



DEFAULT PRICE QUALITY PATH COMPLIANCE STATEMENT

for the Assessment Period ended 31 March 2020

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

26 June 2020

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

Electricity Ashburton Limited, trading as EA Networks, has not complied with the price path during the Assessment Period ended 31 March 2020, 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.

The non-compliance is demonstrated in the following table, which demonstrates that NR during the Assessment Period exceeded ANR by \$52,906.

Test:	$NR_{2019/20} \leq ANR_{2019/20}$
NR _{2019/20}	\$ 36,853,016
ANR _{2019/20}	\$ 36,800,111
Result	1.001 > 1
Result	<i>Price Path has been breached</i>

The reasons for the non-compliance with the Price Path are provide in Appendix A.

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

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 ended 31 March 2020, 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 (Clause 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:	$SAIDI_{Assess\ 2019/20} \leq SAIDI_{Limit}$
SAIDI _{Assess 2019/20}	133.58
SAIDI _{Limit}	151.04
	0.884 < 1
Clause 9.1(a) Result:	<i>Does not exceed limit</i>

Test:	$SAIFI_{Assess\ 2019/20} \leq SAIFI_{Limit}$
SAIFI _{Assess 2019/20}	1.40
SAIFI _{Limit}	1.61
	0.870 < 1
Clause 9.1(a) Result:	<i>Does not exceed limit</i>

Supporting evidence is presented in Appendices F, and G.

Prior Period Reliability Assessment (Clause 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.

The non-compliance is demonstrated in the following tables.

SAIDI Assess 2018/19	133.70	SAIFI Assess 2018/19	1.20
SAIDI Limit 2018/19	151.04	SAIFI Limit 2018/19	1.61
	0.885		0.743
	< 1		< 1
	<i>Does not exceed limit</i>		<i>Does not exceed limit</i>

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		1.005
	> 1		> 1
	<i>Exceeds limit</i>		<i>Exceeds limit</i>

Compliance Summary (Clause 9.1)

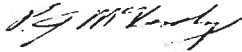
Clause 9.1 A Non-exempt EDB must, in respect of each Assessment Period, either:

- (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) 2019/20 Assessment Period	Does not exceed limit	Does not exceed limit	Complies
or			
Compliance with 9.1(b) 2018/19 Assessment Period	Does not exceed limit	Does not exceed limit	Complies
2017/18 Assessment Period	Exceeds limit	Exceeds limit	Does not comply
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 2015¹ (1) are true and accurate.



Philip John McKendry

26 June 2020



Paul Jason Munro

¹ The Directors of EA Networks note the amendment to the Default Price -Quality Path Determination issued by the Commerce Commission on 9 April 2020 that has removed the auditor report requirements relating to the treatment of successive interruptions for reporting SAIDI, SAIFI and interruptions, because of potential inconsistencies in treatments across the industry. The Directors note that they do not appear to have been provided a similar exemption relating to the treatment of successive interruptions regarding their certification. EA Networks has continued to report successive interruptions consistent with previous periods, including periods used to establish quality standards by which subsequent performance is measured.



Independent Assurance 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, as amended

We have completed the reasonable 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, as amended by the Electricity Distribution Services Default Price-Quality Path (Compliance Statement Due Date and Auditor’s Report) Amendments Determination 2020, issued by the Commerce Commission NZ on 9 April 2020 (“the Determination, as amended”) in preparing the Default Price Quality Path Compliance Statement (“the Annual Compliance Statement”) for the assessment period ended 31 March 2020.

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 clause 11.2 of the Determination, as amended, in preparing the Annual Compliance Statement for the assessment period ended 31 March 2020.

Basis for Opinion

We have 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 (SAE) 3100 (Revised) *Assurance Engagements on Compliance*, issued by the New Zealand Auditing and Assurance Standards Board.

We believe the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Director’s Responsibilities

The Directors are responsible on behalf of the Company for compliance with the Determination, as amended, for the identification of risks that may threaten compliance with the Determination, as amended, controls that would mitigate those risks, and monitoring the Company’s ongoing compliance.

