

For the CPP Assessment Period ending 31 March 2023

# ANNUAL COMPLIANCE STATEMENT





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## 1. INTRODUCTION

### 1.1. CONTEXT

1. Aurora Energy is subject to price-quality regulation made under Part 4 of the Commerce Act 1986.
2. The Commerce Commission (**Commission**) regulates the maximum annual revenue Aurora Energy can earn from its customers and the minimum quality of service it must deliver.
3. For this CPP Assessment Period ending 31 March 2023, Aurora Energy is subject to the *Aurora Energy Limited Electricity Distribution Customised Price-Quality Path Determination 2021* (**Determination**).
4. Clause 11.4 of the Determination requires Aurora Energy to provide to the Commission an annual compliance statement in respect of the Wash-up Amount calculation, quality standards and quality incentives and transactions, no later than 5 months after the end of each CPP Assessment Period. This annual compliance statement (**Statement**) has been prepared pursuant to that clause for the CPP Assessment Period ending 31 March 2023.

### 1.2. DEFINITIONS

5. All capitalised terms used in this Statement have the meanings ascribed to them in the Determination or the *Electricity Distribution Services Input Methodology Determination 2021* (**IMs**). Accordingly, this Statement must be read in conjunction with the Determination and, where necessary, the IMs.

### 1.3. CONTENT OF STATEMENT

6. The content of this Statement is specified in the Determination. A matrix showing the relationship between the requirements set out in the Determination and the contents of this Statement can be found in Appendix A.

### 1.4. CERTIFICATION

7. This Statement was originally prepared and certified in accordance with clause 11.5 of the Determination on 29 August 2023. Following identification of an error in section 2.2 in 2024, Table 1 and Table 2 were corrected and a revised version of this Statement was certified in accordance with clause 11.5 of the Determination on 27 March 2024. A copy of the revised Director's Certificate can be found in Appendix B.

### 1.5. ASSURANCE REPORT

8. Audit NZ has prepared an assurance report that meets the requirements of schedule 8 of the Determination. A copy of that report can be found in Appendix C.

## 2. WASH-UP AMOUNT CALCULATION

### 2.1. STATEMENT OF COMPLIANCE

9. As demonstrated in section 2.2, Aurora Energy has complied with the requirements to calculate the Wash-up Amount in clause 8.6 of the Determination for the CPP Assessment Period ending 31 March 2023.

### 2.2. CALCULATION OF THE WASH-UP AMOUNT

10. Clause 8.6 of the Determination requires that Aurora Energy must calculate the Wash-up Amount for each CPP Assessment Period using the methodology specified in Schedule 1.5 of the Determination.

11. Table 1 demonstrates the calculation of the Wash-up Amount in accordance with the formula set out in Schedule 1.5 of the Determination. The three components of this calculation are described in more detail in sections 2.3 to 2.5 of this Statement.

Table 1: Wash-up amount calculation

Wash-up Amount for the 2023 CPP Assessment Period		
Term	Description	Value (\$000)
<b>Actual Allowable Revenue (AAR)</b>	Actual Net Allowable Revenue <i>plus</i> Actual Pass-through Costs and Recoverable Costs <i>plus</i> Revenue Wash-up Draw Down Amount.	144,828
<b>Actual Revenue (AR)</b>	Sum of Actual Revenue From Prices <i>plus</i> Other Regulated Income.	121,374
<b>Revenue Foregone (RV)</b>	Actual Net Allowable Revenue x (Revenue Reduction Percentage – 20%) when Revenue Reduction Percentage is greater than 20%, otherwise nil.	Nil
<b>Wash-up Amount</b>	$AAR - AR - RV$	23,453

### 2.3. CALCULATION OF ACTUAL ALLOWABLE REVENUE

12. Schedule 1.5 of the Determination defines Actual Allowable Revenue for the second to fifth CPP Assessment Periods, as—

Actual Net Allowable Revenue *plus* Actual Pass-through Costs and Recoverable Costs *plus* Revenue Wash-up Draw Down Amount

13. The calculation of the Actual Allowable Revenue for our second CPP Assessment Period is shown in Table 2.

Table 2: Actual Allowable Revenue for the 2023 CPP Assessment Period

Actual Allowable Revenue for the 2023 CPP Assessment Period		
Term	Description	Value (\$000)
<b>Actual Net Allowable Revenue (ANAR)</b>	Amount specified as Forecast Net Allowable Revenue for the second CPP Assessment Period.	105,472
<b>Actual Pass-through Costs</b>	Sum of all Pass-through Costs that were incurred or approved by the Commission in the CPP Assessment Period.	1,762
<b>Actual Recoverable Costs</b>	Sum of all Recoverable Costs that were incurred or approved by the Commission in the CPP Assessment Period, excluding any Revenue Wash-up Draw Down Amount.	38,880
<b>Revenue Wash-up Draw Down Amount</b>	The Revenue Wash-up Draw Down Amount is the Opening Wash-up Account Balance specified in schedule 1.6.	1,287
<b>Total Actual Allowable Revenue (AAR)</b>	Actual Net Allowable Revenue + Actual Pass-through Costs and Recoverable Costs + Revenue Wash-up Draw Down Amount	<b>144,828</b>

### 2.3.1. Actual Net Allowable Revenue

14. The Actual Net Allowable Revenue for the second to fifth CPP Assessment Periods means the amount calculated by—

Actual Net Allowable Revenue of the previous CPP Assessment Period x (1 +  $\Delta CPI_t$ ) x (1 - X)

where:

$\Delta CPI$  is the derived change in the CPI to be applied for the CPP Assessment Period, calculated in accordance with—

$$\Delta CPI = \frac{CPI_{Jun,t-1} + CPI_{Sep,t-1} + CPI_{Dec,t-1} + CPI_{Mar,t}}{CPI_{Jun,t-2} + CPI_{Sep,t-2} + CPI_{Dec,t-2} + CPI_{Mar,t-1}} - 1$$

where:

$CPI_{q,t-n}$  is the CPI for the quarter year ending q in the 12-month period n prior to year t;

t is the year in which the CPP Assessment Period ends; and

X is the annual rate of change, as specified in clause 8.2.

15. The calculation of Actual Net Allowable Revenue for our second CPP Assessment Period is shown in Table 3.

Table 3: Actual Net Allowable Revenue for the 2023 CPP Assessment Period

Actual Net Allowable Revenue for the 2023 CPP Assessment Period		
Term	Description	Value (\$000)
Actual Net Allowable Revenue of the previous CPP Assessment Period	Amount specified as Net Allowable Revenue for the first CPP Assessment Period.	103,663
$\Delta CPI_t$	$\Delta CPI_t$ is the derived change in the CPI to be applied for the CPP Assessment Period	7.1%
X	X is the annual rate of change, as specified in clause 8.2	5.0%
Actual Net Allowable Revenue	Actual Net Allowable Revenue of the previous CPP Assessment Period $\times (1 + \Delta CPI_t) \times (1 - X)$	105,472

### Actual Pass-through Costs and Recoverable Costs

16. Further information supporting Actual Pass-through costs And Recoverable Costs is included in Appendix D.

#### 2.3.2. Revenue Wash-up Draw Down Amount

17. The Revenue Wash-up Draw Down Amount is the Opening Wash-up Account Balance specified in Schedule 1.6.
18. The Opening Wash-up Account Balance means, for the second CPP Assessment Period, the Closing Wash-up Account Balance of the previous CPP Assessment Period.
19. The Closing Wash-up Account Balance is calculated by-
- $$(\text{Wash-up Amount for the previous CPP Assessment Period} - \text{Voluntary Undercharging Amount Foregone for the previous CPP Assessment Period}) \times (1 + 67^{\text{th}} \text{ Percentile Estimate of Post-tax WACC})^2$$
20. The Voluntary Undercharging Amount Foregone for each CPP Assessment Period is nil.
21. The Opening Wash-up Account Balance has been calculated in Table 9 of Aurora Energy's *Annual Price-Setting Compliance Statement 1 April 2022*.

### 2.4. ACTUAL REVENUE

22. Section 4.2 of the Determination defines Actual Revenue as the amount calculated in accordance with the formula in Table 4.

**Table 4: Actual Revenue for the 2023 CPP Assessment Period**

Actual Revenue for the 2023 CPP Assessment Period		
Term	Description	Value (\$000)
<b>Actual Revenue from Prices</b>	Actual prices for the CPP Assessment Period multiplied by actual quantities for the CPP Assessment Period.	123,153
<b>Other Regulated Income</b>	Other income associated with supply of Electricity Lines Services.	(1,778)
<b>Total Actual Revenue (AR)</b>	Sum of Actual Revenue From Prices plus Other Regulated Income	<b>121,374</b>

23. Further information supporting Actual Revenue From Prices is included in Appendix E.

## 2.5. REVENUE FOREGONE

24. Revenue Foregone means:

- Where the Revenue Reduction Percentage is greater than 20%, the ‘revenue foregone’ must be calculated in accordance with the formula:

Actual Net Allowable Revenue x (Revenue Reduction Percentage – 20%); and

- Where the Revenue Reduction Percentage is not greater than 20%, the ‘revenue foregone’ is nil.

25. Aurora Energy’s Revenue Reduction Percentage for the CPP Assessment Period is -1.1%, as demonstrated in Table 5.

26. Aurora Energy’s Revenue Foregone for the CPP Assessment Period is nil.

**Table 5: Revenue foregone for the 2023 CPP Assessment Period**

Revenue Foregone for the 2023 CPP Assessment Period		
Term	Description	Value (\$000)
<b>Actual Net Allowable Revenue (ANAR)</b>	Amount specified as Forecast Net Allowable Revenue for the second CPP Assessment Period.	105,472
<b>Actual Revenue From Prices</b>	Actual prices for the CPP Assessment Period multiplied by actual Quantities for the CPP Assessment Period	123,153
<b>Forecast Revenue From Prices</b>	Actual prices for the CPP Assessment Period multiplied by Forecast Quantities for the CPP Assessment Period	121,784
<b>Revenue Reduction Percentage (RRP)</b>	1 - (Actual Revenue From Prices / Forecast Revenue From Prices)	-1.1%
<b>Revenue Foregone (RV)</b>	Actual Net Allowable Revenue x (RRP- 20%) when RRP is greater than 20%, otherwise nil	<b>Nil</b>

### 3. QUALITY PATH

#### 3.1. PLANNED INTERRUPTIONS QUALITY STANDARD

- 27. Clause 9.1 of the Determination requires that Aurora Energy must comply with the planned interruptions reliability assessment cap specified in clause 9.2 of the Determination for the CPP Regulatory Period. Compliance with the quality standard will be assessed at the end of the CPP Regulatory Period.
- 28. For the purposes of this Statement, Table 6 and Table 7 demonstrate Aurora Energy’s Planned SAIDI Assessed Value and Planned SAIFI Assessed Value and the relevant limits.

**Table 6: Planned interruptions quality standard compliance for the 2023 CPP Assessment Period - SAIDI**

Planned interruptions quality standard for the 2023 CPP Assessment Period - SAIDI	
Sum of Planned SAIDI Assessed Values ≤ Planned Accumulated SAIDI Limit	
Planned Accumulated SAIDI Limit	979.80
Planned SAIDI Assessed Value for the first CPP Assessment Period	124.50
Planned SAIDI Assessed Value for the second CPP Assessment Period	110.34
Planned accumulated SAIDI	234.84

**Table 7: Planned interruptions quality standard compliance for the 2023 CPP Assessment Period - SAIFI**

Planned interruptions quality standard for the 2023 CPP Assessment Period - SAIFI	
Sum of Planned SAIFI Assessed Values ≤ Planned Accumulated SAIFI Limit	
Planned Accumulated SAIFI Limit	5.5385
Planned SAIFI Assessed Value for the first CPP Assessment Period	0.8271
Planned SAIFI Assessed Value for the second CPP Assessment Period	0.6022
Planned accumulated SAIFI	1.4293

- 29. Further information supporting Planned SAIDI and SAIFI Assessed Values is included in section 3.4.

#### 3.2. UNPLANNED INTERRUPTIONS QUALITY STANDARD

- 30. Aurora Energy has complied with the unplanned interruptions quality standard specified in clause 9.3 of the CPP Determination for the CPP Assessment Period ending 31 March 2023.
- 31. Clause 9.3 of the Determination requires that Aurora Energy must, in respect of each CPP Assessment Period, comply with the annual unplanned interruptions reliability assessment cap specified in clause 9.4, for that CPP Assessment Period.



- 32. Aurora Energy complies with the unplanned interruption quality standard as demonstrated in Table 8 and Table 9.

**Table 8: Unplanned interruptions quality standard compliance for the 2023 CPP Assessment Period - SAIDI**

Unplanned interruptions quality standard for the 2023 CPP Assessment Period - SAIDI	
Sum of Unplanned SAIDI Assessed Values ≤ Unplanned SAIDI Limit	
Unplanned SAIDI Limit	124.94
Unplanned SAIDI Assessed Value	106.49
Compliance result	Compliant

**Table 9: Unplanned interruptions quality standard compliance for the 2023 CPP Assessment Period - SAIFI**

Unplanned interruptions quality standard for the 2023 CPP Assessment Period - SAIFI	
Sum of Unplanned SAIFI Assessed Values ≤ Unplanned SAIFI Limit	
Unplanned SAIFI limit	2.0710
Unplanned SAIFI assessed value	1.7483
Compliance result	Compliant

- 33. Further information supporting Unplanned SAIDI and SAIFI Assessed Values is included in section 3.5 and Appendix F.

### 3.3. EXTREME EVENT STANDARD

- 34. Aurora Energy has complied with the extreme event quality standard specified in clause 9.5 of the Determination for the CPP Assessment Period ending 31 March 2023.
- 35. Clause 9.5 of the Determination requires that Aurora Energy must, in respect of each CPP Assessment Period, comply with the extreme event standard specified in clause 9.6 for that CPP Assessment Period. Compliance is demonstrated in Table 10.

**Table 10: Extreme Event quality standard compliance for the 2023 CPP Assessment Period - SAIDI**

Extreme Event quality standard for the 2023 CPP Assessment Period – SAIDI	
Unplanned SAIDI value > 120 minutes, and customer interruption minutes > six million during any 24-hour period, excluding unplanned interruptions from major external factors	
Number of extreme events	Compliance result
0	Compliant

### 3.4. PLANNED SAIDI AND SAIFI ASSESSED VALUES

36. Table 11 and Table 13 demonstrate Aurora Energy’s planned SAIDI and SAIFI Assessed Values for the CPP Assessment Period.

Table 11: Planned SAIDI Assessed Value for the 2023 CPP Assessment Period

Planned SAIDI Assessed Value for the 2023 CPP Assessment Period		
Term	Description	Value
Class B non-notified interruptions		4.33
Class B Notified Interruptions falling outside the Notified Interruption Window		15.53
SAIDI <sub>B</sub>	Sum of Class B non-notified interruptions	19.85
Class B Notified Interruptions falling inside the Notified Interruption Window		161.70
Class B Intended Interruptions Cancelled Without Notice		19.28
Class B Intended Interruptions Cancelled With Notice		0.00
SAIDI <sub>N</sub>	Sum of Class B Notified Interruptions	180.98
Planned SAIDI Assessed Value	SAIDI <sub>B</sub> + (SAIDI <sub>N</sub> / 2)	110.34

Table 12: Planned SAIFI Assessed Value for the 2023 CPP Assessment Period

Planned SAIFI Assessed Value for the 2023 CPP Assessment Period		
Term	Description	Value
Planned SAIFI Assessed Value	Sum of SAIFI Values for Class B Interruptions commencing within the CPP Assessment Period	0.6022

### 3.5. MAJOR EVENTS

#### 3.5.1. SAIDI and SAIFI boundary values

37. Aurora Energy’s SAIDI Unplanned Boundary Value and SAIFI Unplanned Boundary Value are set out in Table 13.

Table 13: SAIDI Unplanned Boundary Value and SAIFI Unplanned Boundary Value

Aurora Energy’s SAIDI Unplanned Boundary Value and SAIFI Unplanned Boundary Value	
Term	Value
SAIDI Unplanned Boundary Value	5.69
SAIFI Unplanned Boundary Value	0.0737

3.5.2. SAIDI Major Events

- 38. Aurora Energy experienced seven SAIDI Major Events on its network during the CPP Assessment Period. Table 14, sets out the start and end dates and times of those Major Events and the SAIDI values attributed to each.
- 39. Further information about each SAIDI Major Event is included in Appendix F.

Table 14: Unplanned SAIDI major events during the 2023 CPP Assessment Period

Unplanned SAIDI Major Events during the 2023 CPP Assessment Period			
Start	End	Pre-normalised unplanned SAIDI value	Normalised SAIDI value
08/07/2022 6:00 AM	09/07/2022 9:30 AM	5.77	0.71
01/08/2022 7:00 AM	02/08/2022 11:30 PM	7.05	0.73
04/08/2022 3:00 PM	06/08/2022 2:00 PM	10.11	1.64
05/10/2022 8:30 AM	07/10/2022 7:30 AM	8.90	0.25
29/11/2022 6:30 AM	30/11/2022 7:30 AM	5.96	0.24
21/02/2023 2:30 PM	23/02/2023 8:00 AM	7.66	1.12
20/03/2023 10:00 AM	22/03/2023 9:00 AM	11.04	1.76

3.5.3. SAIFI Major Events

- 40. Aurora Energy experienced six SAIFI Major Events on its network during the CPP Assessment Period. Table 15, sets out the start and end dates and times of those Major Events and the SAIFI values attributed to those Major Events.
- 41. Further information about each SAIFI Major Event is included in Appendix F.

Table 15: Unplanned SAIFI major events during the 2023 CPP Assessment Period

Unplanned SAIFI Major Events during the 2023 CPP Assessment Period			
Start	End	Pre-normalised unplanned SAIFI value	Normalised SAIFI value
04/08/2022 11:00 PM	06/08/2022 2:00 PM	0.1038	0.0233
05/10/2022 8:30 AM	07/10/2022 7:30 AM	0.1253	0.0031
02/11/2022 8:00 PM	04/11/2022 2:00 PM	0.1035	0.0123
08/12/2022 9:00 AM	10/12/2022 8:00 AM	0.1688	0.0133
21/02/2023 4:00 PM	23/02/2023 5:00 PM	0.2170	0.0203
20/03/2023 2:00 PM	22/03/2022 9:00 AM	0.1059	0.0215

### 3.6. MEASURING PLANNED AND UNPLANNED INTERRUPTIONS

42. Information about policies, procedures and calculations for measuring planned and unplanned interruptions during the CPP Assessment Period is set out in Appendix G.

### 3.7. DETAILS OF INTERRUPTIONS

43. Details of each:

- Class B Interruption during the CPP Regulatory Period; and
- Class C Interruption during the CPP Assessment Period

can be found alongside this Annual Compliance Statement at <https://www.auroraenergy.co.nz/disclosures/>.



## 4. QUALITY INCENTIVE ADJUSTMENT

44. Table 16, demonstrates the calculation of Aurora Energy’s Quality Incentive Adjustment for the CPP Assessment Period in accordance with the Determination.

