services	–	
43	Distributed generation allowance	149	
44	Extended reserves allowance	–	
45	Other recoverable costs excluding financial incentives and wash-ups	–	
46	**Pass-through and recoverable costs excluding financial incentives and wash-ups**		76,809
47			

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SCHEDULE 3: REPORT ON REGULATORY PROFIT

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

48	**3(iii): Incremental Rolling Incentive Scheme**		**($000)**	
49			**CY-1**	**CY**
50			**31 Mar 17**	**31 Mar 18**
51	Allowed controllable opex		57,926	57,997
52	Actual controllable opex		55,736	54,207
53				
54	Incremental change in year			1,600
55				
56			**Previous years' incremental change**	**Previous years' incremental change adjusted for inflation**
57	CY-5	31 Mar 13		
58	CY-4	31 Mar 14		
59	CY-3	31 Mar 15	4,081	
60	CY-2	31 Mar 16	2,425	
61	CY-1	31 Mar 17	(235)	
62	**Net incremental rolling incentive scheme**			–
63				
64	**Net recoverable costs allowed under incremental rolling incentive scheme**			–
65	**3(iv): Merger and Acquisition Expenditure**			
70				**($000)**
66	Merger and acquisition expenditure			–
67				
68	*Provide commentary on the benefits of merger and acquisition expenditure to the electricity distribution business, including required disclosures in accordance with section 2.7, in Schedule 14 (Mandatory Explanatory Notes)*			
69	**3(v): Other Disclosures**			
70				**($000)**
71	Self-insurance allowance			–

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For Year Ended	**31 March 2018**

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

This schedule requires information on the calculation of the Regulatory Asset Base (RAB) value to the end of this disclosure year. This informs the ROI calculation in Schedule 2.

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

sch ref

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

		RAB	RAB	RAB	RAB	RAB
	for year ended	**31 Mar 14**	**31 Mar 15**	**31 Mar 16**	**31 Mar 17**	**31 Mar 18**
		($000)	**($000)**	**($000)**	**($000)**	**($000)**
	Total opening RAB value	864,649	890,508	907,756	986,595	1,004,182
less	**Total depreciation**	34,385	35,910	37,026	37,063	38,762
plus	**Total revaluations**	12,840	744	5,304	21,320	11,011
plus	**Assets commissioned**	73,121	53,514	113,616	34,993	77,003
less	**Asset disposals**	25,717	1,100	3,055	1,663	996
plus	**Lost and found assets adjustment**	–	–	–	–	–
plus	**Adjustment resulting from asset allocation**	–	–	–	–	(1,245)
	Total closing RAB value	890,508	907,756	986,595	1,004,182	1,051,194

4(ii): Unallocated Regulatory Asset Base

		Unallocated RAB *		RAB	
		($000)	**($000)**	**($000)**	**($000)**
	Total opening RAB value		1,004,182		1,004,182
less					
	Total depreciation		38,762		38,762
plus					
	Total revaluations		11,011		11,011
plus					
	Assets commissioned (other than below)	51,786		51,786	
	Assets acquired from a regulated supplier	–		–	
	Assets acquired from a related party	25,217		25,217	
	Assets commissioned		77,003		77,003
less					
	Asset disposals (other than below)	996		996	
	Asset disposals to a regulated supplier	–		–	
	Asset disposals to a related party	–		–	
	Asset disposals		996		996
plus	**Lost and found assets adjustment**		–		–
plus	**Adjustment resulting from asset allocation**				(1,245)
	Total closing RAB value		1,052,439		1,051,194

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

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For Year Ended	**31 March 2018**

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

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

sch ref						
51						
52		**4(iii): Calculation of Revaluation Rate and Revaluation of Assets**				
53						
54		CPI_4				1,011
55		CPI_4^{-4}				1,000
56		Revaluation rate (%)				1.10%
57						
58			**Unallocated RAB ***		**RAB**	
59			**($000)**	**($000)**	**($000)**	**($000)**
60		Total opening RAB value	1,004,182		1,004,182	
61	*less*	Opening value of fully depreciated, disposed and lost assets	3,181		3,181	
62						
63		Total opening RAB value subject to revaluation	1,001,001		1,001,001	
64		**Total revaluations**		11,011		11,011
65						
66		**4(iv): Roll Forward of Works Under Construction**				
67			**Unallocated works under construction**		**Allocated works under construction**	
68		**Works under construction—preceding disclosure year**		53,907		53,907
69	*plus*	Capital expenditure	65,216		65,216	
70	*less*	Assets commissioned	77,003		77,003	
71	*plus*	Adjustment resulting from asset allocation				
72		**Works under construction - current disclosure year**		42,120		42,120
73						
74		Highest rate of capitalised finance applied				
75						

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

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

sch ref

76 4(v): Regulatory Depreciation

sch ref		Unallocated RAB * ($000)	Unallocated RAB * ($000)	RAB ($000)	RAB ($000)
79	Depreciation - standard	34,863		34,863	
80	Depreciation - no standard life assets	3,899		3,899	
81	Depreciation - modified life assets	–		–	
82	Depreciation - alternative depreciation in accordance with CPP	–		–	
83	**Total depreciation**		38,762		38,762
84					

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

($000 unless otherwise specified)

sch ref	Asset or assets with changes to depreciation*	Reason for non-standard depreciation (text entry)	Depreciation charge for the period (RAB)	Closing RAB value under 'non-standard' depreciation	Closing RAB value under 'standard' depreciation
87	No changes to depreciation profiles				
88					
89					
90					
91					
92					
93					
94					

95 ** include additional rows if needed*

96 4(vii): Disclosure by Asset Category

97 ($000 unless otherwise specified)

sch ref			Subtransmission lines	Subtransmission cables	Zone substations	Distribution and LV lines	Distribution and LV cables	Distribution substations and transformers	Distribution switchgear	Other network assets	Non-network assets	Total
99		**Total opening RAB value**	59,815	83,534	121,202	117,544	333,819	113,673	107,947	31,086	35,564	1,004,182
100	*less*	Total depreciation	2,302	2,329	5,833	4,839	11,157	3,326	4,758	1,192	3,028	38,762
101	*plus*	Total revaluations	657	919	1,329	1,289	3,672	1,249	1,185	342	370	11,011
102	*plus*	Assets commissioned	2,979	1,159	7,672	4,802	17,682	6,722	11,310	1,693	22,984	77,003
103	*less*	Asset disposals	63	–	309	309	–	116	112		86	996
104	*plus*	Lost and found assets adjustment	–	–	–	–	–	–	–	–	–	–
105	*plus*	Adjustment resulting from asset allocation	–	–	–	–	–	–	–	–	(1,245)	(1,245)
106	*plus*	Asset category transfers	–	–	–	–	–	–	–	–	–	–
107		**Total closing RAB value**	61,086	83,283	124,061	118,486	344,015	118,202	115,572	31,929	54,559	1,051,194
108												
109		**Asset Life**										
110		Weighted average remaining asset life	35.6	42.9	31.4	32.5	37.3	33.7	29.0	31.1	21.9	(years)
111		Weighted average expected total asset life	46.0	58.5	45.8	47.9	58.7	45.1	40.5	34.7	26.3	(years)

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SCHEDULE 5a: REPORT ON REGULATORY TAX ALLOWANCE

This schedule requires information on the calculation of the regulatory tax allowance. This information is used to calculate regulatory profit/loss in Schedule 3 (regulatory profit). EDBs must provide explanatory commentary on the information disclosed in this schedule, in Schedule 14 (Mandatory Explanatory Notes).
This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 3.8

sch ref					
7	**5a(i): Regulatory Tax Allowance**			**($000)**	
8		**Regulatory profit / (loss) before tax**		95,795	
9					
10	*plus*	Income not included in regulatory profit / (loss) before tax but taxable	12		*
11		Expenditure or loss in regulatory profit / (loss) before tax but not deductible	473		*
12		Amortisation of initial differences in asset values	15,349		
13		Amortisation of revaluations	3,858		
14				19,691	
15					
16	*less*	Total revaluations	11,011		
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	582		*
20		Notional deductible interest	19,903		
21				31,496	
22					
23		**Regulatory taxable income**		83,990	
24					
25	*less*	Utilised tax losses	–		
26		Regulatory net taxable income		83,990	
27					
28		Corporate tax rate (%)	28%		
29		**Regulatory tax allowance**		23,517	
30					
31	*	Workings to be provided in Schedule 14			

