



DEFAULT PRICE QUALITY PATH COMPLIANCE STATEMENT

for the Assessment Period ending 31 March 2019

*Pursuant to the Electricity Distribution Services Default Price-Quality
Path Determination 2015*

29 May 2019

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1 Compliance with the Price Path (Clause 11.2(a)(i))

Electricity Ashburton Limited, trading as EA Networks, complied with the price path during the Assessment Period ending 31 March 2019, as specified in the *Electricity Distribution Services Default Price-Quality Path Determination 2015*.

Clause 8.3 - The notional revenue (NR) of a Non-exempt EDB in the Assessment Period must not exceed the allowable notional revenue (ANR) for the Assessment Period.

Compliance is demonstrated in the following table, which demonstrates that NR during the Assessment Period does not exceed ANR.

Test:	$NR_{2018/19} \leq ANR_{2018/19}$
NR _{2018/19}	\$ 34,118,831
ANR _{2018/19}	\$ 34,408,161
Result	0.992 < 1
Result	<i>Price Path has not been breached</i>

Supporting evidence is presented in Appendices A, B, C and D.

2 Compliance with the Quality Standards (Clause 11.2(a)(ii))

EA Networks has complied with the quality standards (Clause 9) for the Assessment Period ending 31 March 2019, as specified in the Electricity Distribution Services Default Price-Quality Path Determination 2015. It has done so by complying with clause 9.1(a) - the current period reliability assessment.

Reliability Assessment (9.1(a))

Clause 9.1(a) requires compliance with Clause 9.2: To comply with the annual reliability assessment for the current Assessment Period:

- a Non-exempt EDB's SAIDI Assessed Values for the Assessment Period must not exceed the SAIDI Limit specified in Schedule 4A; and
- a Non-exempt EDB's SAIFI Assessed Values for the Assessment Period must not exceed the SAIFI Limit specified in Schedule 4A.

Compliance is demonstrated in the following tables.

Test:	$SAIDI_{Assess\ 2018/19} \leq SAIDI_{Limit}$	
SAIDI _{Assess 2018/19}		133.70
SAIDI _{Limit}		151.04
		0.885 < 1
Clause 9.1(a) Result:		<i>Does not exceed limit</i>

Test:	$SAIFI_{Assess\ 2018/19} \leq SAIFI_{Limit}$	
SAIFI _{Assess 2018/19}		1.20
SAIFI _{Limit}		1.61
		0.745 < 1
Clause 9.1(a) Result:		<i>Does not exceed limit</i>

Supporting evidence is presented in Appendices E, and F.

Prior Period Reliability Assessment (9.1(b))

Clause 9.1(b): A Non-exempt EDB must have complied with the annual reliability assessments in each of the two preceding Assessment Periods.

Non-Compliance is demonstrated in the following tables.

SAIDI _{Assess 2017/18}	175.93	SAIFI _{Assess 2017/18}	1.62
SAIDI _{Limit 2017/18}	151.04	SAIFI _{Limit 2017/18}	1.61
1.165	> 1	1.005	> 1
<i>Exceeds limit</i>		<i>Exceeds limit</i>	

SAIDI _{Assess 2016/17}	132.11	SAIFI _{Assess 2016/17}	1.24
SAIDI _{Limit 2016/17}	151.04	SAIFI _{Limit 2016/17}	1.61
0.875	< 1	0.769	< 1
<i>Does not exceed limit</i>		<i>Does not exceed limit</i>	

Compliance Summary

Clause 9.1 A Non-exempt EDB must, in respect of each Assessment Period, either:

(a) comply with the annual reliability assessment specified in clause 9.2 for that Assessment Period; or

(b) have complied with the annual reliability assessment in each of the two preceding Assessment Periods

	SAIDI	SAIFI	Compliance
Compliance with 9.1(a) 2018/19 Assessment Period	Does not exceed limit	Does not exceed limit	Complies
or			
Compliance with 9.1(b) 2017/18 Assessment Period	Exceeds limit	Exceeds limit	Does not comply
2016/17 Assessment Period	Does not exceed limit	Does not exceed limit	Complies
Clause 9.1 Result:	Complies with Quality Standard		

3 Director Certification (Clause 11.3(a))

We, Philip John McKendry and Paul Jason Munro, being directors of Electricity Ashburton Limited, trading as EA Networks, certify that, having made all reasonable enquiry, to the best of our knowledge and belief, the attached Annual Compliance Statement of EA Networks, and related information, prepared for the purposes of the *Electricity Distribution Services Default Price-Quality Path Determination 2015* are true and accurate.



Philip John McKendry

29 May 2019



Paul Jason Munro

4 Assurance Report (Clause 11.3(b))



Independent auditor's report

To the Directors of Electricity Ashburton Limited and the Commerce Commission

Assurance Report Pursuant to the Electricity Distribution Services Default Price-Quality Path Determination 2015

We have completed the assurance engagement in respect of the compliance of Electricity Ashburton Limited, trading as EA Networks, ("the Company") with the Electricity Distribution Services Default Price-Quality Path Determination 2015 ("the Determination") in preparing the Default Price Quality Path Compliance Statement ("the Annual Compliance Statement") for the assessment period ended 31 March 2019.

