Orion New Zealand Limited

Information for disclosure

for year ended 31 March 2017

Electricity distribution

Information disclosure

determination 2012

Approved 15 August 2017

Orion New Zealand Ltd
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Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2017**

SCHEDULE 1: ANALYTICAL RATIOS

This schedule calculates expenditure, revenue and service ratios from the information disclosed. The disclosed ratios may vary for reasons that are company specific and, as a result, must be interpreted with care. The Commerce Commission will publish a summary and analysis of information disclosed in accordance with the ID determination. This will include information disclosed in accordance with this and other schedules, and information disclosed under the other requirements of the determination.
This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

1(i): Expenditure metrics

	Expenditure per GWh energy delivered to ICPs ($/GWh)	Expenditure per average no. of ICPs ($/ICP)	Expenditure per MW maximum coincident system demand ($/MW)	Expenditure per km circuit length ($/km)	Expenditure per MVA of capacity from EDB-owned distribution transformers ($/MVA)
Operational expenditure	18,022	284	92,927	4,958	27,073
Network	8,315	131	42,874	2,288	12,491
Non-network	9,707	153	50,053	2,671	14,582
Expenditure on assets	22,183	349	114,380	6,103	33,323
Network	19,942	314	102,827	5,487	29,958
Non-network	2,241	35	11,553	616	3,366

1(ii): Revenue metrics

	Revenue per GWh energy delivered to ICPs ($/GWh)	Revenue per average no. of ICPs ($/ICP)
Total consumer line charge revenue	80,144	1,262
Standard consumer line charge revenue	81,614	1,244
Non-standard consumer line charge revenue	35,667	293,914

1(iii): Service intensity measures

Demand density	53	*Maximum coincident system demand per km of circuit length (for supply) (kW/km)*
Volume density	275	*Total energy delivered to ICPs per km of circuit length (for supply) (MWh/km)*
Connection point density	17	*Average number of ICPs per km of circuit length (for supply) (ICPs/km)*
Energy intensity	15,745	*Total energy delivered to ICPs per average number of ICPs (kWh/ICP)*

1(iv): Composition of regulatory income

	($000)	% of revenue
Operational expenditure	55,736	22.32%
Pass-through and recoverable costs excluding financial incentives and wash-ups	78,055	31.25%
Total depreciation	37,063	14.84%
Total revaluations	21,320	8.54%
Regulatory tax allowance	21,951	8.79%
Regulatory profit/(loss) including financial incentives and wash-ups	78,281	31.34%
Total regulatory income	249,765	

1(v): Reliability

Interruption rate	13.07	*Interruptions per 100 circuit km*

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SCHEDULE 2: REPORT ON RETURN ON INVESTMENT

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

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

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sch ref		CY-2	CY-1	Current Year CY
7	**2(i): Return on Investment**			
8		31 Mar 15	31 Mar 16	31 Mar 17
9	**ROI – comparable to a post tax WACC**	%	%	%
10	Reflecting all revenue earned	8.75%	6.30%	7.76%
11	Excluding revenue earned from financial incentives	8.47%	5.80%	7.29%
12	Excluding revenue earned from financial incentives and wash-ups	8.43%	5.77%	7.25%
13				
14	**Mid-point estimate of post tax WACC**	6.10%	5.37%	4.77%
15	25th percentile estimate	5.39%	4.66%	4.05%
16	75th percentile estimate	6.82%	6.09%	5.48%
17				
18				
19	**ROI – comparable to a vanilla WACC**			
20	Reflecting all revenue earned	9.53%	6.95%	8.30%
21	Excluding revenue earned from financial incentives	9.25%	6.45%	7.83%
22	Excluding revenue earned from financial incentives and wash-ups	9.21%	6.42%	7.80%
23				
24	**WACC rate used to set regulatory price path**	6.92%	6.92%	6.92%
25				
26	**Mid-point estimate of vanilla WACC**	6.89%	6.02%	5.31%
27	25th percentile estimate	6.17%	5.30%	4.59%
28	75th percentile estimate	7.60%	6.74%	6.03%
29				

sch ref				($000)	
30	**2(ii): Information Supporting the ROI**				
31					
32		Total opening RAB value	986,595		
33	*plus*	Opening deferred tax	(34,797)		
34	**Opening RIV**			951,798	
35					
36	**Line charge revenue**			247,856	
37					
38		Expenses cash outflow	133,790		
39	*add*	Assets commissioned	34,993		
40	*less*	Asset disposals	1,663		
41	*add*	Tax payments	17,309		
42	*less*	Other regulated income	1,909		
43	**Mid-year net cash outflows**			182,520	
44					
45	**Term credit spread differential allowance**			–	
46					
47		Total closing RAB value	1,004,182		
48	*less*	Adjustment resulting from asset allocation	0		
49	*less*	Lost and found assets adjustment	–		
50	*plus*	Closing deferred tax	(39,439)		
51	**Closing RIV**			964,743	
52					
53	**ROI – comparable to a vanilla WACC**				8.30%
54					
55		Leverage (%)			44%
56		Cost of debt assumption (%)			4.41%
57		Corporate tax rate (%)			28%
58					
59	**ROI – comparable to a post tax WACC**				7.76%
60					

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SCHEDULE 2: REPORT ON RETURN ON INVESTMENT

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

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sch ref

2(iii): Information Supporting the Monthly ROI

Opening RIV	N/A

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

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

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

Year-end ROI – comparable to a vanilla WACC	7.41%
Year-end ROI – comparable to a post tax WACC	6.87%

** 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	5,994	
Energy efficiency and demand incentive allowance	–	
Quality incentive adjustment	–	
Other financial incentives	–	
Financial incentives		5,994
Impact of financial incentives on ROI		0.47%
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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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

3(i): Regulatory Profit

		($000)
	Income	
	Line charge revenue	247,856
plus	Gains / (losses) on asset disposals	(968)
plus	Other regulated income (other than gains / (losses) on asset disposals)	2,878
	Total regulatory income	249,765
	Expenses	
less	Operational expenditure	55,736
less	Pass-through and recoverable costs excluding financial incentives and wash-ups	78,055
	Operating surplus / (deficit)	115,975
less	Total depreciation	37,063
plus	Total revaluations	21,320
	Regulatory profit / (loss) before tax	100,232
less	Term credit spread differential allowance	–
less	Regulatory tax allowance	21,951
	Regulatory profit/(loss) including financial incentives and wash-ups	78,281

3(ii): Pass-through and Recoverable Costs excluding Financial Incentives and Wash-Ups

	($000)	
Pass through costs		
Rates	3,462	
Commerce Act levies	397	
Industry levies	689	
CPP specified pass through costs		
Recoverable costs excluding financial incentives and wash-ups		
Electricity lines service charge payable to Transpower	70,636	
Transpower new investment contract charges	2,604	
System operator services	–	
Distributed generation allowance	267	
Extended reserves allowance	–	
Other recoverable costs excluding financial incentives and wash-ups	–	
Pass-through and recoverable costs excluding financial incentives and wash-ups		78,055

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SCHEDULE 3: REPORT ON REGULATORY PROFIT

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sch ref				
48	**3(iii): Incremental Rolling Incentive Scheme**		**($000)**	
49			**CY-1**	**CY**
50			**31 Mar 16**	**31 Mar 17**
51	Allowed controllable opex		58,104	57,926
52	Actual controllable opex		55,679	55,736
53				
54	Incremental change in year			(235)
55				
56			**Previous years' incremental change**	**Previous years' incremental change adjusted for inflation**
57	CY-5	31 Mar 12		
58	CY-4	31 Mar 13		
59	CY-3	31 Mar 14		
60	CY-2	31 Mar 15	4,081	
61	CY-1	31 Mar 16	2,425	
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			N/A
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			N/A