32 **5a(ii): Disclosure of Permanent Differences**

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

34	**5a(iii): Amortisation of Initial Difference in Asset Values**			**($000)**
35				
36		Opening unamortised initial differences in asset values	391,081	
37	*less*	Amortisation of initial differences in asset values	15,349	
38	*plus*	Adjustment for unamortised initial differences in assets acquired	–	
39	*less*	Adjustment for unamortised initial differences in assets disposed	620	
40		Closing unamortised initial differences in asset values		375,112
41				
42		Opening weighted average remaining useful life of relevant assets (years)		25
43				

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SCHEDULE 5a: REPORT ON REGULATORY TAX ALLOWANCE

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

sch ref				($000)
44	**5a(iv): Amortisation of Revaluations**			**($000)**
46		Opening sum of RAB values without revaluations	924,294	
48		Adjusted depreciation	34,904	
49		Total depreciation	38,762	
50		Amortisation of revaluations		3,858
52	**5a(v): Reconciliation of Tax Losses**			**($000)**
54		**Opening tax losses**	–	
55	*plus*	Current period tax losses	–	
56	*less*	Utilised tax losses	–	
57		**Closing tax losses**		–
58	**5a(vi): Calculation of Deferred Tax Balance**			**($000)**
60		**Opening deferred tax**	(39,439)	
62	*plus*	Tax effect of adjusted depreciation	9,773	
64	*less*	Tax effect of tax depreciation	11,825	
66	*plus*	Tax effect of other temporary differences*	2,620	
68	*less*	Tax effect of amortisation of initial differences in asset values	4,298	
70	*plus*	Deferred tax balance relating to assets acquired in the disclosure year	–	
72	*less*	Deferred tax balance relating to assets disposed in the disclosure year	(11)	
74	*plus*	Deferred tax cost allocation adjustment	9	
76		**Closing deferred tax**		(43,149)
78	**5a(vii): Disclosure of Temporary Differences**			
79		*In Schedule 14, Box 6, provide descriptions and workings of items recorded in the asterisked category in Schedule 5a(vi) (Tax effect of other temporary differences).*		
81	**5a(viii): Regulatory Tax Asset Base Roll-Forward**			
82				**($000)**
83		**Opening sum of regulatory tax asset values**	381,540	
84	*less*	Tax depreciation	42,233	
85	*plus*	Regulatory tax asset value of assets commissioned	62,189	
86	*less*	Regulatory tax asset value of asset disposals	262	
87	*plus*	Lost and found assets adjustment	–	
88	*plus*	Adjustment resulting from asset allocation	(1,214)	
89	*plus*	Other adjustments to the RAB tax value	–	
90		**Closing sum of regulatory tax asset values**		400,020

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SCHEDULE 5b: REPORT ON RELATED PARTY TRANSACTIONS

This schedule provides information on the valuation of related party transactions, in accordance with section 2.3.6 and 2.3.7 of the ID 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 **5b(i): Summary—Related Party Transactions**

sch ref		($000)
8	Total regulatory income	1,766
9	Operational expenditure	17,309
10	Capital expenditure	21,028
11	Market value of asset disposals	–
12	Other related party transactions	–

13 **5b(ii): Entities Involved in Related Party Transactions**

sch ref	Name of related party	Related party relationship
15	Connetics New Zealand Limited	Wholly-owned subsidiary company which bids for works tendered by Orion
16	Christchurch City Council	Wholly owns Christchurch City Holdings Ltd (CCHL), which owns 89.275% of Orion New Zealand Ltd
17	Selwyn District Council	Selwyn District Council (SDC) owns 10.725% of Orion New Zealand Ltd
18	Lyttelton Port Company Limited	Wholly owned by Christchurch City Holdings Ltd (CCHL), which owns 89.275% of Orion New Zealand Ltd
19	City Care Limited	Wholly owned by Christchurch City Holdings Ltd (CCHL), which owns 89.275% of Orion New Zealand Ltd

20 ** include additional rows if needed*

21 **5b(iii): Related Party Transactions**

sch ref	Name of related party	Related party transaction type	Description of transaction	Value of transaction ($000)	Basis for determining value
23	Connetics Limited	Capex	Construction of electrical works	20,055	IM clause 2.2.11(5)(c)
24	Connetics Limited	Capex	Other sundry sales	55	IM clause 2.2.11(5)(g)
25	Connetics Limited	Opex	Maintenance of electrical works	11,902	ID clause 2.3.6(1)(e)
26	Connetics Limited	Opex	Other sundry sales and recharges	535	ID clause 2.3.6(1)(c)(i)
27	Connetics Limited	Sales	Directors' fees	60	ID clause 2.3.7(2)(a)
28	Connetics Limited	Sales	Rent	433	ID clause 2.3.7(2)(a)
29	Connetics Limited	Sales	Other sundry sales	34	ID clause 2.3.7(2)(a)
30	Christchurch City Council	Capex	Consents and easements on capital projects	854	IM clause 2.2.11(5)(b)(i)
31	Christchurch City Council	Opex	Other sundry sales and recharges	46	ID clause 2.3.6(1)(c)(i)
32	Christchurch City Council	Opex	Rates paid	3,620	ID clause 2.3.6(1)(c)(i)
33	Christchurch City Council	Sales	Capital contributions	918	ID clause 2.3.7(2)(a)
34	Christchurch City Council	Sales	Other sundry sales	30	ID clause 2.3.7(2)(a)
35	Selwyn District Council	Capex	Consents and easements on capital projects	5	IM clause 2.2.11(5)(b)(i)
36	Selwyn District Council	Opex	Rates paid	207	ID clause 2.3.6(1)(c)(i)
37	Selwyn District Council	Sales	Capital contributions	18	ID clause 2.3.7(2)(a)
	Lyttelton Port Company Limited	Sales	Provision of line charges	273	ID clause 2.3.7(2)(a)
	City Care Limited	Opex	Maintenance of electrical works incl tree cutting	999	ID clause 2.3.6(1)(e)
45	City Care Limited	Capex	Construction of electrical works	59	IM clause 2.2.11(5)(c)

** include additional rows if needed*

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2018**

SCHEDULE 5c: REPORT ON TERM CREDIT SPREAD DIFFERENTIAL ALLOWANCE

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

sch ref

7

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

9

sch ref	Issuing party	Issue date	Pricing date	Original tenor (in years)	Coupon rate (%)	Book value at issue date (NZD)	Book value at date of financial statements (NZD)	Term Credit Spread Difference	Cost of executing an interest rate swap	Debt issue cost readjustment
10										
11	N/A									
12										
13										
14										
15										
16	** include additional rows if needed*						–	–	–	–

17

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

sch ref			
19			
20	**Gross term credit spread differential**		–
21			
22	Total book value of interest bearing debt		
23	Leverage	44%	
24	Average opening and closing RAB values		
25	**Attribution Rate (%)**		–
26			
27	**Term credit spread differential allowance**		–

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2018**

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)				
7	**5d(i): Operating Cost Allocations**					
8						
9		Arm's length deduction	Electricity distribution services	Non-electricity distribution services	Total	OVABAA allocation increase ($000s)
10	**Service interruptions and emergencies**					
11	Directly attributable		8,116			
12	Not directly attributable		–		–	
13	**Total attributable to regulated service**		8,116			
14	**Vegetation management**					
15	Directly attributable		3,055			
16	Not directly attributable		–		–	
17	**Total attributable to regulated service**		3,055			
18	**Routine and corrective maintenance and inspection**					
19	Directly attributable		11,017			
20	Not directly attributable		–		–	
21	**Total attributable to regulated service**		11,017			
22	**Asset replacement and renewal**					
23	Directly attributable		3,209			
24	Not directly attributable		–		–	
25	**Total attributable to regulated service**		3,209			
26	**System operations and network support**					
27	Directly attributable		14,920			
28	Not directly attributable		–		–	
29	**Total attributable to regulated service**		14,920			
30	**Business support**					
31	Directly attributable		13,890			
32	Not directly attributable		–		–	
33	**Total attributable to regulated service**		13,890			
34						
35	**Operating costs directly attributable**		54,207			
36	**Operating costs not directly attributable**	–	–	–	–	–
37	**Operational expenditure**		54,207			
38						