Directors' Responsibilities

The Directors' are responsible on behalf of the Company for compliance with the Determination, and for such internal control as the Directors determine is necessary to enable the preparation of an Annual Compliance Statement that is free from material misstatement.

Our Independence and Quality Control

We have complied with the independence and other ethical requirements of Professional and Ethical Standard 1 (Revised) issued by the New Zealand Auditing and Assurance Standards Board, which is founded on the fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The firm applies Professional and Ethical Standard 3 (Amended) and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

Auditors' Responsibilities

Our responsibility is to express an opinion on whether the Company has complied, in all material respects, with the Determination in the preparation of the Annual Compliance Statement for the assessment period ended 31 March 2019 and report our opinion to you.

Our engagement has been conducted in accordance with ISAE (NZ) 3000 (Revised) *Assurance Engagements Other than Audits or Reviews of Historical Financial Information* and SAE 3100 (Revised) *Assurance Engagements on Compliance* to obtain reasonable assurance that the Company has complied, in all material respects, with the Determination in preparation of the Annual Compliance Statement for the assessment period ended 31 March 2019.

In relation to the price path set out in clause 8 of the Determination, our procedures included examination, on a test basis, of evidence relevant to the amounts and disclosures contained on pages 2 and 8 to 14 of the Annual Compliance Statement.

In relation to the quality standards set out in clause 9 of the Determination, our procedures included examination, on a test basis, of evidence relevant to the values and disclosures contained on pages 3 to 4 and 15 to 18 of the Annual Compliance Statement.

Our assurance engagement also included assessment of the significant estimates and judgements, if any, made by the Company in the preparation of the Annual Compliance Statement.

PricewaterhouseCoopers
PwC Centre, Level 4, 60 Cashel Street, Christchurch Central, PO Box 13244, Christchurch 8141, New Zealand
T: +64 3 374 3000, F: +64 3 374 3001, pwc.co.nz



The procedures undertaken were considered sufficient and appropriate to form an opinion as to whether the Company has complied, in all material respects, with the Determination for the assessment period ended 31 March 2019.

Use of Report

This report has been prepared for the Directors of the Company and the Commerce Commission in accordance with the Determination and is provided solely to assist you in establishing that compliance requirements have been met. Our report should not be used for any other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility for any reliance on this report to anyone other than Directors of the Company and the Commerce Commission, or for any purpose other than that for which it was prepared.

Inherent Limitations

Because of the inherent limitations of evidence gathering procedures and limitations in the Company's controls and systems, it is possible that fraud, error or non-compliance may occur and not be detected. As the procedures performed for this engagement were not performed continuously throughout the period and were undertaken on a test basis, our assurance engagement cannot be relied on to detect all instances where the Company may not have complied with the Determination. The opinion expressed in this report has been formed on the above basis.

We are independent of the Company. Our firm carries out other services for the Company in the areas of annual audit of the Company's financial statements and assignments in the areas of compliance with other regulatory requirements of the Commerce Act 1986, tax pooling and the provision of regulatory update and other advisory services. The provision of these services has not impaired our independence.

Opinion

In our opinion:

- As far as appears from an examination, the information used in the preparation of the Annual Compliance Statement has been properly extracted from the Company's accounting and other records, and has been sourced, where appropriate, from its financial and non-financial systems; and
- The Company has complied, in all material respects, with the Determination in preparing the Annual Compliance Statement for the assessment period ended 31 March 2019.

A handwritten signature in black ink that reads 'PricewaterhouseCoopers'.

Chartered Accountants
30 May 2019

Christchurch, New Zealand

Appendix A – Price Path Compliance Calculations (Clause 11.4(c))

Allowable Notional Revenue 2018/19		
Term	Description	Value \$
$\Sigma DP_{2017/18} * Q_{2016/17}$	Distribution Prices between 1 April 2017 and 31 March 2018 multiplied by Quantities for year ending 31 March 2017	33,501,170
$ANR_{2017/18} - NR_{2017/18}$	Revenue differential for year ending 31 March 2018	304,095
$(1 + \Delta CPI_{2018/19})$	Average change in Consumer Price Index	1.0178
X	X Factor, as specified in Schedule 1 of the DPP Determination	0%
$ANR_{2018/19}$	Allowable Notional Revenue for the year ending 31 March 2019	34,408,161

$\Delta CPI_{2018/19}$			
Denominator		Numerator	
$CPI_{Dec2015}$	977	$CPI_{Dec2016}$	990
$CPI_{Mar2016}$	979	$CPI_{Mar2017}$	1000
$CPI_{Jun2016}$	983	$CPI_{Jun2017}$	1000
$CPI_{Sep2016}$	986	$CPI_{Sep2017}$	1005
$\Delta CPI_{2018/19}$	1.78%		

Source: Statistics NZ, SE9A Series

Notional Revenue 2018/19		
Term	Description	Value \$
$NR_{2018/19}$	Notional Revenue for the year ending 31 March 2019	34,118,831