Table 16: Quality Incentive Adjustment calculation for the 2023 CPP Assessment Period

Quality Incentive Adjustment calculation for the 2023 CPP Assessment Period		
Term	Description	Value (\$)
SAIDI planned adjustment	$(\text{SAIDI}_{\text{planned, target}} - \text{SAIDI}_{\text{planned, assessed}}) \times 0.5 \times \text{IR}$	(272,605)
SAIDI unplanned adjustment	$(\text{SAIDI}_{\text{unplanned, target}} - \text{SAIDI}_{\text{unplanned, assessed}}) \times \text{IR}$	(262,805)
Total adjustment	SAIDI planned adjustment + SAIDI unplanned adjustment	(535,410)
Revenue at risk	$0.02 \times \text{ANAR}$	2,109,440
Total penalty/reward		(535,410)
67th Percentile Estimate of Post-tax WACC		4.23%
Quality Incentive Adjustment		(581,664)

45. Table 17, sets out the inputs to the Quality Incentive Adjustment calculation.

Table 17: Quality Incentive Adjustment inputs for the 2023 CPP Assessment Period

Quality Incentive Adjustment inputs for the 2023 CPP Assessment Period		
Term	Units	Value
Planned interruptions		
SAIDI Planned Interruption Cap	minutes	195.96
SAIDI Planned Interruption Collar	minutes	0.00
SAIDI Planned Interruption Target	minutes	72.16
Planned SAIDI Assessed Value	minutes	110.34
Incentive Rate	\$	14,279
Actual Net Allowable Revenue (ANAR)	\$	105,472,000

## Quality Incentive Adjustment



Minimum of the Planned SAIDI Cap and assessed value	minutes	110.34
Planned SAIDI subject to incentive	minutes	(38.18)
Adjustment (IR x 0.5)	\$	7,140
SAIDI planned adjustment	\$	(272,605)
Unplanned interruptions		
SAIDI Unplanned Interruption Cap	minutes	124.94
SAIDI Unplanned Interruption Collar	minutes	0.00
SAIDI Unplanned Interruption Target	minutes	88.08
Unplanned SAIDI Assessed Value	minutes	106.49
Minimum of the Unplanned SAIDI Cap and assessed value	minutes	106.49
Unplanned SAIDI subject to incentive	minutes	(18.41)
Adjustment (IR)	\$	14,279
SAIDI unplanned adjustment	\$	(262,805)

## 5. MISCELLANEOUS STATEMENTS

### 5.1. AMALGAMATION, MERGER, MAJOR TRANSACTION

46. Clause 11.5(c) of the Determination requires Aurora Energy to include in this Statement copies of notifications made in accordance with clause 10.1 of the Determination. Aurora Energy has not notified the Commission that it has entered into an Amalgamation, Merger or Major Transaction, in the CPP Assessment Period ending 31 March 2023.
47. Aurora Energy has notified the Commission that it has entered into a Transfer in the CPP Assessment Period ending 31 March 2023.

### 5.2. TRANSFER

48. On 14 September 2022, Aurora Energy notified the Commission that Aurora Energy had entered into an agreement with an exempt electricity distribution business (EDB) that would result in a Transfer. A copy of the notification is included in Appendix H.
49. At the time of preparing this Statement, Aurora Energy was liaising with the Commerce Commission in relation to the requirements of clause 10 of the Determination that relate to a Transfer. If Aurora Energy is required to make any adjustments in accordance with clause 10.2 of the Determination, we will restate this section 5.

## Appendix A. COMPLIANCE MATRIX

This schedule demonstrates how this Statement complies with the Determination.

Determination Requirement	Determination Reference	Statement Reference
The annual compliance statement must:	Clause 11.5	
state whether Aurora has—	Clause 11.5(a)	
complied with the requirements to calculate the Wash-up Amount under clause 8.6 for the CPP Assessment Period; and	Clause 11.5(a)(i)	Section 2.1
complied with the quality standards in clause 9 for the CPP Assessment Period;	Clause 11.5(a)(ii)	Sections 3.1, 3.2, and 3.3
state the day on which the statement was prepared;	Clause 11.5(b)	Section 1.4
include copies of notifications made in accordance with clause 10.1;	Clause 11.5(c)	Section 5 and Appendix H
include a certificate in the form set out in Schedule 7, signed by at least one Director of Aurora; and	Clause 11.5(d)	Appendix B
be accompanied by an assurance report meeting the requirements in Schedule 8, in respect of all information contained in the ‘annual compliance statement’; and	Clause 11.5(e)	Appendix C
include any information reasonably necessary to demonstrate whether Aurora has complied with clause 8.6, clause 9, clauses 10.1-10.14, and Schedule 4, including:	Clause 11.5(f)	
<u>Wash-up Amount calculation (clause 8.6)</u>		
details of the Wash-up Amount calculation as specified in clause 8.6, together with supporting information for all components of the calculation;	Clause 11.5(f)(i)	Section 2, Appendix D and Appendix E
<u>Compliance with quality standards (clause 9) and quality incentive adjustment (Schedule 4)</u>		



Determination Requirement	Determination Reference	Statement Reference
actions taken to mitigate any non-compliance with clause 9 and Schedules 3.1-3.2 and to prevent similar non-compliance in future CPP Assessment Periods;	Clause 11.5(f)(ii)	N/A
the Planned SAIDI Assessed Value and Planned SAIFI Assessed Value for the CPP Assessment Period, and any supporting calculations (including those in Schedule 3.1);	Clause 11.5(f)(iii)	Sections 3.1 and 3.4
for the annual unplanned interruptions reliability assessment specified in clause 9.4, the Unplanned SAIDI Assessed Value, Unplanned SAIFI Assessed Value, Unplanned SAIDI Limit, Unplanned SAIFI Limit, SAIDI Unplanned Boundary Value, and SAIFI Unplanned Boundary Value for the CPP Assessment Period, and any supporting calculations (including those in Schedule 3.2);	Clause 11.5(f)(iv)	Sections 3.2, 3.5 and Appendix F
for the Quality Incentive Adjustment, SAIDI Planned Interruption Cap, SAIDI Unplanned Interruption Cap, SAIDI Planned Interruption Collar, SAIDI Unplanned Interruption Collar, SAIDI Planned Interruption Target, SAIDI Unplanned Interruption Target and Incentive Rate for the CPP Assessment Period, and any supporting calculations (including those in Schedule 4);	Clause 11.5(f)(v)	Section 4
a description of the policies and procedures which Aurora has used for capturing data and recording Class B Interruptions and Class C Interruptions, and for calculating Planned SAIDI Assessed Values, Unplanned SAIDI Assessed Values, Planned SAIFI Assessed Values, and Unplanned SAIFI Assessed Values for the CPP Assessment Period; and	Clause 11.5(f)(vi)	Appendix G
information relating to each SAIDI Major Event within the assessment period, including:	Clause 11.5(f)(vii)	
the Cause of the SAIDI Major Event;	Clause 11.5(f)(vii)(A)	
the start date (dd/mm/yyyy) of the SAIDI Major Event;	Clause 11.5(f)(vii)(B)	Appendix F
the start time (hh:mm am/pm) of the SAIDI Major Event;	Clause 11.5(f)(vii)(C)	
the end date (dd/mm/yyyy) of the SAIDI Major Event;	Clause 11.5(f)(vii)(D)	
the end time (hh:mm am/pm) of the SAIDI Major Event;	Clause 11.5(f)(vii)(E)	

Determination Requirement	Determination Reference	Statement Reference
the SAIDI Value of the SAIDI Major Event before any replacements under paragraph (2) of Schedule 3.2 occurred;	Clause 11.5(f)(vii)(F)	
the replaced SAIDI Value of the SAIDI Major Event in accordance with paragraph (2) of Schedule 3.2;	Clause 11.5(f)(vii)(G)	
the location of the SAIDI Major Event;	Clause 11.5(f)(vii)(H)	
the Main Equipment involved in the SAIDI Major Event;	Clause 11.5(f)(vii)(I)	
how Aurora responded to the SAIDI Major Event;	Clause 11.5(f)(vii)(J)	
any mitigating factors that may have prevented or minimised the SAIDI Major Event; and	Clause 11.5(f)(vii)(K)	
a description of any steps Aurora proposes to take to mitigate the risk of future similar SAIDI Major Events; and	Clause 11.5(f)(vii)(L)	
information relating to each SAIFI Major Event within the assessment period, including:	Clause 11.5(f)(viii)	
the Cause of the SAIFI Major Event;	Clause 11.5(f)(viii)(A)	
the start date (dd/mm/yyyy) of the SAIFI Major Event;	Clause 11.5(f)(viii)(B)	
the start time (hh:mm am/pm) of the SAIFI Major Event;	Clause 11.5(f)(viii)(C)	
the end date (dd/mm/yyyy) of the SAIFI Major Event;	Clause 11.5(f)(viii)(D)	Appendix F
the end time (hh:mm am/pm) of the SAIFI Major Event;	Clause 11.5(f)(viii)(E)	
the SAIFI Value of the SAIFI Major Event before any replacements under paragraph (3) of Schedule 3.2 occurred;	Clause 11.5(f)(viii)(F)	
the replaced SAIFI Value of the SAIFI Major Event in accordance with paragraph (3) of Schedule 3.2;	Clause 11.5(f)(viii)(G)	

Determination Requirement	Determination Reference	Statement Reference
the location of the SAIFI Major Event;	Clause 11.5(f)(viii)(H)	
the Main Equipment involved in the SAIFI Major Event;	Clause 11.5(f)(viii)(I)	
how Aurora responded to the SAIFI Major Event;	Clause 11.5(f)(viii)(J)	
any mitigating factors that may have prevented or minimised the SAIFI Major Event;	Clause 11.5(f)(viii)(K)	
a description of any steps Aurora proposes to take to mitigate the risk of future similar SAIFI Major Events; and	Clause 11.5(f)(viii)(L)	
for each Class B Interruption during the CPP Regulatory Period:	Clause 11.5(f)(ix)	
the start date (dd/mm/yyyy) of the Class B Interruption;	Clause 11.5(f)(ix)(A)	
the start time (hh:mm am/pm) of the Class B interruption;	Clause 11.5(f)(ix)(B)	
the end date (dd/mm/yyyy) of the Class B Interruption;	Clause 11.5(f)(ix)(C)	Section 3.7
the end time (hh:mm am/pm) of the Class B interruption;	Clause 11.5(f)(ix)(D)	
SAIDI Value of the Class B Interruption; and	Clause 11.5(f)(ix)(E)	
SAIFI Value of the Class B Interruption;	Clause 11.5(f)(ix)(F)	
for each Class C Interruption during the CPP Assessment Period:	Clause 11.5(f)(x)	
the start date (dd/mm/yyyy) of the Class C Interruption;	Clause 11.5(f)(x)(A)	
the start time (hh:mm am/pm) of the Class C interruption;	Clause 11.5(f)(x)(B)	Section 3.7
the end date (dd/mm/yyyy) of the Class C Interruption;	Clause 11.5(f)(x)(C)	
the end time (hh:mm am/pm) of the Class C interruption;	Clause 11.5(f)(x)(D)	

Determination Requirement	Determination Reference	Statement Reference
SAIDI Value of the Class C Interruption;	Clause 11.5(f)(x)(E)	
SAIFI Value of the Class C Interruption; and	Clause 11.5(f)(x)(F)	
the Cause;	Clause 11.5(f)(x)(G)	
<u>Transactions</u>		
all information and calculations required to be made under clauses 10.2- 10.14, including:	Clause 11.5(f)(xi)	
all adjusted measures made in accordance with clauses 10.2-10.14;	Clause 11.5(f)(xi)(A)	
any supporting information and calculations used to determine the adjusted measures made in accordance with clauses 10.2-10.14;	Clause 11.5(f)(xi)(B)	
details of the Wash-up Amount calculation for the period for the CPP Assessment Period commencing 1 April and ending on the day where a Transfer, Major Transaction, Amalgamation, or Merger has occurred, and any supporting information for all components of the calculation;	Clause 11.5(f)(xi)(C)	
the sum of the SAIDI Values for Class B Interruptions for the period in a CPP Assessment Period commencing 1 April and ending on the day where a Transfer, Major Transaction, Amalgamation, or Merger has occurred, and any supporting calculations;	Clause 11.5(f)(xi)(D)	Section 5.2
the sum of the SAIDI Values for Class C Interruptions for the period in a CPP Assessment Period commencing 1 April and ending on the day where a Transfer, Major Transaction, Amalgamation, or Merger has occurred, and any supporting calculations;	Clause 11.5(f)(xi)(E)	
the sum of the SAIFI Values for Class B Interruptions for the period in a CPP Assessment Period commencing 1 April and ending on the day where a Transfer, Major Transaction, Amalgamation, or Merger has occurred, and any supporting calculations; and	Clause 11.5(f)(xi)(F)	



Determination Requirement	Determination Reference	Statement Reference
the sum of the SAIFI Values for Class C Interruptions for the period in a CPP Assessment Period commencing 1 April and ending on the day where a Transfer, Major Transaction, Amalgamation, or Merger has occurred, and any supporting calculations.	Clause 11.5(f)(xi)(G)	

## Appendix B. DIRECTOR'S CERTIFICATE

Clause 11.5(d)

We, Stephen Richard Thompson and Janice Evelyn Fredric, being directors of Aurora Energy Limited certify that, having made all reasonable enquiry, to the best of our knowledge and belief, the attached annual compliance statement of Aurora Energy Limited, and related information, prepared for the purposes of the *Aurora Energy Limited Electricity Distribution Customised Price-Quality Path Determination 2021* has been prepared in accordance with all the relevant requirements.

A handwritten signature in black ink, appearing to read "S. R. Thompson".

Stephen Richard Thompson

A handwritten signature in black ink, appearing to read "J. E. Fredric".

Janice Evelyn Fredric

27 March 2024

Date

## Appendix C. ASSURANCE REPORT

[To be added on receipt]





## Appendix D. ACTUAL PASS-THROUGH AND RECOVERABLE COSTS AND PASS-THROUGH BALANCE

### PASS-THROUGH COSTS

Table 18: Actual and forecast pass-through costs for the 2023 CPP Assessment Period

Actual and forecast Pass-through Costs for the 2023 CPP Assessment Period				
Actual Pass-through Costs	Actual (\$000)	Forecast (\$000)	Forecast variance (\$000)	Explanation for variances
Local Authority rates	1,187	1,135	52	Final rates increases higher than forecast.
Commerce Act levies	280	284	(4)	In line with forecast.
Electricity Authority levies	232	284	(52)	Levy rate increase lower than forecast.
Utilities Disputes levies	62	73	(11)	Case related levies in RY23 were lower than prior years.
<b>Total actual pass-through costs</b>	<b>1,762</b>	<b>1,777</b>	<b>(14)</b>	

## RECOVERABLE COSTS

Table 19: Actual and forecast recoverable costs for the 2023 CPP Assessment Period

Actual and forecast recoverable costs for the 2023 CPP Assessment Period				
Actual recoverable costs	Actual (\$000)	Forecast (\$000)	Forecast variance (\$000)	Explanation for variances
Opex Incentive Amount	13,001	13,001	0	In line with forecast.
Capex Incentive Amount	(1,493)	(1,493)	0	In line with forecast.
Incremental Adjustment Term	-	-	-	
Transpower connection and interconnection costs - Dunedin	13,112	13,112	0	In line with forecast.
Transpower connection and interconnection costs - Central	3,584	3,584	(0)	In line with forecast.
Transpower connection and interconnection costs - Queenstown	5,964	5,964	0	In line with forecast.
Transpower new investment contract - Dunedin	45	45	0	In line with forecast.
Transpower new investment contract – Central Otago / Wanaka	475	475	0	In line with forecast.
Avoided transmission costs	-	-	-	
System operator services	-	-	-	
Distributed generation allowance	4,955	4,955	0	In line with forecast.
Claw-back	-	-	-	
Standard application fee for a CPP proposal	-	-	-	
Commerce Commission assessment fee for a CPP proposal	-	-	-	
Verifier fee under a CPP proposal	-	-	-	
Auditor's fee associated with a CPP proposal	-	-	-	
Audit and assurance report for a CPP proposal	-	-	-	
Catastrophic event allowance	-	-	-	
Extended reserves allowance	-	-	-	



Quality incentive adjustment	(12)	(12)	0	In line with forecast.
Capex wash-up	(785)	(785)	0	In line with forecast.
Transmission asset wash-up adjustment	-	-	-	
2013-15 NPV wash-up allowance	-	-	-	
Reconsideration event allowance	-	-	-	
Engineer fee associated with a proposal of quality standard variation	-	-	-	
Urgent Project Allowance	-	-	-	
Fire and Emergency New Zealand (FENZ) levies	34	36	(2)	Levy rate increase lower than forecast.
Innovation project allowance	-	-	-	
<b>Total actual recoverable costs</b>	<b>38,880</b>	<b>38,882</b>	<b>(2)</b>	

## Appendix E. ACTUAL REVENUE FROM PRICES

50. Aurora Energy's Forecast Revenue From Prices for the second CPP Assessment Period disclosed in Aurora Energy's Price-Setting Compliance Statement for the period 1 April 2022 to 31 March 2023 was \$121,792,565.
51. Table 20, shows the actual Prices and Quantities for Actual Revenue From Prices for the 2023 CPP Assessment Period and includes \$193 of revenue from wash-up billing of prior period Quantities. Those prior period Quantities were invoiced at the price applicable at the time of consumption.