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2018**

SCHEDULE 5d: REPORT ON COST ALLOCATIONS

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

sch ref

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

sch ref		($000)
40	**Pass through and recoverable costs**	
41	**Pass through costs**	
42	Directly attributable	4,744
43	Not directly attributable	–
44	**Total attributable to regulated service**	4,744
45	**Recoverable costs**	
46	Directly attributable	72,065
47	Not directly attributable	–
48	**Total attributable to regulated service**	72,065
49		

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

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

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

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2018**

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

5e(i): Regulated Service Asset Values

	Value allocated ($000s) Electricity distribution services
Subtransmission lines	
Directly attributable	61,086
Not directly attributable	–
Total attributable to regulated service	61,086
Subtransmission cables	
Directly attributable	83,283
Not directly attributable	–
Total attributable to regulated service	83,283
Zone substations	
Directly attributable	124,061
Not directly attributable	–
Total attributable to regulated service	124,061
Distribution and LV lines	
Directly attributable	118,486
Not directly attributable	–
Total attributable to regulated service	118,486
Distribution and LV cables	
Directly attributable	344,015
Not directly attributable	–
Total attributable to regulated service	344,015
Distribution substations and transformers	
Directly attributable	118,202
Not directly attributable	–
Total attributable to regulated service	118,202
Distribution switchgear	
Directly attributable	115,572
Not directly attributable	–
Total attributable to regulated service	115,572
Other network assets	
Directly attributable	31,929
Not directly attributable	–
Total attributable to regulated service	31,929
Non-network assets	
Directly attributable	46,165
Not directly attributable	8,395
Total attributable to regulated service	54,560
Regulated service asset value directly attributable	1,042,799
Regulated service asset value not directly attributable	8,395
Total closing RAB value	1,051,194

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

			($000)	
Change in asset value allocation 1			**CY-1**	**Current Year (CY)**
Asset category		Original allocation		
Original allocator or line items		New allocation		
New allocator or line items		Difference	–	–
Rationale for change				

			($000)	
Change in asset value allocation 2			**CY-1**	**Current Year (CY)**
Asset category		Original allocation		
Original allocator or line items		New allocation		
New allocator or line items		Difference	–	–
Rationale for change				

			($000)	
Change in asset value allocation 3			**CY-1**	**Current Year (CY)**
Asset category		Original allocation		
Original allocator or line items		New allocation		
New allocator or line items		Difference	–	–
Rationale for change				

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

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2018**

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

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

sch ref				
7		**6a(i): Expenditure on Assets**	**($000)**	**($000)**
8		Consumer connection		17,370
9		System growth		9,693
10		Asset replacement and renewal		23,423
11		Asset relocations		8,693
12		Reliability, safety and environment:		
13		Quality of supply	129	
14		Legislative and regulatory	–	
15		Other reliability, safety and environment	36	
16		**Total reliability, safety and environment**		165
17		**Expenditure on network assets**		59,343
18		Expenditure on non-network assets		16,755
19				
20		**Expenditure on assets**		76,098
21	*plus*	Cost of financing		–
22	*less*	Value of capital contributions		10,882
23	*plus*	Value of vested assets		–
24				
25		**Capital expenditure**		65,216
26		**6a(ii): Subcomponents of Expenditure on Assets (where known)**		**($000)**
27		Energy efficiency and demand side management, reduction of energy losses		–
28		Overhead to underground conversion		8,693
29		Research and development		–
30		**6a(iii): Consumer Connection**		
31		*Consumer types defined by EDB**	**($000)**	**($000)**
32		General connections	4,317	
33		Large customers	5,746	
34		Subdivisions	3,444	
35		Switchgear	2,630	
36		Transformers	1,232	
37		** include additional rows if needed*		
38		**Consumer connection expenditure**		17,370
39				
40	*less*	Capital contributions funding consumer connection expenditure	1,969	
41		**Consumer connection less capital contributions**		15,401
42		**6a(iv): System Growth and Asset Replacement and Renewal**		**Asset Replacement and**
43			**System Growth**	**Renewal**
44			**($000)**	**($000)**
45		Subtransmission	353	3,052
46		Zone substations	4,687	2,644
47		Distribution and LV lines	576	3,647
48		Distribution and LV cables	858	69
49		Distribution substations and transformers	2,204	2,243
50		Distribution switchgear	55	3,097
51		Other network assets	961	8,671
52		**System growth and asset replacement and renewal expenditure**	9,693	23,423
53	*less*	Capital contributions funding system growth and asset replacement and renewal	336	882
54		**System growth and asset replacement and renewal less capital contributions**	9,357	22,541
55				
56		**6a(v): Asset Relocations**		
57		*Project or programme**	**($000)**	**($000)**
58		NZTA and others	5,572	
59		Christchurch City Council	1,162	
60		Selwyn District Council	137	
61		Developer-specific projects	1,822	
62		Asset relocation program	–	
63		** include additional rows if needed*		
64		All other projects or programmes - asset relocations		
65		**Asset relocations expenditure**		8,693
66	*less*	Capital contributions funding asset relocations	7,695	
67		**Asset relocations less capital contributions**		998

		Company Name	**Orion NZ Ltd**
		For Year Ended	**31 March 2018**

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	**6a(vi): Quality of Supply**		
70	*Project or programme**	**($000)**	**($000)**
71	Reliability improvement projects	129	
72			
73			
74			
75			
76	** include additional rows if needed*		
77	All other projects programmes - quality of supply		
78	**Quality of supply expenditure**		129
79	*less* Capital contributions funding quality of supply		
80	**Quality of supply less capital contributions**		129
81	**6a(vii): Legislative and Regulatory**		
82	*Project or programme**	**($000)**	**($000)**
83	No projects with this as their primary purpose		
84			
85			
86			
87			
88	** include additional rows if needed*		
89	All other projects or programmes - legislative and regulatory		
90	**Legislative and regulatory expenditure**		–
91	*less* Capital contributions funding legislative and regulatory		
92	**Legislative and regulatory less capital contributions**		–
93	**6a(viii): Other Reliability, Safety and Environment**		
94	*Project or programme**	**($000)**	**($000)**
95	Structure upgrades	36	
96			
97			
98			
99			
100	** include additional rows if needed*		
101	All other projects or programmes - other reliability, safety and environment		
102	**Other reliability, safety and environment expenditure**		36
103	*less* Capital contributions funding other reliability, safety and environment		
104	**Other reliability, safety and environment less capital contributions**		36
105			
106	**6a(ix): Non-Network Assets**		
107	**Routine expenditure**		
108	*Project or programme**	**($000)**	**($000)**
109	Sundry land and buildings	164	
110	Vehicles and mobile plant	860	
111	Information solutions	1,286	
112	Sundry tools and equipment	429	
113			
114	** include additional rows if needed*		
115	All other projects or programmes - routine expenditure		
116	**Routine expenditure**		2,739
117	**Atypical expenditure**		
118	*Project or programme**	**($000)**	**($000)**
119	Construction of a depot	14,016	
120			
121			
122			
123			
124	** include additional rows if needed*		
125	All other projects or programmes - atypical expenditure		
126	**Atypical expenditure**		14,016
127			
128	**Expenditure on non-network assets**		16,755

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2018**

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

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

sch ref			
7	**6b(i): Operational Expenditure**	**($000)**	**($000)**
8	Service interruptions and emergencies	8,116	
9	Vegetation management	3,055	
10	Routine and corrective maintenance and inspection	11,017	
11	Asset replacement and renewal	3,209	
12	**Network opex**		25,397
13	System operations and network support	14,920	
14	Business support	13,890	
15	**Non-network opex**		28,809
16			
17	**Operational expenditure**		54,207
18	**6b(ii): Subcomponents of Operational Expenditure (where known)**		
19	Energy efficiency and demand side management, reduction of energy losses		–
20	Direct billing*		–
21	Research and development		–
22	Insurance		1,480
23	** Direct billing expenditure by suppliers that directly bill the majority of their consumers*		