**Appendix B – Pass-through Balance and Pass-through & Recoverable Costs
(Clause 11.4(e) – (k))**

Pass-through Balance 2018/19		
Term	Description	Value \$
<i>PTP</i> 2018/19 <i>Q</i> 2018/19	Pass-through Prices during 2018/19 multiplied by 31 March 2019 Quantities	7,985,724
<i>K</i> 2018/19	Rates on system fixed assets for the year ending 31 March 2019	182,099
	Commerce Act levies for the year ending 31 March 2019	131,359
	Electricity Authority levies for the year ending 31 March 2019	88,893
	Utilities Disputes levies for the year ending 31 March 2019	10,479
<i>V</i> 2018/19	Transpower transmission charges for the year ending 31 March 2019	5,223,275
	Transpower New Investment Contract charges for the year ending 31 March 2019	1,239,434
	System operator services charges for the year ending 31 March 2019	-
	Avoided transmission charges resulting from purchase of transmission assets from Transpower for the year ending 31 March 2019	-
	Distributed generation allowance for the year ending 31 March 2019	1,187,281
	Claw-back for the year ending 31 March 2019	-
	NPV wash-up allowance for the year ending 31 March 2019	-
	Energy efficiency and demand-side management incentive allowance for the year ending 31 March 2019	-
	Catastrophic event allowance for the year ending 31 March 2019	-
	Extended reserves allowance for the year ending 31 March 2019	-
	Quality incentive adjustment for the year ending 31 March 2019	129,966
	Capex wash-up adjustment for the year ending 31 March 2019	(154,622)
	Reconsideration event allowance for the year ending 31 March 2019	-
	<i>PTB</i> 2017/18	Pass-through balance from previous Assessment Period
<i>r</i>	Cost of Debt	6.09%
<i>PTB</i> 2018/19	Pass-through balance for the Assessment Period ending 31 March 2019	(285,399)

Pass-through Balance Reconciliation 2018/19		
Term	Description	Value \$
<i>PTP</i> 2018/19 <i>Q</i> 2018/19	Pass-through Prices during 2018/19 multiplied by 31 March 2019 Quantities	7,985,724
<i>Total Pass-through and Recoverable Costs</i>	Total Pass-through and Recoverable Costs for the year ending 31 March 2019	8,038,165
<i>PTB</i> 2018/19	Pass-through Balance for the Assessment Period ending 31 March 2019	(285,399)
<i>PTB</i> 2017/18	Pass-through Balance from previous Assessment Period	(219,585)
<i>Difference</i>	Reconciliation between Pass-through Balance for the Assessment Period with the Pass-through Balance for the preceding Assessment Period	(65,814)

Pass-through Costs for year ending March 2019				
K 2018/19	Actual (\$)	Forecast (\$)	Variance (\$)	Variance (%)
Rates on system fixed assets	182,099	172,642	9,457	5.5%
Commerce Act levies	131,359	80,723	50,636	62.7%
Electricity Authority levies	88,893	98,397	(9,504)	(9.7%)
Utilities Disputes levies	10,479	10,065	415	4.1%
Total Pass-through Costs	412,830	361,827	51,003	14.1%

Clauses 11.4(j) All Pass-through forecasted costs were estimated based on the prior year's actual costs and other factors known to EA Networks at the time the budget was set. The variance between actual costs and forecasted costs reflect factors which EA Networks were not aware of at the time that the budget was set.

Recoverable Costs for year ending March 2019				
V 2018/19	Actual (\$)	Forecast (\$)	Variance (\$)	Variance (%)
Transpower transmission charges	5,223,275	5,223,275	-	0.0%
New investment contract charges	1,239,434	1,247,907	(8,473)	(0.7%)
System operator services charges	-	-	-	0.0%
Avoided transmission charges - purchases from Transpower	-	-	-	0.0%
Distributed generation allowance	1,187,281	1,187,281	-	0.0%
Claw-back	-	-	-	0.0%
NPV wash-up allowance	-	-	-	0.0%
Energy efficiency allowance	-	-	-	0.0%
Catastrophic event allowance	-	-	-	0.0%
Extended reserves allowance	-	-	-	0.0%
* Quality incentive adjustment	129,966	115,473	14,493	12.6%
Capex wash-up adjustment	(154,622)	(154,622)	-	0.0%
Reconsideration event allowance	-	-	-	0.0%
Total Recoverable Costs	7,625,334	7,619,314	6,020	0.1%

* No allowance was made in the 2018-19 Budget for an adjustment for the time value of money

New investments Reconciliation				
V _{2018/19}	Actual (\$)	Forecast (\$)	Variance (\$)	Variance (%)
Ashburton 66 kV Supply	278,812	280,662	(1,850)	(0.7%)
33 & 66kV Protection Upgrade	28,758	28,848	(90)	(0.3%)
Provisional Third 220/66 kV Supply Transformer	536,616	536,616	-	0.0%
Ashburton T10	395,249	401,781	(6,533)	(1.6%)
Total Recoverable Costs	1,239,434	1,247,907	(8,473)	(0.7%)

Clauses 11.4(j) Variance with Transpower New Investments charges was caused by:

- The Budget (Forecast) values must be set in December 2017 for the 2018-19 year whereas notification of Transpower's New Investments Charges did not occur until May 2018 which is effective from 1st July 2018.
- There was no new Transpower's New Investment Contracts entered into during 2018-19 year.