Our Independence and Quality Control

We have complied with the independence and other ethical requirements of Professional and Ethical Standard 1 (Revised) *Code of Ethics for Assurance Practitioners* issued by the New Zealand Auditing and Assurance Standards Board, which include independence and other requirements 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) *Quality Control for Firms that Perform Audits and Reviews of Financial Statement and Other Assurance Engagements* 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 regulatory advisory services. The provision of these services has not impaired our independence.

Assurance Practitioner's responsibilities

Our responsibility is to express an opinion on whether the Company has complied, in all material respects, with clause 11.2 of the Determination, as amended, in the preparation of the Annual Compliance Statement for the assessment period ended 31 March 2020 and report our opinion to you. SAE 3100 (Revised) requires that we plan and perform our procedures to obtain reasonable assurance about whether the Company has complied, in all material respects, with clause 11.2 of the Determination, as amended, in the preparation of the Annual Compliance Statement for the assessment period ended 31 March 2020.

In relation to the price path set out in clause 8 of the Determination, as amended, our procedures included examination, on a test basis, of evidence relevant to the amounts and disclosures contained on pages 2 and 8 to 17 of the Annual Compliance Statement.

In relation to the quality standards set out in clause 9 of the Determination, as amended, our procedures included examination, on a test basis, of evidence relevant to the values and disclosures contained on pages 3 to 4 and 18 to 21 of the Annual Compliance Statement.

An assurance engagement to report on the Company's compliance with the Determination, as amended, involves performing procedures to obtain evidence about the compliance activity and controls implemented. The procedures selected depend on our judgement, including the identification and assessment of risks of material non-compliance.

Inherent limitations

Because of the inherent limitations of an assurance engagement, together with the internal control structure, it is possible that fraud, error or non-compliance may occur and not be detected. A reasonable assurance engagement throughout the specified period does not provide assurance on whether compliance with the Determination, as amended, will continue in the future.

Use of report

This report has been prepared for the Directors in accordance with clause 11.3 (b) of the Determination, as amended, 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 the Directors of the Company and the Commerce Commission, or for any purpose other than that for which it was prepared.

A handwritten signature in black ink that reads 'PricewaterhouseCoopers' in a cursive, flowing script.

Chartered Accountants
26 June 2020

Christchurch, New Zealand

Appendix A – Reasons for and actions taken to mitigate and prevent Non-compliance with Price Path (Clauses 11.4(a)-(b))

Requirement of Clause 11.4 (a): If the Non-exempt EDB has not complied with the Price Path, the reasons for the non-compliance.

Two errors occurred within our 2019/20 pricing model which impacted the forecasted 2019 revenue differential carried forward into 2019, which was then used to set prices for the 1 April 2019 pricing year:

Incorrect 2017 quantities used to calculate forecasted notional and allowable revenues
A human error resulted in the wrong 2017 quantities being used to forecast the revenue differential for the 31 March 2019 assessment period at the time the 1 April 2019 prices were set.

After allowing for the average price change in Consumer Price Index, the wrong quantities resulted in allowable notional revenue for the year ended 31 March 2019 being forecast \$109,765 higher than that allowed under the price path and as confirmed per the audited 31 March 2019 compliance statement.

The forecast notional revenue for the year ended 31 March 2019 was also based on the incorrect 2017 quantities, overstating this measure by \$50,589.

The wrong quantities resulted in a (\$109,765-\$50,589) \$59,176 over-statement to the revenue differential term carried forward into the 2020 assessment period. The impact is evident when comparing the audited revenue differential as at 31 March 2019 carried forward into the 2020 compliance statement of \$289,330 to the forecast revenue differential used in the pricing model of \$348,506 which was incorporated into prices at 1 April 2019.

