



Electricity Ashburton Limited, trading as EA Networks

***Default Price-Quality Path
Annual Compliance Statement
1 April 2022 – 31 March 2023 Assessment Period***

10 July 2023

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1. Introduction

Electricity Ashburton Limited trading as EA Networks provides electricity distribution services predominantly between the Rangitata and Rakaia rivers, an area that covers 3500 km². We receive electricity from Transpower's national grid and distribute this electricity to approximately 21,000 homes and businesses that are connected to our network.

We charge electricity retailers on a wholesale basis for this delivery service. Retailers, in turn, include this cost in their retail electricity prices – our delivery charges, including Transpower's charges, typically amount to 24% of a household's electricity bill.

As a natural monopoly service provider, we are subject to government regulation under the Commerce Act 1986. Pursuant to the requirements of this Act, the Commerce Commission has set a regulatory framework that includes information disclosure regulations, default price-quality paths (DPP) and the option for distribution businesses to apply for a customised price-quality path (CPP).

EA Networks is subject to the Electricity Distribution Services Default Price-Quality Path Determination 2020 (the Determination) set by the Commerce Commission and applying for the five-year regulatory period from 1 April 2020 to 31 March 2025.

The Determination requires us to issue an 'annual compliance statement' within 5 months after the end of each assessment period, as well as an 'annual price-setting compliance statement' prior to the start of each assessment period to demonstrate compliance, or otherwise, with the requirements of the Determination.

This annual compliance statement covers information requirements detailed in clause 11.4 of the Determination in relation to the wash-up amount calculation, quality standards and quality incentives compliance and transactions for the year ended 31 March 2023, the third assessment period of the five-year regulatory period.

2. Date of Completion

This statement was completed on 10 July 2023 and approved for release by EA Networks Directors.

3. Wash-up amount

3.1 Statement of compliance

EA Networks has complied with the requirements of clause 8.6 of the 2020 DPP Determination in respect of the wash-up amount calculation.

3.2 Wash-up amount calculation

Table 1

Wash-up amount RY23		
Term	Description	Value (\$000)
Actual allowable revenue (AAR)	<i>Sum of actual net allowable revenue, actual pass-through and recoverable costs, pass-through balance and revenue wash-up draw down amount</i>	44,708
Actual revenue (AR)	<i>Sum of actual revenue from prices plus other regulated income</i>	41,910
Revenue foregone (RV)	<i>Actual net allowable revenue x (revenue reduction percentage - 20%) when revenue reduction percentage is greater than 20%, otherwise nil</i>	-
Wash-up amount	<i>AAR - AR - RV</i>	2,798

Further information supporting actual allowable revenue is included in Section 3.2.1.

Further information supporting actual revenue is included in Section 3.2.2.

Further information supporting revenue foregone is included in Section 3.2.3.

3.2.1 Actual allowable revenue

Sections 3.2.1.2 to 3.2.3 shows the calculation of actual allowable revenue.

3.2.1.1 Calculation of net allowable revenue

Table 2 shows the calculation of actual net allowable revenue consistent with Schedule 1.6 of the 2020 DPP Determination.

Table 2

Calculation of actual net allowable revenue		
Term	Description	Value (\$000)
Actual net allowable revenue (ANAR) of the previous assessment period	<i>Amount specified as forecast net allowable revenue for the second assessment period</i>	35,021
ΔCPI	<i>The derived change in the CPI to be applied for the assessment period</i>	7.10%
X	<i>The annual rate of change as specified in schedule 1.2</i>	0.00%
Actual net allowable revenue	<i>ANAR_{previous}*(1+ΔCPI)^t*(1-X)</i>	37,507

Further information supporting the calculation of ΔCPI is found in Appendix A.

3.2.1.2 Total actual allowable revenue

Table 3 below shows the actual allowable revenue for the assessment period consistent with Schedule 1.6 of the 2020 DPP Determination.

Table 3

Actual allowable revenue RY23		
Term	Description	Value (\$000)
Actual net allowable revenue (ANAR)	<i>Amount specified as forecast net allowable revenue for the first assessment period</i>	37,507
Actual pass-through costs	<i>Sum of all pass-through costs that were incurred or approved by the Commission in the assessment period</i>	473
Actual recoverable costs	<i>Sum of all recoverable costs that were incurred or approved by the Commission in the assessment period</i>	6,954
Revenue wash-up draw down amount	<i>For the third to fifth assessment period, the closing wash-up account balance of previous assessment period</i>	(226)
Total actual allowable revenue (AAR)	<i>Actual net allowable revenue + actual pass-through costs + actual recoverable costs + revenue wash-up drawn down amount</i>	44,708

Further information supporting actual pass-through costs, actual recoverable costs and opening wash-up account balance is included in Appendix B.

3.2.2 Actual revenue

Table 4 below shows actual revenue for the assessment period consistent with clause 4.2 of the 2020 DPP Determination.

Table 4

Actual revenue RY23		
Term	Description	Value (\$000)
Actual revenue from prices	<i>Actual prices between 1 April 2022 and 31 March 2023 multiplied by actual quantities for the assessment period</i>	41,871
Other regulated income	<i>Other income associated with supply of electricity distribution services</i>	39
Total actual revenue (AR)	<i>Sum of actual revenue from prices plus other regulated income</i>	41,910

Further information supporting actual revenue from prices is included in Appendix C.

3.2.3 Revenue foregone

Table 5 below shows the revenue foregone consistent with clause 4.2 of the 2020 DPP Determination.

Table 5

Revenue foregone RY23		
Term	Description	Value (\$000)
Actual revenue from prices	<i>Actual prices between 1 April 2022 and 31 March 2023 multiplied by actual quantities for the assessment period</i>	41,871
Forecast revenue from prices	<i>Amount defined in the price setting compliance statement for the third assessment period</i>	41,739
Revenue reduction percentage (RRP)	<i>1 - (actual revenue from prices / forecast revenue from prices)</i>	-0.32%
Actual net allowable revenue (ANAR)	<i>Amount specified as forecast net allowable revenue for the third assessment period</i>	37,507
Revenue foregone (RV)	<i>Actual net allowable revenue x (RRP-20%) when RRP is greater than 20%, otherwise nil</i>	-

4. Quality standards

4.1 Statement of compliance with planned interruptions quality standards

EA Networks is subject to a planned accumulated SAIDI limit and a planned accumulated SAIFI limit which are assessed for the DPP regulatory period as stated in clause 9.2 of the 2020 DPP Determination.

Table 6 and Table 7 below show the planned accumulated SAIDI and SAIFI limits for EA Networks for the DPP regulatory period and the planned SAIDI and SAIFI assessed values for the third assessment period.

Table 6

Planned interruptions quality standard - SAIDI	
Sum of planned SAIDI assessed values ≤ Planned accumulated SAIDI limit	
Planned accumulated SAIDI limit	1,376.08
Planned SAIDI assessed value for the first assessment period	100.12
Planned SAIDI assessed value for the second assessment period	106.64
Planned SAIDI assessed value for the third assessment period	121.45
Sum of planned SAIDI assessed values	328.21
Compliance result	Compliant

Table 7

Planned interruptions quality standard - SAIFI	
Sum of planned SAIFI assessed values ≤ Planned accumulated SAIFI limit	
Planned accumulated SAIFI limit	4.8939
Planned SAIFI assessed value for the first assessment period	0.3162
Planned SAIFI assessed value for the second assessment period	0.3635
Planned SAIFI assessed value for the third assessment period	0.4587
Sum of planned SAIFI assessed values	1.1384
Compliance result	Compliant

Further information supporting planned SAIDI and SAIFI assessed values is included in Section 4.1.1.