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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

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

		RAB	RAB	RAB	RAB	RAB
	for year ended	**31 Mar 13**	**31 Mar 14**	**31 Mar 15**	**31 Mar 16**	**31 Mar 17**
		($000)	**($000)**	**($000)**	**($000)**	**($000)**
	Total opening RAB value	844,064	864,649	890,508	907,756	986,595
less	**Total depreciation**	33,473	34,385	35,910	37,026	37,063
plus	**Total revaluations**	7,247	12,840	744	5,304	21,320
plus	**Assets commissioned**	46,928	73,121	53,514	113,616	34,993
less	**Asset disposals**	117	25,717	1,100	3,055	1,663
plus	**Lost and found assets adjustment**	–	–	–	–	–
plus	**Adjustment resulting from asset allocation**	–	–	–	–	0
	Total closing RAB value	864,649	890,508	907,756	986,595	1,004,182

4(ii): Unallocated Regulatory Asset Base

		Unallocated RAB *		RAB	
		($000)	**($000)**	**($000)**	**($000)**
	Total opening RAB value		986,595		986,595
less					
	Total depreciation		37,063		37,063
plus					
	Total revaluations		21,320		21,320
plus					
	Assets commissioned (other than below)	25,127		25,127	
	Assets acquired from a regulated supplier	(479)		(479)	
	Assets acquired from a related party	10,346		10,346	
	Assets commissioned		34,993		34,993
less					
	Asset disposals (other than below)	1,663		1,663	
	Asset disposals to a regulated supplier	–		–	
	Asset disposals to a related party	–		–	
	Asset disposals		1,663		1,663
plus	**Lost and found assets adjustment**		–		–
plus	**Adjustment resulting from asset allocation**				0
	Total closing RAB value		1,004,182		1,004,182

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

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

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

sch ref						
52	**4(iii): Calculation of Revaluation Rate and Revaluation of Assets**					
54		CPI_4				1,226
55		CPI_4^{-4}				1,200
56		Revaluation rate (%)				2.17%
58			**Unallocated RAB ***		**RAB**	
59			**($000)**	**($000)**	**($000)**	**($000)**
60		Total opening RAB value	986,595		986,595	
61	*less*	Opening value of fully depreciated, disposed and lost assets	2,595		2,595	
63		Total opening RAB value subject to revaluation	984,000		984,000	
64		**Total revaluations**		21,320		21,320
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**		30,152		30,152
69	*plus*	Capital expenditure	58,747		58,747	
70	*less*	Assets commissioned	34,993		34,993	
71	*plus*	Adjustment resulting from asset allocation			–	
72		**Works under construction - current disclosure year**		53,907		53,907
74		Highest rate of capitalised finance applied				Nil

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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 *		RAB	
78		($000)	($000)	($000)	($000)
79	Depreciation - standard	33,966		33,966	
80	Depreciation - no standard life assets	3,097		3,097	
81	Depreciation - modified life assets	–		–	
82	Depreciation - alternative depreciation in accordance with CPP	–		–	
83	**Total depreciation**		37,063		37,063

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**	58,319	84,004	120,743	115,621	327,738	110,013	103,189	32,004	34,965	986,595
100	*less*	Total depreciation	2,311	2,290	5,684	4,679	10,793	3,223	4,570	1,228	2,284	37,063
101	*plus*	Total revaluations	1,262	1,820	2,602	2,501	7,100	2,380	2,234	684	738	21,320
102	*plus*	Assets commissioned	2,563	–	4,099	4,267	9,781	4,612	7,160	139	2,372	34,993
103	*less*	Asset disposals	17	–	559	165	7	109	66	398	342	1,663
104	*plus*	Lost and found assets adjustment	–	–	–	–	–	–	–	–	–	–
105	*plus*	Adjustment resulting from asset allocation	–	–	–	–	–	–	–	–	–	–
106	*plus*	Asset category transfers	–	–	–	–	–	–	–	(116)	116	–
107		**Total closing RAB value**	59,815	83,534	121,202	117,544	333,819	113,673	107,947	31,086	35,564	1,004,182
109		**Asset Life**										
110		Weighted average remaining asset life	35.8	43.8	31.6	32.7	37.6	33.7	28.8	31.2	22.3	(years)
111		Weighted average expected total asset life	46.1	58.5	45.8	48.0	58.8	45.2	40.4	33.8	26.0	(years)

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SCHEDULE 5a: REPORT ON REGULATORY TAX ALLOWANCE

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

sch ref					
7		**5a(i): Regulatory Tax Allowance**		**($000)**	
8		**Regulatory profit / (loss) before tax**		100,232	
9					
10	*plus*	Income not included in regulatory profit / (loss) before tax but taxable	2,230		*
11		Expenditure or loss in regulatory profit / (loss) before tax but not deductible	342		*
12		Amortisation of initial differences in asset values	15,357		
13		Amortisation of revaluations	2,296		
14				20,226	
15					
16	*less*	Total revaluations	21,320		
17		Income included in regulatory profit / (loss) before tax but not taxable	1,896		*
18		Discretionary discounts and customer rebates	–		
19		Expenditure or loss deductible but not in regulatory profit / (loss) before tax	770		*
20		Notional deductible interest	18,074		
21				42,060	
22					
23		**Regulatory taxable income**		78,397	
24					
25	*less*	Utilised tax losses	–		
26		Regulatory net taxable income		78,397	
27					
28		Corporate tax rate (%)	28%		
29		**Regulatory tax allowance**		21,951	
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	406,663		
37	*less*	Amortisation of initial differences in asset values	15,357		
38	*plus*	Adjustment for unamortised initial differences in assets acquired	–		
39	*less*	Adjustment for unamortised initial differences in assets disposed	225		
40		Closing unamortised initial differences in asset values		391,081	
41					
42		Opening weighted average remaining useful life of relevant assets (years)		26	
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				
44		**5a(iv): Amortisation of Revaluations**		**($000)**
45				
46		Opening sum of RAB values without revaluations	925,980	
47				
48		Adjusted depreciation	34,767	
49		Total depreciation	37,063	
50		Amortisation of revaluations		2,296
51				
52		**5a(v): Reconciliation of Tax Losses**		**($000)**
53				
54		**Opening tax losses**	–	
55	*plus*	Current period tax losses	–	
56	*less*	Utilised tax losses	–	
57		**Closing tax losses**		–
58		**5a(vi): Calculation of Deferred Tax Balance**		**($000)**
59				
60		**Opening deferred tax**	(34,797)	
61				
62	*plus*	Tax effect of adjusted depreciation	9,735	
63				
64	*less*	Tax effect of tax depreciation	9,563	
65				
66	*plus*	Tax effect of other temporary differences*	(437)	
67				
68	*less*	Tax effect of amortisation of initial differences in asset values	4,300	
69				
70	*plus*	Deferred tax balance relating to assets acquired in the disclosure year	–	
71				
72	*less*	Deferred tax balance relating to assets disposed in the disclosure year	77	
73				
74	*plus*	Deferred tax cost allocation adjustment	(0)	
75				
76		**Closing deferred tax**		(39,439)
77				
78		**5a(vii): Disclosure of Temporary Differences**		
79		*In Schedule 14, Box 6, provide descriptions and workings of items recorded in the asterisked category in Schedule 5a(vi) (Tax effect of other temporary differences).*		
80				
81		**5a(viii): Regulatory Tax Asset Base Roll-Forward**		
82				**($000)**
83		**Opening sum of regulatory tax asset values**	380,419	
84	*less*	Tax depreciation	34,154	
85	*plus*	Regulatory tax asset value of assets commissioned	36,676	
86	*less*	Regulatory tax asset value of asset disposals	1,403	
87	*plus*	Lost and found assets adjustment	–	
88	*plus*	Adjustment resulting from asset allocation	–	
89	*plus*	Other adjustments to the RAB tax value	–	
90		**Closing sum of regulatory tax asset values**		381,540