Table 20: Composition of Actual Revenue From Prices for the 2023 CPP Assessment Period

Load Group	Charge Type	Charge Applied	Actual Quantities as at 31 March 2023	Distribution Price	Pass-through and Recoverable Price	Distribution Actual Revenue	Pass-through and Recoverable Actual Revenue	Total Actual Revenue for the year ending 31 March 2023
<b>Fixed charges - Dunedin</b>								
Residential 15	Number	Daily	17,883,494	\$ 0.3000	\$ -	\$ 5,365,048	\$ -	\$ 5,365,048
Residential 8	Number	Daily	201,152	\$ 0.0820	\$ -	\$ 16,489	\$ -	\$ 16,489
Unmetered Supply	Number	Daily	1,460	\$ 0.0569	\$ -	\$ 83	\$ -	\$ 83
L0	Number	Daily	36,963	\$ 0.4634	\$ 0.1437	\$ 17,132	\$ 5,308	\$ 22,439
LOA	Number	Daily	62,993	\$ 0.9621	\$ 0.3873	\$ 60,598	\$ 24,401	\$ 84,999
Load Group 1A	Number	Daily	149,708	\$ 0.0429	\$ -	\$ 6,427	\$ -	\$ 6,427
Load Group 1A	Total Capacity kVA	Daily	1,197,664	\$ 0.0334	\$ 0.0247	\$ 39,982	\$ 29,597	\$ 69,579
Load Group 1A	Total CPD kW	Daily	140,664	\$ 0.5288	\$ 0.2072	\$ 74,386	\$ 29,144	\$ 103,530
Load Group 1	Number	Daily	1,024,299	\$ 0.0429	\$ -	\$ 43,974	\$ -	\$ 43,974
Load Group 1	Total Capacity kVA	Daily	15,360,735	\$ 0.0200	\$ 0.0348	\$ 307,215	\$ 534,526	\$ 841,740
Load Group 1	Total CPD kW	Daily	2,322,571	\$ 0.5782	\$ 0.2221	\$ 1,342,917	\$ 515,836	\$ 1,858,753
Load Group 2	Number	Daily	1,152,719	\$ 0.0846	\$ -	\$ 97,492	\$ -	\$ 97,492
Load Group 2	Total Capacity kVA	Daily	58,950,808	\$ 0.0256	\$ 0.0308	\$ 1,509,204	\$ 1,815,603	\$ 3,324,807
Load Group 2	Total CPD kW	Daily	8,211,876	\$ 0.5979	\$ 0.2092	\$ 4,909,886	\$ 1,717,935	\$ 6,627,821
Load Group 3	Number	Daily	39,131	\$ 1.6088	\$ -	\$ 62,951	\$ -	\$ 62,951
Load Group 3	Total Capacity kVA	Daily	7,636,368	\$ 0.0496	\$ 0.0464	\$ 378,764	\$ 354,327	\$ 733,091
Load Group 3	Total KVA-KM	Daily	43,113,925	\$ 0.0011	\$ -	\$ 47,425	\$ -	\$ 47,425
Load Group 3	Total CPD kW	Daily	1,870,608	\$ 0.4800	\$ 0.1760	\$ 897,892	\$ 329,227	\$ 1,227,119
Load Group 3A	Number	Daily	33,556	\$ 1.6088	\$ -	\$ 53,982	\$ -	\$ 53,982
Load Group 3A	Total Capacity kVA	Daily	10,195,126	\$ 0.0224	\$ 0.0654	\$ 228,373	\$ 666,760	\$ 895,132
Load Group 3A	Total KVA-KM	Daily	55,104,589	\$ 0.0011	\$ -	\$ 60,615	\$ -	\$ 60,615
Load Group 3A	Total CPD kW	Daily	3,179,985	\$ 0.4918	\$ 0.2038	\$ 1,563,916	\$ 648,081	\$ 2,211,998
Load Group 4	Number	Daily	27,146	\$ 4.4262	\$ -	\$ 120,153	\$ -	\$ 120,153
Load Group 4	Total Capacity kVA	Daily	19,279,750	\$ 0.0041	\$ 0.0513	\$ 79,046	\$ 989,052	\$ 1,068,098
Load Group 4	Total KVA-KM	Daily	108,299,201	\$ 0.0011	\$ -	\$ 119,129	\$ -	\$ 119,129
Load Group 4	Total CPD kW	Daily	5,310,327	\$ 0.4082	\$ 0.1789	\$ 2,167,675	\$ 950,018	\$ 3,117,693
Load Group 5	Number	Daily	2,190	\$ 4.4262	\$ -	\$ 9,693	\$ -	\$ 9,693
Load Group 5	Total Capacity kVA	Daily	6,862,000	\$ 0.0041	\$ 0.0550	\$ 28,134	\$ 377,410	\$ 405,544
Load Group 5	Total KVA-KM	Daily	47,680,315	\$ 0.0011	\$ -	\$ 52,448	\$ -	\$ 52,448
Load Group 5	Total CPD kW	Daily	2,097,868	\$ 0.2705	\$ 0.1684	\$ 567,473	\$ 353,281	\$ 920,754
Other Charges	Other Charge (\$)	Annual	23,443	\$ 1.0000	\$ -	\$ 23,443	\$ -	\$ 23,443
Transformer Charges	Other Charge (\$)	Annual	649,500	\$ 1.0000	\$ -	\$ 454,650	\$ -	\$ 454,650
Street Lighting	Fixed	Daily	365	\$ 346.03	\$ 167.82	\$ 126,299	\$ 61,255	\$ 187,555
Street Lighting	Fixed	Daily	365	\$ 680.13	\$ 129.73	\$ 248,247	\$ 47,351	\$ 295,598
Non-Standard	Fixed	Annual	1	\$ 139,193	\$ -	\$ 139,193	\$ -	\$ 139,193
<b>Variable charges - Dunedin</b>								
Residential DN	kWh	Volume	20,445,127	\$ 0.0779	\$ 0.0091	\$ 1,592,676	\$ 186,051	\$ 1,778,727
Residential DN	kWh	Volume	24,836,609	\$ 0.0889	\$ 0.0868	\$ 2,207,974	\$ 2,155,819	\$ 4,363,793
Residential DN	kWh	Volume	1,723,919	\$ 0.0712	\$ 0.0030	\$ 122,744	\$ 5,171	\$ 127,915
Residential DN	kWh	Volume	1,792,965	\$ 0.0756	\$ 0.0812	\$ 135,548	\$ 145,589	\$ 281,137
Residential DN	kWh	Volume	1,748,749	\$ 0.0053	\$ -	\$ 9,268	\$ -	\$ 9,268
Residential DN	kWh	Volume	157,679,980	\$ 0.0384	\$ 0.0256	\$ 6,054,912	\$ 4,036,606	\$ 10,091,517
Residential DN	kWh	Volume	184,083,109	\$ 0.0569	\$ 0.0371	\$ 10,474,329	\$ 6,829,482	\$ 17,303,812
Residential DN	kWh	Volume	1,502,267	\$ 0.0199	\$ 0.0131	\$ 29,896	\$ 19,676	\$ 49,572
Residential DN	kWh	Volume	1,904,611	\$ 0.0053	\$ -	\$ 10,099	\$ -	\$ 10,099
Unmetered Supply DN	kWh	Volume	4,198	\$ 0.0203	\$ 0.0117	\$ 85	\$ 49	\$ 134
Residential DN	kWh	Volume	2,242,198	\$ 0.0245	\$ 0.0159	\$ 54,934	\$ 35,650	\$ 90,584
<b>Total Dunedin</b>						<b>\$ 41,912,802</b>	<b>\$ 22,863,205</b>	<b>\$ 64,776,007</b>



Fixed charges - Clyde/Cromwell															
Residential 15	Number	Daily	6,561,000	\$	0.3000	\$	-	\$	1,968,300	\$	-	\$	1,968,300		
Residential 8	Number	Daily	32,599	\$	0.0820	\$	-	\$	2,672	\$	-	\$	2,672		
L0	Number	Daily	39,811	\$	0.5564	\$	0.9948	\$	22,151	\$	39,607	\$	61,758		
LOA	Number	Daily	136,472	\$	1.0610	\$	2.0340	\$	144,795	\$	277,574	\$	422,369		
Load Group 1A	Number	Daily	120,744	\$	0.0392	\$	-	\$	4,750	\$	-	\$	4,750		
Load Group 1A	Total Capacity kVA	Daily	965,229	\$	0.0423	\$	0.0058	\$	40,824	\$	5,600	\$	46,424		
Load Group 1A	Total CPD kW	Daily	114,204	\$	0.6222	\$	0.0367	\$	71,056	\$	4,192	\$	75,248		
Load Group 1	Number	Daily	649,981	\$	0.0392	\$	-	\$	25,571	\$	-	\$	25,571		
Load Group 1	Total Capacity kVA	Daily	9,746,683	\$	0.0318	\$	0.0007	\$	309,866	\$	6,835	\$	316,701		
Load Group 1	Total CPD kW	Daily	1,404,256	\$	0.6799	\$	0.0020	\$	954,760	\$	2,804	\$	957,564		
Load Group 2	Number	Daily	765,471	\$	0.0792	\$	-	\$	60,734	\$	-	\$	60,734		
Load Group 2	Total Capacity kVA	Daily	38,903,722	\$	0.0532	\$	0.0185	\$	2,069,717	\$	719,663	\$	2,789,380		
Load Group 2	Total CPD kW	Daily	4,118,050	\$	0.5638	\$	0.1562	\$	2,321,757	\$	643,239	\$	2,964,996		
Load Group 3	Number	Daily	32,621	\$	1.6612	\$	-	\$	54,193	\$	-	\$	54,193		
Load Group 3	Total Capacity kVA	Daily	6,062,453	\$	0.0336	\$	0.0397	\$	203,700	\$	240,680	\$	444,380		
Load Group 3	Total KVA-KM	Daily	187,983,803	\$	0.0011	\$	-	\$	206,782	\$	-	\$	206,782		
Load Group 3	Total CPD kW	Daily	734,423	\$	0.8073	\$	0.2634	\$	592,900	\$	193,447	\$	786,347		
Load Group 3A	Number	Daily	20,426	\$	1.6612	\$	-	\$	33,933	\$	-	\$	33,933		
Load Group 3A	Total Capacity kVA	Daily	5,987,318	\$	0.0067	\$	0.0114	\$	40,114	\$	68,256	\$	108,370		
Load Group 3A	Total KVA-KM	Daily	179,621,489	\$	0.0011	\$	-	\$	197,584	\$	-	\$	197,584		
Load Group 3A	Total CPD kW	Daily	935,139	\$	0.9988	\$	0.0703	\$	934,017	\$	65,741	\$	999,757		
Load Group 4	Number	Daily	15,107	\$	4.4666	\$	-	\$	67,476	\$	-	\$	67,476		
Load Group 4	Total Capacity kVA	Daily	11,246,100	\$	0.0547	\$	0.0269	\$	615,162	\$	302,520	\$	917,682		
Load Group 4	Total KVA-KM	Daily	428,217,540	\$	0.0011	\$	-	\$	471,039	\$	-	\$	471,039		
Load Group 4	Total CPD kW	Daily	1,874,776	\$	0.6427	\$	0.1608	\$	1,204,918	\$	301,464	\$	1,506,382		
Load Group 5	Number	Daily	365	\$	4.4666	\$	-	\$	1,630	\$	-	\$	1,630		
Load Group 5	Total Capacity kVA	Daily	912,500	\$	0.0366	\$	0.0151	\$	33,398	\$	13,779	\$	47,176		
Load Group 5	Total KVA-KM	Daily	60,133,750	\$	0.0011	\$	-	\$	66,147	\$	-	\$	66,147		
Load Group 5	Total CPD kW	Daily	36,972	\$	0.7313	\$	0.3522	\$	27,038	\$	13,022	\$	40,059		
Other Charges	Other Charge (\$)	Annual	9,901	\$	1.0000	\$	-	\$	9,901	\$	-	\$	9,901		
Transformer Charges	Other Charge (\$)	Annual	282,750	\$	1.0000	\$	-	\$	197,925	\$	-	\$	197,925		
Non-Standard	Number	Annual	1	\$	462,171.00	\$	-	\$	462,171	\$	-	\$	462,171		
Non-Standard	Number	Annual	1	\$	29,317	\$	-	\$	29,317	\$	-	\$	29,317		
Variable charges - Clyde/Cromwell															
Residential CYD/CML	kWh	Volume	44,437,260	\$	0.0980	\$	0.0568	\$	4,354,851	\$	2,524,034	\$	6,878,885		
Residential CYD/CML	kWh	Volume	55,689,601	\$	0.1357	\$	0.0344	\$	7,557,075	\$	1,915,722	\$	9,472,798		
Residential CYD/CML	kWh	Volume	644,548	\$	0.0582	\$	0.0316	\$	37,514	\$	20,367	\$	57,881		
Residential CYD/CML	kWh	Volume	1,966,607	\$	0.0476	\$	0.0258	\$	93,611	\$	50,737	\$	144,348		
Residential CYD/CML	kWh	Volume	23,595,326	\$	0.0518	\$	0.0246	\$	1,222,242	\$	580,444	\$	1,802,686		
Residential CYD/CML	kWh	Volume	1,420,212	\$	0.0407	\$	-	\$	57,802	\$	-	\$	57,802		
Residential CYD/CML	kWh	Volume	186,022	\$	0.0715	\$	0.0386	\$	13,301	\$	7,180	\$	20,481		
Street Lighting kWh CYD/CML	kWh	Volume	913,605	\$	0.0417	\$	0.0383	\$	38,097	\$	34,991	\$	73,088		
Street Lighting Lamps CYD/CML	#lamps	Daily	1,634,829	\$	0.0305	\$	-	\$	49,862	\$	-	\$	49,862		
									<b>Total Clyde/Cromwell</b>	<b>\$</b>	<b>26,850,852</b>	<b>\$</b>	<b>8,031,897</b>	<b>\$</b>	<b>34,882,749</b>

Fixed charges - Queenstown													
Residential 15	Number	Daily	3,572,832	\$	0.3000	\$	-	\$	1,071,850	\$	-	\$	1,071,850
Residential 8	Number	Daily	39,776	\$	0.0820	\$	-	\$	3,261	\$	-	\$	3,261
Load Group 0	Number	Daily	34,559	\$	0.4122	\$	0.4738	\$	14,248	\$	16,374	\$	30,622
Load Group 0A	Number	Daily	84,874	\$	0.7467	\$	1.1259	\$	63,379	\$	95,557	\$	158,935
Load Group 1A	Number	Daily	60,926	\$	0.0389	\$	-	\$	2,377	\$	-	\$	2,377
Load Group 1A	Total Capacity kVA	Daily	486,864	\$	0.0295	\$	0.0139	\$	14,356	\$	6,773	\$	21,129
Load Group 1A	Total CPD kW	Daily	60,366	\$	0.4101	\$	0.1970	\$	24,755	\$	11,893	\$	36,648
Load Group 1	Number	Daily	309,123	\$	0.0389	\$	-	\$	12,059	\$	-	\$	12,059
Load Group 1	Total Capacity kVA	Daily	4,633,905	\$	0.0156	\$	0.0271	\$	72,322	\$	125,585	\$	197,907
Load Group 1	Total CPD kW	Daily	875,648	\$	0.4337	\$	0.2535	\$	379,765	\$	221,980	\$	601,745
Load Group 2	Number	Daily	594,510	\$	0.0589	\$	-	\$	35,083	\$	-	\$	35,083
Load Group 2	Total Capacity kVA	Daily	27,113,071	\$	0.0297	\$	0.0204	\$	805,259	\$	553,104	\$	1,358,363
Load Group 2	Total CPD kW	Daily	4,061,379	\$	0.4699	\$	0.2356	\$	1,908,442	\$	956,863	\$	2,865,305
Load Group 3	Number	Daily	10,238	\$	1.4537	\$	-	\$	14,882	\$	-	\$	14,882
Load Group 3	Total Capacity kVA	Daily	1,941,800	\$	0.1134	\$	0.0499	\$	220,201	\$	96,896	\$	317,097
Load Group 3	Total KVA-KM	Daily	29,452,618	\$	0.0011	\$	-	\$	32,398	\$	-	\$	32,398
Load Group 3	Total CPD kW	Daily	476,416	\$	0.4977	\$	0.0010	\$	237,112	\$	476	\$	237,589
Load Group 3A	Number	Daily	10,378	\$	1.4537	\$	-	\$	15,085	\$	-	\$	15,085
Load Group 3A	Total Capacity kVA	Daily	3,016,168	\$	0.1036	\$	0.0411	\$	312,475	\$	123,964	\$	436,439
Load Group 3A	Total KVA-KM	Daily	45,008,696	\$	0.0011	\$	-	\$	49,510	\$	-	\$	49,510
Load Group 3A	Total CPD kW	Daily	660,638	\$	0.5120	\$	0.0022	\$	338,247	\$	1,453	\$	339,700
Load Group 4	Number	Daily	8,210	\$	4.0721	\$	-	\$	33,432	\$	-	\$	33,432
Load Group 4	Total Capacity kVA	Daily	5,990,250	\$	0.0278	\$	0.0467	\$	166,529	\$	279,744	\$	446,273
Load Group 4	Total KVA-KM	Daily	69,803,226	\$	0.0011	\$	-	\$	76,784	\$	-	\$	76,784
Load Group 4	Total CPD kW	Daily	1,553,223	\$	0.2971	\$	0.2189	\$	461,462	\$	340,001	\$	801,463
Load Group 5	Number	Daily	-	\$	4.0721	\$	-	\$	-	\$	-	\$	-
Load Group 5	Total Capacity kVA	Daily	-	\$	0.0095	\$	0.0055	\$	-	\$	-	\$	-
Load Group 5	Total KVA-KM	Daily	-	\$	0.0014	\$	-	\$	-	\$	-	\$	-
Load Group 5	Total CPD kW	Daily	-	\$	0.2075	\$	0.2613	\$	-	\$	-	\$	-
Other Charges	Other Charge (\$)	Annual	-	1,512	\$	1.0000	\$	-	1,512	\$	-	\$	1,512
Transformer Charges	Other Charge (\$)	Annual	196,000	\$	1.0000	\$	-	\$	137,200	\$	-	\$	137,200
Non-Standard	Number	Annual	1	\$	28,807.00	\$	-	\$	28,807	\$	-	\$	28,807
Non-Standard	Number	Annual	1	\$	92,171.41	\$	114,141.73	\$	92,171	\$	114,142	\$	206,313
Variable charges - Queenstown													
Residential FKN	kWh	Volume	28,566,397	\$	0.0742	\$	0.0080	\$	2,119,625	\$	228,532	\$	2,348,158
Residential FKN	kWh	Volume	42,092,913	\$	0.0894	\$	0.0859	\$	3,763,107	\$	3,615,782	\$	7,378,888
Residential FKN	kWh	Volume	1,562,803	\$	0.0279	\$	0.0177	\$	43,605	\$	27,661	\$	71,266
Residential FKN	kWh	Volume	919,670	\$	0.0170	\$	0.0111	\$	15,636	\$	10,208	\$	25,843
Residential FKN	kWh	Volume	17,633,456	\$	0.0190	\$	0.0123	\$	335,039	\$	216,889	\$	551,928
Residential FKN	kWh	Volume	958,811	\$	0.0121	\$	-	\$	11,601	\$	-	\$	11,601
Residential FKN	kWh	Volume	254,883	\$	0.0428	\$	0.0271	\$	10,909	\$	6,907	\$	17,816
Street Lighting kWh FKN	kWh	Volume	690,111	\$	0.0126	\$	0.0431	\$	8,695	\$	29,744	\$	38,439
Street Lighting Lamps FKN	#lamps	Daily	1,057,173	\$	0.0357	\$	-	\$	37,741	\$	-	\$	37,741

