



DEFAULT PRICE QUALITY PATH COMPLIANCE STATEMENT

for the Assessment Period ending 31 March 2018

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

30 May 2018

Contents

- 1 Compliance with the Price Path (Clause 11.2(a)(i))
- 2 Compliance with the Quality Standards (Clause 11.2(a)(ii))
- 3 Director Certification (Clause 11.3(a))
- 4 Assurance Report (Clause 11.3(b))

Supporting Information (Clause 11.2(b)-(f))

APPENDIX A	Price Path Compliance Calculations
APPENDIX B	Pass-through Balance and Pass-through and Recoverable Costs
APPENDIX C	Price and Quantity Schedules
APPENDIX D	Transmission Assets, Transactions and Restructuring of Prices
APPENDIX E	Quality Standard Compliance and Incentive
APPENDIX F	Policies and Procedures for Recording SAIDI and SAIFI
APPENDIX G	Estimate of SAIDI and SAIFI assessed values had live-line work Continued - Unaudited

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 2018, 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:	$NR_{2017/18} \leq ANR_{2017/18}$
NR _{2017/18}	\$ 33,515,682
ANR _{2017/18}	\$ 33,819,777
Result	0.991 < 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 2018, as specified in the Electricity Distribution Services Default Price-Quality Path Determination 2015. It has done so by complying with clause 9.1(b) - the prior 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.

Non-Compliance is demonstrated in the following tables.

Test:	$SAIDI_{Assess\ 2017/18} \leq SAIDI_{Limit}$	
SAIDI _{Assess 2017/18}		175.93
SAIDI _{Limit}		151.04
		1.165 > 1
Clause 9.1(a) Result:		<i>Exceeds limit</i>

Test:	$SAIFI_{Assess\ 2017/18} \leq SAIFI_{Limit}$	
SAIFI _{Assess 2017/18}		1.62
SAIFI _{Limit}		1.61
		1.005 > 1
Clause 9.1(a) Result:		<i>Exceeds limit</i>

Supporting evidence is presented in Appendices E, F, and G.

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.

Compliance is demonstrated in the following tables.

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>	

SAIDI _{Assess 2015/16}	125.51	SAIFI _{Assess 2015/16}	1.23
SAIDI _{Limit 2015/16}	151.04	SAIFI _{Limit 2015/16}	1.61
0.831	< 1	0.762	< 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) 2017/18 Assessment Period	Exceeds limit	Exceeds limit	<i>Does not comply</i>
or			
Compliance with 9.1(b)			<i>Complies</i>
2016/17 Assessment Period	Does not exceed limit	Does not exceed limit	<i>Complies</i>
2015/16 Assessment Period	Does not exceed limit	Does not exceed limit	<i>Complies</i>
Clause 9.1 Result:	<i>Complies with Quality Standard</i>		

3 Director Certification (Clause 11.3(a))

We, Gary Richard Leech 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.



Gary Richard Leech



Paul Jason Munro

30 May 2018

4 Assurance Report (Clause 11.3(b))



Independent Auditors' 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 ending 31 March 2018.

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.

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, assignments in the areas of compliance with other regulatory requirements of the Commerce Act 1986, and the provision of other advisory services. The provision of these other services has not impaired our independence.

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 ending 31 March 2018 and report our opinion to you.

Our engagement has been conducted in accordance with ISAE (NZ) 3000, Assurance Engagements Other than Audits or Reviews of Historical Financial Information and SAE 3100 *Compliance Engagements* to obtain reasonable assurance that the Company has complied with the Determination in preparation of the Annual Compliance Statement for the assessment period ending 31 March 2018.

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



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.

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 ending 31 March 2018.

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.

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 ending 31 March 2018.

A handwritten signature in blue ink that reads 'PricewaterhouseCoopers' in a cursive script.

Chartered Accountants
31 May 2018

Christchurch, New Zealand

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

Allowable Notional Revenue 2017/18		
Term	Description	Value \$
$\Sigma DP_{2016/17} * Q_{2015/16}$	Distribution Prices between 1 April 2016 and 31 March 2017 multiplied by Quantities for year ending 31 March 2016	33,515,682
$ANR_{2016/17} - NR_{2016/17}$	Revenue differential for year ending 31 March 2017	192,081
$(1 + \Delta CPI_{2017/18})$	Average change in Consumer Price Index	1.0033
X	X Factor, as specified in Schedule 1 of the DPP Determination	0%
$ANR_{2017/18}$	Allowable Notional Revenue for the year ending 31 March 2018	33,819,777