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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	431
9	Operational expenditure	12,752
10	Capital expenditure	21,927
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 Limited	Wholly-owned subsidiary company which bids for works tendered by Orion
16		
17		
18		
19		

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	21,827	IM clause 2.2.11(5)(c)
24	Connetics Limited	Capex	Other sundry sales	100	IM clause 2.2.11(5)(g)
25	Connetics Limited	Opex	Maintenance of electrical works	12,674	ID clause 2.3.6(1)(e)
26	Connetics Limited	Opex	Other sundry sales and recharges	79	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	231	ID clause 2.3.7(2)(c)
29	Connetics Limited	Sales	Other sundry sales	139	ID clause 2.3.7(2)(c)
30					
31					
32					
33					
34					
35					
36					
37					

38 ** include additional rows if needed*

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2017**

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
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 2017**

SCHEDULE 5d: REPORT ON COST ALLOCATIONS

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

sch ref

7 5d(i): Operating Cost Allocations

sch ref		Arm's length deduction	Electricity distribution services	Non-electricity distribution services	Total	OVABAA allocation increase ($000s)
8			**Value allocated ($000s)**			
10	**Service interruptions and emergencies**					
11	Directly attributable		8,540			
12	Not directly attributable	–	–	–	–	–
13	**Total attributable to regulated service**		8,540			
14	**Vegetation management**					
15	Directly attributable		3,287			
16	Not directly attributable	–	–	–	–	–
17	**Total attributable to regulated service**		3,287			
18	**Routine and corrective maintenance and inspection**					
19	Directly attributable		11,079			
20	Not directly attributable	–	–	–	–	–
21	**Total attributable to regulated service**		11,079			
22	**Asset replacement and renewal**					
23	Directly attributable		2,809			
24	Not directly attributable	–	–	–	–	–
25	**Total attributable to regulated service**		2,809			
26	**System operations and network support**					
27	Directly attributable		16,374			
28	Not directly attributable	–	–	–	–	–
29	**Total attributable to regulated service**		16,374			
30	**Business support**					
31	Directly attributable		13,647			
32	Not directly attributable	–	–	–	–	–
33	**Total attributable to regulated service**		13,647			
34						
35	**Operating costs directly attributable**		55,736			
36	**Operating costs not directly attributable**	–	–	–	–	–
37	**Operational expenditure**		55,736			
38						

39 5d(ii): Other Cost Allocations

sch ref		($000)
40	**Pass through and recoverable costs**	
41	**Pass through costs**	
42	Directly attributable	4,548
43	Not directly attributable	–
44	**Total attributable to regulated service**	4,548
45	**Recoverable costs**	
46	Directly attributable	73,507
47	Not directly attributable	–
48	**Total attributable to regulated service**	73,507
49		

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

sch ref				CY-1 ($000)	Current Year (CY) ($000)
52	**Change in cost allocation 1**				
53	Cost category		Original allocation		
54	Original allocator or line items		New allocation		
55	New allocator or line items		Difference	–	–
57	Rationale for change				
61	**Change in cost allocation 2**				
62	Cost category		Original allocation		
63	Original allocator or line items		New allocation		
64	New allocator or line items		Difference	–	–
66	Rationale for change				
70	**Change in cost allocation 3**				
71	Cost category		Original allocation		
72	Original allocator or line items		New allocation		
73	New allocator or line items		Difference	–	–
75	Rationale for change				

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

79 *† include additional rows if needed*

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2017**

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	59,815
Not directly attributable	–
Total attributable to regulated service	59,815
Subtransmission cables	
Directly attributable	83,534
Not directly attributable	–
Total attributable to regulated service	83,534
Zone substations	
Directly attributable	121,202
Not directly attributable	–
Total attributable to regulated service	121,202
Distribution and LV lines	
Directly attributable	117,544
Not directly attributable	–
Total attributable to regulated service	117,544
Distribution and LV cables	
Directly attributable	333,819
Not directly attributable	–
Total attributable to regulated service	333,819
Distribution substations and transformers	
Directly attributable	113,673
Not directly attributable	–
Total attributable to regulated service	113,673
Distribution switchgear	
Directly attributable	107,947
Not directly attributable	–
Total attributable to regulated service	107,947
Other network assets	
Directly attributable	31,086
Not directly attributable	–
Total attributable to regulated service	31,086
Non-network assets	
Directly attributable	35,564
Not directly attributable	–
Total attributable to regulated service	35,564
Regulated service asset value directly attributable	1,004,182
Regulated service asset value not directly attributable	–
Total closing RAB value	1,004,182

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 2017**

SCHEDULE 5f: REPORT SUPPORTING COST ALLOCATIONS

This schedule requires additional detail on the asset allocation methodology applied in allocating asset values that are not directly attributable, to support the information provided in Schedule 5d (Cost allocations). This schedule is not required to be publicly disclosed, but must be disclosed to the Commission.
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											
7											
8	Have costs been allocated in aggregate using ACAM in accordance with clause 2.1.1(3) of the IM Determination?	No									
9											
10					Allocator Metric (%)		Value allocated ($000)				OVABAA allocation increase ($000)
11	Line Item*	Allocation methodology type	Cost allocator	Allocator type	Electricity distribution services	Non-electricity distribution services	Arm's length deduction	Electricity distribution services	Non-electricity distribution services	Total	
12	**Service interruptions and emergencies**										
13	All service interruptions and emergencies costs are directly attributable									-	
14										-	
15										-	
16										-	
17	**Not directly attributable**						-	-	-	-	-
18	**Vegetation management**										
19	All vegetation management costs are directly attributable									-	
20										-	
21		`								-	
22										-	
23	**Not directly attributable**						-	-	-	-	-
24	**Routine and corrective maintenance and inspection**										
25	All routine and corrective maintenance and inspection costs are directly attributable									-	
26										-	
27										-	
28										-	
29	**Not directly attributable**						-	-	-	-	-
30	**Asset replacement and renewal**										
31	All asset replacement and renewal costs are directly attributable									-	
32										-	
33										-	
34										-	
35	**Not directly attributable**						-	-	-	-	-
36											

									Company Name	Orion NZ Ltd	
									For Year Ended	31 March 2017	

SCHEDULE 5f: REPORT SUPPORTING COST ALLOCATIONS

This schedule requires additional detail on the asset allocation methodology applied in allocating asset values that are not directly attributable, to support the information provided in Schedule 5d (Cost allocations). This schedule is not required to be publicly disclosed, but must be disclosed to the Commission.