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2018**

SCHEDULE 7: COMPARISON OF FORECASTS TO ACTUAL EXPENDITURE

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

sch ref				
7	**7(i): Revenue**	**Target ($000) [1]**	**Actual ($000)**	**% variance**
8	Line charge revenue	251,533	251,787	0%
9	**7(ii): Expenditure on Assets**	**Forecast ($000) [2]**	**Actual ($000)**	**% variance**
10	Consumer connection	14,315	17,370	21%
11	System growth	8,987	9,693	8%
12	Asset replacement and renewal	20,890	23,423	12%
13	Asset relocations	7,080	8,693	23%
14	Reliability, safety and environment:			
15	Quality of supply	–	129	–
16	Legislative and regulatory	–	–	–
17	Other reliability, safety and environment	250	36	(86%)
18	**Total reliability, safety and environment**	250	165	(34%)
19	**Expenditure on network assets**	51,522	59,343	15%
20	Expenditure on non-network assets	20,218	16,755	(17%)
21	Expenditure on assets	71,740	76,098	6%
22	**7(iii): Operational Expenditure**			
23	Service interruptions and emergencies	7,110	8,116	14%
24	Vegetation management	3,505	3,055	(13%)
25	Routine and corrective maintenance and inspection	14,215	11,017	(22%)
26	Asset replacement and renewal	3,735	3,209	(14%)
27	**Network opex**	28,565	25,397	(11%)
28	System operations and network support	17,141	14,920	(13%)
29	Business support	16,025	13,890	(13%)
30	**Non-network opex**	33,166	28,809	(13%)
31	**Operational expenditure**	61,731	54,207	(12%)
32	**7(iv): Subcomponents of Expenditure on Assets (where known)**			
33	Energy efficiency and demand side management, reduction of energy losses	–	–	–
34	Overhead to underground conversion	7,080	8,693	23%
35	Research and development	–	–	–
36				
37	**7(v): Subcomponents of Operational Expenditure (where known)**			
38	Energy efficiency and demand side management, reduction of energy losses	–	–	–
39	Direct billing	–	–	–
40	Research and development	–	–	–
41	Insurance	1,322	1,480	12%
42				

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

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

SCHEDULE 8: REPORT ON BILLED QUANTITIES AND LINE CHARGE REVENUES

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

sch ref

8(i): Billed Quantities by Price Component

Billed quantities by price component

Consumer group name or price category code	Consumer type or types (eg, residential, commercial etc.)	Standard or non-standard consumer group (specify)	Average no. of ICPs in disclosure year	Energy delivered to ICPs in disclosure year (MWh)	Price component	Streetlighting Fixed charge (STFXD)	Streetlighting/ general Peak charge (GENPK)	Streetlighting/ general/irrigation Weekday day volume (VOLWD)	Streetlighting/ general/irrigation Night and weekend (VOLNW)	General Low power factor charge (LOWPF)	Irrigation Capacity charge (ICCAP)
					Unit charging basis (eg, days, kW of demand, kVA of capacity, etc.)	Connection	kW	kWh	kWh	kVAr	kW
LIG	Streetlighting	Standard	588			47,885					
GEN	Residential and commercial	Standard	197,725	2,340,237			481,587	1,141,167,904	1,301,224,393	-	
IRR	Commercial irrigation	Standard	1,091								76,130
MCC	Large commercial and industrial	Standard	422	727,024							
LCC	Large capacity	Non-standard	12	105,260							
		[Select one]									
		[Select one]									
		[Select one]									
		[Select one]									
		[Select one]									
Add extra rows for additional consumer groups or price category codes as necessary											
		Standard consumer totals	199,826	3,067,261		47,885	481,587	1,141,167,904	1,301,224,393	–	76,130
		Non-standard consumer totals	12	105,260		–	–	–	–	–	–
		Total for all consumers	199,838	3,172,521		47,885	481,587	1,141,167,904	1,301,224,393	–	76,130

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

Line charge revenues ($000) by price component

Consumer group name or price category code	Consumer type or types (eg, residential, commercial etc.)	Standard or non-standard consumer group (specify)	Total line charge revenue in disclosure year	Notional revenue foregone from posted discounts (if applicable)	Total distribution line charge revenue	Total transmission line charge revenue (if available)	Price component	Streetlighting Fixed charge (STFXD)	Streetlighting/ general Peak charge (GENPK)	Streetlighting/ general/irrigation Weekday day volume (VOLWD)	Streetlighting/ general/irrigation Night and weekend (VOLNW)	General Low power factor charge (LOWPF)	Irrigation Capacity charge (ICCAP)
							Rate (eg, $ per day, $ per kWh, etc.)	$/conn/day	$/kW/day	$/kWh	$/kWh	$/kVAr/day	$/kW/day
LIG	Streetlighting	Standard	$1,973		$2,062	($89)		1,973					
GEN	Residential and commercial	Standard	$208,095		$146,940	$61,155			93,339	100,115	14,639	-	
IRR	Commercial irrigation	Standard	$4,618		$3,894	$725							5,815
MCC	Large commercial and industrial	Standard	$33,508		$19,982	$13,526							
LCC	Large capacity	Non-standard	$3,592		$1,465	$2,127							
		[Select one]	–										
		[Select one]	–										
		[Select one]	–										
		[Select one]	–										
		[Select one]	–										
Add extra rows for additional consumer groups or price category codes as necessary													
		Standard consumer totals	$248,195	–	$172,878	$75,316		$1,973	$93,339	$100,115	$14,639	–	$5,815
		Non-standard consumer totals	$3,592	–	$1,465	$2,127		–	–	–	–	–	–
		Total for all consumers	$251,787	–	$174,343	$77,444		$1,973	$93,339	$100,115	$14,639	–	$5,815

Check OK

8(iii): Number of ICPs directly billed

Number of directly billed ICPs at year end

4

Irrigation Power factor correction capacitance (ICPFC)	Irrigation Interruptibility rebate (ICIRR)	Major customer fixed charge (MCFXD)	Major customer Peak charge (MCCPD)	Major customer Nominated maximum demand (MCNMD)	Major customer Metered maximum demand (MCMMD)	Major customer Extra switches (EQESW)	Major customer 11kV Metering equipment (EQMET)	Major customer 11kV Underground cabling (EQUGC)	Major customer 11kV Overhead lines (EQOHL)	Major customer Transformer capacity (EQTFC)	Large capacity Operations, maintenance & administration (dedicated assets)	Large capacity Operations, maintenance & administration (shared assets)	Large capacity Asset charge (dedicated assets)	Large capacity Asset charge (shared assets)	Large capacity Interconnection charge (winter)	Large capacity Interconnection charge (summer)	Connection charge	Customer investment contract charge
kVAr	kW	Connection	kVA	kVA	kVA	Switches	Connection	km	km	kVA	kVA	kVA	kVA	kVA	kVA	kVA	kVA	kVA
24,828	47,447																	
		383	99,022	215,471	193,779	109	52	4	3	264,375								
											25,000	20,881	25,000	20,881	4,329	17,306	17,306	13,000
24,828	47,447	383	99,022	215,471	193,779	109	52	4	3	264,375	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	25,000	20,881	25,000	20,881	4,329	17,306	17,306	13,000
24,828	47,447	383	99,022	215,471	193,779	109	52	4	3	264,375	25,000	20,881	25,000	20,881	4,329	17,306	17,306	13,000

Irrigation Power factor correction capacitance (ICPFC)	Irrigation Interruptibility rebate (ICIRR)	Major customer fixed charge (MCFXD)	Major customer Peak charge (MCCPD)	Major customer Nominated maximum demand (MCNMD)	Major customer Metered maximum demand (MCMMD)	Major customer Extra switches (EQESW)	Major customer 11kV Metering equipment (EQMET)	Major customer 11kV Underground cabling (EQUGC)	Major customer 11kV Overhead lines (EQOHL)	Major customer Transformer capacity (EQTFC)	Large capacity Operations, maintenance & administration (dedicated assets)	Large capacity Operations, maintenance & administration (shared assets)	Large capacity Asset charge (dedicated assets)	Large capacity Asset charge (shared assets)	Large capacity Interconnection charge (winter)	Large capacity Interconnection charge (summer)	Connection charge	Customer investment contract charge
$/kVAr/day	$/kW/day	$/conn/day	$/kVA/day	$/kVA/day	$/kVA/day	$/switch/day	$/conn/day	$/km/day	$/km/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day	$/kVA/day
(810)	(387)																	
		264	17,555	8,250	5,998	141	82	5	2	1,283								
											146	329	317	673	280	993	72	783
($810)	($387)	$264	$17,555	$8,250	$5,998	$141	$82	$5	$2	$1,283	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	$146	$329	$317	$673	$280	$993	$72	$783
($810)	($387)	$264	$17,555	$8,250	$5,998	$141	$82	$5	$2	$1,283	$146	$329	$317	$673	$280	$993	$72	$783