4.1.1 Planned SAIDI and SAIFI assessed values

Table 8 and Table 9 below show EA Networks' planned SAIDI and SAIFI assessed values for the assessment period.

Table 8

Planned SAIDI assessed value RY23		
Term	Description	Value
Class B non-notified interruptions		121.45
Class B notified interruptions falling outside window		
SAIDI_B	<i>Sum of Class B non-notified interruptions</i>	121.45
Class B notified interruptions falling inside window		
Class B intended interruptions cancelled without notice		
Class B intended interruptions cancelled with notice		-
SAIDI_N	<i>Sum of Class B notified interruptions</i>	-
Planned SAIDI assessed value	<i>SAIDI_B + (SAIDI_N/2)</i>	121.45

Table 9

Planned SAIFI assessed value RY23		
Term	Description	Value
Planned SAIFI assessed value	<i>Sum of Class B interruptions commencing within the assessment period</i>	0.4587

4.2 Statement of compliance with unplanned interruptions quality standards

As demonstrated in Table 10 and Table 11 below, and consistent with clause 9.7 of the 2020 DPP Determination, EA Networks has complied with the unplanned interruptions quality standard.

Table 10

Unplanned interruptions quality standard RY23 - SAIDI		
Unplanned SAIDI assessed value ≤ Unplanned SAIDI limit		
Unplanned SAIDI limit		91.98
Unplanned SAIDI assessed value	<i>Sum of normalised SAIDI values for Class C interruptions commencing within the assessment period</i>	63.41
Compliance result		Compliant

Table 11

Unplanned interruptions quality standard RY23 - SAIFI		
Unplanned SAIFI assessed value ≤ Unplanned SAIFI limit		
Unplanned SAIFI limit		1.2826
Unplanned SAIFI assessed value	<i>Sum of normalised SAIFI values for Class C interruptions commencing within the assessment period</i>	1.1852
Compliance result		Compliant

Information about policies, procedures and calculations for measuring planned and unplanned interruptions during the assessment period is in Appendix D.

4.2.1 Major events

Table 12 and Table 13 below show the SAIDI and SAIFI values attributed to major events which occurred during the assessment period.

Further information about major events is included in Appendix E.

Table 12

Unplanned SAIDI major events RY23					
Start	End	Pre-normalised unplanned SAIDI	Normalised unplanned SAIDI	Cause of the event	Event
17/07/2022 13:00	19/07/2022 12:00	12.70	1.87	Adverse Weather	SAIDI 1
1/08/2022 4:00	3/08/2022 3:00	8.82	0.50	Adverse Weather	SAIDI 2
4/08/2022 22:00	6/08/2022 23:30	34.86	1.17	Adverse Weather	SAIDI 3
Total		56.38	3.54		

Table 13

Unplanned SAIFI major events RY23					
Start	End	Pre-normalised unplanned SAIFI	Normalised unplanned SAIFI	Cause of the event	Event
17/07/2022 15:00	19/07/2022 11:00	0.0812	0.0173	Adverse Weather	SAIFI 1
5/08/2022 0:30	6/08/2022 18:30	0.0815	0.0115	Adverse Weather	SAIFI 2
Total		0.1628	0.0288		

4.3 Statement of compliance with extreme event standard

As demonstrated in Table 14 below, and consistent with clause 9.9 of the 2020 DPP Determination EA Networks has complied with the extreme event standard.

Table 14

Extreme event standard RY23	
<i>Unplanned SAIDI value \leq 120 minutes, and customer interruption minutes \leq six million during any 24-hour period, excluding unplanned interruptions from major external factors</i>	
Number of extreme events	Compliance result
-	Compliant

4.4 Quality Incentive Adjustment

Table 15 below shows EA Networks' quality incentive adjustment for the assessment period.

Table 15

Quality Incentive Adjustment RY23		
Term	Description	Value (\$000)
SAIDI planned adjustment	$(SAIDI_{planned, target} - SAIDI_{planned, assessed}) \times 0.5 \times IR$	(80)
SAIDI unplanned adjustment	$(SAIDI_{unplanned, target} - SAIDI_{unplanned, assessed}) \times IR$	44
Total adjustment	$SAIDI_{planned adjustment} + SAIDI_{unplanned adjustment}$	(36)
Revenue at risk	$0.02 * ANAR$	750
Total penalty/reward		(36)
67th percentile estimate of post-tax WACC		4.23%
Quality incentive adjustment		(39)

Table 16 below shows EA Networks' quality incentive adjustment inputs consistent with Schedule 4 of the 2020 DPP Determination.

Table 16

Quality Incentive Adjustment Inputs RY23					
Term	Units	Value	Term	Units	Value
SAIDI planned interruption cap	minutes	275.22	SAIDI unplanned interruption cap	minutes	91.98
SAIDI planned interruption collar	minutes	-	SAIDI unplanned interruption collar	minutes	-
SAIDI planned interruption target	minutes	91.74	SAIDI unplanned interruption target	minutes	71.65
Planned SAIDI assessed value	minutes	121.45	Unplanned SAIDI assessed value	minutes	63.41
Incentive rate		5,394			
Actual net allowable revenue (ANAR)	\$000	37,507			
SAIDI planned interruption target	minutes	92	SAIDI unplanned interruption target	minutes	72
Minimum of the planned SAIDI cap and assessed value	minutes	121	Minimum of the unplanned SAIDI cap and assessed value	minutes	63
Planned SAIDI subject to incentive	minutes	(30)	Unplanned SAIDI subject to incentive	minutes	8
Adjustment (IR x 0.5)	\$	2,697	Adjustment (IR)	\$	5,394
SAIDI planned adjustment	\$000	(80)	SAIDI unplanned adjustment	\$000	44

5. Transactions

EA Networks has not entered into any agreements with another EDB or Transpower for an amalgamation, merger, major transaction or transfer in the assessment period.

6. Director's certification

A Director's certificate in the form set out in Schedule 7 of the 2020 DPP Determination is included as Appendix F.

7. Assurance report

An assurance report meeting the requirements of Schedule 8 of the 2020 DPP Determination is included in Appendix G.