$\Delta CPI_{2017/18}$			
Denominator		Numerator	
$CPI_{Dec2014}$	976	$CPI_{Dec2015}$	977
$CPI_{Mar2015}$	975	$CPI_{Mar2016}$	979
$CPI_{Jun2015}$	979	$CPI_{Jun2016}$	983
$CPI_{Sep2015}$	982	$CPI_{Sep2016}$	986
$\Delta CPI_{2017/18}$	0.33%		

Source: Statistics NZ, SE9A Series

Notional Revenue 2017/18		
Term	Description	Value \$
$\Sigma DP_{2017/18} * Q_{2015/16}$	Distribution Prices between 1 April 2017 and 31 March 2018 multiplied by Quantities for year ending 31 March 2016	33,515,682
$NR_{2017/18}$	Notional Revenue for the year ending 31 March 2017	33,515,682

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

Pass-through Balance 2017/18		
Term	Description	Value \$
<i>PTP</i> _{2017/18} <i>Q</i> _{2017/18}	Pass-through Prices during 2017/2018 multiplied by 31 March 2018 Quantities	13,420,055
<i>K</i> _{2017/18}	Rates on system fixed assets for the year ending 31 March 2018	173,580
	Commerce Act levies for the year ending 31 March 2018	94,104
	Electricity Authority levies for the year ending 31 March 2018	91,304
	EGCC levies for the year ending 31 March 2018	10,166
<i>V</i> _{2017/18}	Transpower transmission charges for the year ending 31 March 2018	10,717,046
	Transpower New Investment Contract charges for the year ending 31 March 2018	1,245,685
	System operator services charges for the year ending 31 March 2018	-
	Avoided transmission charges resulting from purchase of transmission assets from Transpower for the year ending 31 March 2018	-
	Distributed generation allowance for the year ending 31 March 2018	982,715
	Claw-back for the year ending 31 March 2018	-
	NPV wash-up allowance for the year ending 31 March 2018	-
	Energy efficiency and demand-side management incentive allowance for the year ending 31 March 2018	-
	Catastrophic event allowance for the year ending 31 March 2018	-
	Extended reserves allowance for the year ending 31 March 2018	-
	Quality incentive adjustment for the year ending 31 March 2018	206,927
	Capex wash-up adjustment for the year ending 31 March 2018	(145,746)
	Reconsideration event allowance for the year ending 31 March 2018	-
	<i>PTB</i> _{2016/17}	Pass-through balance from previous Assessment Period
<i>r</i>	Cost of Debt	6.09%
<i>PTB</i> _{2017/18}	Pass-through balance for the Assessment Period ending 31 March 2018	(219,585)

Pass-through Balance Reconciliation 2017/18		
Term	Description	Value \$
<i>PTP</i> 2017/18 <i>Q</i> 2017/18	Pass-through Prices during 2017/2018 multiplied by 31 March 2018 Quantities	13,420,055
<i>Total Pass-through and Recoverable Costs</i>	Total Pass-through and Recoverable Costs for the year ending 31 March 2018	13,375,781
<i>PTB</i> 2017/18	Pass-through Balance for the Assessment Period ending 31 March 2018	(219,585)
<i>PTB</i> 2016/17	Pass-through Balance from previous Assessment Period	(248,713)
<i>Difference</i>	Reconciliation between Pass-through Balance for the Assessment Period with the Pass-through Balance for the preceding Assessment Period	29,127

Pass-through Costs for year ending March 2018				
<i>K</i> 2017/18	Actual (\$)	Forecast (\$)	Variance (\$)	Variance (%)
Rates on system fixed assets	173,580	188,175	(14,595)	(7.8%)
Commerce Act levies	94,104	119,128	(25,024)	(21.0%)
Electricity Authority levies	91,304	102,000	(10,696)	(10.5%)
EGCC levies	10,166	10,165	1	0.0%
Total Pass-through Costs	369,155	419,468	(50,313)	(12.0%)

Clauses 11.4(j) All Pass-through forecasted costs were based on the prior year's actual costs increased by an allowance for inflation 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 2018				
<i>V</i> 2017/18	Actual (\$)	Forecast (\$)	Variance (\$)	Variance (%)
Transpower transmission charges	10,717,046	10,717,046	(0)	(0.0%)
New investment contract charges	1,245,685	1,239,019	6,666	0.5%
System operator services charges	-	-	-	0.0%
Avoided transmission charges - purchases from Transpower	-	-	-	0.0%
Distributed generation allowance	982,715	982,715	-	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	206,927	183,852	23,075	12.6%
Capex wash-up adjustment	(145,746)	(145,746)	-	0.0%
Reconsideration event allowance	-	-	-	0.0%
Total Recoverable Costs	13,006,626	12,976,885	29,741	0.2%