Fixed charges - Queenstown Sub														
Residential 15	Number	Daily	488,773	\$	0.3000	\$	-	\$	146,632	\$	-	\$	146,632	
Residential 8	Number	Daily	1,095	\$	0.0820	\$	-	\$	90	\$	-	\$	90	
Load Group 0	Number	Daily	5,229	\$	0.4122	\$	0.4738	\$	2,156	\$	2,478	\$	4,633	
Load Group 0A	Number	Daily	4,885	\$	0.7467	\$	1.1259	\$	3,648	\$	5,500	\$	9,148	
Load Group 1A	Number	Daily	6,935	\$	0.0389	\$	-	\$	271	\$	-	\$	271	
Load Group 1A	Total Capacity kVA	Daily	55,480	\$	0.0295	\$	0.0139	\$	1,636	\$	772	\$	2,408	
Load Group 1A	Total CPD kW	Daily	6,421	\$	0.4101	\$	0.1970	\$	2,633	\$	1,265	\$	3,898	
Load Group 1	Number	Daily	76,752	\$	0.0389	\$	-	\$	2,994	\$	-	\$	2,994	
Load Group 1	Total Capacity kVA	Daily	1,151,280	\$	0.0156	\$	0.0271	\$	17,968	\$	31,201	\$	49,170	
Load Group 1	Total CPD kW	Daily	222,134	\$	0.4337	\$	0.2535	\$	96,339	\$	56,312	\$	152,651	
Load Group 2	Number	Daily	78,978	\$	0.0530	\$	-	\$	4,180	\$	-	\$	4,180	
Load Group 2	Total Capacity kVA	Daily	3,766,307	\$	0.0267	\$	0.0204	\$	100,553	\$	76,835	\$	177,388	
Load Group 2	Total CPD kW	Daily	588,554	\$	0.4229	\$	0.2356	\$	248,899	\$	138,664	\$	387,563	
Load Group 3	Number	Daily	3,285	\$	1.1993	\$	-	\$	3,940	\$	-	\$	3,940	
Load Group 3	Total Capacity kVA	Daily	642,765	\$	0.0936	\$	0.0499	\$	60,163	\$	32,074	\$	92,237	
Load Group 3	Total KVA-KM	Daily	2,344,763	\$	0.0011	\$	-	\$	2,579	\$	-	\$	2,579	
Load Group 3	Total CPD kW	Daily	208,960	\$	0.4106	\$	0.0010	\$	85,799	\$	209	\$	86,008	
Load Group 3A	Number	Daily	2,920	\$	1.1993	\$	-	\$	3,502	\$	-	\$	3,502	
Load Group 3A	Total Capacity kVA	Daily	931,480	\$	0.0855	\$	0.0411	\$	79,642	\$	38,284	\$	117,925	
Load Group 3A	Total KVA-KM	Daily	3,612,099	\$	0.0012	\$	-	\$	4,335	\$	-	\$	4,335	
Load Group 3A	Total CPD kW	Daily	225,755	\$	0.4224	\$	0.0032	\$	95,359	\$	722	\$	96,081	
Load Group 4	Number	Daily	3,285	\$	3.1559	\$	-	\$	10,367	\$	-	\$	10,367	
Load Group 4	Total Capacity kVA	Daily	1,916,250	\$	0.0215	\$	0.0467	\$	41,199	\$	89,489	\$	130,688	
Load Group 4	Total KVA-KM	Daily	3,809,691	\$	0.0009	\$	-	\$	3,429	\$	-	\$	3,429	
Load Group 4	Total CPD kW	Daily	751,605	\$	0.2303	\$	0.2189	\$	173,095	\$	164,526	\$	337,621	
Load Group 5	Number	Daily	365	\$	3.1559	\$	-	\$	1,152	\$	-	\$	1,152	
Load Group 5	Total Capacity kVA	Daily	912,500	\$	0.0074	\$	0.0055	\$	6,753	\$	5,019	\$	11,771	
Load Group 5	Total KVA-KM	Daily	1,095,000	\$	0.0011	\$	-	\$	1,205	\$	-	\$	1,205	
Load Group 5	Total CPD kW	Daily	195,640	\$	0.1608	\$	0.2613	\$	31,459	\$	51,121	\$	82,580	
Other Charges	Other Charge (\$)	Annual	-	\$	1.0000	\$	-	\$	-	\$	-	\$	-	
Transformer Charges	Other Charge (\$)	Annual	93,000	\$	1.0000	\$	-	\$	65,100	\$	-	\$	65,100	
Non-Standard	Number	Annual	1	\$	78,858.62	\$	53,885.59	\$	78,859	\$	53,886	\$	132,744	
Variable charges - Queenstown Sub														
Residential FKN Sub	kWh	Volume	3,241,126	\$	0.0742	\$	0.0080	\$	240,492	\$	25,929	\$	266,421	
Residential FKN Sub	kWh	Volume	4,846,398	\$	0.0894	\$	0.0859	\$	433,269	\$	416,305	\$	849,574	
Residential FKN Sub	kWh	Volume	628,240	\$	0.0279	\$	0.0177	\$	17,529	\$	11,119	\$	28,649	
Residential FKN Sub	kWh	Volume	197,510	\$	0.0170	\$	0.0111	\$	3,358	\$	2,192	\$	5,550	
Residential FKN Sub	kWh	Volume	2,389,620	\$	0.0190	\$	0.0123	\$	45,403	\$	29,392	\$	74,795	
Residential FKN Sub	kWh	Volume	91,474	\$	0.0121	\$	-	\$	1,107	\$	-	\$	1,107	
Residential FKN Sub	kWh	Volume	65,756	\$	0.0428	\$	0.0271	\$	2,814	\$	1,782	\$	4,596	
<b>Total Queenstown</b>									<b>\$</b>	<b>15,087,803</b>	<b>\$</b>	<b>8,315,603</b>	<b>\$</b>	<b>23,403,406</b>

Fixed charges - Te Anau															
Residential 15	Number	Daily	32,293	\$	0.3000	\$	-	\$	9,688	\$	-	\$	9,688		
Residential 8	Number	Daily	732	\$	0.0820	\$	-	\$	60	\$	-	\$	60		
Load Group 0	Number	Daily	-	\$	1.3747	\$	-	\$	-	\$	-	\$	-		
Load Group 0A	Number	Daily	488	\$	1.3747	\$	-	\$	671	\$	-	\$	671		
Load Group 1A	Number	Daily	244	\$	0.0333	\$	-	\$	8	\$	-	\$	8		
Load Group 1A	Total Capacity kVA	Daily	1,952	\$	0.0778	\$	-	\$	152	\$	-	\$	152		
Load Group 1A	Total CPD kW	Daily	244	\$	0.7294	\$	-	\$	178	\$	-	\$	178		
Load Group 1	Number	Daily	-	\$	0.0333	\$	-	\$	-	\$	-	\$	-		
Load Group 1	Total Capacity kVA	Daily	-	\$	0.0778	\$	-	\$	-	\$	-	\$	-		
Load Group 1	Total CPD kW	Daily	-	\$	0.7294	\$	-	\$	-	\$	-	\$	-		
Load Group 2	Number	Daily	976	\$	0.0701	\$	-	\$	68	\$	-	\$	68		
Load Group 2	Total Capacity kVA	Daily	27,084	\$	0.0653	\$	-	\$	1,769	\$	-	\$	1,769		
Load Group 2	Total CPD kW	Daily	1,340	\$	0.7049	\$	-	\$	945	\$	-	\$	945		
Variable charges - Te Anau															
Residential Heritage	kWh	Volume	153,998	\$	0.1084	\$	-	\$	16,693	\$	-	\$	16,693		
Residential Heritage	kWh	Volume	327,366	\$	0.1673	\$	-	\$	54,768	\$	-	\$	54,768		
Residential Heritage	kWh	Volume	-	\$	0.0397	\$	-	\$	-	\$	-	\$	-		
Residential Heritage	kWh	Volume	82,382	\$	0.0460	\$	-	\$	3,790	\$	-	\$	3,790		
Residential Heritage	kWh	Volume	14,291	\$	0.0236	\$	-	\$	337	\$	-	\$	337		
Street Lighting kWh	kWh	Volume	5,611	\$	0.0756	\$	-	\$	424	\$	-	\$	424		
Street Lighting Lamps	#lamps	Daily	19,764	\$	0.0396	\$	-	\$	783	\$	-	\$	783		
<b>Total Te Anau</b>								\$	<b>90,334</b>	\$	-	\$	<b>90,334</b>		
<b>Total Network</b>								<b>Total Network</b>		\$	<b>83,941,791</b>	\$	<b>39,210,706</b>	\$	<b>123,152,496</b>
								<b>Prior Year Wash-ups</b>		\$	<b>1,826</b>	\$	<b>1,633</b>	\$	<b>193</b>
<b>Total Revenue</b>								<b>Total Revenue</b>		\$	<b>83,943,617</b>	\$	<b>39,209,073</b>	\$	<b>123,152,690</b>



## Appendix F. MAJOR EVENTS

Details of the seven SAIDI Major Events and six SAIFI Major Events that Aurora Energy experienced on its network during the CPP Assessment Period are set out in the following tables, together with details of the normalisation of the SAIDI and SAIFI values associated with the Major Events.

### 8 JULY 2022 SAIDI MAJOR EVENT

Table 21: Details of 8 July 2022 SAIDI Major Event

Details of 8 July 2022 SAIDI Major Event	
<b>Cause</b>	Twelve outage events contributed to the SAIDI Major Event: <ul style="list-style-type: none"> <li>- Outage event 1 and 2: Human error</li> <li>- Outage event 3, 5, 8 and 10: Adverse weather</li> <li>- Outage event 4 and 6: Defective Equipment</li> <li>- Outage event 7 and 9: Vegetation</li> <li>- Outage event 11 and 12: Unknown</li> </ul>
<b>Start date</b>	8 July 2022
<b>Start time</b>	6:00 am
<b>End date</b>	9 July 2022
<b>End time</b>	9:30 am
<b>Raw SAIDI Value</b>	5.77 minutes
<b>Replaced SAIDI Value</b>	0.71 minutes
<b>Location of the Major Event</b>	Outage event 1, 11 and 12: East Taieri, Dunedin Outage event 2: Omakau, Central Otago Outage event 3, 8 and 10: Camp Hill, Central Otago Outage event 4 and 6: Alexandra, Central Otago Outage event 5: Wanaka, Central Otago Outage event 7: Outram, Dunedin Outage event 9: Port Chalmers, Dunedin
<b>Main Equipment involved in the Major Event</b>	Outage event 1, 2, 4 and 5: Distribution Other (Excluding LV); and Outage event 3, 6 to 12: Distribution Lines (Excluding LV).
<b>How Aurora Energy responded to the Major Event</b>	During this period an extremely high wind event was experienced across both the Central Otago and Dunedin regions and the majority of contributing outages are a result of this with the exception of two planned interruptions where consumers were not given more than 24 hours' notice and therefore have been treated as unplanned interruptions.  Field response was initiated for all the weather-related outages to patrol the feeders and determine if there was a legitimate cause for

	the trip and/or it was safe to reliven. If debris was located it was removed and damaged equipment was repaired.
<b>Any mitigating factors that may have prevented or minimised the Major Event</b>	We do not believe that there were any factors, other than that discussed below, that may have prevented or minimised the Major Event.
<b>Description of any steps Aurora Energy proposes to take to mitigate the risk of future similar Major Events</b>	<p>Aurora Energy will continue to review, with an aim to improving, its fault response times, so that customers are impacted by unplanned outage events for no longer than necessary.</p> <p>Aurora Energy is also undertaking a significant asset replacement and renewal programme, with an aim to improving the safety and reliability of supply to consumers in future years.</p> <p>Improvements are also being made in relation to our outage notification processes, further detail of which can be found in our Development Plan and Annual Delivery Reports on our website.</p>

## 1 AUGUST 2022 SAIDI MAJOR EVENT

Table 22: Details of 1 August 2022 SAIDI Major Event

Details of 1 August 2022 SAIDI Major Event	
<b>Cause</b>	<p>Twelve outage events contributed to the SAIDI Major Event:</p> <ul style="list-style-type: none"> <li>– Outage event 1, 3, 4, 8, 10 and 12: Defective equipment</li> <li>– Outage event 2 and 11: Human error</li> <li>– Outage event 5 and 6: Vegetation</li> <li>– Outage event 7 and 9: Adverse weather</li> </ul>
<b>Start date</b>	1 August 2022
<b>Start time</b>	7:00 am
<b>End date</b>	2 August 2022
<b>End time</b>	11:30 pm
<b>Raw SAIDI Value</b>	7.05 minutes
<b>Replaced SAIDI Value</b>	0.73 minutes
<b>Location of the Major Event</b>	<p>Outage event 1: Ettrick, Central Otago</p> <p>Outage event 2, 4, and 9: Halfway Bush, Dunedin</p> <p>Outage event 3 and 8: East Taieri, Dunedin</p> <p>Outage event 5: Queenstown, Queenstown</p> <p>Outage event 6: Fernhill, Queenstown</p> <p>Outage event 7: Cromwell, Central Otago</p> <p>Outage event 10: Roxburgh, Central Otago</p> <p>Outage event 11: North City, Dunedin</p>

	Outage event 12: Clyde-Earnscliffe, Central Otago
<b>Main Equipment involved in the Major Event</b>	Outage event 1, 2, 4, 10 and 11: Distribution Other (Excluding LV); and Outage event 3, 5 to 9, and 12: Distribution Lines (Excluding LV).
<b>How Aurora Energy responded to the Major Event</b>	<p>During this period an extremely high wind event was experienced across both the Central Otago and Dunedin regions and the majority of contributing outages are a result of this with the exception of two planned interruptions where consumers were not given more than 24 hours' notice and therefore have been treated as unplanned interruptions.</p> <p>Field response was initiated for all the weather-related outages to patrol the feeders and determine if there was a legitimate cause for the trip and/or it was safe to reliven. If debris was located it was removed and damaged equipment was repaired.</p>
<b>Any mitigating factors that may have prevented or minimised the Major Event</b>	We do not believe that there were any factors, other than that discussed below, that may have prevented or minimised the Major Event.
<b>Description of any steps Aurora Energy proposes to take to mitigate the risk of future similar Major Events</b>	<p>Aurora Energy will continue to review, with an aim to improving, its fault response times, so that customers are impacted by unplanned outage events for no longer than necessary.</p> <p>Aurora Energy is also undertaking a significant asset replacement and renewal programme, with an aim to improving the safety and reliability of supply to consumers in future years.</p> <p>Improvements are also being made in relation to our outage notification processes, further detail of which can be found in our Development Plan and Annual Delivery Reports on our website.</p>

## 4 AUGUST 2022 SAIDI MAJOR EVENT

Table 23: Details of 4 August 2022 SAIDI Major Event

Details of 4 August 2022 SAIDI Major Event	
<b>Cause</b>	<p>Fifteen outage events contributed to the SAIDI Major Event:</p> <ul style="list-style-type: none"> <li>– Outage event 1 to 5 and 9 to 11: Vegetation</li> <li>– Outage event 6 and 7: Adverse Weather</li> <li>– Outage event 8, 13, and 14: Defective equipment</li> <li>– Outage event 12: Cause Unknown</li> <li>– Outage event 15: Human error</li> </ul>
<b>Start date</b>	4 August 2022
<b>Start time</b>	3:00 pm
<b>End date</b>	6 August 2022
<b>End time</b>	2:00 pm

<b>Raw SAIDI Value</b>	10.11 minutes
<b>Replaced SAIDI Value</b>	1.64 minutes
<b>Location of the Major Event</b>	<p>Outage event 1: Arrowtown, Queenstown</p> <p>Outage event 2 and 6: Omakau, Central Otago</p> <p>Outage event 3, 10, 11 and 14: Wanaka, Central Otago</p> <p>Outage event 4: Queenstown, Queenstown</p> <p>Outage event 5 and 12: Alexandra, Central Otago</p> <p>Outage event 6: Omakau, Central Otago</p> <p>Outage event 7: Queensberry, Central Otago</p> <p>Outage event 8: Camp Hill, Central Otago</p> <p>Outage event 9: Clyde-Earnsclough, Central Otago</p> <p>Outage event 13: Berwick, Dunedin</p> <p>Outage event 15: Mosgiel, Dunedin</p>
<b>Main Equipment involved in the Major Event</b>	<p>Outage event 13 and 15 Distribution Other (Excluding LV); and</p> <p>Outage event 1 to 12 and 14: Distribution Lines (Excluding LV).</p>
<b>How Aurora Energy responded to the Major Event</b>	<p>During this period an extremely high wind event was experienced across both the Central Otago and Dunedin regions and the majority of contributing outages are a result of this with the exception of one planned interruption where consumers were not given more than 24 hours' notice and therefore has been treated as an unplanned interruption.</p> <p>Field response was initiated for all the weather-related outages to patrol the feeders and determine if there was a legitimate cause for the trip and/or it was safe to reliven. If debris was located it was removed and damaged equipment was repaired.</p>
<b>Any mitigating factors that may have prevented or minimised the Major Event</b>	<p>We do not believe that there were any factors, other than that discussed below, that may have prevented or minimised the Major Event.</p>
<b>Description of any steps Aurora Energy proposes to take to mitigate the risk of future similar Major Events</b>	<p>Aurora Energy will continue to review, with an aim to improving, its fault response times, so that customers are impacted by unplanned outage events for no longer than necessary.</p> <p>Aurora Energy is also undertaking a significant asset replacement and renewal programme, with an aim to improving the safety and reliability of supply to consumers in future years.</p> <p>Improvements are also being made in relation to our outage notification processes, further detail of which can be found in our Development Plan and Annual Delivery Reports on our website.</p>

## 5 OCTOBER 2022 SAIDI MAJOR EVENT

Table 24: Details of 5 October 2022 SAIDI Major Event

Details of 5 October 2022 SAIDI Major Event	
<b>Cause</b>	Three outage events contributed to the SAIDI Major Event: <ul style="list-style-type: none"> <li>– Outage event 1: Third party interference</li> <li>– Outage event 2 and 3: Defective equipment</li> </ul>
<b>Start date</b>	5 October 2022
<b>Start time</b>	8:30 am
<b>End date</b>	7 October 2022
<b>End time</b>	7:30 am
<b>Raw SAIDI Value</b>	8.90 minutes
<b>Replaced SAIDI Value</b>	0.25 minutes
<b>Location of the Major Event</b>	Outage event 1 and 3: Cromwell, Central Otago Outage event 2: Cromwell GXP, Central Otago
<b>Main Equipment involved in the Major Event</b>	Outage event 1 and 3: Distribution Lines (Excluding LV); and Outage event 2: Subtransmission Other.
<b>How Aurora Energy responded to the Major Event</b>	Outage event 1 and 3: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Damaged line found, repairs made, whereafter supply was restored.  Outage event 2: Trip occurred during switching for planned works. Too much load was placed onto the feeder inadvertently and due to the network configuration at that moment the circuit breaker tripped. Network was normalised and supply restored.
<b>Any mitigating factors that may have prevented or minimised the Major Event</b>	This Major Event was a combination of unrelated, unplanned outage events on Aurora Energy’s network during a rolling 24-hour period. As such, we do not believe that there were any mitigating factors in this instance that may have prevented or minimised the Major Event.
<b>Description of any steps Aurora Energy proposes to take to mitigate the risk of future similar Major Events</b>	Aurora Energy will continue to review, with an aim to improving, its fault response times, so that customers are impacted by unplanned outage events for no longer than necessary.  Aurora Energy is also undertaking a significant asset replacement and renewal programme, with an aim to improving the safety and reliability of supply to consumers in future years.  Following outage event 2 we conducted an ICAM investigation. Findings and recommendations were shared within the business and the recommendations considered.