Appendix A – Calculation of Δ CPI

Table 17

Calculation of Δ CPI		
Term	Description	
Δ CPI	<i>is the derived change in the CPI to be applied for the assessment period</i>	
Actual calculation of Δ CPI		
Month	t-1	t-2
<i>June</i>	1161	1082
<i>September</i>	1186	1106
<i>December</i>	1203	1122
<i>March</i>	1218	1142
	4768	4452
ΔCPI		7.10%

Appendix B – Pass-through and recoverable costs

Pass-through costs

Table 18

Actual and forecast pass-through costs RY23				
Actual pass-through costs	Actual (\$000)	Forecast (\$000)	Forecast variance (\$000)	Explanation for variances
Rates on system fixed assets	235	215	20	Higher than expected rates increase
Commerce Act levies	142	165	(23)	Washup levy credit received
Electricity Authority levies	84	109	(25)	Washup levy credit received
Utilities Disputes levies	12	12	0	
Total actual pass-through costs	473	501	(28)	Actual costs are 5.6% under forecast

Recoverable costs

Table 19

Actual and forecast recoverable costs RY23				
Actual recoverable costs	Actual (\$000)	Forecast (\$000)	Forecast variance (\$000)	Explanation for variances
IRIS incentive adjustment	(1,462)	(1,496)	34	Included amount per ComCom model with formula error amended
Transpower Connection Charge	307	307	0	
Transpower Interconnection Charge	5,881	5,881	(0)	
New investment contract charges	1,714	1,697	17	Transpower advised EA Networks what the required new investment payments would be for the 2022-23 year. EA Networks used this number plus an allowance to make a one-off additional payment to calculate the forecast. A slightly higher than planned additional payment was made during the year.
Quality incentive adjustment	(39)	(45)	6	
Capex wash-up adjustment	517	517	-	
Fire and Emergency NZ levies	36	19	17	EA Networks changed its insurance arrangements and values insured during the year
Total actual recoverable costs	6,954	6,880	74	Actual cost are 1.1% over forecast

Opening wash-up account balance

Table 20

Calculation of Opening wash-up account balance		
Term	Description	Value (\$000)
Wash-up amount of the previous assessment period	<i>Wash-up amount from the compliance statement dated 25 August 2021</i>	(208)
Voluntary undercharging amount forgone	<i>Voluntary undercharge stated in the compliance statement dated 25 August 2021</i>	-
Wash up amount net of voluntary underchargings	<i>Total of above</i>	(208)
67th percentile estimate of post tax WACC	<i>from the determination</i>	4.23%
Opening wash-up account balance	<i>Sum of actual revenue from prices plus other regulated income</i>	(226)

Appendix C – Prices and quantities

Table 21 shows the actual prices and quantities for actual revenue from prices for the third assessment period.

Table 21

Actual Revenue from Prices (FRFP)								Budget	Variation
		FY2023	FY2023 Actual	Days	Price x		Budget	Variation	
		Delivery Prices	Quantities	applicable	Quantity		Quantities		
						(\$000)		(\$000)	
General Supply									
<i>Fixed Charges</i>									
GS05	General Supply - less than 5 kVA	GS05	0.5320 \$/con/day	48.8 cons	365 days	9.5	52.7 cons	(0.8)	
GS20	General Supply - 20 kVA	GS20	0.3000 \$/con/day	16,030.7 cons	365 days	1,755.4	15,998.0 cons	3.6	
GS50	General Supply - 50 kVA	GS50	0.7500 \$/con/day	1,735.8 cons	365 days	475.2	1,730.1 cons	1.6	
G100	General Supply - 100 kVA	G100	2.5800 \$/con/day	745.5 cons	365 days	702.0	727.5 cons	16.9	
G150	General Supply - 150 kVA	G150	4.6000 \$/con/day	299.8 cons	365 days	503.3	305.6 cons	(9.8)	
<i>Volume charges</i>									
All GS	Uncontrolled	GUEN	0.0689 \$/kWh	232,051.4 MWh		15,988.3	231,650.3 MWh	27.6	
All GS	Controlled 16	GCOP	0.0140 \$/kWh	31,553.5 MWh		441.7	31,175.6 MWh	5.3	
All GS	Night Boost	G10N	0.0140 \$/kWh	770.5 MWh		10.8	634.6 MWh	1.9	
All GS	Night only	GNEN	0.0000 \$/kWh	4,071.6 MWh		-	3,732.2 MWh	-	
<i>Other charges</i>									
All GS	Unmetered Streetlighting	MCSL	0.1901 \$/fitting/day	21.0 fittings	365 days	1.5	20.0 fittings	0.1	
All GS	Floodlight - Closed	MCRF	0.2876 \$/fitting/day	5.0 fittings	365 days	0.5	1.7 fittings	0.3	
All GS	Under Verandah - Closed	MCRU	0.2532 \$/fitting/day	12.9 fittings	365 days	1.2	7.3 fittings	0.5	
Irrigation									
All irrigator	Chargeable kW	ISCH	0.3550 \$/kW/day	140,796.3 kW	365 days	18,243.7	140,731.2 kW	8.4	
ISCF	Irrigation Harmonic Penalty	ISCF	0.4550 \$/kW/day	830.4 kW	365 days	137.9	884.6 kW	(9.0)	
Industrial									
ICMD	Anytime Demand kVA	ICMD	0.3313 \$/kVA/day	11,468.0 kVA	365 days	1,386.8	11,092.0 kVA	45.5	
ICDYMD	Day Demand kVA	ICDYMD	0.3313 \$/kVA/day	829.8 kVA	365 days	100.3	806.0 kVA	2.9	
ICDPD	Peak Demand	ICDPD	0.0748 \$/kVA/day	2,505.2 kVA	365 days	68.4	2,424.0 kVA	2.2	
	Anytime Demand	ICDAM	0.2565 \$/kVA/day	2,737.4 kVA	365 days	256.3	2,660.0 kVA	7.2	
Large user									
LUCM	ANZCO Seafield Plant	LUCM	693.9621 \$/day	1.0 cons	365 days	253.3	1.0 cons	-	
	Maximum demand	LMCM	0.0754 \$/kVA/day	7,074.4 kVA	365 days	194.7	6,034.1 kVA	28.6	
LUPP	Talley's Fairfield Plant	LUPP	97.3238 \$/day	1.0 cons	365 days	35.5	1.0 cons	-	
	Maximum demand	LMPP	0.0764 \$/kVA/day	299.1 kVA	365 days	8.3	550.8 kVA	(7.0)	
LUMH	Mt Hutt Ski Area	LUMH	334.0691 \$/day	1.0 cons	365 days	121.9	1.0 cons	-	
	Maximum demand	LMMH	0.0576 \$/kVA/day	1,052.5 kVA	365 days	22.1	1,131.8 kVA	(1.7)	
LUHP	Highbank Pumps	LUHP	0.1385 \$/kW/day	9,600.0 kW	365 days	485.3	9,600.0 kW	-	
	Maximum demand	LMHP	0.0000 \$/kVA/day	3,500.9 kVA	365 days	-	NA	-	
Generation									
LUHB	Highbank	LUHB	932.8355 \$/day	1.0 cons	365 days	340.5	1.0 cons	-	
LUMO	Montalto	LUMO	95.6232 \$/day	1.0 cons	365 days	34.9	1.0 cons	-	
LUCD	Cleardale	LUCD	68.5883 \$/day	1.0 cons	365 days	25.0	1.0 cons	-	
LULN	Lavington	LULN	19.2439 \$/day	1.0 cons	365 days	7.0	1.0 cons	-	
Streetlighting									
MCSL	Street Lighting	MCSL	0.1901 \$/fixture/day	3,734.7 fittings	365 days	259.1	3,636.8 fittings	6.8	
						41,870.5		131.2	

Table 22 shows the forecast revenue from prices for the third assessment period from the price setting compliance statement.