* No allowance was made in the 2017-18 Budget for an adjustment for the time value of money

New investments Reconciliation				
V _{2017/18}	Actual (\$)	Forecast (\$)	Variance (\$)	Variance (%)
Ashburton 66 kV Supply	280,142	278,584	1,559	0.6%
33 & 66kV Protection Upgrade	28,818	28,730	88	0.3%
Provisional Third 220/66 kV Supply Transformer	536,616	536,616	-	0.0%
Ashburton T10	400,108	395,089	5,020	1.3%
Total Recoverable Costs	1,245,685	1,239,019	6,666	0.5%

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

- The Budget (Forecast) values must be set in December 2016 for the 2017-18 year whereas notification of Transpower's New Investments Charges did not occur until May 2017 which is effective from 1st July 2017.
- There was no new Transpower's New Investment Contracts entered into during 2017-18 year.

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

Prices between 1 April 2016 and 31 March 2017 multiplied by 31 March 2016 Quantities:

Reporting Group	UOS Code	Tariff Description	Units	Quantity	Count	Irrigation	Industrial	kWh	Distribution Rate	Distribution Value
General	GS05	less than 5 kVA	day	44	44	-	-	-	56.46	9,028.26
General	GS20	20 kVA	day	14,591	14,591	-	-	-	15.00	801,032.39
General	GS50	50 kVA	day	1,531	1,531	-	-	-	30.00	168,138.50
General	G100	100 kVA	day	639	639	-	-	-	60.00	140,219.21
General	G150	150 kVA	day	244	244	-	-	-	90.00	80,321.55
General	GUEN	Uncontrolled Energy	kWh	217,666,998	-	-	-	217,666,998	6.76	14,714,289.09
General	GCOP	Controlled Off-Peak Energy	kWh	32,682,533	-	-	-	32,682,533	1.74	568,676.08
General	G10N	Night Boost 10	kWh	944,400	-	-	-	944,400	1.74	16,432.56
General	G10N	Night Rate	kWh	5,661,946	-	-	-	5,661,946	-	-
General	GEDG	Export kWh	kWh	299,742	-	-	-	299,742	-	-
General	GUDG	Generation Credit	kWh	80,876	-	-	-	-	-	-
General	MCRF	Floodlight	fitting per day	10	10	-	-	-	30.72	1,150.77
General	MCRU	Under Verandah	fitting per day	46	46	-	-	-	27.03	4,530.59
Irrigation	ISCH	Connected kW	kW per day	133,516	1,561	133,516	-	-	30.77	15,036,310.76
Irrigation	IUEN	Uncontrolled Energy	kWh	235,837,741	-	-	-	235,837,741	-	-
Industrial	IDEN	Day Energy	kWh	1,858,529	-	-	-	1,858,529	-	-
Industrial	INEN	Night Energy	kWh	575,837	-	-	-	575,837	-	-
Industrial	IEMD	Industrial Supply Energy - kVA	kWh	52,083,657	-	-	-	52,083,657	-	-
Industrial	ICMD	Industrial Supply - kVA	kVA per day	11,627	40	-	11,627	-	28.24	1,201,759.90