## 29 NOVEMBER 2022 SAIDI MAJOR EVENT

Table 25: Details of 29 November 2022 SAIDI Major Event

Details of 29 November 2022 SAIDI Major Event	
<b>Cause</b>	Two outage events contributed to the SAIDI Major Event: <ul style="list-style-type: none"> <li>– Outage event 1: Human error; and</li> <li>– Outage event 2: Defective equipment.</li> </ul>
<b>Start date</b>	29 November 2022
<b>Start time</b>	6:30 am
<b>End date</b>	30 November 2022
<b>End time</b>	7:30 am
<b>Raw SAIDI Value</b>	5.96 minutes
<b>Replaced SAIDI Value</b>	0.24 minutes
<b>Location of the Major Event</b>	Outage event 1: Cromwell, Central Otago Outage event 2: Port Chalmers, Queenstown
<b>Main Equipment involved in the Major Event</b>	Outage event 1: Subtransmission Other; and Outage event 2: Distribution Lines (Excluding LV).
<b>How Aurora Energy responded to the Major Event</b>	Outage event 1: Planned interruption was not notified correctly and accordingly was recorded as a non-notified planned interruption and unplanned.  Outage event 2: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Damaged equipment found, repairs made, whereafter supply was restored.
<b>Any mitigating factors that may have prevented or minimised the Major Event</b>	This Major Event was a combination of unrelated, unplanned outage events on Aurora Energy’s network during a rolling 24-hour period. As such, we do not believe that there were any mitigating factors in this instance that may have prevented or minimised the Major Event.
<b>Description of any steps Aurora Energy proposes to take to mitigate the risk of future similar Major Events</b>	Aurora Energy will continue to review, with an aim to improving, its fault response times, so that customers are impacted by unplanned outage events for no longer than necessary.  Aurora Energy is also undertaking a significant asset replacement and renewal programme, with an aim to improving the safety and reliability of supply to consumers in future years.

## 21 FEBRUARY 2023 SAIDI MAJOR EVENT

Table 26: Details of 21 February 2023 SAIDI Major Event

Details of 21 February 2023 SAIDI Major Event	
<b>Cause</b>	Sixteen outage events contributed to the SAIDI Major Event: <ul style="list-style-type: none"> <li>– Outage event 1 to 4, 6, 9, 15 and 16: Defective equipment</li> <li>– Outage event 5, 7 and 10 to 14: Human error</li> <li>– Outage event 8: Cause unknown</li> </ul>
<b>Start date</b>	21 February 2023
<b>Start time</b>	2:30 pm
<b>End date</b>	23 February 2023
<b>End time</b>	8.00 am
<b>Raw SAIDI Value</b>	7.66 minutes
<b>Replaced SAIDI Value</b>	1.12 minutes
<b>Location of the Major Event</b>	Outage event 1: Corstorphine, Dunedin Outage event 2: East Taieri, Dunedin Outage event 3, 5, 6, 13, 15 and 16: Camp hill, Central Otago Outage event 4, 7, 10 to 12 and 14: Wanaka, Central Otago Outage event 8: Alexandra, Central Otago Outage event 9: Port Chalmers, Dunedin
<b>Main Equipment involved in the Major Event</b>	Outage event 1, 2, 6, 8 and 15: Distribution Lines (Excluding LV); Outage event 3 to 5, 7, 9, 10, 13, 14 and 16: Distribution Other; and Outage event 11 and 12: Subtransmission Other.
<b>How Aurora Energy responded to the Major Event</b>	Outage event 1: Feeder appropriately isolated for repairs to be made, whereafter supply was restored. Outage event 2: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Damaged line found, repairs made, whereafter supply was restored. Outage event 3 and 4: Trip took place during switching for planned works. Dublin Bay Regulators were not switched to manual and neutral tap before making the parallel between CH2004 and WK2752. This is required since circulating currents are generated due to the 2-can Open delta configuration of the regulators, causing the SEF trip, as per design. Network normalised. Outage event 7 and 14: Planned interruption was not notified correctly and accordingly was recorded as a non-notified planned interruption and unplanned. Outage event 6: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Broken crossarm found, repairs made, whereafter supply was restored.



Outage event 8: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. No fault found, whereafter supply was restored.

Outage event 9: Faulty transformer replaced, and supply was restored.

Outage event 5, 13, 10, 11 and 12: Supply was restored following Technician error made during protection testing.

Outage event 15: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Damaged equipment found, repairs made, whereafter supply was restored.

Outage event 16: Distribution transformer isolated by pulling the 11 kV HV fuses to do an offline tap change whereafter supply was restored.

**Any mitigating factors that may have prevented or minimised the Major Event**

This Major Event was a combination of unrelated, unplanned outage events on Aurora Energy’s network during a rolling 24-hour period. As such, we do not believe that there were any mitigating factors in this instance that may have prevented or minimised the Major Event.

**Description of any steps Aurora Energy proposes to take to mitigate the risk of future similar Major Events**

Aurora Energy will continue to review, with an aim to improving, its fault response times, so that customers are impacted by unplanned outage events for no longer than necessary.

Aurora Energy is also undertaking a significant asset replacement and renewal programme, with an aim to improving the safety and reliability of supply to consumers in future years.

Additional training is being implemented in relation to control room practices.

In relation to outage events 2 and 3, we have addressed the operation of airbreak switches and ensured that other regulator sites on the network were also checked for the possibility of a similar event occurring.

## 20 MARCH 2023 SAIDI MAJOR EVENT

Table 27: Details of 20 March 2023 SAIDI Major Event

Details of 20 March 2023 SAIDI Major Event	
<b>Cause</b>	<p>Twenty four outage events contributed to the SAIDI Major Event:</p> <ul style="list-style-type: none"> <li>– Outage event 1 to 5, 7, 11, 15 and 20 to 23: Defective equipment</li> <li>– Outage event 6, 8 to 10, 12 to 14, 16, 18 and 19: Vegetation</li> <li>– Outage event 17 and 24: Cause unknown</li> </ul>
<b>Start date</b>	20 March 2023
<b>Start time</b>	10:00 am
<b>End date</b>	22 March 2022

<b>End time</b>	9:00 am
<b>Raw SAIDI Value</b>	11.04 minutes
<b>Replaced SAIDI Value</b>	1.76 minutes
<b>Location of the Major Event</b>	<p>Outage event 1: Lauder Flat, Central Otago</p> <p>Outage event 2, 4 and 24: Roxburgh, Central Otago</p> <p>Outage event 3, 5 and 7: Ettrick, Central Otago</p> <p>Outage event 6, 15 and 21: Northeast Valley, Dunedin</p> <p>Outage event 8, 9 and 12: Alexandra, Central Otago</p> <p>Outage event 10 and 13: Outram, Dunedin</p> <p>Outage event 11: Kaikorai Valley, Dunedin</p> <p>Outage event 14, 16, 18 and 22: Port Chalmers, Dunedin</p> <p>Outage event 17 and 23: Anderson Bay, Dunedin</p> <p>Outage event 19: Omakau, Central Otago</p> <p>Outage event 20: East Taieri, Dunedin</p>
<b>Main Equipment involved in the Major Event</b>	<p>Outage event 1, 2, 7, 15 and 21: Distribution Other (Excluding LV);</p> <p>Outage event 6, 8 to 14, 16 to 20, 22 and 23: Distribution Lines (Excluding LV); and</p> <p>Outage event 3 to 5 and 24: Subtransmission Lines.</p>
<b>How Aurora Energy responded to the Major Event</b>	<p>Outage event 1, 2 and 7: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Blown fuse replaced whereafter supply was restored.</p> <p>Outage event 3 to 5: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Broken conductor found, repairs made, whereafter supply was restored.</p> <p>Outage event 17, 22 and 24: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. No fault found, whereafter supply was restored.</p> <p>Outage event 6, 8 to 14, 16, 18 and 19: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Fallen vegetation cleared, repairs made, whereafter supply was restored.</p> <p>Outage event 15: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Slack in conductor taken up, blown fuse replaced whereafter supply was restored.</p> <p>Outage event 17 and 23: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Damaged conductor repaired whereafter supply was restored.</p> <p>Outage event 20: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. No fault found, whereafter supply was restored.</p> <p>Outage event 21: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Damaged conductor tied back in whereafter supply was restored.</p>

<b>Any mitigating factors that may have prevented or minimised the Major Event</b>	We do not believe that there were any factors, other than that discussed below, that may have prevented or minimised the Major Event.
<b>Description of any steps Aurora Energy proposes to take to mitigate the risk of future similar Major Events</b>	<p>Aurora Energy will continue to review, with an aim to improving, its fault response times, so that customers are impacted by unplanned outage events for no longer than necessary.</p> <p>Aurora Energy is also undertaking a significant asset replacement and renewal programme, with an aim to improving the safety and reliability of supply to consumers in future years.</p> <p>Improvements are also being made in relation to our outage notification processes, further detail of which can be found in our Development Plan and Annual Delivery Reports on our website.</p>

## 4 AUGUST 2022 SAIFI MAJOR EVENT

Table 28: Details of 4 August 2022 SAIFI Major Event

Details of 4 August 2022 SAIFI Major Event	
<b>Cause</b>	<p>Fifteen outage events contributed to the SAIFI Major Event:</p> <ul style="list-style-type: none"> <li>– Outage event 1 to 5 and 9 to 11: Vegetation</li> <li>– Outage event 6 and 7: Adverse Weather</li> <li>– Outage event 8, 13, and 14: Defective equipment</li> <li>– Outage event 12: Cause unknown</li> <li>– Outage event 15: Human error</li> </ul>
<b>Start date</b>	4 August 2022
<b>Start time</b>	11:00 pm
<b>End date</b>	6 August 2022
<b>End time</b>	2:00 pm
<b>Raw SAIFI Value</b>	0.1038 interruptions
<b>Replace SAIFI Value</b>	0.0233 interruptions
<b>Location of the Major Event</b>	<p>Outage event 1: Arrowtown, Queenstown</p> <p>Outage event 2 and 6: Omakau, Central Otago</p> <p>Outage event 3, 10, 11 and 14: Wanaka, Central Otago</p> <p>Outage event 4: Queenstown, Queenstown</p> <p>Outage event 5 and 12: Alexandra, Central Otago</p> <p>Outage event 7: Queensberry, Central Otago</p> <p>Outage event 8: Camp Hill, Central Otago</p> <p>Outage event 9: Clyde-Earnsclough, Central Otago</p> <p>Outage event 13: Berwick, Dunedin</p> <p>Outage event 15: Mosgiel, Dunedin</p>

<b>Main Equipment involved in the Major Event</b>	Outage event 13 and 15 Distribution Other (Excluding LV); and Outage event 1 to 12 and 14: Distribution Lines (Excluding LV).
<b>How Aurora Energy responded to the Major Event</b>	<p>During this period an extremely high wind event was experienced across both the Central Otago and Dunedin regions and the majority of contributing outages are a result of this with the exception of one planned interruption where consumers were not given more than 24 hours' notice and therefore has been treated as an unplanned interruption.</p> <p>Field response was initiated for all the weather-related outages to patrol the feeders and determine if there was a legitimate cause for the trip and/or it was safe to reliven. If debris was located it was removed and damaged equipment was repaired.</p>
<b>Any mitigating factors that may have prevented or minimised the Major Event</b>	We do not believe that there were any factors, other than that discussed below, that may have prevented or minimised the Major Event.
<b>Description of any steps Aurora Energy proposes to take to mitigate the risk of future similar Major Events</b>	<p>Aurora Energy will continue to review, with an aim to improving, its fault response times, so that customers are impacted by unplanned outage events for no longer than necessary.</p> <p>Aurora Energy is also undertaking a significant asset replacement and renewal programme, with an aim to improving the safety and reliability of supply to consumers in future years.</p> <p>Improvements are also being made in relation to our outage notification processes, further detail of which can be found in our Development Plan and Annual Delivery Reports on our website.</p>

## 5 OCTOBER 2022 SAIFI MAJOR EVENT

Table 29: Details of 5 October 2022 SAIFI Major Event

Details of 5 October 2022 SAIFI Major Event	
<b>Cause</b>	Three outage events contributed to the SAIFI Major Event: <ul style="list-style-type: none"> <li>– Outage event 1: Third-party interference</li> <li>– Outage event 2 and 3: Defective equipment</li> </ul>
<b>Start date</b>	5 October 2022
<b>Start time</b>	8:30 am
<b>End date</b>	7 October 2022
<b>End time</b>	7:30 am
<b>Raw SAIFI Value</b>	0.1253 interruptions
<b>Replaced SAIFI Value</b>	0.0031 interruptions
<b>Location of the Major Event</b>	Outage event 1 and 3: Cromwell, Central Otago Outage event 2: Cromwell GXP, Central Otago

<b>Main Equipment involved in the Major Event</b>	Outage event 1 and 3: Distribution Lines (Excluding LV); and Outage event 2: Subtransmission Other.
<b>How Aurora Energy responded to the Major Event</b>	Outage event 1 and 3: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to live. Damaged line found, repairs made, whereafter supply was restored.  Outage event 2: Trip occurred during switching for planned works. Too much load was placed onto the feeder inadvertently and due to the network configuration at that moment the circuit breaker tripped. Network was normalised and supply restored.
<b>Any mitigating factors that may have prevented or minimised the Major Event</b>	This Major Event was a combination of unrelated, unplanned outage events on Aurora Energy’s network during a rolling 24-hour period. As such, we do not believe that there were any mitigating factors in this instance that may have prevented or minimised the Major Event.
<b>Description of any steps Aurora Energy proposes to take to mitigate the risk of future similar Major Events</b>	Aurora Energy will continue to review, with an aim to improving, its fault response times, so that customers are impacted by unplanned outage events for no longer than necessary.  Following outage event 2 we conducted a ICAM investigation. Findings and recommendations were shared within the business and the recommendations considered.

## 2 NOVEMBER 2022 SAIFI MAJOR EVENT

Table 30: Details of 2 November 2022 SAIFI Major Event

Details of 2 November 2022 SAIFI Major Event	
<b>Cause</b>	Three outage events contributed to the SAIFI Major Event: <ul style="list-style-type: none"> <li>– Outage event 1: Vegetation</li> <li>– Outage event 2: Lightning</li> <li>– Outage event 3: Defective equipment</li> </ul>
<b>Start date</b>	2 November 2022
<b>Start time</b>	8:00 pm
<b>End date</b>	4 November 2022
<b>End time</b>	2:00 pm
<b>Raw SAIFI Value</b>	0.1035 interruptions
<b>Replaced SAIFI Value</b>	0.0123 interruptions
<b>Location of the Major Event</b>	Outage event 1: Fernhill, Queenstown Outage event 2: Queenstown, Queenstown Outage event 3: Cromwell, Central Otago
<b>Main Equipment involved in the Major Event</b>	Outage event 1: Distribution Lines (Excluding LV) Outage event 2: Distribution Other (Excluding LV) Outage event 3: Distribution Cables (Excluding LV)

<b>How Aurora Energy responded to the Major Event</b>	<p>Outage event 1: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Damaged line found, tree cleared, repairs made, whereafter supply was restored.</p> <p>Outage event 2: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Damaged equipment found, repairs made, whereafter supply was restored.</p> <p>Outage event 3: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Damaged cable located, repairs made, whereafter supply was restored.</p>
<b>Any mitigating factors that may have prevented or minimised the Major Event</b>	<p>This Major Event was a combination of unrelated, unplanned outage events on Aurora Energy’s network during a rolling 24-hour period. As such, we do not believe that there were any mitigating factors in this instance that may have prevented or minimised the Major Event.</p>
<b>Description of any steps Aurora Energy proposes to take to mitigate the risk of future similar Major Events</b>	<p>Aurora Energy will continue to review, with an aim to improving, its fault response times, so that customers are impacted by unplanned outage events for no longer than necessary.</p> <p>Aurora Energy is also undertaking a significant asset replacement and renewal programme, with an aim to improving the safety and reliability of supply to consumers in future years.</p>

## 8 DECEMBER 2022 SAIFI MAJOR EVENT

Table 31: Details of 8 December 2022 SAIFI Major Event

Details of 8 December 2022 SAIFI Major Event	
<b>Cause</b>	<p>Nineteen outage events contributed to the SAIFI Major Event:</p> <ul style="list-style-type: none"> <li>– Outage event 1, 2, 4 to 12, 14, 15, 18 and 19: Cause unknown</li> <li>– Outage event 3, 13, 16 and 17: Defective equipment</li> </ul>
<b>Start date</b>	8 December 2022
<b>Start time</b>	9:00 am
<b>End date</b>	10 December 2022
<b>End time</b>	8:00 am
<b>Raw SAIFI Value</b>	0.1688 interruptions
<b>Replaced SAIFI Value</b>	0.0133 interruptions
<b>Location of the Major Event</b>	<p>Outage event 1: Remarkables, Queenstown</p> <p>Outage event 2 to 6, 9, 10, 13 and 14: Arrowtown, Queenstown</p> <p>Outage event 16 and 18: Lauder Flat, Central Otago</p> <p>Outage event 7 and 8: Dalefield, Queenstown</p> <p>Outage event 11: Coronet Peak Sub, Queenstown</p>

	<p>Outage event 12: Frankton GXP, Queenstown</p> <p>Outage event 15: Omakau, Central Otago</p> <p>Outage event 17: Alexandra, Central Otago</p> <p>Outage event 19: Cromwell GXP, Central Otago</p>
<b>Main Equipment involved in the Major Event</b>	<p>Outage event 1, 2, 4 to 9, 13, 15, 18 and 19: Distribution Lines (Excluding LV)</p> <p>Outage event 3 and 16: Distribution Other (Excluding LV)</p> <p>Outage event 10 to 12, 14 and 17: Subtransmission Lines</p>
<b>How Aurora Energy responded to the Major Event</b>	<p>Outage event 1, 2, 4 to 12: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. No fault found whereafter supply was restored.</p> <p>Outage event 3, 13, 14 and 17: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Damaged equipment found, repairs made, whereafter supply was restored.</p> <p>Outage event 15: High loading on an already installed generator necessitated the installation of additional generation. The outage was to install additional generation.</p> <p>Outage event 16: Critical High Alarms received for Lauder Flat Zone Substation. Offloading of HV feeder loads onto Omakau and Alexandra Zone Substations. Outage event 18: Outage was required to install a generator due to high load condition.</p> <p>Outage event 19: Cause of trip determined and ascertain whether safe to liven whereafter supply was restored.</p>
<b>Any mitigating factors that may have prevented or minimised the Major Event</b>	<p>This Major Event was a combination of unrelated, unplanned outage events on Aurora Energy’s network during a rolling 24-hour period. As such, we do not believe that there were any mitigating factors in this instance that may have prevented or minimised the Major Event.</p>
<b>Description of any steps Aurora Energy proposes to take to mitigate the risk of future similar Major Events</b>	<p>Aurora Energy will continue to review, with an aim to improving, its fault response times, so that customers are impacted by unplanned outage events for no longer than necessary.</p> <p>Aurora Energy is also undertaking a significant asset replacement and renewal programme, with an aim to improving the safety and reliability of supply to consumers in future years.</p> <p>In relation to outage event 7 a full ICAM investigation was conducted. Findings and recommendations have been shared with the business for consideration.</p>