Company Name **Orion NZ Ltd**
For Year Ended **31 March 2018**
Network / Sub-Network Name **Entire network**

30 - 750 kW generators Control period export (EXPCP1)	30 - 750 kW generators Control period export (EXPCP2)	500 - 1200 kW generators Generation period (GEN1)	Monthly invoice charge (INVFXD)
kW	kVAr	kWh	Invoice
140	14		248
1,427	279	83,158	108
1,567	292	83,158	356
–	–	–	–
1,567	292	83,158	356

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

30 - 750 kW generators Control period export (EXPCP1)	30 - 750 kW generators Control period export (EXPCP2)	500 - 1200 kW generators Generation period (GEN1)	Monthly invoice charge (INVFXD)
$/kW/yr	$/kVAr/yr	$/kWh	$/Invoice
(5)	(0)		7
(47)	(3)	(25)	3
($52)	($3)	($25)	$11
–	–	–	–
($52)	($3)	($25)	$11

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

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2018**
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	**Voltage**	**Asset category**	**Asset class**	**Units**	**Items at start of year (quantity)**	**Items at end of year (quantity)**	**Net change**	**Data accuracy (1–4)**
9	All	Overhead Line	Concrete poles / steel structure	No.	30,028	29,554	(474)	4
10	All	Overhead Line	Wood poles	No.	60,350	60,085	(265)	4
11	All	Overhead Line	Other pole types	No.	–	–	–	N/A
12	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	524	520	(4)	4
13	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	–	–	–	N/A
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	84	86	3	4
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	40	40	(0)	4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	–	–	–	N/A
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	2	2	(0)	4
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	–	–	–	N/A
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	–	–	–	N/A
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	–	–	–	N/A
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	–	–	–	N/A
22	HV	Subtransmission Cable	Subtransmission submarine cable	km	–	–	–	N/A
23	HV	Zone substation Buildings	Zone substations up to 66kV	No.	81	81	–	4
24	HV	Zone substation Buildings	Zone substations 110kV+	No.	–	–	–	N/A
25	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	–	–	–	N/A
26	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	107	109	2	4
27	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	–	–	–	N/A
28	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	339	336	(3)	4
29	HV	Zone substation switchgear	33kV RMU	No.	–	–	–	N/A
30	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	25	25	–	4
31	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	38	38	–	4
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	762	724	(38)	4
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	–	–	–	N/A
34	HV	Zone Substation Transformer	Zone Substation Transformers	No.	85	85	–	4
35	HV	Distribution Line	Distribution OH Open Wire Conductor	km	3,108	3,089	(19)	3
36	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	–	–	–	N/A
37	HV	Distribution Line	SWER conductor	km	100	100	(0)	3
38	HV	Distribution Cable	Distribution UG XLPE or PVC	km	1,035	1,088	53	4
39	HV	Distribution Cable	Distribution UG PILC	km	1,567	1,559	(8)	4
40	HV	Distribution Cable	Distribution Submarine Cable	km	–	–	–	N/A
41	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	55	57	2	4
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	958	910	(48)	4
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	9,350	9,337	(13)	3
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	40	25	(15)	4
45	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	4,396	4,491	95	4
46	HV	Distribution Transformer	Pole Mounted Transformer	No.	6,429	6,457	28	4
47	HV	Distribution Transformer	Ground Mounted Transformer	No.	5,049	5,139	90	4
48	HV	Distribution Transformer	Voltage regulators	No.	15	15	–	4
49	HV	Distribution Substations	Ground Mounted Substation Housing	No.	4,283	4,571	288	4
50	LV	LV Line	LV OH Conductor	km	1,804	1,778	(27)	2
51	LV	LV Cable	LV UG Cable	km	2,974	3,087	113	3
52	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	3,351	3,437	86	3
53	LV	Connections	OH/UG consumer service connections	No.	198,056	201,255	3,199	2
54	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	2,740	2,717	(23)	4
55	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	276	303	27	4
56	All	Capacitor Banks	Capacitors including controls	No	1	2	1	4
57	All	Load Control	Centralised plant	Lot	44	44	–	4
58	All	Load Control	Relays	No	2,012	2,072	60	3
59	All	Civils	Cable Tunnels	km	1	1	–	4

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2018**
Network / Sub-network Name	**Entire network**