Appendix C – Price and Quantity Schedules (Clause 11.4(c) – (d))

Prices between 1 April 2017 and 31 March 2018 multiplied by 31 March 2017 Quantities:

Reporting Group	UOS Code	Tariff Description	Units	Quantity	Count	Irrigation	Industrial	kWh	Distribution Rate	Distribution Value
General	GS05	less than 5 kVA	day	43	43	-	-	-	56.46	8,886.95
General	GS20	20 kVA	day	14,827	14,827	-	-	-	15.00	811,778.69
General	GS50	50 kVA	day	1,561	1,561	-	-	-	30.00	170,931.58
General	G100	100 kVA	day	643	643	-	-	-	60.00	140,709.03
General	G150	150 kVA	day	261	261	-	-	-	90.00	85,721.42
General	GUEN	Uncontrolled Energy	kWh	209,014,534	-	-	-	209,014,534	6.76	14,129,382.53
General	GCOP	Controlled Off-Peak Energy	kWh	32,287,523	-	-	-	32,287,523	1.74	561,802.90
General	G10N	Night Boost 10	kWh	997,962	-	-	-	997,962	1.74	17,364.55
General	G10N	Night Rate	kWh	5,700,675	-	-	-	5,700,675	-	-
General	GEDG	Export kWh	kWh	326,363	-	-	-	326,363	-	-
General	GUDG	Generation Credit	kWh	111,678	-	-	-	-	-	-
General	MCRF	Floodlight	fitting per day	9	9	-	-	-	30.72	999.62
General	MCRU	Under Verandah	fitting per day	43	43	-	-	-	27.03	4,217.89
Irrigation	ISCH	Connected kW	kW per day	137,410	1,594	137,410	-	-	30.77	15,432,584.23
Irrigation	IUEN	Uncontrolled Energy	kWh	209,752,086	-	-	-	209,752,086	-	-
Industrial	IDEN	Day Energy	kWh	1,449,917	-	-	-	1,449,917	-	-
Industrial	INEN	Night Energy	kWh	322,478	-	-	-	322,478	-	-
Industrial	IEMD	Industrial Supply Energy - kVA	kWh	51,537,752	-	-	-	51,537,752	-	-
Industrial	ICMD	Industrial Supply - kVA	kVA per day	11,136	38	-	11,136	-	28.24	1,147,855.26
Industrial	ICDYMD	Industrial Supply - Day Demand	kVA per day	245	1	-	245	-	28.24	25,286.09
Industrial	ICDPD	Industrial Supply - Peak Demand	kVA per day	673	4	-	673	-	2.27	5,578.94
Industrial	ICDYAD	Industrial Supply - Anytime Demand	kVA per day	-	-	-	258	-	-	-
Industrial	ICDAM	Industrial Supply - Anytime Demand	kVA per day	868	4	-	868	-	25.97	82,280.05
Large User	LUCM	CMP	day	1	1	-	-	-	66,516.69	242,785.92
Large User	LECM	CMP Energy	kWh	34,694,898	-	-	-	34,694,898	-	-
Large User	LMCM	CMP MD	kVA per day	6,286	1	-	6,286	-	2.27	52,082.81
Large User	LUPP	Silver Fern Farms	day	1	1	-	-	-	8,910.84	32,524.57
Large User	LEPP	Silver Fern Farms Energy	kWh	7,766,485	-	-	-	7,766,485	-	-
Large User	LMPP	Silver Fern Farms MD	kVA per day	1,872	1	-	1,872	-	2.27	15,509.18
Large User	LUMH	Mt Hutt	day	1	1	-	-	-	35,408.78	129,242.05
Large User	LEMH	Mt Hutt Energy	kWh	2,320,665	-	-	-	2,320,665	-	-
Large User	LMMH	Mt Hutt MD	kVA per day	1,045	1	-	1,045	-	2.27	8,654.35
Large User	LUHP	Connected kW	kW per day	9,600	1	9,600	-	-	6.54	229,161.60
Large User	LEHP	Highbank Pumps Energy	kWh	5,397,419	-	-	-	5,397,419	-	-
Large User	LMHP	Highbank Pumps MD	kVA per day	-	-	-	3,328	-	-	-
Generation	LUHB	Highbank	day	1	1	-	-	-	105,852.16	386,360.38
Generation	LEHB	Highbank Energy	kWh	86,116,196	-	-	-	86,116,196	-	-
Generation	LMHB	Highbank MD	kVA per day	-	-	-	15,082	-	-	-
Generation	LUMO	Montalto	day	1	1	-	-	-	9,243.95	33,740.42
Generation	LEMO	Montalto Energy	kWh	10,068,365	-	-	-	10,068,365	-	-
Generation	LMMO	Montalto MD	kVA per day	-	-	-	1,513	-	-	-
Generation	LUCD	Cleardale	day	1	1	-	-	-	8,480.38	30,953.39
Generation	LECD	Cleardale Energy	kWh	3,135,990	-	-	-	3,135,990	-	-
Generation	LMCD	Cleardale MD	kVA per day	-	-	-	716	-	-	-
Generation	LULN	Lavington	day	1	1	-	-	-	2,183.67	7,970.40
Generation	LELN	Lavington Energy	kWh	3,111,793	-	-	-	3,111,793	-	-
Generation	LMLN	Lavington MD	kVA per day	-	-	-	484	-	-	-
Street Lighting	MCSL	Streetlighting	fitting per day	3,344	-	-	-	1,734,822	23.33	284,792.84
	ISFD	Filter installation Discount	\$/VSD kW	11,399	-	-	-	-	80.00	911,881.60
New Connections	Urban	\$/Connection		68	-	-	-	-	755.56	51,378.08
New Connections	Rural	\$/Connection		67	-	-	-	-	1,315.56	88,142.52
New Connections	Rural - New Substation required	\$/Connection		111	-	-	-	-	1,751.11	194,373.21
									Total	\$33,501,169.85