## 21 FEBRUARY 2023 SAIFI MAJOR EVENT

Table 32: Details of 21 February 2023 SAIFI Major Event

Details of 21 February 2023 SAIFI Major Event	
<b>Cause</b>	<p>Eighteen outage events contributed to the SAIFI Major Event:</p> <ul style="list-style-type: none"> <li>– Outage event 1 to 4, 6, 9, 15 to 17: Defective equipment</li> <li>– Outage event 5, 7 and 10 to 14: Human error</li> <li>– Outage event 8 and 18: Cause unknown</li> </ul>
<b>Start date</b>	21 February 2023
<b>Start time</b>	4:00 pm
<b>End date</b>	23 February 2023
<b>End time</b>	5:00 pm
<b>Raw SAIFI Value</b>	0.2170 interruptions
<b>Replaced SAIFI Value</b>	0.0203 interruptions
<b>Location of the Major Event</b>	<p>Outage event 1: Corstorphine, Dunedin</p> <p>Outage event 2: East Taieri, Dunedin</p> <p>Outage event 3, 5, 6, 13, 15 and 16: Camp hill, Central Otago</p> <p>Outage event 4, 7, 10 to 12 and 14: Wanaka, Central Otago</p> <p>Outage event 8: Alexandra, Central Otago</p> <p>Outage event 9: Port Chalmers, Dunedin</p> <p>Outage event 17: Linidis Crossing, Central Otago</p> <p>Outage event 18: Ettrick, Central Otago</p>
<b>Main Equipment involved in the Major Event</b>	<p>Outage event 1, 2, 6, 8, 15 and 16: Distribution Lines (Excluding LV);</p> <p>Outage event 3 to 5, 7, 9, 10, 13, 14, 16, 17: Distribution Other; and</p> <p>Outage event 11 and 12: Subtransmission Other.</p>
<b>How Aurora Energy responded to the Major Event</b>	<p>Outage event 1: Feeder appropriately isolated for repairs to be made, whereafter supply was restored.</p> <p>Outage event 2: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to live. Damaged line found, repairs made, whereafter supply was restored.</p> <p>Outage event 3 and 4: Trip took place during switching for planned works. Dublin Bay Regulators were not switched to manual and neutral tap before making the parallel between CH2004 and WK2752. This is required since circulating currents are generated due to the 2-can open delta configuration of the regulators, causing the SEF trip, as per design. Network normalised.</p> <p>Outage event 7, and 14: Planned interruption was not notified correctly and accordingly was recorded as a non-notified planned interruption and unplanned.</p>

	<p>Outage event 6: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Broken crossarm found, repairs made, whereafter supply was restored.</p> <p>Outage event 8 and 18: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. No fault found, whereafter supply was restored.</p> <p>Outage event 9: Faulty transformer replaced, and supply was restored.</p> <p>Outage event 5, 13, 10, 11 and 12: Supply was restored following Technician error made during protection testing.</p> <p>Outage event 15: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Damaged equipment found, repairs made, whereafter supply was restored.</p> <p>Outage event 16: Distribution transformer isolated by pulling the 11 kV HV fuses to do an offline tap change whereafter supply was restored.</p> <p>Outage event 17: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Damaged equipment found, repairs made, whereafter supply was restored.</p>
<p><b>Any mitigating factors that may have prevented or minimised the Major Event</b></p>	<p>This Major Event was a combination of unrelated, unplanned outage events on Aurora Energy’s network during a rolling 24-hour period. As such, we do not believe that there were any mitigating factors in this instance that may have prevented or minimised the Major Event.</p>
<p><b>Description of any steps Aurora Energy proposes to take to mitigate the risk of future similar Major Events</b></p>	<p>Aurora Energy will continue to review, with an aim to improving, its fault response times, so that customers are impacted by unplanned outage events for no longer than necessary.</p> <p>Aurora Energy is also undertaking a significant asset replacement and renewal programme, with an aim to improving the safety and reliability of supply to consumers in future years.</p> <p>We have addressed the operation of airbreak switches and ensured that other regulator sites on the network were also checked for the possibility of a similar event occurring.</p> <p>Additional training is being implemented in relation to control room practices.</p> <p>Improvements are also being made in relation to our outage notification processes, further detail of which can be found in our Development Plan and Annual Delivery Reports on our website.</p>

## 20 MARCH 2023 SAIFI MAJOR EVENT

Table 33: Details of 20 March 2023 SAIFI Major Event

Details of 20 March 2023 SAIFI Major Event	
<b>Cause</b>	<p>Twenty two outage events contributed to the SAIFI Major Event:</p> <ul style="list-style-type: none"> <li>– Outage event 1, 2, 4, 5, 7, 11, 15 and 20 to 23: Defective equipment</li> <li>– Outage event 6, 8 to 10, 12 to 14, 16, 18, and 19: Vegetation</li> <li>– Outage event 3, 17 and 24: Cause unknown</li> </ul>
<b>Start date</b>	20 March 2023
<b>Start time</b>	2:00 pm
<b>End date</b>	22 March 2023
<b>End time</b>	9:00 am
<b>Raw SAIFI Value</b>	0.1059 interruptions
<b>Replaced SAIFI Value</b>	0.0215 interruptions
<b>Location of the Major Event</b>	<p>Outage event 1: Lauder Flat, Central Otago</p> <p>Outage event 2, 4 and 24: Roxburgh, Central Otago</p> <p>Outage event 3, 5 and 7: Ettrick, Central Otago</p> <p>Outage event 6, 15, and 21: Northeast Valley, Dunedin</p> <p>Outage event 8, 9 and 12: Alexandra, Central Otago</p> <p>Outage event 10 and 13: Outram, Dunedin</p> <p>Outage event 11: Kaikorai Valley, Dunedin</p> <p>Outage event 14, 16, 18 and 22: Port Chalmers, Dunedin</p> <p>Outage event 17 and 23: Anderson Bay, Dunedin</p> <p>Outage event 19: Omakau, Central Otago</p> <p>Outage event 20: East Taieri, Dunedin</p>
<b>Main Equipment involved in the Major Event</b>	<p>Outage event 1, 2, 7, 15 and 21: Distribution Lines (Excluding LV);</p> <p>Outage event 6, 8, to 14, 16 to 20, 22 and 23: Distribution Other (Excluding LV); and</p> <p>Outage event 3 to 5 and 24: Subtransmission Lines.</p>
<b>How Aurora Energy responded to the Major Event</b>	<p>Outage event 1, 2 and 7: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Blown fuse replaced whereafter supply was restored.</p> <p>Outage event 3 to 5: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Broken conductor found, repairs made, whereafter supply was restored.</p> <p>Outage event 17, 22 and 24: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. No fault found, whereafter supply was restored.</p> <p>Outage event 6, 8 to 14, 16, 18 and 19: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether</p>

	<p>safe to liven. Fallen vegetation cleared, repairs made, whereafter supply was restored.</p> <p>Outage event 15: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Slack in conductor taken up, blown fuse replaced whereafter supply was restored.</p> <p>Outage event 17 and 23: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Damaged conductor repaired whereafter supply was restored.</p> <p>Outage event 20: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Damaged tie wire found and repaired whereafter supply was restored.</p> <p>Outage event 21: Initiated field response to patrol the feeder to determine cause of trip and ascertain whether safe to liven. Damaged conductor tied back in whereafter supply was restored.</p>
<p><b>Any mitigating factors that may have prevented or minimised the Major Event</b></p>	<p>This Major Event was a combination of unrelated, unplanned outage events on Aurora Energy’s network during a rolling 24-hour period. As such, we do not believe that there were any mitigating factors in this instance that may have prevented or minimised the Major Event.</p>
<p><b>Description of any steps Aurora Energy proposes to take to mitigate the risk of future similar Major Events</b></p>	<p>Aurora Energy will continue to review, with an aim to improving, its fault response times, so that customers are impacted by unplanned outage events for no longer than necessary.</p> <p>Aurora Energy is also undertaking a significant asset replacement and renewal programme, with an aim to improving the safety and reliability of supply to consumers in future years.</p>

## NORMALISATION OF RY23 MAJOR EVENTS

Table 34: Normalisation of RY23 SAIDI Major Events

Normalisation of RY23 SAIDI Major Events												
Aurora Energy's SAIDI Unplanned Boundary Value												5.69
1/48th of the SAIDI Unplanned Boundary Value	8 July 2022 Major Event			1 August 2022 Major Event			4 August 2022 Major Event			5 October 2022 Major Event		
	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour
0.1185	8/07/2022 6:00	0.0000	0.0000	1/08/2022 7:00	0.0000	0.0000	4/08/2022 15:00	0.0000	0.0000	5/10/2022 8:00	0.0000	0.0000
0.1185	8/07/2022 6:30	0.0000	0.0000	1/08/2022 7:30	0.0000	0.0000	4/08/2022 15:30	0.0000	0.0000	5/10/2022 8:30	0.0000	0.0000
0.1185	8/07/2022 7:00	0.0000	0.0000	1/08/2022 8:00	0.0048	0.0048	4/08/2022 16:00	0.0000	0.0000	5/10/2022 9:00	0.0000	0.0000
0.1185	8/07/2022 7:30	0.0000	0.0000	1/08/2022 8:30	0.0000	0.0000	4/08/2022 16:30	0.0000	0.0000	5/10/2022 9:30	0.0000	0.0000
0.1185	8/07/2022 8:00	0.0000	0.0000	1/08/2022 9:00	0.0000	0.0000	4/08/2022 17:00	0.0000	0.0000	5/10/2022 10:00	0.0000	0.0000
0.1185	8/07/2022 8:30	0.0000	0.0000	1/08/2022 9:30	0.0000	0.0000	4/08/2022 17:30	0.0000	0.0000	5/10/2022 10:30	0.0000	0.0000
0.1185	8/07/2022 9:00	0.0047	0.0047	1/08/2022 10:00	0.0000	0.0000	4/08/2022 18:00	0.0000	0.0000	5/10/2022 11:00	0.0000	0.0000
0.1185	8/07/2022 9:30	0.0000	0.0000	1/08/2022 10:30	0.0000	0.0000	4/08/2022 18:30	0.0000	0.0000	5/10/2022 11:30	0.0000	0.0000
0.1185	8/07/2022 10:00	2.9607	0.1185	1/08/2022 11:00	0.0000	0.0000	4/08/2022 19:00	0.0000	0.0000	5/10/2022 12:00	0.0000	0.0000
0.1185	8/07/2022 10:30	0.0000	0.0000	1/08/2022 11:30	0.0000	0.0000	4/08/2022 19:30	0.0000	0.0000	5/10/2022 12:30	0.0000	0.0000
0.1185	8/07/2022 11:00	0.0000	0.0000	1/08/2022 12:00	0.0000	0.0000	4/08/2022 20:00	0.0000	0.0000	5/10/2022 13:00	0.0000	0.0000
0.1185	8/07/2022 11:30	0.0000	0.0000	1/08/2022 12:30	0.0000	0.0000	4/08/2022 20:30	0.0000	0.0000	5/10/2022 13:30	0.0000	0.0000
0.1185	8/07/2022 12:00	0.0000	0.0000	1/08/2022 13:00	0.0000	0.0000	4/08/2022 21:00	0.0000	0.0000	5/10/2022 14:00	0.0000	0.0000
0.1185	8/07/2022 12:30	0.0679	0.0679	1/08/2022 13:30	0.0000	0.0000	4/08/2022 21:30	0.0000	0.0000	5/10/2022 14:30	0.0000	0.0000



Normalisation of RY23 SAIDI Major Events

Aurora Energy's SAIDI Unplanned Boundary Value													5.69
1/48th of the SAIDI Unplanned Boundary Value	8 July 2022 Major Event			1 August 2022 Major Event			4 August 2022 Major Event			5 October 2022 Major Event			
	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	
0.1185	8/07/2022 13:00	0.4413	0.1185	1/08/2022 14:00	0.0000	0.0000	4/08/2022 22:00	0.0000	0.0000	5/10/2022 15:00	0.0000	0.0000	
0.1185	8/07/2022 13:30	0.0000	0.0000	1/08/2022 14:30	0.4472	0.1185	4/08/2022 22:30	0.0000	0.0000	5/10/2022 15:30	0.0000	0.0000	
0.1185	8/07/2022 14:00	0.1360	0.1185	1/08/2022 15:00	0.0000	0.0000	4/08/2022 23:00	0.0000	0.0000	5/10/2022 16:00	0.0000	0.0000	
0.1185	8/07/2022 14:30	1.2028	0.1185	1/08/2022 15:30	0.0000	0.0000	4/08/2022 23:30	0.0000	0.0000	5/10/2022 16:30	0.0000	0.0000	
0.1185	8/07/2022 15:00	0.0000	0.0000	1/08/2022 16:00	0.0000	0.0000	5/08/2022 0:00	0.0000	0.0000	5/10/2022 17:00	0.0000	0.0000	
0.1185	8/07/2022 15:30	0.0000	0.0000	1/08/2022 16:30	0.0133	0.0133	5/08/2022 0:30	0.0000	0.0000	5/10/2022 17:30	0.0000	0.0000	
0.1185	8/07/2022 16:00	0.0000	0.0000	1/08/2022 17:00	0.0000	0.0000	5/08/2022 1:00	0.0000	0.0000	5/10/2022 18:00	0.0000	0.0000	
0.1185	8/07/2022 16:30	0.0000	0.0000	1/08/2022 17:30	0.0000	0.0000	5/08/2022 1:30	0.0000	0.0000	5/10/2022 18:30	0.0000	0.0000	
0.1185	8/07/2022 17:00	0.0056	0.0056	1/08/2022 18:00	0.0000	0.0000	5/08/2022 2:00	0.0000	0.0000	5/10/2022 19:00	0.0000	0.0000	
0.1185	8/07/2022 17:30	0.0161	0.0161	1/08/2022 18:30	0.0000	0.0000	5/08/2022 2:30	0.0000	0.0000	5/10/2022 19:30	0.0000	0.0000	
0.1185	8/07/2022 18:00	0.0242	0.0242	1/08/2022 19:00	0.0000	0.0000	5/08/2022 3:00	0.0000	0.0000	5/10/2022 20:00	0.0000	0.0000	
0.1185	8/07/2022 18:30	0.0000	0.0000	1/08/2022 19:30	0.0000	0.0000	5/08/2022 3:30	0.0000	0.0000	5/10/2022 20:30	0.0000	0.0000	
0.1185	8/07/2022 19:00	0.0013	0.0013	1/08/2022 20:00	0.0000	0.0000	5/08/2022 4:00	0.0000	0.0000	5/10/2022 21:00	0.0000	0.0000	
0.1185	8/07/2022 19:30	0.0000	0.0000	1/08/2022 20:30	0.0000	0.0000	5/08/2022 4:30	0.4180	0.1185	5/10/2022 21:30	0.0000	0.0000	
0.1185	8/07/2022 20:00	0.0000	0.0000	1/08/2022 21:00	0.0000	0.0000	5/08/2022 5:00	0.0000	0.0000	5/10/2022 22:00	0.0000	0.0000	
0.1185	8/07/2022 20:30	0.0000	0.0000	1/08/2022 21:30	0.0000	0.0000	5/08/2022 5:30	0.1824	0.1185	5/10/2022 22:30	0.0000	0.0000	
0.1185	8/07/2022 21:00	0.0000	0.0000	1/08/2022 22:00	0.0000	0.0000	5/08/2022 6:00	0.0000	0.0000	5/10/2022 23:00	0.0000	0.0000	
0.1185	8/07/2022 21:30	0.0000	0.0000	1/08/2022 22:30	0.0000	0.0000	5/08/2022 6:30	0.3153	0.1185	5/10/2022 23:30	0.0000	0.0000	



Normalisation of RY23 SAIDI Major Events

Aurora Energy's SAIDI Unplanned Boundary Value 5.69

1/48th of the SAIDI Unplanned Boundary Value	8 July 2022 Major Event			1 August 2022 Major Event			4 August 2022 Major Event			5 October 2022 Major Event		
	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour
0.1185	8/07/2022 22:00	0.0000	0.0000	1/08/2022 23:00	0.0000	0.0000	5/08/2022 7:00	0.0000	0.0000	6/10/2022 0:00	0.0000	0.0000
0.1185	8/07/2022 22:30	0.0000	0.0000	1/08/2022 23:30	0.0000	0.0000	5/08/2022 7:30	0.0000	0.0000	6/10/2022 0:30	0.0000	0.0000
0.1185	8/07/2022 23:00	0.0000	0.0000	2/08/2022 0:00	4.3810	0.1185	5/08/2022 8:00	0.0000	0.0000	6/10/2022 1:00	0.0000	0.0000
0.1185	8/07/2022 23:30	0.0000	0.0000	2/08/2022 0:30	0.0000	0.0000	5/08/2022 8:30	0.0000	0.0000	6/10/2022 1:30	1.9553	0.1185
0.1185	9/07/2022 0:00	0.0000	0.0000	2/08/2022 1:00	0.0000	0.0000	5/08/2022 9:00	0.0000	0.0000	6/10/2022 2:00	0.0000	0.0000
0.1185	9/07/2022 0:30	0.0000	0.0000	2/08/2022 1:30	0.0000	0.0000	5/08/2022 9:30	0.0000	0.0000	6/10/2022 2:30	0.0000	0.0000
0.1185	9/07/2022 1:00	0.0000	0.0000	2/08/2022 2:00	0.0000	0.0000	5/08/2022 10:00	0.0000	0.0000	6/10/2022 3:00	0.0000	0.0000
0.1185	9/07/2022 1:30	0.0000	0.0000	2/08/2022 2:30	0.0000	0.0000	5/08/2022 10:30	0.0000	0.0000	6/10/2022 3:30	0.0000	0.0000
0.1185	9/07/2022 2:00	0.0000	0.0000	2/08/2022 3:00	0.0000	0.0000	5/08/2022 11:00	0.0000	0.0000	6/10/2022 4:00	0.0000	0.0000
0.1185	9/07/2022 2:30	0.0000	0.0000	2/08/2022 3:30	0.0000	0.0000	5/08/2022 11:30	0.0000	0.0000	6/10/2022 4:30	0.0000	0.0000
0.1185	9/07/2022 3:00	0.0000	0.0000	2/08/2022 4:00	0.0000	0.0000	5/08/2022 12:00	0.0000	0.0000	6/10/2022 5:00	0.0000	0.0000
0.1185	9/07/2022 3:30	0.0000	0.0000	2/08/2022 4:30	0.0000	0.0000	5/08/2022 12:30	0.0000	0.0000	6/10/2022 5:30	0.0000	0.0000
0.1185	9/07/2022 4:00	0.0000	0.0000	2/08/2022 5:00	0.7379	0.1185	5/08/2022 13:00	0.1569	0.1185	6/10/2022 6:00	0.0000	0.0000
0.1185	9/07/2022 4:30	0.0000	0.0000	2/08/2022 5:30	0.0000	0.0000	5/08/2022 13:30	0.0000	0.0000	6/10/2022 6:30	0.0000	0.0000
0.1185	9/07/2022 5:00	0.0000	0.0000	2/08/2022 6:00	0.0000	0.0000	5/08/2022 14:00	0.4675	0.1185	6/10/2022 7:00	0.0000	0.0000
0.1185	9/07/2022 5:30	0.9071	0.1185	2/08/2022 6:30	0.8835	0.1185	5/08/2022 14:30	4.7134	0.1185	6/10/2022 7:30	6.9352	0.1185
0.1185	9/07/2022 6:00	0.0000	0.0000	2/08/2022 7:00	0.0000	0.0000	5/08/2022 15:00	0.3523	0.1185	6/10/2022 8:00	0.0000	0.0000
0.1185	9/07/2022 6:30	0.0000	0.0000	2/08/2022 7:30	0.4322	0.1185	5/08/2022 15:30	0.0000	0.0000	6/10/2022 8:30	0.0000	0.0000