Incorrect CPI rate:

A minor rounding error also occurred in the CPI index which resulted in the average consumer price index change being overstated by 0.01%. The impact of the rounding difference was immaterial on the calculation of the allowable notional revenue.

Requirement of Clause 11.4 (B): Actions taken to mitigate any non-compliance and to prevent similar non-compliance in future Assessment Periods.

We have reviewed our forecasting model and identified areas of possible weakness and will be addressing these weaknesses. This review has resulted in the following changes:

- The inputs into the forecasting price model and the model itself will be independently reviewed annually prior to setting prices.
- Improved reconciliation process back to source information.

Other relevant information concerning the breach

Repayment of the breach to consumers.

In March 2020 we paid a \$2.9 million consumer discount to all consumers connected to the network, allocation of the discount pool to an individual consumer was based on the following calculation:

$A/B * C$

Where

- A. EA networks charges to qualifying consumers for the Assessment P
- B. The sum of all qualifying consumers charges for the Assessment Period.
- C. the value of consumer discount pool

The Assessment Period was from 1 March 2019 to 29 February 2020

A qualifying consumer is anyone connected to the network at 29 February 2020 at 5pm.

EA Networks charges are total distribution charges for the Assessment Period.

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

Allowable Notional Revenue 2019/20		
Term	Description	Value \$
$\Sigma DP_{2018/19} * Q_{2017/18}$	Distribution Prices between 1 April 2018 and 31 March 2019 multiplied by quantities for year ended 31 March 2018	35,957,327
$ANR_{2018/19} - NR_{2018/19}$	Revenue differential for year ended 31 March 2019	289,331
$(1 + \Delta CPI_{2019/20})$	Average change in Consumer Price Index	1.0153
X	X Factor, as specified in Schedule 1 of the DPP Determination	0%
$ANR_{2019/20}$	Allowable Notional Revenue for the year ended 31 March 2020	36,800,111

$\Delta CPI_{2019/20}$			
Denominator		Numerator	
$CPI_{Dec2016}$	990	$CPI_{Dec2017}$	1006
$CPI_{Mar2017}$	1000	$CPI_{Mar2018}$	1011
$CPI_{Jun2017}$	1000	$CPI_{Jun2018}$	1015
$CPI_{Sep2017}$	1005	$CPI_{Sep2018}$	1024
$\Delta CPI_{2019/20}$	1.53%		

Notional Revenue 2019/20		
Term	Description	Value \$
$\Sigma DP_{2019/20} * Q_{2017/18}$	Distribution Prices between 1 April 2019 and 31 March 2020 multiplied by quantities for year ended 31 March 2018	36,853,016
$NR_{2019/20}$	Notional Revenue for the year ended 31 March 2020	36,853,016

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

Pass-through Balance 2019/20		
Term	Description	Value \$
<i>PTP</i> 2019/20 <i>Q</i> 2019/20	Pass-through Prices during 2019/20 multiplied by 31 March 2020 quantities	17,765,101
<i>K</i> 2019/20	Rates on system fixed assets for the year ended 31 March 2020	194,502
	Commerce Act levies for the year ended 31 March 2020	96,980
	Electricity Authority levies for the year ended 31 March 2020	97,341
	Utilities Disputes levies for the year ended 31 March 2020	10,974
<i>V</i> 2019/20	Transpower transmission charges for the year ended 31 March 2020	15,380,803
	Transpower New Investment Contract charges for the year ended 31 March 2020	1,214,311
	System operator services charges for the year ended 31 March 2020	-
	Avoided transmission charges resulting from purchase of transmission assets from Transpower for the year ended 31 March 2020	-
	Distributed generation allowance for the year ended 31 March 2020	190,398
	Claw-back for the year ended 31 March 2020	-
	NPV wash-up allowance for the year ended 31 March 2020	-
	Energy efficiency and demand-side management incentive allowance for the year ended 31 March 2020	-
	Catastrophic event allowance for the year ended 31 March 2020	-
	Extended reserves allowance for the year ended 31 March 2020	-
	Quality incentive adjustment for the year ended 31 March 2020	(371,947)
	Capex wash-up adjustment for the year ended 31 March 2020	(164,039)
	Reconsideration event allowance for the year ended 31 March 2020	-
<i>PTB</i> 2018/19	Pass-through balance from previous Assessment Period	(285,399)
<i>r</i>	Cost of Debt	6.09%
<i>PTB</i> 2019/20	Pass-through balance for the Assessment Period ended 31 March 2020	812,999