Industrial	ICDYMD	Industrial Supply - Day Demand	kVA per day	288	1	-	288	-	28.24	29,799.36
Industrial	ICDPD	Industrial Supply - Peak Demand	kVA per day	465	3	-	465	-	2.27	3,859.28
Industrial	ICDYAD	Industrial Supply - Anytime Demand	kVA per day	-	-	-	303	-	-	-
Industrial	ICDAM	Industrial Supply - Anytime Demand	kVA per day	744	3	-	744	-	25.97	70,728.09
Large User	LUCM	CMP	day	1	1	-	-	-	66,516.69	242,720.73
Large User	LECM	CMP Energy	kWh	35,108,056	-	-	-	35,108,056	-	-
Large User	LMCM	CMP MD	kVA per day	6,222	1	-	6,222	-	2.27	51,694.73
Large User	LUPP	Silver Fern Farms	day	1	1	-	-	-	8,910.84	32,515.83
Large User	LEPP	Silver Fern Farms Energy	kWh	9,667,244	-	-	-	9,667,244	-	-
Large User	LMPP	Silver Fern Farms MD	kVA per day	2,412	1	-	2,412	-	2.27	20,042.47
Large User	LUMH	Mt Hutt	day	1	1	-	-	-	35,408.78	129,207.35
Large User	LEMH	Mt Hutt Energy	kWh	2,265,464	-	-	-	2,265,464	-	-
Large User	LMMH	Mt Hutt MD	kVA per day	907	1	-	907	-	2.27	7,539.14
Large User	LUHP	Connected kW	kW per day	9,600	1	9,600	-	-	6.54	229,789.44
Large User	LEHP	Highbank Pumps Energy	kWh	9,380,290	-	-	-	9,380,290	-	-
Large User	LMHP	Highbank Pumps MD	kVA per day	-	-	-	5,202	-	-	-
Generation	LUHB	Highbank	day	1	1	-	-	-	105,852.16	386,256.65
Generation	LEHB	Highbank Energy	kWh	93,586,790	-	-	-	93,586,790	-	-
Generation	LMHB	Highbank MD	kVA per day	-	-	-	23,760	-	-	-
Generation	LUMO	Montalto	day	1	1	-	-	-	9,243.95	33,731.36
Generation	LEMO	Montalto Energy	kWh	10,286,529	-	-	-	10,286,529	-	-
Generation	LMMO	Montalto MD	kVA per day	-	-	-	1,607	-	-	-
Generation	LUCD	Cleardale	day	1	1	-	-	-	8,480.38	30,945.08
Generation	LECD	Cleardale Energy	kWh	3,139,091	-	-	-	3,139,091	-	-
Generation	LMCD	Cleardale MD	kVA per day	-	-	-	663	-	-	-
Generation	LULN	Lavington	day	1	1	-	-	-	2,183.67	5,978.19
Generation	LELN	Lavington Energy	kWh	525,844	-	-	-	525,844	-	-
Generation	LMLN	Lavington MD	kVA per day	-	-	-	91	-	-	-
Street Lighting	MCSL	Streetlighting	fitting per day	3,160	-	-	-	1,639,132	23.33	269,821.18
	ISFD	Filter installation Discount	\$/VSD kW	14,521	-	-	-	-	80.00	1,161,672.80
New Connections	Urban	\$/Connection		66	-	-	-	-	755.56	49,866.96
New Connections	Rural	\$/Connection		170	-	-	-	-	1,315.56	223,645.20
New Connections	Rural - New Substation required	\$/Connection		67	-	-	-	-	1,751.11	117,324.37
									Total	\$33,515,682.27