Normalisation of RY23 SAIDI Major Events

Aurora Energy's SAIDI Unplanned Boundary Value												5.69
1/48th of the SAIDI Unplanned Boundary Value	8 July 2022 Major Event			1 August 2022 Major Event			4 August 2022 Major Event			5 October 2022 Major Event		
	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour
0.1185	9/07/2022 7:00	0.0000	0.0000	2/08/2022 8:00	0.0000	0.0000	5/08/2022 16:00	0.2567	0.1185	6/10/2022 9:00	0.0000	0.0000
0.1185	9/07/2022 7:30	0.0000	0.0000	2/08/2022 8:30	0.0020	0.0020	5/08/2022 16:30	0.0000	0.0000	6/10/2022 9:30	0.0000	0.0000
0.1185	9/07/2022 8:00	0.0000	0.0000	2/08/2022 9:00	0.0000	0.0000	5/08/2022 17:00	0.7108	0.1185	6/10/2022 10:00	0.0089	0.0089
0.1185	9/07/2022 8:30	0.0000	0.0000	2/08/2022 9:30	0.0000	0.0000	5/08/2022 17:30	0.0000	0.0000	6/10/2022 10:30	0.0000	0.0000
0.1185	9/07/2022 9:00	0.0000	0.0000	2/08/2022 10:00	0.0000	0.0000	5/08/2022 18:00	0.0000	0.0000	6/10/2022 11:00	0.0000	0.0000
0.1185	9/07/2022 9:30	0.0000	0.0000	2/08/2022 10:30	0.0000	0.0000	5/08/2022 18:30	0.9236	0.1185	6/10/2022 11:30	0.0000	0.0000
0.1185				2/08/2022 11:00	0.0000	0.0000	5/08/2022 19:00	0.5387	0.1185	6/10/2022 12:00	0.0000	0.0000
0.1185				2/08/2022 11:30	0.0000	0.0000	5/08/2022 19:30	0.0000	0.0000	6/10/2022 12:30	0.0000	0.0000
0.1185				2/08/2022 12:00	0.0000	0.0000	5/08/2022 20:00	0.1021	0.1021	6/10/2022 13:00	0.0000	0.0000
0.1185				2/08/2022 12:30	0.0000	0.0000	5/08/2022 20:30	0.0243	0.0243	6/10/2022 13:30	0.0000	0.0000
0.1185				2/08/2022 13:00	0.0000	0.0000	5/08/2022 21:00	0.0000	0.0000	6/10/2022 14:00	0.0000	0.0000
0.1185				2/08/2022 13:30	0.0000	0.0000	5/08/2022 21:30	0.0000	0.0000	6/10/2022 14:30	0.0000	0.0000
0.1185				2/08/2022 14:00	0.0000	0.0000	5/08/2022 22:00	0.0000	0.0000	6/10/2022 15:00	0.0000	0.0000
0.1185				2/08/2022 14:30	0.0000	0.0000	5/08/2022 22:30	0.0105	0.0105	6/10/2022 15:30	0.0000	0.0000
0.1185				2/08/2022 15:00	0.0000	0.0000	5/08/2022 23:00	0.0000	0.0000	6/10/2022 16:00	0.0000	0.0000
0.1185				2/08/2022 15:30	0.0000	0.0000	5/08/2022 23:30	0.8529	0.1185	6/10/2022 16:30	0.0000	0.0000
0.1185				2/08/2022 16:00	0.0000	0.0000	6/08/2022 0:00	0.0000	0.0000	6/10/2022 17:00	0.0000	0.0000
0.1185				2/08/2022 16:30	0.0000	0.0000	6/08/2022 0:30	0.0000	0.0000	6/10/2022 17:30	0.0000	0.0000





Normalisation of RY23 SAIDI Major Events

Aurora Energy's SAIDI Unplanned Boundary Value												5.69
1/48th of the SAIDI Unplanned Boundary Value	8 July 2022 Major Event			1 August 2022 Major Event			4 August 2022 Major Event			5 October 2022 Major Event		
	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour
0.1185				2/08/2022 17:00	0.0000	0.0000	6/08/2022 1:00	0.0628	0.0628	6/10/2022 18:00	0.0000	0.0000
0.1185				2/08/2022 17:30	0.0000	0.0000	6/08/2022 1:30	0.0000	0.0000	6/10/2022 18:30	0.0000	0.0000
0.1185				2/08/2022 18:00	0.1442	0.1185	6/08/2022 2:00	0.0000	0.0000	6/10/2022 19:00	0.0000	0.0000
0.1185				2/08/2022 18:30	0.0000	0.0000	6/08/2022 2:30	0.0000	0.0000	6/10/2022 19:30	0.0000	0.0000
0.1185				2/08/2022 19:00	0.0000	0.0000	6/08/2022 3:00	0.0000	0.0000	6/10/2022 20:00	0.0000	0.0000
0.1185				2/08/2022 19:30	0.0000	0.0000	6/08/2022 3:30	0.0000	0.0000	6/10/2022 20:30	0.0000	0.0000
0.1185				2/08/2022 20:00	0.0000	0.0000	6/08/2022 4:00	0.0000	0.0000	6/10/2022 21:00	0.0000	0.0000
0.1185				2/08/2022 20:30	0.0000	0.0000	6/08/2022 4:30	0.0000	0.0000	6/10/2022 21:30	0.0000	0.0000
0.1185				2/08/2022 21:00	0.0000	0.0000	6/08/2022 5:00	0.0000	0.0000	6/10/2022 22:00	0.0000	0.0000
0.1185				2/08/2022 21:30	0.0000	0.0000	6/08/2022 5:30	0.0000	0.0000	6/10/2022 22:30	0.0000	0.0000
0.1185				2/08/2022 22:00	0.0000	0.0000	6/08/2022 6:00	0.0000	0.0000	6/10/2022 23:00	0.0000	0.0000
0.1185				2/08/2022 22:30	0.0000	0.0000	6/08/2022 6:30	0.0000	0.0000	6/10/2022 23:30	0.0000	0.0000
0.1185				2/08/2022 23:00	0.0000	0.0000	6/08/2022 7:00	0.0000	0.0000	7/10/2022 0:00	0.0000	0.0000
0.1185				2/08/2022 23:30	0.0000	0.0000	6/08/2022 7:30	0.0000	0.0000	7/10/2022 0:30	0.0000	0.0000
0.1185							6/08/2022 8:00	0.0020	0.0020	7/10/2022 1:00	0.0000	0.0000
0.1185							6/08/2022 8:30	0.0000	0.0000	7/10/2022 1:30	0.0000	0.0000
0.1185							6/08/2022 9:00	0.0000	0.0000	7/10/2022 2:00	0.0000	0.0000
0.1185							6/08/2022 9:30	0.0000	0.0000	7/10/2022 2:30	0.0000	0.0000



### Normalisation of RY23 SAIDI Major Events

Aurora Energy's SAIDI Unplanned Boundary Value													5.69
1/48th of the SAIDI Unplanned Boundary Value	8 July 2022 Major Event			1 August 2022 Major Event			4 August 2022 Major Event			5 October 2022 Major Event			
	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	
0.1185							6/08/2022 10:00	0.0000	0.0000	7/10/2022 3:00	0.0000	0.0000	
0.1185							6/08/2022 10:30	0.0000	0.0000	7/10/2022 3:30	0.0000	0.0000	
0.1185							6/08/2022 11:00	0.0000	0.0000	7/10/2022 4:00	0.0000	0.0000	
0.1185							6/08/2022 11:30	0.0187	0.0187	7/10/2022 4:30	0.0000	0.0000	
0.1185							6/08/2022 12:00	0.0000	0.0000	7/10/2022 5:00	0.0000	0.0000	
0.1185							6/08/2022 12:30	0.0000	0.0000	7/10/2022 5:30	0.0000	0.0000	
0.1185							6/08/2022 13:00	0.0000	0.0000	7/10/2022 6:00	0.0000	0.0000	
0.1185							6/08/2022 13:30	0.0000	0.0000	7/10/2022 6:30	0.0000	0.0000	
0.1185							6/08/2022 14:00	0.0000	0.0000	7/10/2022 7:00	0.0000	0.0000	
0.1185										7/10/2022 7:30	0.0000	0.0000	
<b>Total</b>		<b>5.7677</b>	<b>0.7123</b>		<b>7.0461</b>	<b>0.7311</b>		<b>10.1089</b>	<b>1.6424</b>		<b>8.8994</b>	<b>0.2459</b>	

Table 35: Normalisation of RY23 SAIDI Major Events, continued

Normalisation of RY23 SAIDI Major Events									
Aurora Energy's SAIDI Unplanned Boundary Value									5.69
1/48th of the SAIDI Unplanned Boundary Value	29 November 2022 Major Event			21 February 2023 Major Event			20 March 2023 Major Event		
	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour
0.1185	29/11/2022 6:30	0.0000	0.0000	21/02/2023 14:30	0.0000	0.0000	20/03/2023 10:00	0.0000	0.0000
0.1185	29/11/2022 7:00	0.0000	0.0000	21/02/2023 15:00	0.0000	0.0000	20/03/2023 10:30	0.0000	0.0000
0.1185	29/11/2022 7:30	0.0000	0.0000	21/02/2023 15:30	0.0000	0.0000	20/03/2023 11:00	0.0000	0.0000
0.1185	29/11/2022 8:00	5.3574	0.1185	21/02/2023 16:00	0.1200	0.1185	20/03/2023 11:30	0.0000	0.0000
0.1185	29/11/2022 8:30	0.0000	0.0000	21/02/2023 16:30	0.0000	0.0000	20/03/2023 12:00	0.0000	0.0000
0.1185	29/11/2022 9:00	0.0000	0.0000	21/02/2023 17:00	0.0000	0.0000	20/03/2023 12:30	0.0000	0.0000
0.1185	29/11/2022 9:30	0.0000	0.0000	21/02/2023 17:30	0.0000	0.0000	20/03/2023 13:00	0.0000	0.0000
0.1185	29/11/2022 10:00	0.0000	0.0000	21/02/2023 18:00	1.1585	0.1185	20/03/2023 13:30	0.0000	0.0000
0.1185	29/11/2022 10:30	0.0000	0.0000	21/02/2023 18:30	0.0000	0.0000	20/03/2023 14:00	0.0000	0.0000
0.1185	29/11/2022 11:00	0.0000	0.0000	21/02/2023 19:00	0.0000	0.0000	20/03/2023 14:30	0.0000	0.0000
0.1185	29/11/2022 11:30	0.0000	0.0000	21/02/2023 19:30	0.0000	0.0000	20/03/2023 15:00	0.0017	0.0017
0.1185	29/11/2022 12:00	0.0000	0.0000	21/02/2023 20:00	0.0098	0.0098	20/03/2023 15:30	0.0000	0.0000
0.1185	29/11/2022 12:30	0.0000	0.0000	21/02/2023 20:30	0.0000	0.0000	20/03/2023 16:00	0.0000	0.0000
0.1185	29/11/2022 13:00	0.0000	0.0000	21/02/2023 21:00	0.0000	0.0000	20/03/2023 16:30	2.7052	0.1185
0.1185	29/11/2022 13:30	0.0000	0.0000	21/02/2023 21:30	0.0000	0.0000	20/03/2023 17:00	0.0000	0.0000
0.1185	29/11/2022 14:00	0.0000	0.0000	21/02/2023 22:00	0.0000	0.0000	20/03/2023 17:30	0.0000	0.0000
0.1185	29/11/2022 14:30	0.0000	0.0000	21/02/2023 22:30	0.0000	0.0000	20/03/2023 18:00	0.0922	0.0922

### Normalisation of RY23 SAIDI Major Events

Aurora Energy's SAIDI Unplanned Boundary Value										5.69
1/48th of the SAIDI Unplanned Boundary Value	29 November 2022 Major Event			21 February 2023 Major Event			20 March 2023 Major Event			
	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	
0.1185	29/11/2022 15:00	0.0000	0.0000	21/02/2023 23:00	0.0000	0.0000	20/03/2023 18:30	0.0000	0.0000	
0.1185	29/11/2022 15:30	0.0000	0.0000	21/02/2023 23:30	0.0000	0.0000	20/03/2023 19:00	0.0000	0.0000	
0.1185	29/11/2022 16:00	0.0000	0.0000	22/02/2023 0:00	0.0000	0.0000	20/03/2023 19:30	0.0000	0.0000	
0.1185	29/11/2022 16:30	0.0000	0.0000	22/02/2023 0:30	0.0000	0.0000	20/03/2023 20:00	0.0000	0.0000	
0.1185	29/11/2022 17:00	0.0000	0.0000	22/02/2023 1:00	0.0000	0.0000	20/03/2023 20:30	0.0000	0.0000	
0.1185	29/11/2022 17:30	0.0000	0.0000	22/02/2023 1:30	0.0000	0.0000	20/03/2023 21:00	0.0000	0.0000	
0.1185	29/11/2022 18:00	0.0000	0.0000	22/02/2023 2:00	0.0000	0.0000	20/03/2023 21:30	0.0000	0.0000	
0.1185	29/11/2022 18:30	0.0000	0.0000	22/02/2023 2:30	0.0000	0.0000	20/03/2023 22:00	0.0006	0.0006	
0.1185	29/11/2022 19:00	0.0000	0.0000	22/02/2023 3:00	0.0000	0.0000	20/03/2023 22:30	0.0000	0.0000	
0.1185	29/11/2022 19:30	0.0000	0.0000	22/02/2023 3:30	0.0000	0.0000	20/03/2023 23:00	0.0000	0.0000	
0.1185	29/11/2022 20:00	0.0000	0.0000	22/02/2023 4:00	0.0000	0.0000	20/03/2023 23:30	0.0000	0.0000	
0.1185	29/11/2022 20:30	0.0000	0.0000	22/02/2023 4:30	0.0000	0.0000	21/03/2023 0:00	0.0000	0.0000	
0.1185	29/11/2022 21:00	0.0000	0.0000	22/02/2023 5:00	0.0000	0.0000	21/03/2023 0:30	0.0000	0.0000	
0.1185	29/11/2022 21:30	0.0000	0.0000	22/02/2023 5:30	0.2078	0.1185	21/03/2023 1:00	0.0000	0.0000	
0.1185	29/11/2022 22:00	0.0000	0.0000	22/02/2023 6:00	0.0000	0.0000	21/03/2023 1:30	0.0000	0.0000	
0.1185	29/11/2022 22:30	0.0000	0.0000	22/02/2023 6:30	0.0000	0.0000	21/03/2023 2:00	0.0000	0.0000	
0.1185	29/11/2022 23:00	0.0000	0.0000	22/02/2023 7:00	0.1386	0.1185	21/03/2023 2:30	0.0000	0.0000	
0.1185	29/11/2022 23:30	0.0000	0.0000	22/02/2023 7:30	0.0000	0.0000	21/03/2023 3:00	0.0000	0.0000	
0.1185	30/11/2022 0:00	0.0000	0.0000	22/02/2023 8:00	0.0000	0.0000	21/03/2023 3:30	0.3778	0.1185	
0.1185	30/11/2022 0:30	0.0000	0.0000	22/02/2023 8:30	3.7070	0.1185	21/03/2023 4:00	0.0000	0.0000	

### Normalisation of RY23 SAIDI Major Events

Aurora Energy's SAIDI Unplanned Boundary Value										5.69
1/48th of the SAIDI Unplanned Boundary Value	29 November 2022 Major Event			21 February 2023 Major Event			20 March 2023 Major Event			
	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	
0.1185	30/11/2022 1:00	0.0000	0.0000	22/02/2023 9:00	0.0053	0.0053	21/03/2023 4:30	0.0004	0.0004	
0.1185	30/11/2022 1:30	0.0000	0.0000	22/02/2023 9:30	0.0000	0.0000	21/03/2023 5:00	0.1169	0.1169	
0.1185	30/11/2022 2:00	0.0000	0.0000	22/02/2023 10:00	0.0000	0.0000	21/03/2023 5:30	0.0000	0.0000	
0.1185	30/11/2022 2:30	0.0000	0.0000	22/02/2023 10:30	0.0000	0.0000	21/03/2023 6:00	0.1256	0.1185	
0.1185	30/11/2022 3:00	0.0000	0.0000	22/02/2023 11:00	0.0000	0.0000	21/03/2023 6:30	0.0000	0.0000	
0.1185	30/11/2022 3:30	0.0000	0.0000	22/02/2023 11:30	0.3295	0.1185	21/03/2023 7:00	0.0000	0.0000	
0.1185	30/11/2022 4:00	0.0000	0.0000	22/02/2023 12:00	0.0000	0.0000	21/03/2023 7:30	0.4052	0.1185	
0.1185	30/11/2022 4:30	0.0000	0.0000	22/02/2023 12:30	0.0000	0.0000	21/03/2023 8:00	1.0096	0.1185	
0.1185	30/11/2022 5:00	0.0000	0.0000	22/02/2023 13:00	0.0000	0.0000	21/03/2023 8:30	0.0146	0.0146	
0.1185	30/11/2022 5:30	0.0000	0.0000	22/02/2023 13:30	0.0000	0.0000	21/03/2023 9:00	0.0000	0.0000	
0.1185	30/11/2022 6:00	0.6075	0.1185	22/02/2023 14:00	0.0156	0.0156	21/03/2023 9:30	3.1681	0.1185	
0.1185	30/11/2022 6:30	0.0000	0.0000	22/02/2023 14:30	0.0000	0.0000	21/03/2023 10:00	0.0815	0.0815	
0.1185	30/11/2022 7:00	0.0000	0.0000	22/02/2023 15:00	0.0000	0.0000	21/03/2023 10:30	0.9810	0.1185	
0.1185	30/11/2022 7:30	0.0000	0.0000	22/02/2023 15:30	0.3550	0.1185	21/03/2023 11:00	0.0000	0.0000	
0.1185				22/02/2023 16:00	0.0000	0.0000	21/03/2023 11:30	0.0000	0.0000	
0.1185				22/02/2023 16:30	0.0000	0.0000	21/03/2023 12:00	0.0000	0.0000	
0.1185				22/02/2023 17:00	0.8030	0.1185	21/03/2023 12:30	0.0000	0.0000	
0.1185				22/02/2023 17:30	0.7902	0.1185	21/03/2023 13:00	0.5755	0.1185	
0.1185				22/02/2023 18:00	0.0000	0.0000	21/03/2023 13:30	0.7014	0.1185	
0.1185				22/02/2023 18:30	0.0204	0.0204	21/03/2023 14:00	0.0000	0.0000	