Pass-through Balance Reconciliation 2019/20		
Term	Description	Value \$
<i>PTP</i> 2019/20 <i>Q</i> 2019/20	Pass-through Prices during 2019/20 multiplied by 31 March 2020 quantities	17,765,101
<i>Total Pass-through and Recoverable Costs</i>	Total Pass-through and Recoverable Costs for the year ended 31 March 2020	16,649,322
<i>PTB</i> 2019/20	Pass-through Balance for the Assessment Period ended 31 March 2019	812,999
<i>PTB</i> 2018/19	Pass-through Balance from previous Assessment Period	(285,399)
<i>Difference</i>	Reconciliation between Pass-through Balance for the Assessment Period with the Pass-through Balance for the preceding Assessment Period	1,098,398

Pass-through Costs for year ended March 2020				
K 2019/20	Actual (\$)	Forecast (\$)	Variance (\$)	Variance (%)
Rates on system fixed assets	194,502	188,317	6,185	3.3%
Commerce Act levies	96,980	130,040	(33,060)	(25.4%)
Electricity Authority levies	97,341	104,868	(7,527)	(7.2%)
Utilities Disputes levies	10,974	10,656	318	3.0%
Total Pass-through Costs	399,796	433,881	(34,085)	(7.9%)

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 ended March 2020				
V _{2019/20}	Actual (\$)	Forecast (\$)	Variance (\$)	Variance (%)
^ Transpower transmission charges	15,380,803	15,452,933	(72,130)	(0.5%)
New investment contract charges	1,214,311	1,236,610	(22,299)	(1.8%)
System operator services charges	-	-	-	0.0%
Avoided transmission charges - purchases from Transpower	-	-	-	0.0%
# Distributed generation allowance	190,398	179,438	10,960	6.1%
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	(371,947)	(330,470)	(41,477)	12.6%
Capex wash-up adjustment	(164,039)	(164,039)	-	0.0%
Reconsideration event allowance	-	-	-	0.0%
Total Recoverable Costs	16,249,526	16,374,472	(124,946)	(0.8%)

No allowances were made in the 2019-20 budget for the following costs (or recoveries) which resulted in the variances noted above:

- ^ The decommissioning of Ashburton 33 kV Point of supply resulted reduction Transmission connection cost for February and March 2020.
- # An unplanned ACOT payment of \$10,960 was made.
- * No adjustment for the time-value of money was made in setting the forecast for the quality incentive adjustment.

New investments Reconciliation				
V _{2019/20}	Actual (\$)	Forecast (\$)	Variance (\$)	Variance (%)
Ashburton 66 kV Supply	273,687	278,195	(4,508)	(1.6%)
33 & 66kV Protection Upgrade	28,558	28,728	(170)	(0.6%)
Provisional Third 220/66 kV Supply Transformer	536,616	536,616	-	0.0%
Ashburton T10	375,450	393,071	(17,621)	(4.5%)
Total Recoverable Costs	1,214,311	1,236,610	(22,299)	(1.8%)

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

- The budget (forecast) values must be set in December 2018 for the 2019-20 year whereas notification of Transpower's New Investments Charges did not occur until May 2019 which is effective from 1st July 2019.
- There was no new Transpower's New Investment Contracts entered into during 2019-20 Assessment Period.