Table 22

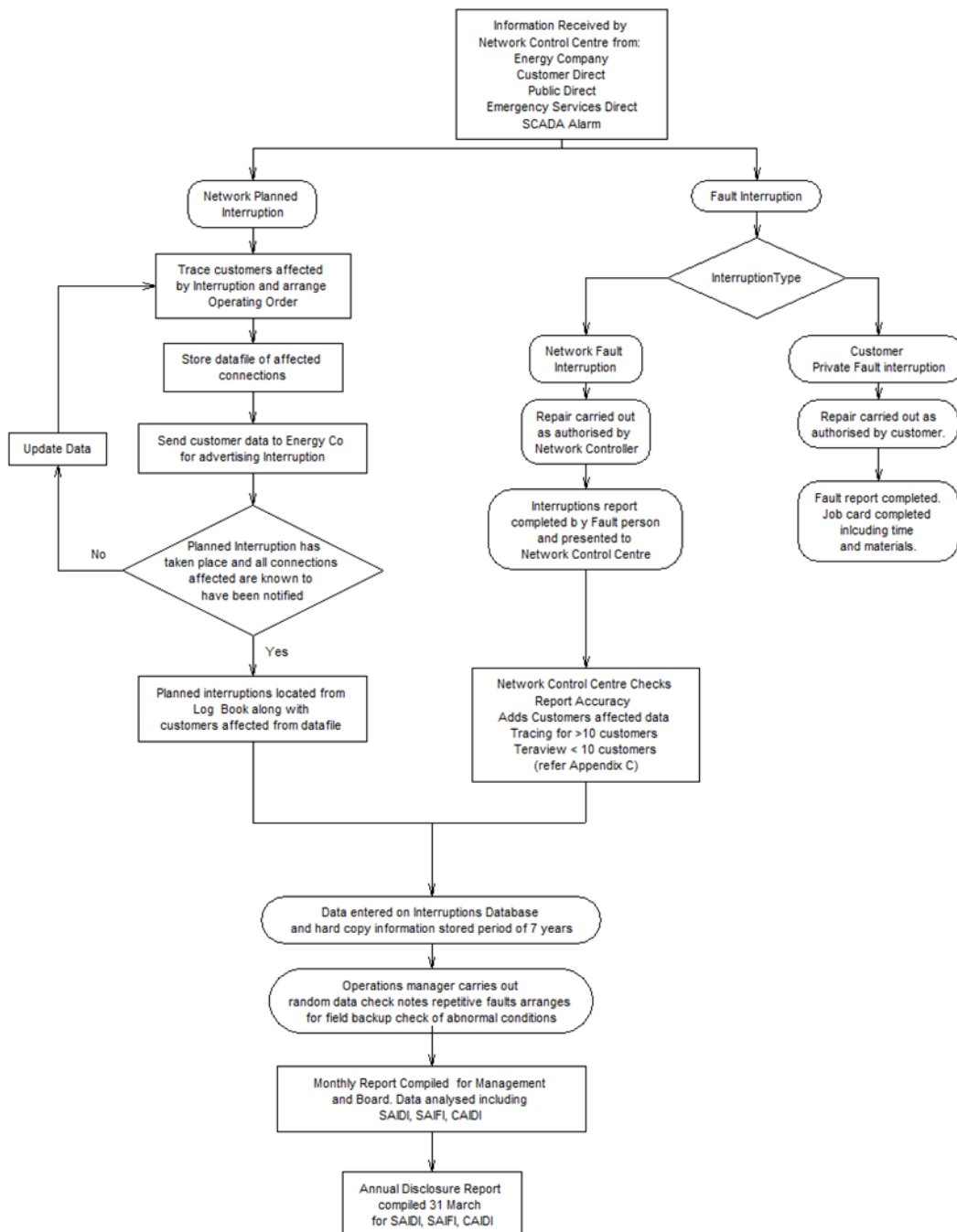
Forecast revenue from prices RY23	
Total forecast revenue from prices	41,739

Appendix D – Policies and procedures for measuring planned and unplanned interruptions

1 EA Networks' 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". During the year EA Networks recorded no 'notified interruptions'.

2 The procedures are summarised by following flow chart:

INTERRUPTION RECORDS FLOW CHART



Appendix E – SAIDI and SAIFI major events

The tables below show the normalisation of the SAIDI and SAIFI major events that took place during the assessment period, consistent with Schedule 3.2 of the 2020 DPP Determination.

Table 23

Normalisation of unplanned SAIDI major events RY23						
SAIDI unplanned boundary value						6.25
1/48th of the SAIDI unplanned boundary value	17/07/2022 13:00			1/08/2022 4:00		
	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption
0.13	01:00 PM	0.00	0.00	04:00 AM	0.00	0.00
0.13	01:30 PM	0.00	0.00	04:30 AM	0.00	0.00
0.13	02:00 PM	0.00	0.00	05:00 AM	0.00	0.00
0.13	02:30 PM	0.00	0.00	05:30 AM	0.00	0.00
0.13	03:00 PM	0.00	0.00	06:00 AM	0.00	0.00
0.13	03:30 PM	0.00	0.00	06:30 AM	0.00	0.00
0.13	04:00 PM	0.00	0.00	07:00 AM	0.00	0.00
0.13	04:30 PM	0.00	0.00	07:30 AM	0.00	0.00
0.13	05:00 PM	0.00	0.00	08:00 AM	0.00	0.00
0.13	05:30 PM	0.00	0.00	08:30 AM	0.00	0.00
0.13	06:00 PM	0.00	0.00	09:00 AM	0.00	0.00
0.13	06:30 PM	0.00	0.00	09:30 AM	0.00	0.00
0.13	07:00 PM	0.00	0.00	10:00 AM	0.00	0.00
0.13	07:30 PM	0.00	0.00	10:30 AM	0.00	0.00
0.13	08:00 PM	0.00	0.00	11:00 AM	0.00	0.00
0.13	08:30 PM	0.00	0.00	11:30 AM	0.00	0.00
0.13	09:00 PM	0.00	0.00	12:00 PM	0.00	0.00
0.13	09:30 PM	0.00	0.00	12:30 PM	0.00	0.00
0.13	10:00 PM	0.00	0.00	01:00 PM	0.00	0.00
0.13	10:30 PM	0.00	0.00	01:30 PM	0.00	0.00
0.13	11:00 PM	0.00	0.00	02:00 PM	0.00	0.00
0.13	11:30 PM	0.00	0.00	02:30 PM	0.00	0.00
0.13	12:00 AM	0.00	0.00	03:00 PM	0.00	0.00
0.13	12:30 AM	0.00	0.00	03:30 PM	0.00	0.00
0.13	01:00 AM	0.00	0.00	04:00 PM	0.00	0.00
0.13	01:30 AM	0.39	0.13	04:30 PM	0.00	0.00
0.13	02:00 AM	0.00	0.00	05:00 PM	0.00	0.00
0.13	02:30 AM	0.00	0.00	05:30 PM	0.00	0.00
0.13	03:00 AM	0.00	0.00	06:00 PM	0.00	0.00
0.13	03:30 AM	0.00	0.00	06:30 PM	0.00	0.00
0.13	04:00 AM	0.00	0.00	07:00 PM	0.00	0.00
0.13	04:30 AM	0.00	0.00	07:30 PM	0.00	0.00
0.13	05:00 AM	0.00	0.00	08:00 PM	0.00	0.00
0.13	05:30 AM	0.00	0.00	08:30 PM	0.00	0.00
0.13	06:00 AM	0.00	0.00	09:00 PM	0.00	0.00
0.13	06:30 AM	0.00	0.00	09:30 PM	0.00	0.00
0.13	07:00 AM	0.06	0.06	10:00 PM	0.00	0.00