Distribution Price times Quantity schedules for NR2019:

Prices between 1 April 2018 and 31 March 2019 multiplied by 31 March 2017 Quantities:

Reporting Group	UOS Code	Tariff Description	Units	Quantity	Count	Irrigation	Industrial	kWh	Distribution Rate	Distribution Value
General	GS05	less than 5 kVA	day	43	43	-	-	-	56.46	8,886.95
General	GS20	20 kVA	day	14,827	14,827	-	-	-	15.00	811,778.69
General	GS50	50 kVA	day	1,561	1,561	-	-	-	30.00	170,931.58
General	G100	100 kVA	day	643	643	-	-	-	60.00	140,709.03
General	G150	150 kVA	day	261	261	-	-	-	90.00	85,721.42
General	GUEN	Uncontrolled Energy	kWh	209,014,534	-	-	-	209,014,534	7.22	15,090,849.39
General	GCOP	Controlled Off-Peak Energy	kWh	32,287,523	-	-	-	32,287,523	1.74	561,802.90
General	G10N	Night Boost 10	kWh	997,962	-	-	-	997,962	1.74	17,364.55
General	GNEN	Night Rate	kWh	5,700,675	-	-	-	5,700,675	-	-
General	GEDG	Export kWh	kWh	326,363	-	-	-	326,363	-	-
General	GUDG	Generation Credit	kWh	111,678	-	-	-	-	-	-
General	MCRF	Floodlight	fitting per day	9	9	-	-	-	30.72	999.62
General	MCRU	Under Verandah	fitting per day	43	43	-	-	-	27.03	4,217.89
Irrigation	ISCH	Connected kW	kW per day	135,840	1,577	135,840	-	-	30.00	14,874,478.47
Irrigation	ISCF	Irrigation Harmonic Penalty	kW per day	1,570	17	1,570	-	-	40.00	229,220.00
Irrigation	IUEN	Uncontrolled Energy	kWh	209,752,086	-	-	-	209,752,086	-	-
Industrial	IDEN	Day Energy	kWh	1,449,917	-	-	-	1,449,917	-	-
Industrial	INEN	Night Energy	kWh	322,478	-	-	-	322,478	-	-
Industrial	IEMD	Industrial Supply Energy - kVA	kWh	51,537,752	-	-	-	51,537,752	-	-
Industrial	ICMD	Industrial Supply - kVA	kVA per day	11,136	38	-	11,136	-	29.13	1,184,030.59
Industrial	ICDYMD	Industrial Supply - Day Demand	kVA per day	245	1	-	245	-	29.13	26,082.99
Industrial	ICDPD	Industrial Supply - Peak Demand	kVA per day	673	4	-	673	-	2.34	5,750.98
Industrial	ICDYAD	Industrial Supply - Anytime Demand	kVA per day	-	-	-	258	-	-	-
Industrial	ICDAM	Industrial Supply - Anytime Demand	kVA per day	868	4	-	868	-	26.79	84,878.03
Large User	LUCM	CMP	day	1	1	-	-	-	66,516.69	242,785.92
Large User	LECM	CMP Energy	kWh	34,694,898	-	-	-	34,694,898	-	-
Large User	LMCM	CMP MD	kVA per day	6,286	1	-	6,286	-	2.27	52,082.81
Large User	LUPP	Silver Fern Farms	day	1	1	-	-	-	8,910.84	32,524.57
Large User	LEPP	Silver Fern Farms Energy	kWh	7,766,485	-	-	-	7,766,485	-	-
Large User	LMPP	Silver Fern Farms MD	kVA per day	1,872	1	-	1,872	-	2.27	15,509.18
Large User	LUMH	Mt Hutt	day	1	1	-	-	-	35,408.78	129,242.05
Large User	LEMH	Mt Hutt Energy	kWh	2,320,665	-	-	-	2,320,665	-	-
Large User	LMMH	Mt Hutt MD	kVA per day	1,045	1	-	1,045	-	2.27	8,654.35
Large User	LUHP	Connected kW	kW per day	9,600	1	9,600	-	-	4.98	174,499.20
Large User	LEHP	Highbank Pumps Energy	kWh	5,397,419	-	-	-	5,397,419	-	-
Large User	LMHP	Highbank Pumps MD	kVA per day	-	-	-	3,328	-	-	-
Generation	LUHB	Highbank	day	1	1	-	-	-	105,852.16	386,360.38
Generation	LEHB	Highbank Energy	kWh	86,116,196	-	-	-	86,116,196	-	-
Generation	LMHB	Highbank MD	kVA per day	-	-	-	15,082	-	-	-
Generation	LUMO	Montalto	day	1	1	-	-	-	9,243.95	33,740.42
Generation	LEMO	Montalto Energy	kWh	10,068,365	-	-	-	10,068,365	-	-
Generation	LMMO	Montalto MD	kVA per day	-	-	-	1,513	-	-	-
Generation	LUCD	Cleardale	day	1	1	-	-	-	8,480.38	30,953.39
Generation	LECD	Cleardale Energy	kWh	3,135,990	-	-	-	3,135,990	-	-
Generation	LMCD	Cleardale MD	kVA per day	-	-	-	716	-	-	-
Generation	LULN	Lavington	day	1	1	-	-	-	2,183.67	7,970.40
Generation	LELN	Lavington Energy	kWh	3,111,793	-	-	-	3,111,793	-	-
Generation	LMLN	Lavington MD	kVA per day	-	-	-	484	-	-	-
Street Lighting	MCSL	Streetlighting	fitting per day	3,344	-	-	-	1,734,822	23.33	284,792.84
	ISFD	Filter installation Discount	\$/VSD kW	11,399	-	-	-	-	80.00	911,881.60
New Connections		Urban	\$/Connection	68	-	-	-	-	755.56	51,378.08
New Connections		Rural	\$/Connection	67	-	-	-	-	1,315.56	88,142.52
New Connections		Rural - New Substation required	\$/Connection	111	-	-	-	-	1,751.11	194,373.21
									Total	\$ 34,118,830.80