Appendix D – Price and Quantity Schedules (Clauses 11.4(c) – (d))

Prices between 1 April 2018 and 31 March 2019 multiplied by 31 March 2018

Quantities:

Reporting Group	UOS Code	Tariff Description	Units	Quantity	Count	Irrigation	Industrial	kWh	Distribution Rate - Cents	Distribution Value
General	GS05	less than 5 kVA	day	45	45	-	-	-	56.46	9,272
General	GS20	20 kVA	day	14,875	14,875	-	-	-	15.00	814,391
General	GS50	50 kVA	day	1,596	1,596	-	-	-	30.00	174,727
General	G100	100 kVA	day	648	648	-	-	-	60.00	141,958
General	G150	150 kVA	day	267	267	-	-	-	90.00	87,794
General	GUEN	Uncontrolled Energy	kWh	221,994,816	-	-	-	221,994,816	7.22	16,028,026
General	GCOP	Controlled Off-Peak Energy	kWh	31,740,864	-	-	-	31,740,864	1.74	552,291
General	G10N	Night Boost 10	kWh	949,070	-	-	-	949,070	1.74	16,514
General	GENE	Night Rate	kWh	5,316,476	-	-	-	5,316,476	-	-
General	GEDG	Export kWh	kWh	319,045	-	-	-	319,045	-	-
General	GLUDG	Generation Credit	kWh	128,788	-	-	-	-	-	-
General	MCRF	Floodlight	fitting per day	8	8	-	-	-	30.72	916
General	MCRU	Under Verandah	fitting per day	16	16	-	-	-	27.03	1,581
Irrigation	ISCH	Connected kW	kW per day	137,792	1,595	137,792	-	-	30.00	15,088,224
Irrigation	ISCF	Irrigation Harmonic Penalty	kW per day	654	7	654	-	-	40.00	95,420
Irrigation	IJEN	Uncontrolled Energy	kWh	176,251,017	-	-	-	176,251,017	-	-
Industrial	IDEN	Day Energy	kWh	748,676	-	-	-	748,676	-	-
Industrial	INEN	Night Energy	kWh	140,997	-	-	-	140,997	-	-
Industrial	IEMD	Industrial Supply Energy - kVA	kWh	55,682,725	-	-	-	55,682,725	-	-
Industrial	ICMD	Industrial Supply - kVA	kVA per day	11,616	38	-	11,616	-	29.13	1,235,033
Industrial	ICDYMD	Industrial Supply - Day Demand	kVA per day	225	1	-	225	-	29.13	23,950
Industrial	ICDDP	Industrial Supply - Peak Demand	kVA per day	737	4	-	737	-	2.34	6,294
Industrial	ICDYAD	Industrial Supply - Anytime Demand	kVA per day	-	-	-	233	-	-	-
Industrial	ICDAD	Industrial Supply - Anytime Demand	kVA per day	856	4	-	856	-	26.79	83,679
Large User	LUCM	CMP	day	1	1	-	-	-	66,516.69	242,786
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	48,064
Large User	LUPP	Silver Fern Farms	day	1	1	-	-	-	8,910.84	32,525
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
Large User	LUMH	Mt Hutt	day	1	1	-	-	-	35,408.78	129,242
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	8,261
Large User	LUHP	Connected kW	kW per day	9,600	1	9,600	-	-	4.98	174,499
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
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
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
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
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	285,404
Irrigation		Filter installation Discount	kW	-	-	605.61	-	-	8,000.00	48,449
New Connections		Urban	Connection	42	-	-	-	-	75,556.00	31,734
New Connections		Rural	Connection	56	-	-	-	-	131,556.00	73,671
New Connections		Rural - New Substation required	Connection	86	-	-	-	-	175,111.00	150,595