Normalisation of unplanned SAIDI major events RY23

SAIDI unplanned boundary value						6.25
1/48th of the SAIDI unplanned boundary value	17/07/2022 13:00			1/08/2022 4:00		
	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption
0.13	07:30 AM	0.00	0.00	10:30 PM	0.00	0.00
0.13	08:00 AM	0.00	0.00	11:00 PM	0.00	0.00
0.13	08:30 AM	0.00	0.00	11:30 PM	0.00	0.00
0.13	09:00 AM	0.00	0.00	12:00 AM	0.00	0.00
0.13	09:30 AM	0.00	0.00	12:30 AM	0.00	0.00
0.13	10:00 AM	0.00	0.00	01:00 AM	0.00	0.00
0.13	10:30 AM	1.05	0.13	01:30 AM	0.00	0.00
0.13	11:00 AM	0.00	0.00	02:00 AM	0.00	0.00
0.13	11:30 AM	1.15	0.13	02:30 AM	0.00	0.00
0.13	12:00 PM	3.18	0.13	03:00 AM	0.00	0.00
0.13	12:30 PM	3.31	0.13	03:30 AM	6.57	0.13
0.13	01:00 PM	0.52	0.13	04:00 AM	0.00	0.00
0.13	01:30 PM	0.46	0.13	04:30 AM	0.00	0.00
0.13	02:00 PM	0.09	0.09	05:00 AM	0.00	0.00
0.13	02:30 PM	1.26	0.13	05:30 AM	0.00	0.00
0.13	03:00 PM	0.61	0.13	06:00 AM	0.00	0.00
0.13	03:30 PM	0.00	0.00	06:30 AM	0.00	0.00
0.13	04:00 PM	0.00	0.00	07:00 AM	0.55	0.13
0.13	04:30 PM	0.00	0.00	07:30 AM	0.00	0.00
0.13	05:00 PM	0.00	0.00	08:00 AM	0.00	0.00
0.13	05:30 PM	0.00	0.00	08:30 AM	0.00	0.00
0.13	06:00 PM	0.00	0.00	09:00 AM	0.00	0.00
0.13	06:30 PM	0.00	0.00	09:30 AM	0.00	0.00
0.13	07:00 PM	0.08	0.08	10:00 AM	0.00	0.00
0.13	07:30 PM	0.00	0.00	10:30 AM	0.00	0.00
0.13	08:00 PM	0.00	0.00	11:00 AM	0.00	0.00
0.13	08:30 PM	0.20	0.13	11:30 AM	0.00	0.00
0.13	09:00 PM	0.00	0.00	12:00 PM	0.00	0.00
0.13	09:30 PM	0.00	0.00	12:30 PM	0.11	0.11
0.13	10:00 PM	0.00	0.00	01:00 PM	0.00	0.00
0.13	10:30 PM	0.00	0.00	01:30 PM	0.00	0.00
0.13	11:00 PM	0.00	0.00	02:00 PM	0.00	0.00
0.13	11:30 PM	0.00	0.00	02:30 PM	0.00	0.00
0.13	12:00 AM	0.00	0.00	03:00 PM	0.00	0.00
0.13	12:30 AM	0.00	0.00	03:30 PM	0.00	0.00
0.13	01:00 AM	0.00	0.00	04:00 PM	0.00	0.00
0.13	01:30 AM	0.00	0.00	04:30 PM	0.00	0.00
0.13	02:00 AM	0.00	0.00	05:00 PM	0.00	0.00
0.13	02:30 AM	0.00	0.00	05:30 PM	0.00	0.00
0.13	03:00 AM	0.00	0.00	06:00 PM	0.00	0.00
0.13	03:30 AM	0.00	0.00	06:30 PM	0.00	0.00

Normalisation of unplanned SAIDI major events RY23						
SAIDI unplanned boundary value						6.25
1/48th of the SAIDI unplanned boundary value	17/07/2022 13:00			1/08/2022 4:00		
	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption
0.13	04:00 AM	0.00	0.00	07:00 PM	0.00	0.00
0.13	04:30 AM	0.00	0.00	07:30 PM	0.00	0.00
0.13	05:00 AM	0.00	0.00	08:00 PM	0.00	0.00
0.13	05:30 AM	0.00	0.00	08:30 PM	0.00	0.00
0.13	06:00 AM	0.00	0.00	09:00 PM	0.00	0.00
0.13	06:30 AM	0.00	0.00	09:30 PM	0.00	0.00
0.13	07:00 AM	0.08	0.08	10:00 PM	0.00	0.00
0.13	07:30 AM	0.05	0.05	10:30 PM	0.00	0.00
0.13	08:00 AM	0.11	0.11	11:00 PM	0.00	0.00
0.13	08:30 AM	0.00	0.00	11:30 PM	0.00	0.00
0.13	09:00 AM	0.00	0.00	12:00 AM	0.00	0.00
0.13	09:30 AM	0.00	0.00	12:30 AM	0.00	0.00
0.13	10:00 AM	0.00	0.00	01:00 AM	0.00	0.00
0.13	10:30 AM	0.00	0.00	01:30 AM	1.59	0.13
0.13	11:00 AM	0.00	0.00	02:00 AM	0.00	0.00
0.13	11:30 AM	0.10	0.10	02:30 AM	0.00	0.00
0.13	12:00 PM	0.00	0.00	03:00 AM	0.00	0.00
Total		12.70	1.87		8.82	0.50

Table 24

Normalisation of unplanned SAIDI major events RY23						
SAIDI unplanned boundary value						6.25
1/48th of the SAIDI unplanned boundary value	4/08/2022 22:00					
	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption			
0.13	10:00 PM	0.00	0.00			
0.13	10:30 PM	0.00	0.00			
0.13	11:00 PM	0.00	0.00			
0.13	11:30 PM	0.00	0.00			
0.13	12:00 AM	0.00	0.00			
0.13	12:30 AM	0.00	0.00			
0.13	12:30 AM	0.00	0.00			
0.13	01:00 AM	0.00	0.00			
0.13	01:30 AM	0.00	0.00			
0.13	02:00 AM	0.00	0.00			
0.13	02:30 AM	0.00	0.00			
0.13	03:00 AM	0.00	0.00			
0.13	03:30 AM	0.00	0.00			
0.13	04:00 AM	0.00	0.00			
0.13	04:30 AM	0.00	0.00			
0.13	05:00 AM	0.00	0.00			
0.13	05:30 AM	0.00	0.00			
0.13	06:00 AM	0.00	0.00			
0.13	06:30 AM	0.00	0.00			
0.13	07:00 AM	0.00	0.00			
0.13	07:30 AM	0.00	0.00			
0.13	08:00 AM	0.00	0.00			
0.13	08:30 AM	0.00	0.00			
0.13	09:00 AM	0.00	0.00			
0.13	09:30 AM	0.00	0.00			
0.13	10:00 AM	0.00	0.00			
0.13	10:30 AM	0.00	0.00			
0.13	11:00 AM	0.00	0.00			
0.13	11:30 AM	0.00	0.00			
0.13	12:00 PM	0.00	0.00			
0.13	12:30 PM	0.00	0.00			
0.13	01:00 PM	0.00	0.00			
0.13	01:30 PM	0.00	0.00			
0.13	02:00 PM	0.00	0.00			
0.13	02:30 PM	0.00	0.00			
0.13	03:00 PM	0.00	0.00			
0.13	03:30 PM	0.00	0.00			
0.13	04:00 PM	0.00	0.00			
0.13	04:30 PM	0.00	0.00			
0.13	05:00 PM	0.00	0.00			
0.13	05:30 PM	0.00	0.00			