Pass-through Price times Quantity schedule:

Reporting Group	UOS Code	Tariff Description	Units	Quantity	Count	Irrigation	Industrial	kWh	Distribution Rate	Distribution Value	Pass-through Prices	Pass-through Value
General	GS05	less than 5 kVA	day	43	43	-	-	-	56.46	8,838.93	-	-
General	GS20	20 kVA	day	15,488	15,488	-	-	-	15.00	847,950.10	-	-
General	GS50	50 kVA	day	1,640	1,640	-	-	-	30.00	179,571.68	-	-
General	G100	100 kVA	day	683	683	-	-	-	60.00	149,498.38	-	-
General	G150	150 kVA	day	281	281	-	-	-	90.00	92,163.30	-	-
General	GUEN	Uncontrolled Energy	kWh	221,097,306	-	-	-	221,097,306	7.22	15,963,225.47	1.90	4,200,848.81
General	GCOP	Controlled Off-Peak Energy	kWh	32,721,245	-	-	-	32,721,245	1.74	569,349.67	-	-
General	G10N	Night Boost 10	kWh	895,476	-	-	-	895,476	1.74	15,581.27	-	-
General	GNEN	Night Rate	kWh	5,206,549	-	-	-	5,206,549	-	-	-	-
General	GEDG	Export kWh	kWh	311,709	-	-	-	311,709	-	-	-	-
General	GUDG	Generation Credit	kWh	154,499	-	-	-	-	-	-	-	-
General	MCRF	Floodlight	fitting per day	8	8	-	-	-	30.72	854.42	-	-
General	MCRU	Under Verandah	fitting per day	13	13	-	-	-	27.03	1,306.84	-	-
Irrigation	ISCH	Connected kW	kW per day	137,341	1,615	137,341	-	-	30.00	15,038,790.77	5.03	2,521,503.92
Irrigation	ISCF	Irrigation Harmonic Penalty	kV per day	1,180	12	1,180	-	-	40.00	172,307.30	5.03	21,667.64
Irrigation	IUEN	Uncontrolled Energy	kWh	135,825,281	-	-	-	135,825,281	-	-	-	-
Industrial	IDEN	Day Energy	kWh	721,794	-	-	-	721,794	-	-	-	-
Industrial	IEND	Night Energy	kWh	132,989	-	-	-	132,989	-	-	-	-
Industrial	IEMD	Industrial Supply Energy - kVA	kWh	59,183,837	-	-	-	59,183,837	-	-	-	-
Industrial	ICMD	Industrial Supply - kVA	kVA per day	12,021	39	-	12,021	-	29.13	1,278,136.49	14.00	614,277.75
Industrial	ICDYMD	Industrial Supply - Day Demand	kVA per day	224	1	-	224	-	29.13	23,763.74	14.00	11,420.95
Industrial	ICDPD	Industrial Supply - Peak Demand	kVA per day	712	4	-	712	-	2.34	6,080.74	14.82	38,511.35
Industrial	ICDYAD	Industrial Supply - Anytime Demand	kVA per day	-	-	-	232	-	-	-	-	-
Industrial	ICDAM	Industrial Supply - Anytime Demand	kVA per day	823	4	-	823	-	26.79	80,449.81	0.82	2,462.44
Large User	LUCM	CMP	day	1	1	-	-	-	66,516.69	242,785.92	-	-
Large User	LECM	CMP Energy	kWh	33,349,014	-	-	-	33,349,014	-	-	-	-
Large User	LMCM	CMP MD	kVA per day	5,388	1	-	5,388	-	2.27	44,638.23	14.89	292,803.20
Large User	LUPP	Silver Fern Farms	day	1	1	-	-	-	8,910.84	32,524.57	-	-
Large User	LEPP	Silver Fern Farms Energy	kWh	4,281,379	-	-	-	4,281,379	-	-	-	-
Large User	LMPP	Silver Fern Farms MD	kVA per day	940	1	-	940	-	2.27	7,784.87	14.89	51,064.65
Large User	LUMH	Mt Hutt	day	1	1	-	-	-	35,408.78	129,242.05	-	-
Large User	LEMH	Mt Hutt Energy	kWh	2,567,698	-	-	-	2,567,698	-	-	-	-