SCHEDULE 9b: ASSET AGE PROFILE

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

sch ref

8 **Disclosure Year (year ended)** 31 March 2018

Number of assets at disclosure year end by installation date

sch ref	Voltage	Asset category	Asset class	Units	pre-1940	1940 –1949	1950 –1959	1960 –1969	1970 –1979	1980 –1989	1990 –1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	No. with age unknown	end of year (quantity)	No. with default dates	Data accuracy (1–4)
10	All	Overhead Line	Concrete poles / steel structure	No.	–	726	1,711	8,248	7,537	8,191	2,996	1	–	–	1	38	16	24	11	4	2	7	5	13	12	–	8	1	–	2	–	29,554		4
11	All	Overhead Line	Wood poles	No.	–	1	551	6,438	9,392	2,593	13,521	2,401	2,963	3,644	1,277	1,286	1,612	1,424	1,512	1,375	1,672	1,442	1,015	801	758	824	828	890	1,016	849	–	60,085		4
12	All	Overhead Line	Other pole types	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		N/A
13	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	–	–	60	88	136	49	40	3	1	41	13	–	16	13	–	21	–	7	–	12	1	0	3	3	0	15	–	520		4
14	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km																											–	–		N/A
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	–	–	–	–	–	–	9	–	5	2	2	0	3	0	2	4	0	1	3	2	2	5	18	21	1	3	–	86		4
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	–	–	–	5	26	9	–	–	–	0	–	–	–	0	0	0	–	0	0	–	0	–	–	–	0	–	–	40		4
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km																											–	–		N/A
18	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	–	–	–	–	2	1	–	–	–	–	–	–	–	–	–	0	–	–	–	–	–	–	–	–	–	–	–	2		4
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km																											–	–		N/A
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km																											–	–		N/A
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km																											–	–		N/A
22	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km																											–	–		N/A
23	HV	Subtransmission Cable	Subtransmission submarine cable	km																											–	–		N/A
24	HV	Zone substation Buildings	Zone substations up to 66kV	No.	1	–	4	10	26	12	2	–	1	2	–	2	–	1	2	4	1	4	1	4	–	2	–	1	–	1	–	81		4
25	HV	Zone substation Buildings	Zone substations 110kV+	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0	–	–	–	–	–	–	–	–	–	–	–		N/A
26	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		N/A
27	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	–	–	–	6	9	1	3	–	4	9	–	6	4	1	1	14	6	11	5	16	4	–	4	3	2	–	–	109		4
28	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		N/A
29	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	–	–	2	71	72	31	2	–	20	4	6	4	14	3	2	31	11	9	1	20	14	6	6	–	7	–	–	336		4
30	HV	Zone substation switchgear	33kV RMU	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		N/A
31	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	–	–	–	–	–	–	–	–	–	–	–	–	5	9	–	6	–	3	2	–	–	–	–	–	–	–	–	25		4
32	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	–	–	–	8	11	16	–	1	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	38		4
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	–	–	–	27	195	47	39	13	11	60	–	42	34	7	41	26	49	–	53	13	20	2	26	18	1	–	–	724		4
34	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		N/A
35	HV	Zone Substation Transformer	Zone Substation Transformers	No.	–	–	1	19	17	16	3	1	2	2	–	–	5	2	3	4	–	–	2	–	2	2	3	–	–	1	–	85		4
36	HV	Distribution Line	Distribution OH Open Wire Conductor	km	–	–	27	159	785	549	581	56	47	60	73	33	63	51	58	56	43	43	33	30	88	78	49	65	18	46	–	3,089		3
37	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km																											–	–		N/A
38	HV	Distribution Line	SWER conductor	km	–	–	1	1	26	15	33	8	–	–	–	3	4	1	2	0	3	–	1	–	–	–	–	–	–	–	–	100		3
39	HV	Distribution Cable	Distribution UG XLPE or PVC	km	0	0	0	0	1	16	51	25	34	40	51	54	58	47	50	44	47	46	49	77	56	53	74	96	58	60	–	1,088		4
40	HV	Distribution Cable	Distribution UG PILC	km	30	37	137	390	404	309	200	15	12	11	2	2	0	0	1	1	1	1	0	0	0	0	0	0	1	5	–	1,559		4
41	HV	Distribution Cable	Distribution Submarine Cable	km																											–	–		N/A
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	–	–	–	–	–	5	3	6	3	5	7	3	3	2	1	–	–	12	–	–	2	–	–	3	–	2	–	57		4
43	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	–	–	–	98	368	137	58	9	45	32	46	29	25	16	13	11	1	–	1	2	7	–	4	–	8	–	–	910		4
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	35	–	25	81	520	666	1,760	431	534	509	476	484	472	581	374	424	336	197	156	182	167	142	276	198	153	145	13	9,337		3
45	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	–	–	–	13	12	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	25		4
46	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	–	–	–	212	968	815	505	139	149	127	134	58	35	82	71	65	81	96	79	126	76	157	149	141	171	55	–	4,491		4
47	HV	Distribution Transformer	Pole Mounted Transformer	No.	–	53	26	588	1,008	1,118	1,246	156	118	178	183	141	218	181	160	97	162	76	120	112	68	103	140	72	99	34	–	6,457		4
48	HV	Distribution Transformer	Ground Mounted Transformer	No.	1	36	133	729	868	795	560	87	69	120	104	79	89	96	106	108	109	63	92	129	75	170	204	139	136	42	–	5,139		4
49	HV	Distribution Transformer	Voltage regulators	No.	–	–	–	3	1	–	5	–	–	–	–	2	1	–	–	1	2	–	–	–	–	–	–	–	–	–	–	15		4
50	HV	Distribution Substations	Ground Mounted Substation Housing	No.	39	21	118	544	815	701	660	62	78	82	52	63	56	68	71	85	72	60	67	80	106	146	133	166	114	112	–	4,571		3
51	LV	LV Line	LV OH Conductor	km	2	3	17	356	617	160	234	14	12	7	11	8	13	8	4	3	2	1	1	1	0	1	1	1	3	1	298	1,778		2
52	LV	LV Cable	LV UG Cable	km	2	2	13	213	506	610	444	43	81	73	56	73	85	89	62	65	56	26	31	41	64	86	101	116	76	73	–	3,087		3
53	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	0	2	4	416	678	495	563	43	77	67	55	67	70	88	52	59	55	24	29	42	94	93	98	130	83	54	–	3,437		3
54	LV	Connections	OH/UG consumer service connections	No.	–	–	–	102,284	74	6,099	27,850	2,714	2,452	2,524	2,626	3,173	3,583	3,381	3,300	3,437	2,888	2,143	2,333	1,887	2,237	3,792	5,782	6,499	5,467	4,730	–	201,255	108,716	2
55	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	–	–	–	137	356	198	21	9	19	124	197	68	119	211	90	101	101	125	110	107	200	83	104	117	63	57	–	2,717		4
56	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	–	–	–	–	–	–	12	6	12	16	23	41	19	22	17	13	8	9	8	8	4	8	12	28	11	24	2	303		4
57	All	Capacitor Banks	Capacitors including controls	No	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	–	–	–	–	–	–	2		4
58	All	Load Control	Centralised plant	Lot	–	–	–	–	–	7	–	–	–	3	1	18	1	2	3	2	–	–	1	2	1	1	1	1	–	–	–	44		4
59	All	Load Control	Relays	No	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	160	153	49	60	1,650	2,072		3
60	All	Civils	Cable Tunnels	km	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1		4

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2018**
Network / Sub-network Name	**Entire network**

SCHEDULE 9c: REPORT ON OVERHEAD LINES AND UNDERGROUND CABLES

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

sch ref

9				
10	**Circuit length by operating voltage (at year end)**	**Overhead (km)**	**Underground (km)**	**Total circuit length (km)**
11	> 66kV	–	–	–
12	50kV & 66kV	244	91	335
13	33kV	276	38	314
14	SWER (all SWER voltages)	100	2	102
15	22kV (other than SWER)	–	–	–
16	6.6kV to 11kV (inclusive—other than SWER)	3,089	2,645	5,734
17	Low voltage (< 1kV)	1,778	3,087	4,865
18	**Total circuit length (for supply)**	5,487	5,864	11,351
19				
20	Dedicated street lighting circuit length (km)	912	2,525	3,437
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)			93
22				
23	**Overhead circuit length by terrain (at year end)**	**Circuit length (km)**	**(% of total overhead length)**	
24	Urban	1,724	31%	
25	Rural	3,196	58%	
26	Remote only	146	3%	
27	Rugged only	184	3%	
28	Remote and rugged	238	4%	
29	Unallocated overhead lines	–	–	
30	**Total overhead length**	5,487	100%	
31				
32		**Circuit length (km)**	**(% of total circuit length)**	
33	Length of circuit within 10km of coastline or geothermal areas (where known)	1,926	17%	
34		**Circuit length (km)**	**(% of total overhead length)**	
35	Overhead circuit requiring vegetation management	5,487	100%	

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2018**

SCHEDULE 9d: REPORT ON EMBEDDED NETWORKS

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

sch ref

	Location *	Number of ICPs served	Line charge revenue ($000)
8			
9	Rakaia Gorge Embedded Network, upper Rakaia river	2	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 NZ Ltd**
For Year Ended	**31 March 2018**
Network / Sub-network Name	**Entire network**

SCHEDULE 9e: REPORT ON NETWORK DEMAND

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

sch ref				
8	**9e(i): Consumer Connections**			
9	*Number of ICPs connected in year by consumer type*			
10	*Consumer types defined by EDB**		**Number of connections (ICPs)**	
11	Streetlighting		16	
12	General		4,840	
13	Irrigation		18	
14	Major customer		10	
15	Large capacity		1	
16	** include additional rows if needed*			
17	**Connections total**		4,885	
18				
19	**Distributed generation**			
20	Number of connections made in year		508	**connections**
21	Capacity of distributed generation installed in year		5.49	**MVA**
22	**9e(ii): System Demand**			
23				
24			**Demand at time of maximum coincident demand (MW)**	
25	**Maximum coincident system demand**			
26	GXP demand		623	
27	Distributed generation output at HV and above	*plus*	1	
28	**Maximum coincident system demand**		624	
29	Net transfers to (from) other EDBs at HV and above	*less*	0	
30	**Demand on system for supply to consumers' connection points**		624	
31	**Electricity volumes carried**		**Energy (GWh)**	
32	Electricity supplied from GXPs		3,300	
33	Electricity exports to GXPs	*less*	0	
34	Electricity supplied from distributed generation	*plus*	8	
35	Net electricity supplied to (from) other EDBs	*less*	0	
36	**Electricity entering system for supply to consumers' connection points**		3,308	
37	Total energy delivered to ICPs	*less*	3,173	
38	**Electricity losses (loss ratio)**		136	4.1%
39				
40	**Load factor**		0.61	
41	**9e(iii): Transformer Capacity**			
42			**(MVA)**	
43	Distribution transformer capacity (EDB owned)		2,108	
44	Distribution transformer capacity (Non-EDB owned, estimated)		220	
45	**Total distribution transformer capacity**		2,328	
46				
47	**Zone substation transformer capacity**		1,139	