Normalisation of unplanned SAIDI major events RY23

SAIDI unplanned boundary value				6.25		
1/48th of the SAIDI unplanned boundary value	4/08/2022 22:00					
	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption			
0.13	06:00 PM	0.00	0.00			
0.13	06:30 PM	0.00	0.00			
0.13	07:00 PM	0.69	0.13			
0.13	07:30 PM	0.00	0.00			
0.13	08:00 PM	0.00	0.00			
0.13	08:30 PM	0.00	0.00			
0.13	09:00 PM	0.00	0.00			
0.13	09:30 PM	8.36	0.13			
0.13	10:00 PM	2.39	0.13			
0.13	10:30 PM	3.14	0.13			
0.13	11:00 PM	2.92	0.13			
0.13	11:30 PM	2.02	0.13			
0.13	12:00 AM	13.55	0.13			
0.13	12:30 AM	0.00	0.00			
0.13	01:00 AM	0.00	0.00			
0.13	01:30 AM	0.00	0.00			
0.13	02:00 AM	0.00	0.00			
0.13	02:30 AM	0.00	0.00			
0.13	03:00 AM	0.00	0.00			
0.13	03:30 AM	0.00	0.00			
0.13	04:00 AM	0.00	0.00			
0.13	04:30 AM	0.00	0.00			
0.13	05:00 AM	0.00	0.00			
0.13	05:30 AM	0.00	0.00			
0.13	06:00 AM	0.00	0.00			
0.13	06:30 AM	0.00	0.00			
0.13	07:00 AM	0.00	0.00			
0.13	07:30 AM	0.00	0.00			
0.13	08:00 AM	0.00	0.00			
0.13	08:30 AM	0.00	0.00			
0.13	09:00 AM	0.00	0.00			
0.13	09:30 AM	0.00	0.00			
0.13	10:00 AM	0.30	0.13			
0.13	10:30 AM	0.00	0.00			
0.13	11:00 AM	0.00	0.00			
0.13	11:30 AM	0.00	0.00			
0.13	12:00 PM	0.00	0.00			
0.13	12:30 PM	0.00	0.00			
0.13	01:00 PM	0.00	0.00			
0.13	01:30 PM	0.00	0.00			
0.13	02:00 PM	0.00	0.00			
0.13	02:30 PM	0.00	0.00			
0.13	03:00 PM	0.00	0.00			
0.13	03:30 PM	0.00	0.00			
0.13	04:00 PM	0.00	0.00			

Normalisation of unplanned SAIDI major events RY23						
SAIDI unplanned boundary value						6.25
1/48th of the SAIDI unplanned boundary value	4/08/2022 22:00					
	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption			
0.13	04:30 PM	1.49	0.13			
0.13	05:00 PM	0.00	0.00			
0.13	05:30 PM	0.00	0.00			
0.13	06:00 PM	0.00	0.00			
0.13	06:30 PM	0.00	0.00			
0.13	07:00 PM	0.00	0.00			
0.13	07:30 PM	0.00	0.00			
0.13	08:00 PM	0.00	0.00			
0.13	08:30 PM	0.00	0.00			
0.13	09:00 PM	0.00	0.00			
0.13	09:30 PM	0.00	0.00			
0.13	10:00 PM	0.00	0.00			
0.13	10:30 PM	0.00	0.00			
0.13	11:00 PM	0.00	0.00			
0.13	11:30 PM	0.00	0.00			
0.13	12:00 AM	0.00	0.00			
0.13	12:30 AM	0.00	0.00			
0.13	01:00 AM	0.00	0.00			
0.13	01:30 AM	0.00	0.00			
0.13	02:00 AM	0.00	0.00			
0.13	02:30 AM	0.00	0.00			
0.13	03:00 AM	0.00	0.00			
0.13	03:30 AM	0.00	0.00			
0.13	04:00 AM	0.00	0.00			
Total		34.86	1.17		0.00	0.00

Table 25

Normalisation of unplanned SAIFI major events RY23						
SAIFI unplanned boundary value						0.0729
1/48th of the SAIFI unplanned boundary value	17/07/2022 15:00			5/08/2022 0:30		
	Half hour commencing	Raw SAIFI value for Class C interruption	Normalised SAIFI value for Class C interruption	Half hour commencing	Raw SAIFI value for Class C interruption	Normalised SAIFI value for Class C interruption
0.0015	03:00 PM	0.0000	-	12:30 AM	0.0000	-
0.0015	03:30 PM	0.0000	-	01:00 AM	0.0000	-
0.0015	04:00 PM	0.0000	-	01:30 AM	0.0000	-
0.0015	04:30 PM	0.0000	-	02:00 AM	0.0000	-
0.0015	05:00 PM	0.0000	-	02:30 AM	0.0000	-
0.0015	05:30 PM	0.0000	-	03:00 AM	0.0000	-
0.0015	06:00 PM	0.0000	-	03:30 AM	0.0000	-
0.0015	06:30 PM	0.0000	-	04:00 AM	0.0000	-
0.0015	07:00 PM	0.0000	-	04:30 AM	0.0000	-
0.0015	07:30 PM	0.0000	-	05:00 AM	0.0000	-
0.0015	08:00 PM	0.0000	-	05:30 AM	0.0000	-
0.0015	08:30 PM	0.0000	-	06:00 AM	0.0000	-
0.0015	09:00 PM	0.0000	-	06:30 AM	0.0000	-
0.0015	09:30 PM	0.0000	-	07:00 AM	0.0000	-
0.0015	10:00 PM	0.0000	-	07:30 AM	0.0000	-
0.0015	10:30 PM	0.0000	-	08:00 AM	0.0000	-
0.0015	11:00 PM	0.0000	-	08:30 AM	0.0000	-
0.0015	11:30 PM	0.0000	-	09:00 AM	0.0000	-
0.0015	12:00 AM	0.0000	-	09:30 AM	0.0000	-
0.0015	12:30 AM	0.0000	-	10:00 AM	0.0000	-
0.0015	01:00 AM	0.0000	-	10:30 AM	0.0000	-
0.0015	01:30 AM	0.0013	0.0013	11:00 AM	0.0000	-
0.0015	02:00 AM	0.0000	-	11:30 AM	0.0000	-
0.0015	02:30 AM	0.0000	-	12:00 PM	0.0000	-
0.0015	03:00 AM	0.0000	-	12:30 PM	0.0000	-
0.0015	03:30 AM	0.0000	-	01:00 PM	0.0000	-
0.0015	04:00 AM	0.0000	-	01:30 PM	0.0000	-
0.0015	04:30 AM	0.0000	-	02:00 PM	0.0000	-
0.0015	05:00 AM	0.0000	-	02:30 PM	0.0000	-
0.0015	05:30 AM	0.0000	-	03:00 PM	0.0000	-
0.0015	06:00 AM	0.0000	-	03:30 PM	0.0000	-
0.0015	06:30 AM	0.0000	-	04:00 PM	0.0000	-
0.0015	07:00 AM	0.0003	0.0003	04:30 PM	0.0000	-
0.0015	07:30 AM	0.0000	-	05:00 PM	0.0000	-
0.0015	08:00 AM	0.0000	-	05:30 PM	0.0000	-
0.0015	08:30 AM	0.0000	-	06:00 PM	0.0000	-
0.0015	09:00 AM	0.0000	-	06:30 PM	0.0000	-
0.0015	09:30 AM	0.0000	-	07:00 PM	0.0140	0.0015
0.0015	10:00 AM	0.0000	-	07:30 PM	0.0000	-
0.0015	10:30 AM	0.0032	0.0015	08:00 PM	0.0000	-
0.0015	11:00 AM	0.0000	-	08:30 PM	0.0000	-