Large User	LMMH	Mt Hutt MD	kVA per day	1,101	1	-	1,101	-	2.27	9,122.18	14.89	59,836.67
Large User	LUHP	Connected kW	kW per day	9,600	1	9,600	-	-	4.98	174,499.20	5.03	176,251.20
Large User	LEHP	Highbank Pumps Energy	kWh	4,860,384	-	-	-	4,860,384	-	-	-	-
Large User	LMHP	Highbank Pumps MD	kVA per day	-	-	-	2,735	-	-	-	-	-
Generation	LUHB	Highbank	day	1	1	-	-	-	105,852.16	386,360.38	-	-
Generation	LEHB	Highbank Energy	kWh	129,799,795	-	-	-	129,799,795	-	-	-	-
Generation	LMHB	Highbank MD	kVA per day	-	-	-	22,689	-	-	-	-	-
Generation	LUMO	Montalto	day	1	1	-	-	-	9,243.95	33,740.42	-	-
Generation	LEMO	Montalto Energy	kWh	10,555,707	-	-	-	10,555,707	-	-	-	-
Generation	LMMO	Montalto MD	kVA per day	-	-	-	1,558	-	-	-	-	-
Generation	LUCD	Cleardale	day	1	1	-	-	-	8,480.38	30,953.39	-	-
Generation	LECD	Cleardale Energy	kWh	3,312,084	-	-	-	3,312,084	-	-	-	-
Generation	LMCD	Cleardale MD	kVA per day	-	-	-	825	-	-	-	-	-
Generation	LULN	Lavington	day	1	1	-	-	-	2,183.67	7,970.40	-	-
Generation	LELN	Lavington Energy	kWh	2,492,318	-	-	-	2,492,318	-	-	-	-
Generation	LMLN	Lavington MD	kVA per day	-	-	-	464	-	-	-	-	-
Street Lighting	MCSL	Streetlighting	fitting per day	3,449	-	-	-	-	23.33	293,722.14	-	-
											Total	\$ 7,985,723.70

Clauses 11.4(e) The methodology used to calculate Distribution Prices and Pass-through Prices excluding ACOT payments and HVDC pass-through to large Distribution Generation:

EA Networks made estimates of Pass-through Costs and Distribution revenue requirements for the 2018-19 year. From this information, it was determined that the 2017-18 delivery prices would generate necessary revenue for all Customer Groups except for Irrigation and Highbank Pumps Customers. Pass-through Prices for Irrigation and Highbank Pumps Customers would have to decrease due to Transmission Costs being driven by Peaks having occurred during winter for Upper South Island Distributors.

**Appendix D – Transmission Assets, Transactions and Restructuring of Prices
(Clauses 11.2(d) and 11.6 – 11.8)**

Clauses 11.2(d)(i), 11.7 and 11.8 – EA Networks did not undertake a Restructure of its Prices that first applied during the current or preceding Assessment Period and therefore clauses 8.7 - 8.10 did not apply during the Assessment Period.

Clause 11.2(d)(ii) – EA Networks did not receive a transfer of transmission assets from Transpower that became system fixed assets, or transferred system fixed assets to Transpower.

Clauses 11.2(d)(iii)-(iv) and 11.6 – EA Networks did not participate in an Amalgamation, a Merger or Major Transaction for the Assessment Period. Clauses 10.1 – 10.4 therefore did not apply for the Assessment Period.