35,957,327

**Prices between 1 April 2019 and 31 March 2020 multiplied by 31 March 2018
Quantities:**

Reporting Group	UOS Code	Tariff Description	Units	Quantity	Count	Irrigation	Industrial	kWh	Distribution Rate - Cents	Distribution Value
General	GS05	less than 5 kVA	day	45	45	-	-	-	57.88	9,505
General	GS20	20 kVA	day	14,875	14,875	-	-	-	15.00	814,391
General	GS50	50 kVA	day	1,596	1,596	-	-	-	30.00	174,727
General	G100	100 kVA	day	648	648	-	-	-	60.00	141,958
General	G150	150 kVA	day	267	267	-	-	-	90.00	87,794
General	GUEN	Uncontrolled Energy	kWh	221,994,816	-	-	-	221,994,816	7.40	16,427,616
General	GCOP	Controlled Off-Peak Energy	kWh	31,740,864	-	-	-	31,740,864	1.78	564,987
General	G10N	Night Boost 10	kWh	949,070	-	-	-	949,070	1.78	16,893
General	GNEN	Night Rate	kWh	5,316,476	-	-	-	5,316,476	-	-
General	GEDG	Export kWh	kWh	319,045	-	-	-	319,045	-	-
General	GUDG	Generation Credit	kWh	128,788	-	-	-	-	-	-
General	MCRF	Floodlight	fitting per day	8	8	-	-	-	31.49	939
General	MCRU	Under Verandah	fitting per day	16	16	-	-	-	27.71	1,621
Irrigation	ISCH	Connected kW	kW per day	137,792	1,595	137,792	-	-	30.82	15,500,635
Irrigation	ISCF	Irrigation Harmonic Penalty	kW per day	654	7	654	-	-	40.82	97,376
Irrigation	IUEN	Uncontrolled Energy	kWh	176,251,017	-	-	-	176,251,017	-	-
Industrial	IDEN	Day Energy	kWh	748,676	-	-	-	748,676	-	-
Industrial	INEN	Night Energy	kWh	140,997	-	-	-	140,997	-	-
Industrial	IEMD	Industrial Supply Energy - kVA	kWh	55,882,725	-	-	-	55,882,725	-	-
Industrial	ICMD	Industrial Supply - kVA	kVA per day	11,616	38	-	11,616	-	30.58	1,296,509
Industrial	ICDYMD	Industrial Supply - Day Demand	kVA per day	225	1	-	225	-	30.58	25,142
Industrial	ICDPD	Industrial Supply - Peak Demand	kVA per day	737	4	-	737	-	-	-
Industrial	ICDYAD	Industrial Supply - Anytime Demand	kVA per day	-	-	-	233	-	-	-
Industrial	ICDAM	Industrial Supply - Anytime Demand	kVA per day	856	4	-	856	-	30.58	95,517
Large User	LUCM	CMP	day	1	1	-	-	-	66,516.69	242,786
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	48,064
Large User	LUPP	Silver Fern Farms	day	1	1	-	-	-	8,910.84	32,525
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
Large User	LUMH	MI Hutt	day	1	1	-	-	-	35,408.78	129,242
Large User	LEMH	MI Hutt Energy	kWh	2,201,622	-	-	-	2,201,622	-	-
Large User	LMMH	MI Hutt MD	kVA per day	997	1	-	997	-	2.27	8,261
Large User	LUHP	Connected kW	kW per day	9,600	1	9,600	-	-	5.55	194,472
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
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	-	-	-	10,850.70	39,605
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
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
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	21.23	259,714
Irrigation		Filter Installation Discount	kW	-	-	605.61	-	-	8,000.00	48,449
New Connections		Urban	Connection	42	-	-	-	-	75,556.00	31,734
New Connections		Rural	Connection	56	-	-	-	-	131,556.00	73,671
New Connections		Rural - New Substation required	Connection	86	-	-	-	-	175,111.00	150,595
\$ 36,853,016										

Pass-through Prices times Quantity schedule:

Reporting Group	UOS Code	Price Description	Units	Quantity	Count	Irrigation	Industrial	kWh	Transmission Rate - Cents	Transmission Value
General	GS05	less than 5 kVA	day	43	43	-	-	-	-	-
General	GS20	20 kVA	day	15,302	15,302	-	-	-	-	-
General	GS50	50 kVA	day	1,631	1,631	-	-	-	-	-
General	G100	100 kVA	day	681	681	-	-	-	-	-
General	G150	150 kVA	day	281	281	-	-	-	-	-
General	GUEN	Uncontrolled Energy	kWh	237,015,098	-	-	-	237,015,098	2.76	6,541,617
General	GCOP	Controlled Off-Peak Energy	kWh	32,809,751	-	-	-	32,809,751	-	-
General	G10N	Night Boost 10	kWh	854,326	-	-	-	854,326	-	-
General	GNEN	Night Rate	kWh	4,772,360	-	-	-	4,772,360	-	-
General	GEDG	Export kWh	kWh	324,336	-	-	-	324,336	-	-
General	GUDG	Generation Credit	kWh	167,858	-	-	-	-	-	-
General	MCRF	Floodlight	fitting per day	5	5	-	-	-	-	-
General	MCRU	Under Verandah	fitting per day	12	12	-	-	-	-	-
Irrigation	ISCH	Connected kW	kW per day	136,394	1,588	136,394	-	-	18.14	9,055,538
Irrigation	ISCF	Irrigation Harmonic Penalty	kW per day	1,105	11	1,105	-	-	18.14	73,368
Irrigation	IUEN	Uncontrolled Energy	kWh	218,935,148	-	-	-	218,935,148	-	-
Industrial	ICEN	Uncontrolled Energy	kWh	3,737,632	-	-	-	3,737,632	-	-
Industrial	IDEN	Day Energy	kWh	1,036,820	-	-	-	1,036,820	-	-
Industrial	INEN	Night Energy	kWh	247,446	-	-	-	247,446	-	-
Industrial	IEMD	Industrial Supply Energy - kVA	kWh	58,767,246	-	-	-	58,767,246	-	-
Industrial	IEDS	Direct Supply Energy - kVA	kWh	214,721	-	-	-	214,721	-	-
Industrial	ICMD	Industrial Supply - kVA	kVA per day	11,577	39	-	11,577	-	18.33	776,689
Industrial	ICDYMD	Industrial Supply - Day Demand	kVA per day	296	1	-	296	-	18.33	19,851
Industrial	ICDPD	Industrial Supply - Peak Demand	kVA per day	2,045	6	-	2,045	-	18.33	137,219
Industrial	ICDYAD	Industrial Supply - Anytime Demand	kVA per day	-	-	-	301	-	-	-
Industrial	ICDAM	Industrial Supply - Anytime Demand	kVA per day	2,233	6	-	2,233	-	-	-
Large User	LUCM	CMP	day	1	1	-	-	-	-	-
Large User	LECM	CMP Energy	kWh	32,680,958	-	-	-	32,680,958	-	-
Large User	LMCM	CMP MD	kVA per day	5,515	1	-	5,515	-	18.33	370,010
Large User	LUPP	Silver Fern Farms	day	1	1	-	-	-	-	-
Large User	LEPP	Silver Fern Farms Energy	kWh	4,274,470	-	-	-	4,274,470	-	-
Large User	LMPP	Silver Fern Farms MD	kVA per day	820	1	-	820	-	18.33	55,040
Large User	LUMH	MI Hutt	day	1	1	-	-	-	-	-
Large User	LEMH	MI Hutt Energy	kWh	2,498,056	-	-	-	2,498,056	-	-
Large User	LMMH	MI Hutt MD	kVA per day	1,162	1	-	1,162	-	18.33	77,986
Large User	LUHP	Connected kW	kW per day	9,600	1	9,600	-	-	18.14	637,367
Large User	LEHP	Highbank Pumps Energy	kWh	7,416,652	-	-	-	7,416,652	-	-
Large User	LMHP	Highbank Pumps MD	kVA per day	-	-	-	2,947	-	-	-
Generation	LUHB	Highbank	day	1	1	-	-	-	-	-
Generation	LEHB	Highbank Energy	kWh	83,018,633	-	-	-	83,018,633	-	-
Generation	LMHB	Highbank MD	kVA per day	-	-	-	18,668	-	-	-
Generation	LUMO	Montalto	day	1	1	-	-	-	-	-
Generation	LEMO	Montalto Energy	kWh	10,104,901	-	-	-	10,104,901	-	-
Generation	LMMO	Montalto MD	kVA per day	-	-	-	1,506	-	-	-
Generation	LUCD	Cleardale	day	1	1	-	-	-	-	-
Generation	LECD	Cleardale Energy	kWh	3,655,746	-	-	-	3,655,746	-	-
Generation	LMCD	Cleardale MD	kVA per day	-	-	-	839	-	-	-
Generation	LULN	Lavington	day	1	1	-	-	-	-	-
Generation	LELN	Lavington Energy	kWh	2,227,209	-	-	-	2,227,209	-	-
Generation	LMLN	Lavington MD	kVA per day	-	-	-	398	-	-	-
Street Lighting	MCSL	Streetlighting	fitting per day	2,656	-	-	-	-	2.10	20,416
Total										\$ 17,765,101