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											
37	**System operations and network support**										
38	All system operations and network support costs are directly attributable									-	
39										-	
40										-	
41										-	
42	**Not directly attributable**						-	-	-	-	-
43	**Business support**										
44	All business support costs are directly attributable									-	
45										-	
46										-	
47										-	
48	**Not directly attributable**						-	-	-	-	-
49											
50	**Operating costs not directly attributable**						-	-	-	-	-
51											
52	**Pass through and recoverable costs**										
53	**Pass through costs**										
54	All pass through costs are directly attributable									-	
55										-	
56										-	
57										-	
58	**Not directly attributable**						-	-	-	-	-
59	**Recoverable costs**										
60	All recoverable costs are directly attributable									-	
61										-	
62										-	
63										-	
64	**Not directly attributable**						-	-	-	-	-
65	** include additional rows if needed*										

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2017**

SCHEDULE 5g: REPORT SUPPORTING ASSET ALLOCATIONS

This schedule requires additional detail on the asset allocation methodology applied in allocating asset values that are not directly attributable, to support the information provided in Schedule 5e (Report on Asset Allocations). This schedule is not required to be publicly disclosed, but must be disclosed to the Commission.

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 Have assets been allocated in aggregate using ACAM in accordance with clause 2.1.1(3) of the IM Determination? | No

9

sch ref					Allocator Metric (%)		Value allocated ($000)				
11	**Line Item***	**Allocation methodology type**	**Allocator**	**Allocator type**	**Electricity distribution services**	**Non-electricity distribution services**	**Arm's length deduction**	**Electricity distribution services**	**Non-electricity distribution services**	**Total**	**OVABAA allocation increase ($000)**
12	**Subtransmission lines**										
13	All substransmission lines are directly attributable									-	
14										-	
15										-	
16										-	
17	**Not directly attributable**						-	-	-	-	-
18	**Subtransmission cables**										
19	All substransmission cables are directly attributable									-	
20										-	
21										-	
22										-	
23	**Not directly attributable**						-	-	-	-	-
24	**Zone substations**										
25	All zone substations are directly attributable									-	
26										-	
27										-	
28										-	
29	**Not directly attributable**						-	-	-	-	-
30	**Distribution and LV lines**										
31	All distribution and LV lines are directly attributable									-	
32										-	
33										-	
34										-	
35	**Not directly attributable**						-	-	-	-	-

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2017**

SCHEDULE 5g: REPORT SUPPORTING ASSET ALLOCATIONS

This schedule requires additional detail on the asset allocation methodology applied in allocating asset values that are not directly attributable, to support the information provided in Schedule 5e (Report on Asset Allocations). This schedule is not required to be publicly disclosed, but must be disclosed to the Commission.

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											
36	**Distribution and LV cables**										
37	All distribution and LV cables are directly attributable									-	
38										-	
39										-	
40										-	
41	**Not directly attributable**						-	-	-	-	-
42											
43	**Distribution substations and transformers**										
44	All distribution substations and transformers are directly attributable									-	
45										-	
46										-	
47										-	
48	**Not directly attributable**						-	-	-	-	-
49											
50	**Distribution switchgear**										
51	All distribution switchgear is directly attributable									-	
52										-	
53										-	
54										-	
55	**Not directly attributable**						-	-	-	-	-
56	**Other network assets**										
57	All other network assets are directly attributable									-	
58										-	
59										-	
60										-	
61	**Not directly attributable**						-	-	-	-	-
62	**Non-network assets**										
63	All non-network assets are directly attributable									-	
64										-	
65										-	
66										-	
67	**Not directly attributable**						-	-	-	-	-
68											
69	**Regulated service asset value not directly attributable**						-	-	-	-	-
70	** include additional rows if needed*										

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2017**

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		20,686
9		System growth		10,467
10		Asset replacement and renewal		15,705
11		Asset relocations		11,337
12		Reliability, safety and environment:		
13		Quality of supply	–	
14		Legislative and regulatory	–	
15		Other reliability, safety and environment	3,479	
16		**Total reliability, safety and environment**		3,479
17		**Expenditure on network assets**		61,674
18		Expenditure on non-network assets		6,929
19				
20		**Expenditure on assets**		68,603
21	*plus*	Cost of financing		–
22	*less*	Value of capital contributions		9,856
23	*plus*	Value of vested assets		–
24				
25		**Capital expenditure**		58,747
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		7,446
29		Research and development		–
30		**6a(iii): Consumer Connection**		
31		*Consumer types defined by EDB**	**($000)**	**($000)**
32		General connections	4,915	
33		Large customers	6,141	
34		Subdivisions	5,794	
35		Switchgear	2,301	
36		Transformers	1,536	
37		** include additional rows if needed*		
38		**Consumer connection expenditure**		20,686
39				
40	*less*	Capital contributions funding consumer connection expenditure	1,923	
41		**Consumer connection less capital contributions**		18,763
42		**6a(iv): System Growth and Asset Replacement and Renewal**		**Asset Replacement and**
43			**System Growth**	**Renewal**
44			**($000)**	**($000)**
45		Subtransmission	6,297	751
46		Zone substations	826	1,281
47		Distribution and LV lines	–	2,635
48		Distribution and LV cables	2,374	280
49		Distribution substations and transformers	538	2,251
50		Distribution switchgear	111	4,629
51		Other network assets	322	3,878
52		**System growth and asset replacement and renewal expenditure**	10,467	15,705
53	*less*	Capital contributions funding system growth and asset replacement and renewal	6	–
54		**System growth and asset replacement and renewal less capital contributions**	10,462	15,705
55				
56		**6a(v): Asset Relocations**		
57		*Project or programme**	**($000)**	**($000)**
58		NZTA and others	5,657	
59		Christchurch City Council	1,367	
60		Selwyn District Council	922	
61		Developer-specific projects	287	
62		Asset relocation programme	3,104	
63		** include additional rows if needed*		
64		All other projects or programmes - asset relocations	–	
65		**Asset relocations expenditure**		11,337
66	*less*	Capital contributions funding asset relocations	7,927	
67		**Asset relocations less capital contributions**		3,410

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2017**

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		No projects with this as the primary intent	–	
72				
73				
74				
75				
76		** include additional rows if needed*		
77		All other projects programmes - quality of supply		
78		**Quality of supply expenditure**		–
79	*less*	Capital contributions funding quality of supply		
80		**Quality of supply less capital contributions**		–
81		**6a(vii): Legislative and Regulatory**		
82		*Project or programme**	**($000)**	**($000)**
83		No projects with this as the primary intent	–	
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		Install boundary boxes for T-jonted cables	2,509	
96		Security fencing and seismic structure upgrades	706	
97		CBD development	263	
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**		3,479
103	*less*	Capital contributions funding other reliability, safety and environment		
104		**Other reliability, safety and environment less capital contributions**		3,479
105				
106		**6a(ix): Non-Network Assets**		
107		**Routine expenditure**		
108		*Project or programme**	**($000)**	**($000)**
109		Sundry land and buildings	140	
110		Vehicles and mobile plant	914	
111		Information solutions	435	
112		Sundry tools and equipment	434	
113				
114		** include additional rows if needed*		
115		All other projects or programmes - routine expenditure		
116		**Routine expenditure**		1,923
117		**Atypical expenditure**		
118		*Project or programme**	**($000)**	**($000)**
119		Construction of a depot	4,664	
120		Electric vehicle fast charging stations	341	
121				
122				
123				
124		** include additional rows if needed*		
125		All other projects or programmes - atypical expenditure		
126		**Atypical expenditure**		5,006
127				
128		**Expenditure on non-network assets**		6,929