Appendix E – Quality Standard Compliance and Incentive (Clause 11.5(c), (d) and (f))

Quality Standard Compliance Calculations

SAIDI and SAIFI Limits		
SAIDI Limit	2015-2020 regulatory period	151.043
SAIFI Limit	2015-2020 regulatory period	1.612
SAIDI Unplanned Boundary Value	2015-2020 regulatory period	8.081
SAIFI Unplanned Boundary Value	2015-2020 regulatory period	0.098

SAIDI Assessed Values					
Raw data			Adjusted data		
SAIDI _B	Planned SAIDI	127.455	SAIDI _B	Planned SAIDI multiplied by 0.5	63.727
SAIDI _C	Unplanned SAIDI	69.971	SAIDI _C	Normalised unplanned SAIDI	69.971
SAIDI _{Assess (B+C)}				133.698	

SAIFI Assessed Values					
Raw data			Adjusted data		
SAIFI _B	Planned SAIFI	0.402	SAIFI _B	Planned SAIFI multiplied by 0.5	0.201
SAIFI _C	Unplanned SAIFI	1.057	SAIFI _C	Normalised unplanned SAIFI	0.997
SAIFI _{Assess (B+C)}				1.198	

Days exceeding SAIDI Boundary Value within the 2018/19 Assessment Dataset		
Date	Pre-Normalised unplanned SAIDI	Normalised unplanned SAIDI

Days exceeding SAIFI Boundary Value within the 2018/19 Assessment Dataset		
Date	Pre-Normalised unplanned SAIFI	Normalised unplanned SAIFI
18/11/2018	0.158	0.098

There was one Major Event Day on 18th November 2018 which was due to Lightning and strong winds which caused multiple feeder and sub-transmission trippings.

Clause 11.5(f)

Assessed SAIDI Value 2017/18		
SAIDI _{2017/18}	175.932	The sum of daily SAIDI Values in the 1 April 2017 - 31 March 2018 Normalised Assessment Dataset
Assessed SAIFI Value 2017/18		
SAIFI _{2017/18}	1.620	The sum of daily SAIFI Values in the 1 April 2017 - 31 March 2018 Normalised Assessment Dataset
Assessed SAIDI Value 2016/17		
SAIDI _{2016/17}	132.107	The sum of daily SAIDI Values in the 1 April 2016 - 31 March 2017 Normalised Assessment Dataset
Assessed SAIFI Value 2016/17		
SAIFI _{2016/17}	1.239	The sum of daily SAIFI Values in the 1 April 2016 - 31 March 2017 Normalised Assessment Dataset

Quality Incentive Calculations

Quality Incentive Adjustment		
Term	Description	Value \$
S_{SAIDI}	SAIDI incentive	(7,735)
S_{SAIFI}	SAIFI incentive	138,825
S_{TOTAL}	SAIDI incentive plus SAIFI incentive	131,090

SAIDI Incentive		
Term	Description	Value
<i>SAIDI Target</i>	SAIDI target specified in DPP Determination	132.8466
<i>SAIDI Collar</i>	SAIDI incentive range collar specified in DPP Determination	114.6501
<i>SAIDI Cap</i>	SAIDI incentive range cap specified in DPP Determination	151.0431
<i>Starting price MAR</i>	Maximum allowable revenue for the 2015/16 year	33,047,000
$0.5 * REV_{RISK}$	Revenue at risk relating to SAIDI target (equal to 0.5% of MAR)	\$165,235
$SAIDI_{IR}$	SAIDI incentive rate per unit (equal to revenue at risk divided by Cap minus Target)	\$9,081
$SAIDI_{ASSESS}$	Assessed SAIDI value for purpose of incentive	133.698
S_{SAIDI}	SAIDI incentive adjustment (equal to incentive rate multiplied by SAIDI target minus Assessed SAIDI value)	(\$7,735)

SAIFI Incentive		
Term	Description	Value
<i>SAIFI Target</i>	SAIFI target specified in DPP Determination	1.3870
<i>SAIFI Collar</i>	SAIFI incentive range collar specified in DPP Determination	1.1625
<i>SAIFI Cap</i>	SAIFI incentive range cap specified in DPP Determination	1.6116
<i>Starting price MAR</i>	Maximum allowable revenue for the 2015/16 year	\$33,047,000
$0.5 * REV_{RISK}$	Revenue at risk relating to SAIFI target (equal to 0.5% of MAR)	\$165,235
$SAIFI_{IR}$	SAIFI incentive rate per unit (equal to revenue at risk divided by Cap minus Target)	\$735,686
$SAIFI_{ASSESS}$	Assessed SAIFI value for purpose of incentive	1.198
S_{SAIFI}	SAIFI incentive adjustment (equal to incentive rate multiplied by SAIFI target minus Assessed SAIFI value)	\$138,825

Appendix F – Policies and Procedures for Recording SAIDI and SAIFI (Clause 11.5(e))

- EA Network's Control Centre is responsible for managing the operation of the electricity network and as such is responsible for recording all interruptions both planned and unplanned. The policies and procedures for carrying out this task are documented in the document labelled "Procedure: Network Interruption Records".
- The procedures are summarised by following flow chart:

INTERRUPTION RECORDS FLOW CHART