Distribution Price times Quantity schedules for NR2018:

Reporting Group	UOS Code	Tariff Description	Units	Quantity	Count	Irrigation	Industrial	kWh	Distribution Rate	Distribution Value
General	GS05	less than 5 kVA	day	44	44	-	-	-	56.46	9,028.26
General	GS20	20 kVA	day	14,591	14,591	-	-	-	15.00	801,032.39
General	GS50	50 kVA	day	1,531	1,531	-	-	-	30.00	168,138.50
General	G100	100 kVA	day	639	639	-	-	-	60.00	140,219.21
General	G150	150 kVA	day	244	244	-	-	-	90.00	80,321.55
General	GUEN	Uncontrolled Energy	kWh	217,666,998	-	-	-	217,666,998	6.76	14,714,289.09
General	GCOP	Controlled Off-Peak Energy	kWh	32,682,533	-	-	-	32,682,533	1.74	568,676.08
General	G10N	Night Boost 10	kWh	944,400	-	-	-	944,400	1.74	16,432.56
General	GNEN	Night Rate	kWh	5,661,946	-	-	-	5,661,946	-	-
General	GEDG	Export kWh	kWh	299,742	-	-	-	299,742	-	-
General	GUDG	Generation Credit	kWh	80,876	-	-	-	-	-	-
General	MCRF	Floodlight	fitting per day	10	10	-	-	-	30.72	1,150.77
General	MCRU	Under Verandah	fitting per day	46	46	-	-	-	27.03	4,530.59
Irrigation	ISCH	Connected kW	kW per day	133,516	1,561	133,516	-	-	30.77	15,036,310.76
Irrigation	IUEN	Uncontrolled Energy	kWh	235,837,741	-	-	-	235,837,741	-	-
Industrial	IDEN	Day Energy	kWh	1,858,529	-	-	-	1,858,529	-	-
Industrial	INEN	Night Energy	kWh	575,837	-	-	-	575,837	-	-
Industrial	IEMD	Industrial Supply Energy - kVA	kWh	52,083,657	-	-	-	52,083,657	-	-
Industrial	ICMD	Industrial Supply - kVA	kVA per day	11,627	40	-	11,627	-	28.24	1,201,759.90
Industrial	ICDYMD	Industrial Supply - Day Demand	kVA per day	288	1	-	288	-	28.24	29,799.36
Industrial	ICDPD	Industrial Supply - Peak Demand	kVA per day	465	3	-	465	-	2.27	3,859.28
Industrial	ICDYAD	Industrial Supply - Anytime Demand	kVA per day	-	-	-	303	-	-	-
Industrial	ICDAM	Industrial Supply - Anytime Demand	kVA per day	744	3	-	744	-	25.97	70,728.09
Large User	LUCM	CMP	day	1	1	-	-	-	66,516.69	242,720.73
Large User	LECM	CMP Energy	kWh	35,108,056	-	-	-	35,108,056	-	-
Large User	LMCM	CMP MD	kVA per day	6,222	1	-	6,222	-	2.27	51,694.73
Large User	LUPP	Silver Fern Farms	day	1	1	-	-	-	8,910.84	32,515.83
Large User	LEPP	Silver Fern Farms Energy	kWh	9,667,244	-	-	-	9,667,244	-	-
Large User	LMPP	Silver Fern Farms MD	kVA per day	2,412	1	-	2,412	-	2.27	20,042.47
Large User	LUMH	Mt Hutt	day	1	1	-	-	-	35,408.78	129,207.35
Large User	LEMH	Mt Hutt Energy	kWh	2,265,464	-	-	-	2,265,464	-	-
Large User	LMMH	Mt Hutt MD	kVA per day	907	1	-	907	-	2.27	7,539.14
Large User	LUHP	Connected kW	kW per day	9,600	1	9,600	-	-	6.54	229,789.44
Large User	LEHP	Highbank Pumps Energy	kWh	9,380,290	-	-	-	9,380,290	-	-
Large User	LMHP	Highbank Pumps MD	kVA per day	-	-	-	5,202	-	-	-
Generation	LUHB	Highbank	day	1	1	-	-	-	105,852.16	386,256.65
Generation	LEHB	Highbank Energy	kWh	93,586,790	-	-	-	93,586,790	-	-
Generation	LMHB	Highbank MD	kVA per day	-	-	-	23,760	-	-	-
Generation	LUMO	Montalto	day	1	1	-	-	-	9,243.95	33,731.36
Generation	LEMO	Montalto Energy	kWh	10,286,529	-	-	-	10,286,529	-	-
Generation	LMMO	Montalto MD	kVA per day	-	-	-	1,607	-	-	-
Generation	LUCD	Cleardale	day	1	1	-	-	-	8,480.38	30,945.08
Generation	LECD	Cleardale Energy	kWh	3,139,091	-	-	-	3,139,091	-	-
Generation	LMCD	Cleardale MD	kVA per day	-	-	-	663	-	-	-
Generation	LULN	Lavington	day	1	1	-	-	-	2,183.67	5,978.19
Generation	LELN	Lavington Energy	kWh	525,844	-	-	-	525,844	-	-
Generation	LMLN	Lavington MD	kVA per day	-	-	-	91	-	-	-
Street Lighting	MCSL	Streetlighting	fitting per day	3,160	-	-	-	1,639,132	23.33	269,821.18
	ISFD	Filter installation Discount	\$/VSD kW	14,521	-	-	-	-	80.00	1,161,672.80
New Connections		Urban	\$/Connection	66	-	-	-	-	755.56	49,866.96
New Connections		Rural	\$/Connection	170	-	-	-	-	1,315.56	223,645.20
New Connections		Rural - New Substation required	\$/Connection	67	-	-	-	-	1,751.11	117,324.37
									Total	\$33,515,682.27

Pass-through Price times Quantity schedule:

Reporting Group	UOS Code	Tariff Description	Units	Quantity	Count	Irrigation	Industrial	kWh	Distribution Prices	Distribution Value	Pass-through Prices	Pass-through Value
General	GS05	less than 5 kVA	day	44	44	-	-	-	56.46	9,159.80	-	-
General	GS20	20 kVA	day	15,285	15,285	-	-	-	15.00	836,867.33	-	-
General	GS50	50 kVA	day	1,609	1,609	-	-	-	30.00	176,163.05	-	-
General	G100	100 kVA	day	652	652	-	-	-	60.00	142,807.05	-	-
General	G150	150 kVA	day	268	268	-	-	-	90.00	88,180.90	-	-
General	GUEN	Uncontrolled Energy	kWh	224,313,707	-	-	-	224,313,707	6.76	15,163,606.57	2.36	5,293,803.48
General	GCOP	Controlled Off-Peak Energy	kWh	32,582,551	-	-	-	32,582,551	1.74	566,936.38	-	-
General	G10N	Night Boost 10	kWh	965,388	-	-	-	965,388	1.74	16,797.75	-	-
General	GNEN	Night Rate	kWh	5,425,948	-	-	-	5,425,948	-	-	-	-
General	GEDG	Export kWh	kWh	328,283	-	-	-	328,283	-	-	-	-
General	GUDG	Generation Credit	kWh	127,229	-	-	-	-	-	-	-	-
General	MCRF	Floodlight	fitting per day	8	8	-	-	-	30.72	905.10	-	-
General	MCRU	Under Verandah	fitting per day	16	16	-	-	-	27.03	1,561.78	-	-
Irrigation	ISCH	Connected kW	kW per day	136,362	1,591	136,362	-	-	30.77	15,314,867.44	13.11	6,525,119.02
Irrigation	ISCF	Irrigation Harmonic Penalty	kW per day	646	7	646	-	-	40.77	96,079.05	13.11	30,895.18
Irrigation	IUEN	Uncontrolled Energy	kWh	174,993,264	-	-	-	174,993,264	-	-	-	-
Industrial	IDEN	Day Energy	kWh	786,229	-	-	-	786,229	-	-	-	-
Industrial	INEN	Night Energy	kWh	162,478	-	-	-	162,478	-	-	-	-
Industrial	IEMD	Industrial Supply Energy - kVA	kWh	55,008,620	-	-	-	55,008,620	-	-	-	-
Industrial	ICMD	Industrial Supply - kVA	kVA per day	11,496	38	-	11,496	-	28.24	1,184,964.58	14.89	624,791.88
Industrial	ICDYMD	Industrial Supply - Day Demand	kVA per day	223	1	-	223	-	28.24	22,937.19	14.89	12,094.01
Industrial	ICDPD	Industrial Supply - Peak Demand	kVA per day	728	4	-	728	-	2.27	6,032.03	14.89	39,566.90
Industrial	ICDYAD	Industrial Supply - Anytime Demand	kVA per day	-	-	-	230	-	-	-	-	-
Industrial	ICDAM	Industrial Supply - Anytime Demand	kVA per day	845	4	-	845	-	25.97	80,135.51	-	-
Large User	LUCM	CMP	day	1	1	-	-	-	66,516.69	242,785.92	-	-
Large User	LECM	CMP Energy	kWh	34,985,040	-	-	-	34,985,040	-	-	-	-
Large User	LMCM	CMP MD	kVA per day	5,801	1	-	5,801	-	2.27	48,063.75	14.89	315,272.82
Large User	LUPP	Silver Fern Farms	day	1	1	-	-	-	8,910.84	32,524.57	-	-
Large User	LEPP	Silver Fern Farms Energy	kWh	5,094,334	-	-	-	5,094,334	-	-	-	-
Large User	LMPP	Silver Fern Farms MD	kVA per day	1,195	1	-	1,195	-	2.27	9,902.08	14.89	64,952.44
Large User	LUMH	Mt Hutt	day	1	1	-	-	-	35,408.78	129,242.05	-	-
Large User	LEMH	Mt Hutt Energy	kWh	2,201,622	-	-	-	2,201,622	-	-	-	-
Large User	LMMH	Mt Hutt MD	kVA per day	997	1	-	997	-	2.27	8,260.55	14.89	54,184.86
Large User	LUHP	Connected kW	kW per day	9,600	1	9,600	-	-	6.54	229,161.60	13.11	459,374.40
Large User	LEHP	Highbank Pumps Energy	kWh	5,712,146	-	-	-	5,712,146	-	-	-	-
Large User	LMHP	Highbank Pumps MD	kVA per day	-	-	-	3,202	-	-	-	-	-
Generation	LUHB	Highbank	day	1	1	-	-	-	105,852.16	386,360.38	-	-
Generation	LEHB	Highbank Energy	kWh	122,855,905	-	-	-	122,855,905	-	-	-	-
Generation	LMHB	Highbank MD	kVA per day	-	-	-	22,554	-	-	-	-	-
Generation	LUMO	Montalto	day	1	1	-	-	-	9,243.95	33,740.42	-	-
Generation	LEMO	Montalto Energy	kWh	10,509,598	-	-	-	10,509,598	-	-	-	-
Generation	LMMO	Montalto MD	kVA per day	-	-	-	1,586	-	-	-	-	-
Generation	LUCD	Cleardale	day	1	1	-	-	-	8,480.38	30,953.39	-	-
Generation	LECD	Cleardale Energy	kWh	3,955,646	-	-	-	3,955,646	-	-	-	-
Generation	LMCD	Cleardale MD	kVA per day	-	-	-	841	-	-	-	-	-
Generation	LULN	Lavington	day	1	1	-	-	-	2,183.67	7,970.40	-	-
Generation	LELN	Lavington Energy	kWh	3,103,671	-	-	-	3,103,671	-	-	-	-
Generation	LMLN	Lavington MD	kVA per day	-	-	-	472	-	-	-	-	-
Street Lighting	MCSL	Streetlighting	fitting per day	3,352	-	-	-	1,738,544	23.33	285,403.82	-	-
										Total		13,420,054.99