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2018**
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

sch ref			
8	**10(i): Interruptions**		
9	**Interruptions by class**	**Number of interruptions**	
10	Class A (planned interruptions by Transpower)	1	
11	Class B (planned interruptions on the network)	606	
12	Class C (unplanned interruptions on the network)	857	
13	Class D (unplanned interruptions by Transpower)	1	
14	Class E (unplanned interruptions of EDB owned generation)	–	
15	Class F (unplanned interruptions of generation owned by others)	–	
16	Class G (unplanned interruptions caused by another disclosing entity)	–	
17	Class H (planned interruptions caused by another disclosing entity)	–	
18	Class I (interruptions caused by parties not included above)	9	
19	**Total**	1,474	
20			
21	**Interruption restoration**	**≤3Hrs**	**>3hrs**
22	Class C interruptions restored within	573	284
23			
24	**SAIFI and SAIDI by class**	**SAIFI**	**SAIDI**
25	Class A (planned interruptions by Transpower)	0.00	0.4
26	Class B (planned interruptions on the network)	0.06	13.9
27	Class C (unplanned interruptions on the network)	0.93	65.2
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)	0.01	0.2
34	**Total**	1.01	79.7
35			
36	**Normalised SAIFI and SAIDI**	**Normalised SAIFI**	**Normalised SAIDI**
37	Classes B & C (interruptions on the network)	1.00	79.0
38			
39	**Quality path normalised reliability limit**	**SAIFI reliability limit**	**SAIDI reliability limit**
40	SAIFI and SAIDI limits applicable to disclosure year*	1.02	82.4
41	** not applicable to exempt EDBs*		

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2018**
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	1.4
Vegetation	0.09	9.4
Adverse weather	0.00	0.1
Adverse environment	0.00	0.2
Third party interference	0.10	8.3
Wildlife	0.06	4.3
Human error	0.02	0.5
Defective equipment	0.52	30.7
Cause unknown	0.11	10.2

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

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	0.01	0.0
Subtransmission cables	–	–
Subtransmission other	–	–
Distribution lines (excluding LV)	0.01	3.8
Distribution cables (excluding LV)	0.04	8.7
Distribution other (excluding LV)	0.00	1.4

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

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	0.08	5.4
Subtransmission cables	0.04	2.3
Subtransmission other	0.21	6.8
Distribution lines (excluding LV)	0.37	37.9
Distribution cables (excluding LV)	0.17	8.2
Distribution other (excluding LV)	0.07	4.6

10(v): Fault Rate

Main equipment involved	Number of Faults	Circuit length (km)	Fault rate (faults per 100km)
Subtransmission lines	14	520	2.69
Subtransmission cables	1	129	0.78
Subtransmission other	3		
Distribution lines (excluding LV)	565	3,189	17.72
Distribution cables (excluding LV)	71	2,648	2.68
Distribution other (excluding LV)	95		
Total	749		

Company	Orion New Zealand Limited
Year ended	31 March 2018

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 12 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)

Our FY11 to FY18 financial performance has been affected by the Canterbury quakes, including:

- higher capex
- higher opex
- lower network delivery revenues in FY11 to FY14 – due to quake affects on demand
- higher network delivery revenues in FY15 to FY18 – due to our CPP price resets
- quake insurance cash settlement revenues (affected disclosures in FY15, FY13 and FY12).

Our FY18 post-tax regulatory ROI was 6.8% (FY17: 7.8%; FY16: 6.3%). FY18's ROI includes a 1.1% CPI movement (FY17: 2.2%).

No items were reclassified in FY18.

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):

	FY18 $m
Recoveries from third parties who cause to damage to our network	1.2
Rental revenue	0.8
Insurance recovery of opex	0.6
Revenues from contractors – for providing builders' temporary supply boxes	0.2
Other	0.7
Total	3.5

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:

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

No items were reclassified in FY18.

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 FY18 our RAB value increased as follows:

	FY18 $m
Opening RAB value	1,004
Add new assets commissioned	77
Add indexed asset revaluation (at CPI)	11
Less asset disposals at RAB value	(1)
Less transferred from RAB	(1)
Less depreciation and amortisation	(39)
Closing RAB value	1,051

Our $77m of commissioned assets in FY18 is significantly higher than FY17 ($35m). FY18 was abnormally high due to the completion of our Waterloo depot ($21m), leased to Connetics on a negotiated arms-length basis.

We also completed and commissioned the post-earthquake rebuild of our Lancaster zone substation, with a commissioned value of $7m. We commissioned over $8m of new connections in FY18. No other projects commissioned exceeded $2m per project.

We have reallocated from RAB $0.3m of EV chargers and $0.9m of land – refer box 9 for more information.

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

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

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

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

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

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

Box 5: Regulatory tax: permanent differences

	FY18 $m
Taxable income that is not in regulatory profit before tax	-
Expenditure that is not deductible:	
Accounting depreciation on land assets	0.2
Accounting costs of asset disposal	0.1
Legal and entertainment expenses	0.1
Other	0.1
	0.5
Income that is not taxable	-
Deductible expenditure that is not in regulatory profit before tax:	
Tax depreciation on land improvements	0.4
Costs to obtain land easements	0.2
	0.6

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

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

Box 6: Regulatory tax: temporary differences

	FY18 $m
Insurance cash settlement proceeds – assessable for tax purposes	0.2
Finance lease payments – operating leases for tax purposes	(0.2)
Capex – deductible for tax purposes	(0.6)
Internal labour capitalized	(0.8)
Internal profits on capex – deductible for tax purposes	(1.2)
Net total	(2.6)

Related party transactions: disclosure of related party transactions (Schedule 5b)

10. In the box below, provide descriptions of related party transactions beyond those disclosed on Schedule 5b including identification and descriptions as to the nature of directly attributable costs disclosed under subclause 2.3.6(1)(b).

Box 7: Related party transactions

We undertake virtually all of our (non-salary and non-Transpower) distribution network opex and capex on a lowest-price conforming attributes tender basis. Our wholly-owned subsidiary Connetics tenders for most of such work on the same competitive tender basis as other suppliers.

All transactions with Connetics are undertaken on an arms-length basis. Other than providing interest-bearing intercompany debt funding, and joint insurance services, Orion provides minimal services to Connetics.

We have developed a resilient depot in western Christchurch, and Connetics moved to that depot in FY18. Connetics pays a negotiated market rental for the depot

We are owned 89.275% by Christchurch City Holding Limited (CCHL) which is 100% owned by the Christchurch City Council (CCC) and 10.725% by Selwyn District Council (SDC). CCC and SDC charge us for rates and other council charges. We charge our shareholders for delivery services indirectly via electricity retailers, and also for other works – eg, those associated with asset relocations.

Lyttelton Port Company Limited (LPC) and City Care Limited (CCL) are both wholly-owned subsidiaries of CCHL. We provide lines services directly to LPC as a major customer on the same terms and conditions we provide to our other major customers. CCL, a contracting company, tenders for work on the same lowest-price conforming attributes as Connetics and other unrelated parties.

Cost allocation (Schedule 5d)

11. 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 8: 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 lease of the depot by Connetics (as described on box 7) is recognised as Other regulated income in Schedule 3.

No items were reclassified in FY17 or FY18.

Asset allocation (Schedule 5e)

12. 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 9: 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 have re-allocated the values of EV chargers (other than those at our head office site) to non-electricity distribution activities. We have excluded FY18 expenditure related to EV chargers from EDB expenditure values. We have 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 activities was \$0.3m.

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Capital Expenditure for the Disclosure Year (Schedule 6a)

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

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

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

Box 10: Comment on capex

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

- $59m (last year: $62m) for network assets
- $17m (last year: $7m) for non-network assets.

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

Schedule 6a(iv) discloses $10m of capex for system growth and $23m for asset replacement and renewal. Nearly $2m of the capex is the rebuild of our Lancaster district substation, which was completed in FY18. We also spent just over $3m on our supply fuse relocation program in FY18. No other individual projects in schedule 6a(iv) exceeded $2m.

Schedule 6a(ix) discloses $14m of costs for the construction of a works depot. Construction was completed in FY18, and we now lease the depot to Connetics, on an arms-length basis. This project accounts for most of our non-network capex spend in FY18.

No capex items were reclassified in FY18.