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2017**

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	8,540	
9	Vegetation management	3,287	
10	Routine and corrective maintenance and inspection	11,079	
11	Asset replacement and renewal	2,809	
12	**Network opex**		25,715
13	System operations and network support	16,374	
14	Business support	13,647	
15	**Non-network opex**		30,021
16			
17	**Operational expenditure**		55,736
18	**6b(ii): Subcomponents of Operational Expenditure (where known)**		
19	Energy efficiency and demand side management, reduction of energy losses		N/A
20	Direct billing*		N/A
21	Research and development		N/A
22	Insurance		1,235
23	** Direct billing expenditure by suppliers that directly bill the majority of their consumers*		

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2017**

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	255,150	247,856	(3%)
9	**7(ii): Expenditure on Assets**	**Forecast ($000) [2]**	**Actual ($000)**	**% variance**
10	Consumer connection	13,702	20,686	51%
11	System growth	13,530	10,467	(23%)
12	Asset replacement and renewal	16,150	15,705	(3%)
13	Asset relocations	9,498	11,337	19%
14	Reliability, safety and environment:			
15	Quality of supply	–	–	–
16	Legislative and regulatory	–	–	–
17	Other reliability, safety and environment	1,280	3,479	172%
18	**Total reliability, safety and environment**	1,280	3,479	172%
19	**Expenditure on network assets**	54,160	61,674	14%
20	Expenditure on non-network assets	15,294	6,929	(55%)
21	Expenditure on assets	69,454	68,603	(1%)
22	**7(iii): Operational Expenditure**			
23	Service interruptions and emergencies	8,780	8,540	(3%)
24	Vegetation management	3,390	3,287	(3%)
25	Routine and corrective maintenance and inspection	13,815	11,079	(20%)
26	Asset replacement and renewal	3,590	2,809	(22%)
27	**Network opex**	29,575	25,715	(13%)
28	System operations and network support	18,074	16,374	(9%)
29	Business support	16,144	13,647	(15%)
30	**Non-network opex**	34,218	30,021	(12%)
31	**Operational expenditure**	63,793	55,736	(13%)
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	9,498	7,446	(22%)
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	–	N/A	–
39	Direct billing	–	N/A	–
40	Research and development	–	N/A	–
41	Insurance	1,160	1,235	6%
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)	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)	Irrigation Power factor correction capacitance (ICPFC)	Irrigation Interruptibility rebate (ICIRR)	Major customer fixed charge (MCFXD)
				Unit charging basis (eg, days, kW of demand, kVA of capacity, etc.)	Connections	kW	kWh	kWh	kVAr	kW	kVAr	kW	Connections
LIG	Streetlighting	Standard	610		47,162								
GEN	Residential and commercial	Standard	194,292	2,288,060		477,567	1,116,844,567	1,273,053,663	-				
IRR	Commercial irrigation	Standard	1,111							76,165	25,015	46,020	
MCC	Large commercial and industrial	Standard	396	705,665									385
LCC	Large capacity	Non-standard	12	98,886									
Add extra rows for additional consumer groups or price category codes as necessary													
		Standard consumer totals	196,409	2,993,725	47,162	477,567	1,116,844,567	1,273,053,663	–	76,165	25,015	46,020	385
		Non-standard consumer totals	12	98,886	–	–	–	–	–	–	–	–	–
		Total for all consumers	196,421	3,092,611	47,162	477,567	1,116,844,567	1,273,053,663	–	76,165	25,015	46,020	385

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)	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)	Irrigation Power factor correction capacitance (ICPFC)	Irrigation Interruptibility rebate (ICIRR)	Major customer fixed charge (MCFXD)
						Rate (eg, $ per day, $ per kWh, etc.)	c/conn/day	c/kW/day	c/kWh	c/kWh	c/kVAr/day	c/kW/day	c/kVAr/day	c/kW/day	c/conn/day
LIG	Streetlighting	Standard	$2,007		$2,100	($93)	2,007								
GEN	Residential and commercial	Standard	$203,425		$142,069	$61,356		92,821	96,518	14,080	-				
IRR	Commercial irrigation	Standard	$5,629		$4,717	$912						6,820	(816)	(375)	
MCC	Large commercial and industrial	Standard	$33,268		$19,698	$13,570									261
LCC	Large capacity	Non-standard	$3,527		$1,371	$2,156									
			–												
			–												
			–												
			–												
			–												
Add extra rows for additional consumer groups or price category codes as necessary															
		Standard consumer totals	$244,329	–	$168,583	$75,745	$2,007	$92,821	$96,518	$14,080	–	$6,820	($816)	($375)	$261
		Non-standard consumer totals	$3,527	–	$1,371	$2,156	–	–	–	–	–	–	–	–	–
		Total for all consumers	$247,856	–	$169,955	$77,901	$2,007	$92,821	$96,518	$14,080	–	$6,820	($816)	($375)	$261

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8(iii): Number of ICPs directly billed

Number of directly billed ICPs at year end	31

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2017**
Network / Sub-Network Name	

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	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)
kVA	kVA	kVA	Switches	Connections	km	km	kVA	kVA	kVA	kVA	kVA	kVA	kVA	kVA	kVA	kW	kVAr	kWh	Invoice
																			218
96,115	210,265	195,982	113	57	3	3	253,738									2,071	357	187,720	110
								25,000	21,772	25,000	21,772	4,510	16,912	16,912	13,000				
96,115	210,265	195,982	113	57	3	3	253,738	–	–	–	–	–	–	–	–	2,071	357	187,720	328
–	–	–	–	–	–	–	–	25,000	21,772	25,000	21,772	4,510	16,912	16,912	13,000	–	–	–	–
96,115	210,265	195,982	113	57	3	3	253,738	25,000	21,772	25,000	21,772	4,510	16,912	16,912	13,000	2,071	357	187,720	328

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

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	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)
c/kVA/day	c/kVA/day	c/kVA/day	c/switch/day	c/conn/day	c/km/day	c/km/day	c/kVA/day	$/kVA/year	$/kVA/year	$/kVA/year	$/kVA/year	$/kVA/year	$/kVA/year	$/kVA/year	$/kVA/year	$/kW/yr	$/kVAr/yr	c/kWh	$/Invoice
																			7
17,159	6,900	7,160	207	146	3	2	1,556									(69)	(4)	(56)	3
								128	285	310	649	315	956	65	819				
$17,159	$6,900	$7,160	$207	$146	$3	$2	$1,556	–	–	–	–	–	–	–	–	($69)	($4)	($56)	$10
–	–	–	–	–	–	–	–	$128	$285	$310	$649	$315	$956	$65	$819	–	–	–	–
$17,159	$6,900	$7,160	$207	$146	$3	$2	$1,556	$128	$285	$310	$649	$315	$956	$65	$819	($69)	($4)	($56)	$10

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

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2017**
Network / Sub-network Name	