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 2017-18 year. From this information, it was determined that the 2016-17 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 increase due to Transmission Costs driven by Summer Peaks having occurred 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					
<i>Raw data</i>			<i>Adjusted data</i>		
SAIDI _B	Planned SAIDI	162.546	SAIDI _B	Planned SAIDI multiplied by 0.5	81.273
SAIDI _C	Unplanned SAIDI	94.659	SAIDI _C	Normalised unplanned SAIDI	94.659
SAIDI _{Assess (B+C)}					175.932

SAIFI Assessed Values					
<i>Raw data</i>			<i>Adjusted data</i>		
SAIFI _B	Planned SAIFI	0.561	SAIFI _B	Planned SAIFI multiplied by 0.5	0.281
SAIFI _C	Unplanned SAIFI	1.340	SAIFI _C	Normalised unplanned SAIFI	1.340
SAIFI _{Assess (B+C)}					1.620

Days exceeding SAIDI Boundary Value within the 2017/18 Assessment Dataset		
Date	Pre-Normalised unplanned SAIDI	Normalised unplanned SAIDI

Days exceeding SAIFI Boundary Value within the 2017/18 Assessment Dataset		
Date	Pre-Normalised unplanned SAIFI	Normalised unplanned SAIFI

Clause 11.5(f) There were no Major Event Days during 2017/18.

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
Assessed SAIDI Value 2015/16		
SAIDI _{2015/16}	125.514	The sum of daily SAIDI Values in the 1 April 2015 - 31 March 2016 Normalised Assessment Dataset
Assessed SAIFI Value 2015/16		
SAIFI _{2015/16}	1.228	The sum of daily SAIFI Values in the 1 April 2015 - 31 March 2016 Normalised Assessment Dataset

Quality Incentive Calculations

Quality Incentive Adjustment		
Term	Description	Value \$
S_{SAIDI}	SAIDI incentive	(165,235)
S_{SAIFI}	SAIFI incentive	(165,235)
S_{TOTAL}	SAIDI incentive plus SAIFI incentive	(330,470)

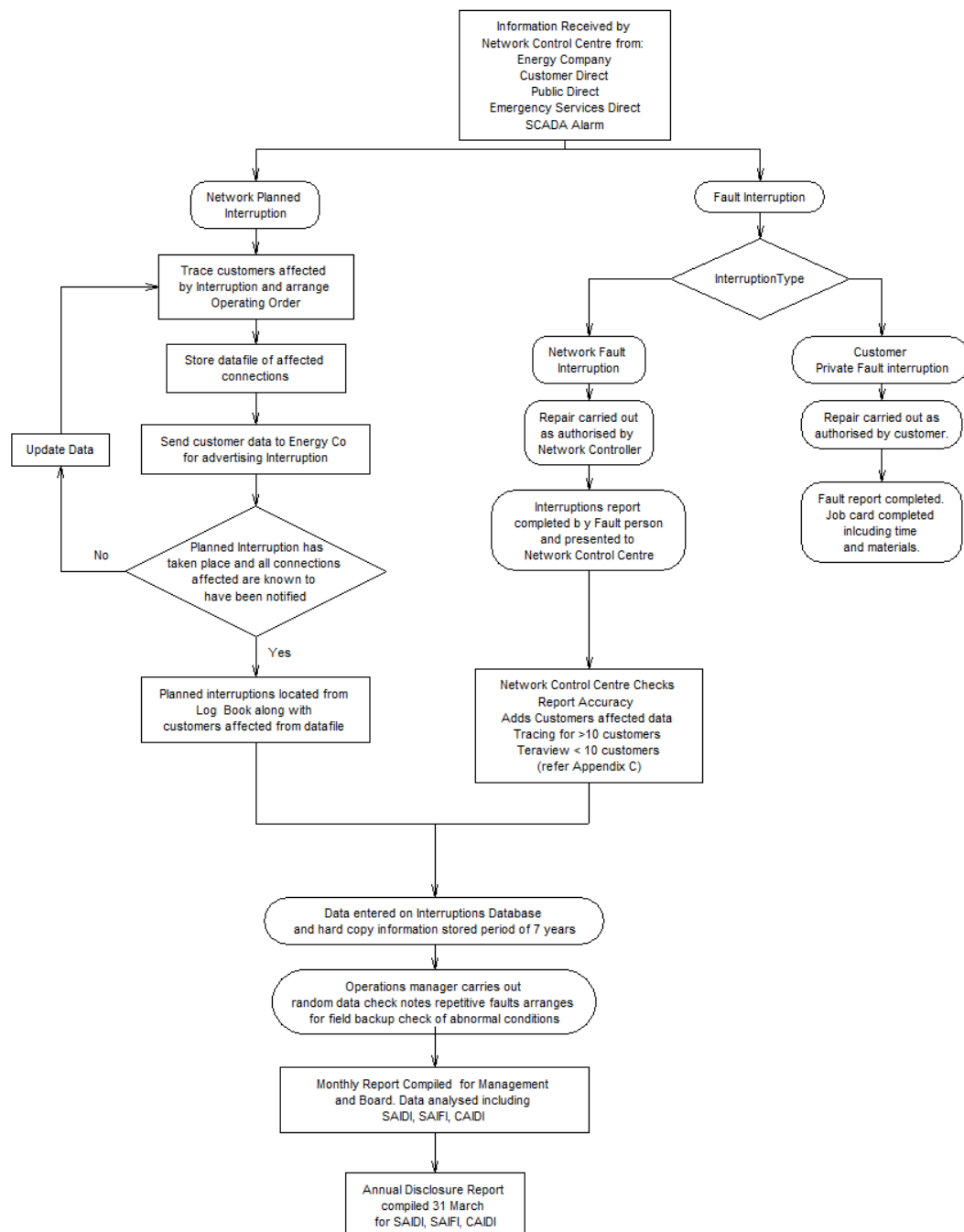
SAIDI Incentive		
Term	Description	Value
$SAIDI_{Target}$	SAIDI target specified in DPP Determination	132.8466
$SAIDI_{Collar}$	SAIDI incentive range collar specified in DPP Determination	114.6501
$SAIDI_{Cap}$	SAIDI incentive range cap specified in DPP Determination	151.0431
$Starting\ price\ MAR$	Maximum 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	151.043
S_{SAIDI}	SAIDI incentive adjustment (equal to incentive rate multiplied by SAIDI target minus Assessed SAIDI value)	(\$165,235)