Operational Expenditure for the Disclosure Year (Schedule 6b)

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

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

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

    14.3 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 11: Comment on operational expenditure for the disclosure year

Schedule 6b(i) discloses $3.2m of FY18 maintenance opex as asset replacement and renewal:

	FY18 $m
Retightening and cross-arm and insulator work on 11kV overhead lines	1.5
Substation repairs	0.8
Foundation work on 66kV towers	0.4
66kV underground cable joint refurbishment	0.3
Other	0.2
	3.2

All categories of network opex in Schedule 6b have some minor ongoing impacts from the quakes. However, it difficult to separately attribute costs to the quakes. From the FY13 year on, we have not separately attributed costs to the quakes.

There were no material atypical items of expenditure in FY18.

No items were reclassified during FY18.

Variance between forecast and actual expenditure (Schedule 7)

15. 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 12: Comment on the variance between forecast and actual capex and opex

CAPEX

Schedule 7(ii)) discloses our AMP forecast capex at $71.7m and actual capex at $76.1m. The key offsetting reasons for this overspend of $4.4m are:

	FY18 $m
Higher connection and subdivision expenditure (customer driven)	3
Higher capex due to capitalised internal labour (transferred from opex)	3
Delayed Lancaster substation rebuild from earlier years	2
Higher asset relocations due to roading changes (customer driven)	1
Spur asset purchase deferred to FY19	(1)
Lower capex on IT	(1)
Lower capex on works depot (some costs incurred by Connetics directly)	(2)
Other (net)	(1)
Overspend relative to our AMP forecast	4

OPEX

Schedule 7(iii) discloses our AMP forecast opex of $61.7m and actual opex of $54.2m. Of this $7.5m underspend, $3.2m is due to network opex and $4.3m is due to non-network opex.

The key reasons for these two variances are:

Network opex	**FY18 $m**
Routine and corrective maintenance and inspection	3.2
Vegetation management	0.5
Asset replacement and renewal	0.5
Service interruptions and emergencies	(1.0)
Underspend relative to our AMP forecast	3.2

A number of factors contributed to our below-forecast opex on routine and corrective maintenance and inspection in FY18. In particular, we have:

- not yet decommissioned or repaired all of our overhead lines, underground cables and other equipment in the residential red zone in the eastern suburbs, pending decisions on future land use
- deferred some planned works due to resource constraints, with contractor resource applied to customer driven work.

Our below-forecast opex on asset replacement and renewal is due to less opex on roading-related works than forecast, with most treated as capex.

Service interruptions and emergency expenditure was above budget due largely to higher levels of reactive pole replacement works.

Non-network opex	FY18 $m
Salaries and wages capitalised (change in accounting treatment)	2.6
Commercial and regulatory	0.6
Salaries and wages	0.4
Other	0.6
Underspend relative to AMP forecast	4.2

In FY18 we 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 have made this change for financial reporting, tax and regulatory reporting purposes.

No other opex items were reclassified during FY18.

Information relating to revenues and quantities for the disclosure year

16. In the box below provide-

16.1 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

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

Box 13: Comment on revenue for the disclosure year

In order to compare actual 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 $1.3m) 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:

	Actual $m	Target $m	Difference $m
Distribution	175.6	174.2	1.4
Transmission	77.4	77.1	0.3
Delivery revenue	**253.0**	**251.3**	**1.7**

The main reason for our above target delivery revenue in FY18 was general connection volume revenue, which was $1.7m above target, because chargeable volumes were 33GWh (1%) higher than forecast.

Network Reliability for the Disclosure Year (Schedule 10)

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

Box 14: Comment on network reliability for the disclosure year

Schedule 10 sets out our CPP network reliability limits for information disclosure (IDD) purposes.

Our normalisation adjustments in Schedule 10 differ slightly from our CPP compliance statement for FY18, as follows:

	CPP limit	IDD	CPP compliance statement
SAIDI	82.4	79.0	79.1
SAIFI	1.02	1.00	1.00

The different results between information disclosure and our CPP compliance statement are caused by different boundary values when normalising for major event days.

Insurance cover

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

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

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

Box 15: Comment on insurance cover

Our current key material damage (MD) / business interruption (BI) terms are:

- our annual MD/BI premium is around $1.1m – it was around $0.3m pre-quakes
- our MD/BI natural disaster restrictions are:
  - 1% deductibles of the site insured value per-site (2.5% for 1935-2004 buildings and 5% for pre-1935 buildings) – capped in aggregate at $10m for any one event
  - our BI indemnity period is 18 months
- our buildings and key substations continue to have natural disaster cover, subject to the key restrictions noted above
- our overhead lines and underground cables remain economically uninsurable – and they continue to be for the whole industry
- our general lost revenue risks (drops in revenue due to general depopulation etc following a catastrophic event) also remain economically uninsurable – and they continue to be for the whole industry.

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

We continue to prudently insure our key risks where it's economically feasible to do so, in line with good industry practice.

Amendments to previously disclosed information

19. 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:

    19.1 a description of each error; and

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

Box 16: Disclosure of amendment to previously disclosed information
We have made no amendments to previously disclosed information to correct errors.

Company Name	Orion New Zealand Limited
For Year Ended	31 March 2018

Schedule 15 Voluntary Explanatory Notes

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

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

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

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

3. Provide additional explanatory comment in the box below.

Voluntary other comments on disclosed information

Schedule 2(v)

Recoverable costs in schedule 2(v) are the annualised recovery of some of our CPP application costs over five years, FY15 to FY19 inclusive, as follows:

	Total $000	Annualised $000
Application fee	20	5
Assessment fee	1,288	318
Verifier	204	52
Auditor	244	62
Independent engineer	15	4
Total	**1,771**	**440**

Schedule 3(iii)

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

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

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

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

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

= ($1,656k).

We have carried forward the incorrect amount of $2,425k in row 61 in our FY17 disclosures and row 60 of our FY18 disclosures .

We have not restated/corrected this information in our FY16/FY17/FY18 disclosures because the error is not material.

This error has no impact on any other disclosed information.

The information will become relevant when the Commerce Commission assesses any allowance for us to recover costs under the Orion-specific incremental rolling incentive scheme (IRIS) which is prescribed in our CPP. This assessment will occur after the end of FY19.

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 GXPs 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, this year, as a result of the correction of this factor, the age profile shows 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.

Orion

Certification for year-end disclosures

We, Geoffrey Edward Vazey 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 (consolidated in 2015) 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.

In respect of related party costs and revenues recorded in accordance with subclause 2.3.6(1) (when valued in accordance with clause 2.2.11(5)(h)(ii) of the Electricity Distribution Services Input Methodologies Determination 2012), we certify that, having made all reasonable enquiry, including enquiries of our related parties, we are satisfied that to the best of our knowledge and belief the costs and revenues recorded for related party transactions reasonably reflect the price or prices that would have been paid or received had these transactions been at arm's-length.

Geoff Vazey **Bruce Gemmell**

17 August 2018

AUDIT NEW ZEALAND
Mana Arotake Aotearoa

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 disclosed in schedules 1 to 4, 5a to 5g, 6a and 6b, 7, 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 12 in Schedule 14 ("the Disclosure Information") for the disclosure year ended 31 March 2018, have been prepared, in all material respects, in accordance with the Electricity Distribution Information Disclosure Determination 2012 (the "Determination").

Directors' responsibility for the Disclosure Information

The directors of the company are responsible for preparation of the Disclosure Information in accordance with the Determination, and for such internal control as the directors determine is necessary to enable the preparation of the Disclosure Information that is free from material misstatement.

Our responsibility for the Disclosure Information

Our responsibility is to express an opinion on whether the Disclosure Information has been prepared, in all material respects, in accordance with the Determination.

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: *Compliance Engagements* issued by the External Reporting 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 in accordance with the Determination.

We have performed procedures to obtain evidence about the amounts and disclosures in the Disclosure Information. The procedures selected depend on our judgement, including the assessment of the risks of material misstatement of the Disclosure Information, whether due to fraud or error or non-compliance with the Determination. In making those risk assessments, we considered internal control relevant to the company's preparation of the Disclosure 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.

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 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.

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 nor do we guarantee complete accuracy of the Disclosure Information. Also we did not evaluate the security and controls over the electronic publication of the Disclosure Information.

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

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; and

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

We also complied with the independence requirements specified in the Determination.

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

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

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

John Mackey
Audit New Zealand
On behalf of the Auditor-General
Christchurch, New Zealand
17 August 2018