SCHEDULE 9a: ASSET REGISTER

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

sch ref

	Voltage	Asset category	Asset class	Units	Items at start of year (quantity)	Items at end of year (quantity)	Net change	Data accuracy (1–4)
8								
9	All	Overhead Line	Concrete poles / steel structure	No.	30,389	30,028	(361)	4
10	All	Overhead Line	Wood poles	No.	60,679	60,350	(329)	4
11	All	Overhead Line	Other pole types	No.	–	–	–	N/A
12	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	524	524	(0)	4
13	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	–	–	–	N/A
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	86	84	(2)	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	3	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.	80	81	1	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.	108	107	(1)	4
27	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	–	–	–	N/A
28	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	340	339	(1)	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.	759	762	3	4
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	–	–	–	N/A
34	HV	Zone Substation Transformer	Zone Substation Transformers	No.	85	85	–	4
35	HV	Distribution Line	Distribution OH Open Wire Conductor	km	3,118	3,108	(9)	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	979	1,035	56	4
39	HV	Distribution Cable	Distribution UG PILC	km	1,579	1,567	(11)	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.	53	55	2	4
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	965	958	(7)	4
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	9,323	9,350	27	3
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	57	40	(17)	4
45	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	4,300	4,396	96	4
46	HV	Distribution Transformer	Pole Mounted Transformer	No.	6,409	6,429	20	4
47	HV	Distribution Transformer	Ground Mounted Transformer	No.	4,944	5,049	105	4
48	HV	Distribution Transformer	Voltage regulators	No.	15	15	–	4
49	HV	Distribution Substations	Ground Mounted Substation Housing	No.	4,196	4,283	87	4
50	LV	LV Line	LV OH Conductor	km	1,819	1,804	(15)	2
51	LV	LV Cable	LV UG Cable	km	2,945	2,974	29	3
52	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	3,300	3,351	51	3
53	LV	Connections	OH/UG consumer service connections	No.	194,408	198,056	3,648	2
54	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	2,691	2,740	49	4
55	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	251	276	25	4
56	All	Capacitor Banks	Capacitors including controls	No	1	1	–	4
57	All	Load Control	Centralised plant	Lot	44	44	–	4
58	All	Load Control	Relays	No	1,963	2,012	49	3
59	All	Civils	Cable Tunnels	km	1	1	–	4

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2017**
Network / Sub-network Name	

SCHEDULE 9b: ASSET AGE PROFILE

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

sch ref

8		**Disclosure Year (year ended)**	31 March 2017		**Number of assets at disclosure year end by installation date**																												
9	**Voltage**	**Asset category**	**Asset class**	**Units**	**pre-1940**	**1940 –1949**	**1950 –1959**	**1960 –1969**	**1970 –1979**	**1980 –1989**	**1990 –1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**No. with age unknown**	**Items at end of year (quantity)**	**No. with default dates**	**Data accuracy (1–4)**
10	All	Overhead Line	Concrete poles / steel structure	No.	1	728	1,730	8,419	7,695	8,292	3,016	1	–	–	1	38	16	24	11	5	2	10	5	13	12	–	8	1	–		30,028		4
11	All	Overhead Line	Wood poles	No.	–	–	609	5,395	11,037	2,629	13,724	2,420	2,974	3,656	1,290	1,347	1,641	1,445	1,528	1,399	1,727	1,467	1,033	809	765	840	829	885	901		60,350		4
12	All	Overhead Line	Other pole types	No.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		–		N/A
13	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	–	–	60	99	138	49	44	3	1	41	13	–	16	13	–	21	–	8	–	12	1	0	3	3	0		524		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		84		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	3	–	1	2	–	2	–	1	2	4	1	4	1	4	–	2	–	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.	–	–	–	7	10	1	4	–	4	9	–	6	4	1	1	14	6	11	5	16	4	–	4	–	–		107		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	73	31	2	–	26	4	6	4	15	3	2	31	11	9	1	20	14	6	6	–	2		339		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.	–	–	–	60	195	47	39	13	11	65	–	42	34	7	41	26	49	–	53	13	20	2	26	18	1		762		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	20	17	16	3	1	2	2	–	–	5	2	3	4	–	–	2	–	2	2	3	–	–		85		4
36	HV	Distribution Line	Distribution OH Open Wire Conductor	km	–	–	30	167	803	561	606	59	47	61	73	34	63	51	58	57	44	43	33	30	86	77	49	62	12		3,108		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	52	25	34	41	51	56	59	48	50	44	48	48	50	77	56	54	74	152	–		1,035		4
40	HV	Distribution Cable	Distribution UG PILC	km	30	37	139	394	408	311	200	15	12	12	2	1	0	0	1	1	1	1	0	0	0	0	0	0	0		1,567		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	4	6	3	5	8	3	3	2	1	–	–	12	–	–	2	–	–	1	–		55		4
43	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	–	–	–	136	374	137	58	9	45	36	46	29	25	16	13	11	1	–	1	2	7	–	4	–	8		958		4
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	–	–	38	94	561	705	1,811	432	543	516	483	492	478	585	382	431	345	203	157	186	169	144	267	209	119		9,350		3
45	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	–	–	–	17	23	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		40		4
46	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	–	–	–	212	986	831	513	144	153	127	135	58	37	84	74	64	82	94	79	125	76	155	143	137	87		4,396		4
47	HV	Distribution Transformer	Pole Mounted Transformer	No.	–	55	27	605	1,024	1,130	1,262	157	118	178	182	140	217	183	159	98	161	76	119	115	67	101	134	71	50		6,429		4
48	HV	Distribution Transformer	Ground Mounted Transformer	No.	4	38	135	740	888	795	561	87	68	120	106	77	90	96	106	111	111	63	92	130	75	169	203	127	57		5,049		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.	38	20	108	520	771	668	639	61	77	80	48	61	53	68	69	83	71	61	65	80	106	145	129	158	104		4,283		3
51	LV	LV Line	LV OH Conductor	km	1	3	17	360	627	163	237	14	12	7	11	8	13	8	4	3	2	1	1	1	0	1	1	1	3	305	1,804		2
52	LV	LV Cable	LV UG Cable	km	1	2	13	210	500	604	438	42	79	72	55	71	83	88	61	64	55	26	30	41	63	85	99	113	80		2,974		3
53	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	0	2	4	415	677	491	559	43	76	66	54	66	69	87	51	58	54	24	26	42	93	91	97	127	80		3,351		3
54	LV	Connections	OH/UG consumer service connections	No.	–	–	–	103,031	75	6,128	27,983	2,726	2,453	2,534	2,636	3,179	3,588	3,387	3,309	3,446	2,900	2,157	2,353	1,917	2,277	3,809	5,832	6,572	5,764		198,056	108,730	2
55	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	–	–	–	194	378	207	41	20	137	217	69	128	227	90	108	105	129	109	105	199	71	64	80	56	6		2,740		4
56	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	–	–	–	–	–	–	14	6	12	16	23	41	19	22	17	14	8	9	8	8	4	8	15	31	1		276		4
57	All	Capacitor Banks	Capacitors including controls	No	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–		1		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	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2,012	2,012		3
60	All	Civils	Cable Tunnels	km	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		1		4

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2017**
Network / Sub-network Name	

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	246	89	335
13	33kV	279	37	316
14	SWER (all SWER voltages)	100	2	102
15	22kV (other than SWER)	–	–	–
16	6.6kV to 11kV (inclusive—other than SWER)	3,108	2,600	5,709
17	Low voltage (< 1kV)	1,804	2,974	4,779
18	**Total circuit length (for supply)**	5,538	5,703	11,241
19				
20	Dedicated street lighting circuit length (km)	917	2,434	3,351
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	1,749	32%	
25	Rural	3,222	58%	
26	Remote only	146	3%	
27	Rugged only	183	3%	
28	Remote and rugged	238	4%	
29	Unallocated overhead lines	–	–	
30	**Total overhead length**	5,538	100%	
31				
32		**Circuit length (km)**	**(% of total circuit length)**	
33	Length of circuit within 10km of coastline or geothermal areas (where known)	1,939	17%	
34		**Circuit length (km)**	**(% of total overhead length)**	
35	Overhead circuit requiring vegetation management	5,538	100%	