Normalisation of unplanned SAIFI major events RY23

SAIFI unplanned boundary value						0.0729
1/48th of the SAIFI unplanned boundary value	17/07/2022 15:00			5/08/2022 0:30		
	Half hour commencing	Raw SAIFI value for Class C interruption	Normalised SAIFI value for Class C interruption	Half hour commencing	Raw SAIFI value for Class C interruption	Normalised SAIFI value for Class C interruption
0.0015	11:30 AM	0.0102	0.0015	09:00 PM	0.0000	-
0.0015	12:00 PM	0.0181	0.0015	09:30 PM	0.0060	0.0015
0.0015	12:30 PM	0.0160	0.0015	10:00 PM	0.0039	0.0015
0.0015	01:00 PM	0.0011	0.0011	10:30 PM	0.0180	0.0015
0.0015	01:30 PM	0.0025	0.0015	11:00 PM	0.0041	0.0015
0.0015	02:00 PM	0.0005	0.0005	11:30 PM	0.0090	0.0015
0.0015	02:30 PM	0.0229	0.0015	12:00 AM	0.0255	0.0015
0.0015	03:00 PM	0.0004	0.0004	12:30 AM	0.0000	-
0.0015	03:30 PM	0.0000	-	01:00 AM	0.0000	-
0.0015	04:00 PM	0.0000	-	01:30 AM	0.0000	-
0.0015	04:30 PM	0.0000	-	02:00 AM	0.0000	-
0.0015	05:00 PM	0.0000	-	02:30 AM	0.0000	-
0.0015	05:30 PM	0.0000	-	03:00 AM	0.0000	-
0.0015	06:00 PM	0.0000	-	03:30 AM	0.0000	-
0.0015	06:30 PM	0.0000	-	04:00 AM	0.0000	-
0.0015	07:00 PM	0.0002	0.0002	04:30 AM	0.0000	-
0.0015	07:30 PM	0.0000	-	05:00 AM	0.0000	-
0.0015	08:00 PM	0.0000	-	05:30 AM	0.0000	-
0.0015	08:30 PM	0.0016	0.0015	06:00 AM	0.0000	-
0.0015	09:00 PM	0.0000	-	06:30 AM	0.0000	-
0.0015	09:30 PM	0.0000	-	07:00 AM	0.0000	-
0.0015	10:00 PM	0.0000	-	07:30 AM	0.0000	-
0.0015	10:30 PM	0.0000	-	08:00 AM	0.0000	-
0.0015	11:00 PM	0.0000	-	08:30 AM	0.0000	-
0.0015	11:30 PM	0.0000	-	09:00 AM	0.0000	-
0.0015	12:00 AM	0.0000	-	09:30 AM	0.0000	-
0.0015	12:30 AM	0.0000	-	10:00 AM	0.0002	0.0002
0.0015	01:00 AM	0.0000	-	10:30 AM	0.0000	-
0.0015	01:30 AM	0.0000	-	11:00 AM	0.0000	-
0.0015	02:00 AM	0.0000	-	11:30 AM	0.0000	-
0.0015	02:30 AM	0.0000	-	12:00 PM	0.0000	-
0.0015	03:00 AM	0.0000	-	12:30 PM	0.0000	-
0.0015	03:30 AM	0.0000	-	01:00 PM	0.0000	-
0.0015	04:00 AM	0.0000	-	01:30 PM	0.0000	-
0.0015	04:30 AM	0.0000	-	02:00 PM	0.0000	-
0.0015	05:00 AM	0.0000	-	02:30 PM	0.0000	-
0.0015	05:30 AM	0.0000	-	03:00 PM	0.0000	-
0.0015	06:00 AM	0.0000	-	03:30 PM	0.0000	-
0.0015	06:30 AM	0.0000	-	04:00 PM	0.0000	-
0.0015	07:00 AM	0.0008	0.0008	04:30 PM	0.0007	0.0007
0.0015	07:30 AM	0.0007	0.0007	05:00 PM	0.0000	-
0.0015	08:00 AM	0.0012	0.0012	05:30 PM	0.0000	-
0.0015	08:30 AM	0.0000	-	06:00 PM	0.0000	-

Normalisation of unplanned SAIFI major events RY23						
SAIFI unplanned boundary value						0.0729
1/48th of the SAIFI unplanned boundary value	17/07/2022 15:00			5/08/2022 0:30		
	Half hour commencing	Raw SAIFI value for Class C interruption	Normalised SAIFI value for Class C interruption	Half hour commencing	Raw SAIFI value for Class C interruption	Normalised SAIFI value for Class C interruption
0.0015	09:00 AM	0.0000	-	06:30 PM	0.0000	-
0.0015	09:30 AM	0.0000	-	07:00 PM	0.0000	-
0.0015	10:00 AM	0.0000	-	07:30 PM	0.0000	-
0.0015	10:30 AM	0.0000	-	08:00 PM	0.0000	-
0.0015	11:00 AM	0.0000	-	08:30 PM	0.0000	-
Total		0.0812	0.0173		0.0815	0.0115

Disclosure required under causes 11.6(g) & 11.6(h) for major interruptions.

**SAIDI Event 1
and
SAIFI Event 1
Strong winds
17-19 July 2022**

How the event occurred

Between 17-19 July 2022, the Ashburton District experienced extreme strong winds, with gusts in excess of 100km/h. Information concerning this windstorm can be found at:

<https://www.rnz.co.nz/news/national/471170/strong-wind-gusts-topple-trees-trigger-power-cuts-in-south-island>

The strong windstorm resulted in widespread damage to the rural overhead high voltage network, with the root causes being:

1. Adverse Weather – High winds creating forces on our overhead line hardware, resulting in tripping and equipment failure across the network.
2. Vegetation – Trees and bark coming in to contact with our lines, resulting in equipment failure and tripping across the network.
3. Defective Equipment – Failed connections

The main equipment affected by the event

The main equipment affected by the event were the 11kV and 22kV lines and associated equipment.