SAIFI Incentive		
Term	Description	Value
$SAIFI_{Target}$	SAIFI target specified in DPP Determination	1.3870
$SAIFI_{Collar}$	SAIFI incentive range collar specified in DPP Determination	1.1625
$SAIFI_{Cap}$	SAIFI incentive range cap specified in DPP Determination	1.6116
$Starting\ price\ MAR$	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	1.612
S_{SAIFI}	SAIFI incentive adjustment (equal to incentive rate multiplied by SAIFI target minus Assessed SAIFI value)	(\$165,235)

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



Appendix G – Estimate of SAIDI and SAIFI assessed values had live-line work continued - Unaudited

EA Networks has exceeded both SAIDI & SAIFI limits for 2017/18 year due to its decision to cease to carry out Live Line work from 5th December 2016, due to perceived safety concerns raised by WorkSafe over such practices.

The following tables provides an estimate of SAIDI and SAIFI assessed values had live-line work continued.

The Live Line Estimate (LL) was the interruptions identified by the Company's Operation team that traditionally would have been carried out energised using live line techniques.

SAIDI Assessed Values (Live Line)					
<i>Raw data</i>			<i>Adjusted data</i>		
SAIDI _B	Planned SAIDI	162.546	SAIDI _{B LL}	Planned SAIDI multiplied by 0.5	56.060
	Live Line Estimate(LL)	50.426			
	SAIDI Less LL	112.120			
SAIDI _C	Unplanned SAIDI	94.659	SAIDI _C	Normalised unplanned SAIDI	94.659
			SAIDI _{Assess (B+C)}		150.719
			SAIDI Limit <small>2015-2020 regulatory period</small>		151.043
					0.998 < 1
Clause 9.1(a) Result:			<i>Does not exceed limit</i>		

SAIFI Assessed Values (Live Line)					
<i>Raw data</i>			<i>Adjusted data</i>		
SAIFI _B	Planned SAIFI	0.561	SAIFI _{B LL}	Planned SAIFI multiplied by 0.5	0.175
	Live Line Estimate(LL)	0.211			
	SAIFI Less LL	0.350			
SAIFI _C	Unplanned SAIFI	1.340	SAIFI _C	Normalised unplanned SAIFI	1.340
			SAIFI _{Assess (B+C)}		1.515
			SAIFI Limit <small>2015-2020 regulatory period</small>		1.612
					0.940 < 1
Clause 9.1(a) Result:			<i>Does not exceed limit</i>		