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2017**

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	5
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 2017**
Network / Sub-network Name	

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		69	
12	General		5,840	
13	Irrigation		5	
14	Major customer		27	
15	Large capacity		–	
16	** include additional rows if needed*			
17	**Connections total**		5,941	
18				
19	**Distributed generation**			
20	Number of connections made in year		537	**connections**
21	Capacity of distributed generation installed in year		14.54	**MVA**
22	**9e(ii): System Demand**			
23				
24				
25	**Maximum coincident system demand**		**Demand at time of maximum coincident demand (MW)**	
26	GXP demand		599	
27	Distributed generation output at HV and above	*plus*	1	
28	**Maximum coincident system demand**		600	
29	Net transfers to (from) other EDBs at HV and above	*less*	0	
30	**Demand on system for supply to consumers' connection points**		600	
31	**Electricity volumes carried**		**Energy (GWh)**	
32	Electricity supplied from GXPs		3,219	
33	Electricity exports to GXPs	*less*	0	
34	Electricity supplied from distributed generation	*plus*	7	
35	Net electricity supplied to (from) other EDBs	*less*	0	
36	**Electricity entering system for supply to consumers' connection points**		3,226	
37	Total energy delivered to ICPs	*less*	3,093	
38	**Electricity losses (loss ratio)**		134	4.1%
39				
40	**Load factor**		0.61	
41	**9e(iii): Transformer Capacity**			
42			**(MVA)**	
43	Distribution transformer capacity (EDB owned)		2,059	
44	Distribution transformer capacity (Non-EDB owned, estimated)		227	
45	**Total distribution transformer capacity**		2,286	
46				
47	**Zone substation transformer capacity**		1,176	

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2017**
Network / Sub-network Name	

SCHEDULE 10: REPORT ON NETWORK RELIABILITY

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

sch ref			
8	**10(i): Interruptions**		
9	**Interruptions by class**	**Number of interruptions**	
10	Class A (planned interruptions by Transpower)	–	
11	Class B (planned interruptions on the network)	574	
12	Class C (unplanned interruptions on the network)	873	
13	Class D (unplanned interruptions by Transpower)	21	
14	Class E (unplanned interruptions of EDB owned generation)	–	
15	Class F (unplanned interruptions of generation owned by others)	–	
16	Class G (unplanned interruptions caused by another disclosing entity)	–	
17	Class H (planned interruptions caused by another disclosing entity)	–	
18	Class I (interruptions caused by parties not included above)	1	
19	**Total**	1,469	
20			
21	**Interruption restoration**	**≤3Hrs**	**>3hrs**
22	Class C interruptions restored within	554	319
23			
24	**SAIFI and SAIDI by class**	**SAIFI**	**SAIDI**
25	Class A (planned interruptions by Transpower)	–	–
26	Class B (planned interruptions on the network)	0.04	11.4
27	Class C (unplanned interruptions on the network)	0.73	68.3
28	Class D (unplanned interruptions by Transpower)	0.70	27.2
29	Class E (unplanned interruptions of EDB owned generation)	–	–
30	Class F (unplanned interruptions of generation owned by others)	–	–
31	Class G (unplanned interruptions caused by another disclosing entity)	–	–
32	Class H (planned interruptions caused by another disclosing entity)	–	–
33	Class I (interruptions caused by parties not included above)	0.00	0.1
34	**Total**	1.47	107.0
35			
36	**Normalised SAIFI and SAIDI**	**Normalised SAIFI**	**Normalised SAIDI**
37	Classes B & C (interruptions on the network)	0.77	77.9
38			
39	**Quality path normalised reliability limit**	**SAIFI reliability limit**	**SAIDI reliability limit**
40	SAIFI and SAIDI limits applicable to disclosure year*	1.16	91.0
41	** not applicable to exempt EDBs*		

Company Name	**Orion NZ Ltd**
For Year Ended	**31 March 2017**
Network / Sub-network Name	

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.

42 ### 10(ii): Class C Interruptions and Duration by Cause

43

		SAIFI	SAIDI
44	**Cause**		
45	Lightning	0.01	1.5
46	Vegetation	0.07	5.8
47	Adverse weather	0.05	9.0
48	Adverse environment	0.01	4.3
49	Third party interference	0.10	7.2
50	Wildlife	0.03	3.0
51	Human error	0.03	0.7
52	Defective equipment	0.34	28.2
53	Cause unknown	0.10	8.7

54

55 ### 10(iii): Class B Interruptions and Duration by Main Equipment Involved

56

		SAIFI	SAIDI
57	**Main equipment involved**		
58	Subtransmission lines	–	–
59	Subtransmission cables	–	–
60	Subtransmission other	–	–
61	Distribution lines (excluding LV)	0.04	11.4
62	Distribution cables (excluding LV)	–	–
63	Distribution other (excluding LV)	–	–

64 ### 10(iv): Class C Interruptions and Duration by Main Equipment Involved

65

		SAIFI	SAIDI
66	**Main equipment involved**		
67	Subtransmission lines	0.06	3.9
68	Subtransmission cables	0.00	0.3
69	Subtransmission other	0.00	0.2
70	Distribution lines (excluding LV)	0.36	41.7
71	Distribution cables (excluding LV)	0.23	16.9
72	Distribution other (excluding LV)	0.07	5.2

73 ### 10(v): Fault Rate

		Number of Faults	Circuit length (km)	Fault rate (faults per 100km)
74	**Main equipment involved**			
75	Subtransmission lines	9	524	1.72
76	Subtransmission cables	1	126	0.79
77	Subtransmission other	1		
78	Distribution lines (excluding LV)	566	3,209	17.64
79	Distribution cables (excluding LV)	63	2,602	2.42
80	Distribution other (excluding LV)	99		
81	**Total**	739		

Company	Orion New Zealand Limited
Year ended	31 March 2017

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 FY17 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 FY17– due to our CPP price resets
- one-off quake insurance cash settlement revenues.

Our FY17 post-tax regulatory ROI was 7.8% (FY16: 6.3%; FY15: 8.7%).

In FY15, we cash-settled our remaining quake insurance claims. This caused one-off increases in FY15 as follows:

- post-tax regulatory ROI by 2.9%
- post-tax profit by $24m
- pre-tax revenues by $29m.

No items were reclassified in FY17.

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):

	FY17 $m
Recoveries from third parties who cause to damage to our network	1.0
Rental revenue	0.5
Revenues from contractors – for providing builders' temporary supply boxes	0.4
Other	1.1
Total	3.0

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:

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

No items were reclassified in FY17.

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 FY17 our RAB value increased as follows:

	FY17 $m
Opening RAB value	987
Add new assets commissioned	35
Add indexed asset revaluation (at CPI)	21
Less asset disposals at RAB value	(2)
Less depreciation and amortisation	(37)
Closing RAB value	1,004

Our $35m of commissioned assets in FY17 is significantly lower than FY16 ($114m). FY16 was abnormally high due to the completion of some major projects which were part of our quake recovery programme.

We commissioned over $5m of new connections in FY17. No other projects commissioned exceeded $2m per project.