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 2019-20 year. From this information, it was determined that a \$10M increase in Transpower charges would be passed onto all customer groups.

Appendix E – 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 F – Quality Standard Compliance and Incentive (Clauses 11.5(c)-(d) and (f))

Quality Standard Compliance Calculations

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

SAIDI Assessed Values						
<i>Raw data</i>			<i>Adjusted data</i>			
SAIDI _B	Planned SAIDI	96.055	SAIDI _B	Planned SAIDI multiplied by 0.5	48.028	
SAIDI _C	Unplanned SAIDI	95.279	SAIDI _C	Normalised unplanned SAIDI	85.550	
					SAIDI _{Assess (B+C)}	133.578

SAIFI Assessed Values						
<i>Raw data</i>			<i>Adjusted data</i>			
SAIFI _B	Planned SAIFI	0.292	SAIFI _B	Planned SAIFI multiplied by 0.5	0.146	
SAIFI _C	Unplanned SAIFI	1.451	SAIFI _C	Normalised unplanned SAIFI	1.256	
					SAIFI _{Assess (B+C)}	1.402

Days exceeding SAIDI Boundary Value within the 2019/20 Assessment Dataset		
Date	Pre-Normalised unplanned SAIDI	Normalised unplanned SAIDI
01/06/2019	12.257	8.081
07/12/2019	13.633	8.081

Days exceeding SAIFI Boundary Value within the 2019/20 Assessment Dataset

Date	Pre-Normalised unplanned SAIFI	Normalised unplanned SAIFI
05/06/2019	0.293	0.098

Major Event Days

Date	Interruption
1/6/2019	Snow event
5/6/2019	Sub-transmission fault
7/12/2019	Lightning storm

Clause 11.5(f)

Assessed SAIDI Value 2018/19

SAIDI _{2018/19}	133.698	The sum of daily SAIDI Values in the 1 April 2018 - 31 March 2019 Normalised Assessment Dataset
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Assessed SAIFI Value 2018/19

SAIFI _{2018/19}	1.198	The sum of daily SAIFI Values in the 1 April 2018 - 31 March 2019 Normalised Assessment Dataset
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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
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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
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Quality Incentive Calculations

Quality Incentive Adjustment		
Term	Description	Value \$
S_{SAIDI}	SAIDI incentive	(6,638)
S_{SAIFI}	SAIFI incentive	(10,798)
S_{TOTAL}	SAIDI incentive plus SAIFI incentive	(17,436)

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	133.578
S_{SAIDI}	SAIDI incentive adjustment (equal to incentive rate multiplied by SAIDI target minus Assessed SAIDI value)	(\$6,638)

SAIFI Incentive

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	1.402
S_{SAIFI}	SAIFI incentive adjustment (equal to incentive rate multiplied by SAIFI target minus Assessed SAIFI value)	(\$10,798)

Appendix G – 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