The equipment was affected by:

- Fall zone trees, growth limit zone trees and bark coming in to contact with the non-insulated/bare conductor on our overhead 11kV and 22kV lines. This caused circuit breakers to operate, turning the power off.
- Line splices and other types of connections failed on the bare conductor on our overhead 11kV and 22kV lines. This caused circuit breakers to operate, turning the power off.
- Equipment on poles failed due to the high winds.

How EA Networks responded

EA Networks response to this event was:

- Resource was reallocated to restore power as quickly as possible.
- All planned work stopped, and crews reassigned to repairing damage to the network.
- Extra vegetation resource was brought in to assist with clearing vegetation.

Our post event review

A program to identify and evaluate all fall zone trees is underway. Had this been done prior to the event and had the EDB been given rights around these trees there would likely have been less SAIDI.

Post event analysis:

- Our network performed well in the conditions.
- The majority of the vegetation related SAIDI incurred by this event were from fall zone trees. A program to identify and evaluate all fall zone trees is underway.

**SAIDI Event 2 & 3
and
SAIFI Event 2
Strong winds
1-3 and 4-6
August 2022**

- We investigated and identified more opportunities for meshing of the network and installing more points for isolating.
- Bark from Blue Gum trees continues to be a problem. These trees tend to be outside the area currently covered under the tree regulations. We are proactively engaging with tree owners in question, to identify a way forward.

Mitigating factors

EA Networks ability to minimise SAIDI and SAIFI caused by wind is affected by the Tree Regulations that do not cover fall zone vegetation that has the potential to interrupt supply.

We have and will continue to consider increasing sectionalising and protection on the network which would reduce the number of consumers without power during the interruptions. This approach comes at a cost to consumers and as such we need to balance the cost of increased protection with benefit to consumers.

How the event occurred

Between 1-3 and 4-6 August 2022, the Ashburton District experienced extreme strong winds with gusts in excess of 100km/h. Information concerning this windstorm can be found at:

<https://www.nzherald.co.nz/nz/weather-heavy-rain-strong-wind-warnings-issued-in-south-island/E4HMPOTYE5GY2I3DUD7XQWEIEA/>

The strong windstorm resulted in widespread damage to the rural overhead high voltage network, with the root causes being:

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The equipment was affected by:

- Fall zone trees, growth limit zone trees and bark coming in to contact with the non-insulated/bare conductor on our overhead 11kV and 22kV lines. This caused circuit breakers to operate, turning the power off.
- Line splices and other types of connections failed on the bare conductor on our overhead 11kV and 22kV lines. This caused circuit breakers to operate, turning the power off.
- Equipment on poles failed due to the high winds.

How EA Network responded

EA Networks response to this event was;

- Resource was reallocated to restore power as quickly as possible.
- All planned work stopped, and crews reassigned to repairing damage to the network.
- Extra vegetation resource was brought in to assist clearing vegetation.

Our post event review

A program to identify and evaluate all fall zone trees is underway. Had this been done prior to the event and had the EDB been given rights around these trees there would likely have been less SAIDI.

Post event analysis:

- Our network performed well in the conditions.
- The majority of the vegetation related SAIDI incurred by this event were from fall zone trees. A program to identify and evaluate all fall zone trees is underway.
- We investigated and identified more opportunities for meshing of the network and installing more points for isolating.
- Bark from Blue Gum trees continue to be a problem. These trees tend to be outside the area currently covered under the tree regulations. We are proactively engaging with tree owners in question, to identify a way forward.

Mitigating factors

EA Networks ability to minimise SAIDI and SAIFI caused by wind is affected by the Tree Regulations that do not cover fall zone vegetation that has the potential to interrupt supply.

We have and will continue to consider increasing sectionalising and protection on the network which would reduce the number of consumers without power during the interruptions. This approach comes at a cost to consumers and as such we need to balance the cost of increased protection with benefit to consumers.

Appendix F - Director's certificate

Form of director's certificate for annual compliance statement

We, Paul Jason Munro and Andrew David Barlass, 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 2020 has been prepared in accordance with all the relevant requirements.



Paul Jason Munro



Andrew David Barlass

10 July 2023



Independent Assurance Report

To the Directors of Electricity Ashburton Limited

Assurance report pursuant to Electricity Distribution Services Default Price-Quality Path Determination 2020 (consolidated 20 May 2020)

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 2020 consolidated 20 May 2020 (“the Determination”) in preparing the Annual Compliance Statement for the assessment period ended 31 March 2023.

In our opinion, in all material respects:

- 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 with clauses 11.5 and 11.6 of the Determination in preparing the Annual Compliance Statement for the assessment period ended 31 March 2023.

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 Standard on Assurance Engagements (SAE) 3100 (Revised) Compliance Engagements (“SAE 3100 (Revised)”), 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.

Directors’ Responsibilities

The Directors of the Company are responsible on behalf of Company for:

- the preparation of the Annual Compliance Statement under clause 11.4 and in accordance with the requirements in clauses 11.5 and 11.6 of the Determination; and
- the identification of risks that may threaten compliance with the Determination and for such internal controls that would mitigate those risks and monitoring the Company’s ongoing compliance.

Our Independence and Quality Control

We have complied with the Professional and Ethical Standard 1 *International Code of Ethics for Assurance Practitioners (including International Independence Standards) (New Zealand)* or other professional requirements, or requirements in law or regulation, that are at least as demanding, which include independence and other requirements founded on the fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

In accordance with the Professional and Ethical Standard 3 (Amended) *Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance Engagements* or other professional requirements, or requirements in law or regulation, that are at least as demanding, our firm 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 assurance over compliance with regulatory requirements of the Commerce Act 1986. In addition, certain partners and employees of our firm may deal with the Company on normal terms within the ordinary course of trading activities of the Company. The provision of these other services have not impaired our independence as auditor of the Company.



Assurance Practitioner's responsibilities

Our responsibility is to express an opinion on whether the Company has complied, in all material respects, with clause 11.5(e) and schedule 8(1)(b)(vi) and 8(1)(c) of the Determination are to express an opinion on whether:

- as far as appears from our examination, the information used in the preparation of the Annual Compliance Statement has been properly extracted from the Company's accounting and other records, sourced from its financial and non-financial systems; and
- the Annual Compliance Statement, for the assessment period ended 31 March 2023, has been prepared, in all material respects, in accordance with the requirements in clauses 11.5 and 11.6 of the Determination.

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 the Determination, in preparing the Annual Compliance Statement for the assessment period ended 31 March 2023. In relation to the wash-up amount set out in clause 8.6 of the Determination, our procedures included recalculation of the wash-up amount in accordance with schedule 1.6 of the Determination and assessing it against the amounts and disclosures contained on pages 3 to 5 and 12 to 16 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 6 to 11 and 17 to 29 of the Annual Compliance Statement.

An assurance engagement to report on the Company's compliance with the Determination 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 will continue in the future.

Use of Report

This report has been prepared for the Directors in accordance with Clause 11.5 (e) of 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 the Directors of the Company, as a body, or for any purpose other than that for which it was prepared.

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

Chartered Accountants
11 July 2023

Christchurch, New Zealand