Two projects accounted for around $53m (46%) of our commissioned assets in FY16:

- first, we completed our permanent 66kV underground feeds in the east of Christchurch – from Transpower's Bromley grid exit point to our McFaddens, Dallington and Rawhiti zone substations. We commissioned around $21m for this project in FY16. Project completion enabled us to remove our temporary 66kV overhead lines in the east, with a write-down on disposal of $1.6m
- second, we completed our 'northern loop' underground 66kV underground feed – from our Rawhiti zone substation to our Papanui zone substation. As part of this, we constructed and commissioned a new zone substation, called Waimakariri. We commissioned around $32m for these projects in FY16.

During FY17 generation equipment with a carrying value of $116k was re-categorised from system fixed assets to non- system fixed assets.

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

	FY17 $m
Taxable income that is not in regulatory profit before tax	
Insurance proceeds allocated as disposal proceeds for Lancaster 66kv switchyard assets	2.1
Insurance proceeds – Lancaster substation earthquake repair	0.1
Expenditure that is not deductible:	
Accounting depreciation on land assets	0.1
Legal and entertainment expenses	0.2
Other	0.1
	2.6
Income that is not taxable	
Tax capital profit on disposal of Lancaster substation 66kv switchyard assets	1.9
Deductible expenditure that is not in regulatory profit before tax:	
Claim Lancaster substation earthquake repair	0.1
Book value of Lancaster 66kv switchyard assets disposal	0.2
Tax depreciation on land improvements	0.2
Costs to obtain land easements	0.2
Other	0.1
	2.7

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

	FY17 $m
Internal labour capitalised	2.3
Insurance cash settlement proceeds – assessable for tax purposes	0.3
Tax and accounting disposal adjustments for property, plant and equipment	(0.1)
Finance lease payments – operating leases for tax purposes	(0.2)
Capex – deductible for tax purposes	(0.7)
Internal profits on capex – deductible for tax purposes	(1.2)
Net total	0.4

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. 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.

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.

No items were reclassified in FY17.

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 FY17, generation equipment with a carrying value of $116k was re-categorised from system fixed assets to non-system fixed assets.

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:

- $62m (last year: $85m) for network assets
- $7m (last year: $5m) for non-network assets.

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

Schedule 6a(iv) discloses $6m of capex for sub-transmission system growth. Nearly $5m of the capex is the rebuild of our Lancaster district substation, which will be completed in FY18. No other individual projects in schedule 6a(iv) exceeded $2m.

Schedule 6a(ix) discloses $4.7m of costs for the construction of a works depot. Once construction is completed in FY18, we will lease the depot to Connetics, on an arms-length basis. This project accounts for two-thirds of our non-network capex spend in FY17.

No capex items were reclassified in FY17.

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 $2.8m of FY17 maintenance opex as asset replacement and renewal:

	FY17 $m
Retightening and cross-arm and insulator work on 11kV overhead lines	0.8
Half-life maintenance on transformers	0.7
Substation repairs	0.7
66kV underground cable joint refurbishment	0.4
Other	0.2
	2.8

All categories of network opex in Schedule 6b have some ongoing impact 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 FY17.

No items were reclassified during FY17.

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 $69.5m and actual capex at $68.6m. The key offsetting reasons for this underspend of $1m are:

	FY17 $m
Delayed build for a new works depot at Waterloo business park	7
Delayed Lancaster substation rebuild	2
Delayed purchase of land for a switchyard	1
Higher asset relocations due to roading changes (customer driven)	(2)
Higher connection and subdivision expenditure (customer driven)	(7)
Underspend relative to our AMP forecast	1

We now forecast that construction of the new works depot will be completed in FY18.

OPEX

Schedule 7(iii) discloses our AMP forecast opex of $64m and actual opex of $56m. Of this $8.1m underspend, $3.9m is due to network opex and $4.2m is due to non-network opex.

The key reasons for these two variances are:

Network opex	**FY17 $m**
Routine and corrective maintenance and inspection	2.7
Vegetation management	0.1
Asset replacement and renewal	0.8
Service interruptions and emergencies	0.2
Underspend relative to our AMP forecast	3.9

A number of factors contributed to our below-forecast opex on routine and corrective maintenance and inspection in FY17. 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 substation repairs and decommissions, pending decisions on red zoned land
- deferred some planned works due to resource constraints, with contractor resource applied to customer driven work
- completed some technical works using in-house resources.

Our below-forecast opex on asset replacement and renewal is due to less opex on roading-related works than forecast.

Non-network opex	FY17 $m
Salaries and wages	0.9
Re-branding and strategy	0.7
Communications and engagement	0.5
Safety and risk	0.5
Other	1.6
Underspend relative to AMP forecast	4.2

No opex items were reclassified during FY17.

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 target revenue, as disclosed in our "Methodology for deriving delivery prices" document, with actual revenue we have excluded irrigation rebates and export and generation credits (totalling $1.3m) from actual revenue and made some other minor adjustments. The following table shows our target and actual revenue after allowing for these adjustments:

	Actual $m	Target $m	Difference $m
Distribution	171	176	5
Transmission	78	79	1
Delivery revenue	**249**	**255**	**6**

The main reasons for our below target delivery revenue in FY17 were:

- general connection volume revenue was $4m below target, because chargeable volumes were 101GWh (4%) lower than forecast
- general connection peak revenue was $1.7m below target, because chargeable quantities were 8MW (2%) lower 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 FY17, as follows:

	CPP limit	**IDD**	**CPP compliance statement**
SAIDI	91.0	77.9	78.8
SAIFI	1.16	0.77	0.77

The different results between information disclosure and our CPP compliance statement are caused by different boundary values when normalising for major event days. In FY17 there were two 'major event' day adjustments for information disclosure whereas there was only one event day adjustment for CPP compliance purposes. The major event day adjustments for information disclosure were:

	Daily SAIDI adjustment	**Daily SAIFI adjustment**	**Event**
8 Sep 2016	5.33 reduced to 4.95	Unchanged	Power was cut to around 3,000 connections as winds up to hurricane force affected power lines across our network. Most outages were due to trees or branches falling onto power lines.
5 Nov 2016	6.39 reduced to 4.95	Unchanged	A fault occurred at the termination of our double-circuit overhead line which feeds Lyttelton, damaging both circuits and cutting power to 1700 connections. We deployed generators to manage key loads in the township and restored full supply by 5pm. The close physical proximity of the two feeder circuits is an issue, and we are part way through a project to address this, as well as working to establish an alternative supply route.

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 $0.9m – it was around $0.3m pre-quakes
- our MD/BI natural disaster restrictions are:
  - 1% deductibles of the site insured value per-site (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 2017

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)

We have 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 disclosure.

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

This error has no impact on any other disclosed information in either FY16 or FY17.

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 9b

We have identified an error with previously disclosed information.

In FY15 and FY16 we had 111,581 and 111,569 consumer service connections respectively where we used default dates to develop our age profile. Due to transposition errors, we did not disclose these quantities in the default date column in schedule 9b in either year.

We have not restated/corrected this information in our FY15 and FY16 disclosures because the error is not material.

Schedule 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.

Orion

Certification for year-end disclosures

We, Nicholas David Miller 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.

Nicholas Miller

Bruce Gemmell

15 August 2017

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 2017, 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. Other than any dealings on normal terms within the ordinary course of business, this engagement, the annual audit of the company's and its subsidiaries' financial statements, the audit of the company's CPP compliance statement for the year ended 31 March 2017, and a fraud assurance review engagement for the company, 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
15 August 2017