### Normalisation of RY23 SAIDI Major Events

Aurora Energy's SAIDI Unplanned Boundary Value										5.69
1/48th of the SAIDI Unplanned Boundary Value	29 November 2022 Major Event			21 February 2023 Major Event			20 March 2023 Major Event			
	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	
0.1185				22/02/2023 19:00	0.0000	0.0000	21/03/2023 14:30	0.2105	0.1185	
0.1185				22/02/2023 19:30	0.0000	0.0000	21/03/2023 15:00	0.3259	0.1185	
0.1185				22/02/2023 20:00	0.0000	0.0000	21/03/2023 15:30	0.1066	0.1066	
0.1185				22/02/2023 20:30	0.0000	0.0000	21/03/2023 16:00	0.0000	0.0000	
0.1185				22/02/2023 21:00	0.0000	0.0000	21/03/2023 16:30	0.0000	0.0000	
0.1185				22/02/2023 21:30	0.0000	0.0000	21/03/2023 17:00	0.0000	0.0000	
0.1185				22/02/2023 22:00	0.0001	0.0001	21/03/2023 17:30	0.0207	0.0207	
0.1185				22/02/2023 22:30	0.0000	0.0000	21/03/2023 18:00	0.0000	0.0000	
0.1185				22/02/2023 23:00	0.0000	0.0000	21/03/2023 18:30	0.0000	0.0000	
0.1185				22/02/2023 23:30	0.0000	0.0000	21/03/2023 19:00	0.0000	0.0000	
0.1185				23/02/2023 0:00	0.0000	0.0000	21/03/2023 19:30	0.0000	0.0000	
0.1185				23/02/2023 0:30	0.0000	0.0000	21/03/2023 20:00	0.0000	0.0000	
0.1185				23/02/2023 1:00	0.0000	0.0000	21/03/2023 20:30	0.0000	0.0000	
0.1185				23/02/2023 1:30	0.0000	0.0000	21/03/2023 21:00	0.0000	0.0000	
0.1185				23/02/2023 2:00	0.0000	0.0000	21/03/2023 21:30	0.0000	0.0000	
0.1185				23/02/2023 2:30	0.0000	0.0000	21/03/2023 22:00	0.0000	0.0000	
0.1185				23/02/2023 3:00	0.0000	0.0000	21/03/2023 22:30	0.0000	0.0000	
0.1185				23/02/2023 3:30	0.0000	0.0000	21/03/2023 23:00	0.0000	0.0000	
0.1185				23/02/2023 4:00	0.0000	0.0000	21/03/2023 23:30	0.0000	0.0000	
0.1185				23/02/2023 4:30	0.0000	0.0000	22/03/2023 0:00	0.0000	0.0000	

### Normalisation of RY23 SAIDI Major Events

Aurora Energy's SAIDI Unplanned Boundary Value										5.69
1/48th of the SAIDI Unplanned Boundary Value	29 November 2022 Major Event			21 February 2023 Major Event			20 March 2023 Major Event			
	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	Half hour commencing	Raw SAIDI Value for half hour	Normalised SAIDI Value for half hour	
0.1185				23/02/2023 5:00	0.0000	0.0000	22/03/2023 0:30	0.0000	0.0000	
0.1185				23/02/2023 5:30	0.0000	0.0000	22/03/2023 1:00	0.0000	0.0000	
0.1185				23/02/2023 6:00	0.0000	0.0000	22/03/2023 1:30	0.0000	0.0000	
0.1185				23/02/2023 6:30	0.0000	0.0000	22/03/2023 2:00	0.0000	0.0000	
0.1185				23/02/2023 7:00	0.0000	0.0000	22/03/2023 2:30	0.0000	0.0000	
0.1185				23/02/2023 7:30	0.0000	0.0000	22/03/2023 3:00	0.0190	0.0190	
0.1185				23/02/2023 8:00	0.0000	0.0000	22/03/2023 3:30	0.0000	0.0000	
0.1185							22/03/2023 4:00	0.0000	0.0000	
0.1185							22/03/2023 4:30	0.0000	0.0000	
0.1185							22/03/2023 5:00	0.0000	0.0000	
0.1185							22/03/2023 5:30	0.0000	0.0000	
0.1185							22/03/2023 6:00	0.0000	0.0000	
0.1185							22/03/2023 6:30	0.0000	0.0000	
0.1185							22/03/2023 7:00	0.0000	0.0000	
0.1185							22/03/2023 7:30	0.0000	0.0000	
0.1185							22/03/2023 8:00	0.0000	0.0000	
0.1185							22/03/2023 8:30	0.0000	0.0000	
0.1185							22/03/2023 9:00	0.0000	0.0000	
<b>Total</b>		<b>5.9649</b>	<b>0.2371</b>		<b>7.6608</b>	<b>1.1177</b>		<b>11.0400</b>	<b>1.7577</b>	



Table 36: Normalisation of RY23 SAIFI Major Events

Normalisation of RY23 SAIFI Major Events									
Aurora Energy's SAIFI Unplanned Boundary Value									0.0737
1/48th of the SAIFI Unplanned Boundary Value	4 August 2022 Major Event			5 October 2022 Major Event			2 November 2022 Major Event		
	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour
0.0015	4/08/2022 11:00	0.0000	0.0000	5/10/2022 8:30	0.0000	0.0000	2/11/2022 20:00	0.0000	0.0000
0.0015	4/08/2022 11:30	0.0000	0.0000	5/10/2022 9:00	0.0000	0.0000	2/11/2022 20:30	0.0000	0.0000
0.0015	4/08/2022 12:00	0.0000	0.0000	5/10/2022 9:30	0.0000	0.0000	2/11/2022 21:00	0.0000	0.0000
0.0015	4/08/2022 12:30	0.0000	0.0000	5/10/2022 10:00	0.0000	0.0000	2/11/2022 21:30	0.0000	0.0000
0.0015	4/08/2022 13:00	0.0000	0.0000	5/10/2022 10:30	0.0000	0.0000	2/11/2022 22:00	0.0000	0.0000
0.0015	4/08/2022 13:30	0.0000	0.0000	5/10/2022 11:00	0.0000	0.0000	2/11/2022 22:30	0.0000	0.0000
0.0015	4/08/2022 14:00	0.0000	0.0000	5/10/2022 11:30	0.0000	0.0000	2/11/2022 23:00	0.0000	0.0000
0.0015	4/08/2022 14:30	0.0000	0.0000	5/10/2022 12:00	0.0000	0.0000	2/11/2022 23:30	0.0000	0.0000
0.0015	4/08/2022 15:00	0.0000	0.0000	5/10/2022 12:30	0.0000	0.0000	3/11/2022 0:00	0.0000	0.0000
0.0015	4/08/2022 15:30	0.0000	0.0000	5/10/2022 13:00	0.0000	0.0000	3/11/2022 0:30	0.0000	0.0000
0.0015	4/08/2022 16:00	0.0000	0.0000	5/10/2022 13:30	0.0000	0.0000	3/11/2022 1:00	0.0000	0.0000
0.0015	4/08/2022 16:30	0.0000	0.0000	5/10/2022 14:00	0.0000	0.0000	3/11/2022 1:30	0.0000	0.0000
0.0015	4/08/2022 17:00	0.0000	0.0000	5/10/2022 14:30	0.0000	0.0000	3/11/2022 2:00	0.0000	0.0000
0.0015	4/08/2022 17:30	0.0000	0.0000	5/10/2022 15:00	0.0000	0.0000	3/11/2022 2:30	0.0000	0.0000
0.0015	4/08/2022 18:00	0.0000	0.0000	5/10/2022 15:30	0.0000	0.0000	3/11/2022 3:00	0.0000	0.0000
0.0015	4/08/2022 18:30	0.0000	0.0000	5/10/2022 16:00	0.0000	0.0000	3/11/2022 3:30	0.0000	0.0000





Normalisation of RY23 SAIFI Major Events

Aurora Energy's SAIFI Unplanned Boundary Value 0.0737

1/48th of the SAIFI Unplanned Boundary Value	4 August 2022 Major Event			5 October 2022 Major Event			2 November 2022 Major Event		
	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour
0.0015	4/08/2022 19:00	0.0000	0.0000	5/10/2022 16:30	0.0000	0.0000	3/11/2022 4:00	0.0000	0.0000
0.0015	4/08/2022 19:30	0.0000	0.0000	5/10/2022 17:00	0.0000	0.0000	3/11/2022 4:30	0.0000	0.0000
0.0015	4/08/2022 20:00	0.0000	0.0000	5/10/2022 17:30	0.0000	0.0000	3/11/2022 5:00	0.0000	0.0000
0.0015	4/08/2022 20:30	0.0000	0.0000	5/10/2022 18:00	0.0000	0.0000	3/11/2022 5:30	0.0000	0.0000
0.0015	4/08/2022 21:00	0.0000	0.0000	5/10/2022 18:30	0.0000	0.0000	3/11/2022 6:00	0.0000	0.0000
0.0015	4/08/2022 21:30	0.0000	0.0000	5/10/2022 19:00	0.0000	0.0000	3/11/2022 6:30	0.0000	0.0000
0.0015	4/08/2022 22:00	0.0000	0.0000	5/10/2022 19:30	0.0000	0.0000	3/11/2022 7:00	0.0000	0.0000
0.0015	4/08/2022 22:30	0.0000	0.0000	5/10/2022 20:00	0.0000	0.0000	3/11/2022 7:30	0.0000	0.0000
0.0015	4/08/2022 23:00	0.0000	0.0000	5/10/2022 20:30	0.0000	0.0000	3/11/2022 8:00	0.0000	0.0000
0.0015	4/08/2022 23:30	0.0000	0.0000	5/10/2022 21:00	0.0000	0.0000	3/11/2022 8:30	0.0000	0.0000
0.0015	5/08/2022 0:00	0.0000	0.0000	5/10/2022 21:30	0.0000	0.0000	3/11/2022 9:00	0.0000	0.0000
0.0015	5/08/2022 0:30	0.0061	0.0015	5/10/2022 22:00	0.0000	0.0000	3/11/2022 9:30	0.0000	0.0000
0.0015	5/08/2022 1:00	0.0000	0.0000	5/10/2022 22:30	0.0000	0.0000	3/11/2022 10:00	0.0000	0.0000
0.0015	5/08/2022 1:30	0.0061	0.0015	5/10/2022 23:00	0.0000	0.0000	3/11/2022 10:30	0.0000	0.0000
0.0015	5/08/2022 2:00	0.0000	0.0000	5/10/2022 23:30	0.0000	0.0000	3/11/2022 11:00	0.0118	0.0015
0.0015	5/08/2022 2:30	0.0027	0.0015	6/10/2022 0:00	0.0000	0.0000	3/11/2022 11:30	0.0000	0.0000
0.0015	5/08/2022 3:00	0.0000	0.0000	6/10/2022 0:30	0.0000	0.0000	3/11/2022 12:00	0.0000	0.0000
0.0015	5/08/2022 3:30	0.0000	0.0000	6/10/2022 1:00	0.0000	0.0000	3/11/2022 12:30	0.0086	0.0015



Normalisation of RY23 SAIFI Major Events

Normalisation of RY23 SAIFI Major Events									
Aurora Energy's SAIFI Unplanned Boundary Value									0.0737
1/48th of the SAIFI Unplanned Boundary Value	4 August 2022 Major Event			5 October 2022 Major Event			2 November 2022 Major Event		
	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour
0.0015	5/08/2022 4:00	0.0000	0.0000	6/10/2022 1:30	0.0000	0.0000	3/11/2022 13:00	0.0000	0.0000
0.0015	5/08/2022 4:30	0.0000	0.0000	6/10/2022 2:00	0.0144	0.0015	3/11/2022 13:30	0.0091	0.0015
0.0015	5/08/2022 5:00	0.0000	0.0000	6/10/2022 2:30	0.0000	0.0000	3/11/2022 14:00	0.0000	0.0000
0.0015	5/08/2022 5:30	0.0000	0.0000	6/10/2022 3:00	0.0000	0.0000	3/11/2022 14:30	0.0183	0.0015
0.0015	5/08/2022 6:00	0.0000	0.0000	6/10/2022 3:30	0.0000	0.0000	3/11/2022 15:00	0.0000	0.0000
0.0015	5/08/2022 6:30	0.0000	0.0000	6/10/2022 4:00	0.0000	0.0000	3/11/2022 15:30	0.0091	0.0015
0.0015	5/08/2022 7:00	0.0000	0.0000	6/10/2022 4:30	0.0000	0.0000	3/11/2022 16:00	0.0000	0.0000
0.0015	5/08/2022 7:30	0.0000	0.0000	6/10/2022 5:00	0.0000	0.0000	3/11/2022 16:30	0.0000	0.0000
0.0015	5/08/2022 8:00	0.0000	0.0000	6/10/2022 5:30	0.0000	0.0000	3/11/2022 17:00	0.0000	0.0000
0.0015	5/08/2022 8:30	0.0000	0.0000	6/10/2022 6:00	0.0000	0.0000	3/11/2022 17:30	0.0000	0.0000
0.0015	5/08/2022 9:00	0.0018	0.0015	6/10/2022 6:30	0.0000	0.0000	3/11/2022 18:00	0.0000	0.0000
0.0015	5/08/2022 9:30	0.0000	0.0000	6/10/2022 7:00	0.0000	0.0000	3/11/2022 18:30	0.0158	0.0015
0.0015	5/08/2022 10:00	0.0101	0.0015	6/10/2022 7:30	0.0000	0.0000	3/11/2022 19:00	0.0000	0.0000
0.0015	5/08/2022 10:30	0.0082	0.0015	6/10/2022 8:00	0.1109	0.0015	3/11/2022 19:30	0.0283	0.0015
0.0015	5/08/2022 11:00	0.0012	0.0012	6/10/2022 8:30	0.0000	0.0000	3/11/2022 20:00	0.0024	0.0015
0.0015	5/08/2022 11:30	0.0000	0.0000	6/10/2022 9:00	0.0000	0.0000	3/11/2022 20:30	0.0000	0.0000
0.0015	5/08/2022 12:00	0.0034	0.0015	6/10/2022 9:30	0.0000	0.0000	3/11/2022 21:00	0.0000	0.0000
0.0015	5/08/2022 12:30	0.0000	0.0000	6/10/2022 10:00	0.0000	0.0000	3/11/2022 21:30	0.0000	0.0000



Normalisation of RY23 SAIFI Major Events

Aurora Energy's SAIFI Unplanned Boundary Value 0.0737

1/48th of the SAIFI Unplanned Boundary Value	4 August 2022 Major Event			5 October 2022 Major Event			2 November 2022 Major Event		
	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour
0.0015	5/08/2022 13:00	0.0119	0.0015	6/10/2022 10:30	0.0000	0.0000	3/11/2022 22:00	0.0000	0.0000
0.0015	5/08/2022 13:30	0.0000	0.0000	6/10/2022 11:00	0.0000	0.0000	3/11/2022 22:30	0.0000	0.0000
0.0015	5/08/2022 14:00	0.0000	0.0000	6/10/2022 11:30	0.0000	0.0000	3/11/2022 23:00	0.0000	0.0000
0.0015	5/08/2022 14:30	0.0116	0.0015	6/10/2022 12:00	0.0000	0.0000	3/11/2022 23:30	0.0000	0.0000
0.0015	5/08/2022 15:00	0.0059	0.0015	6/10/2022 12:30	0.0000	0.0000	4/11/2022 0:00	0.0000	0.0000
0.0015	5/08/2022 15:30	0.0000	0.0000	6/10/2022 13:00	0.0000	0.0000	4/11/2022 0:30	0.0000	0.0000
0.0015	5/08/2022 16:00	0.0020	0.0015	6/10/2022 13:30	0.0000	0.0000	4/11/2022 1:00	0.0000	0.0000
0.0015	5/08/2022 16:30	0.0000	0.0000	6/10/2022 14:00	0.0000	0.0000	4/11/2022 1:30	0.0000	0.0000
0.0015	5/08/2022 17:00	0.0000	0.0000	6/10/2022 14:30	0.0000	0.0000	4/11/2022 2:00	0.0000	0.0000
0.0015	5/08/2022 17:30	0.0000	0.0000	6/10/2022 15:00	0.0000	0.0000	4/11/2022 2:30	0.0000	0.0000
0.0015	5/08/2022 18:00	0.0000	0.0000	6/10/2022 15:30	0.0000	0.0000	4/11/2022 3:00	0.0000	0.0000
0.0015	5/08/2022 18:30	0.0105	0.0015	6/10/2022 16:00	0.0000	0.0000	4/11/2022 3:30	0.0000	0.0000
0.0015	5/08/2022 19:00	0.0000	0.0000	6/10/2022 16:30	0.0000	0.0000	4/11/2022 4:00	0.0000	0.0000
0.0015	5/08/2022 19:30	0.0115	0.0015	6/10/2022 17:00	0.0000	0.0000	4/11/2022 4:30	0.0000	0.0000
0.0015	5/08/2022 20:00	0.0000	0.0000	6/10/2022 17:30	0.0000	0.0000	4/11/2022 5:00	0.0000	0.0000
0.0015	5/08/2022 20:30	0.0000	0.0000	6/10/2022 18:00	0.0000	0.0000	4/11/2022 5:30	0.0000	0.0000
0.0015	5/08/2022 21:00	0.0105	0.0015	6/10/2022 18:30	0.0000	0.0000	4/11/2022 6:00	0.0000	0.0000
0.0015	5/08/2022 21:30	0.0000	0.0000	6/10/2022 19:00	0.0000	0.0000	4/11/2022 6:30	0.0000	0.0000



Normalisation of RY23 SAIFI Major Events

Normalisation of RY23 SAIFI Major Events									
Aurora Energy's SAIFI Unplanned Boundary Value									0.0737
1/48th of the SAIFI Unplanned Boundary Value	4 August 2022 Major Event			5 October 2022 Major Event			2 November 2022 Major Event		
	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour
0.0015	5/08/2022 22:00	0.0000	0.0000	6/10/2022 19:30	0.0000	0.0000	4/11/2022 7:00	0.0000	0.0000
0.0015	5/08/2022 22:30	0.0000	0.0000	6/10/2022 20:00	0.0000	0.0000	4/11/2022 7:30	0.0000	0.0000
0.0015	5/08/2022 23:00	0.0000	0.0000	6/10/2022 20:30	0.0000	0.0000	4/11/2022 8:00	0.0000	0.0000
0.0015	5/08/2022 23:30	0.0000	0.0000	6/10/2022 21:00	0.0000	0.0000	4/11/2022 8:30	0.0000	0.0000
0.0015	6/08/2022 0:00	0.0000	0.0000	6/10/2022 21:30	0.0000	0.0000	4/11/2022 9:00	0.0000	0.0000
0.0015	6/08/2022 0:30	0.0000	0.0000	6/10/2022 22:00	0.0000	0.0000	4/11/2022 9:30	0.0000	0.0000
0.0015	6/08/2022 1:00	0.0000	0.0000	6/10/2022 22:30	0.0000	0.0000	4/11/2022 10:00	0.0000	0.0000
0.0015	6/08/2022 1:30	0.0000	0.0000	6/10/2022 23:00	0.0000	0.0000	4/11/2022 10:30	0.0000	0.0000
0.0015	6/08/2022 2:00	0.0000	0.0000	6/10/2022 23:30	0.0000	0.0000	4/11/2022 11:00	0.0000	0.0000
0.0015	6/08/2022 2:30	0.0000	0.0000	7/10/2022 0:00	0.0000	0.0000	4/11/2022 11:30	0.0000	0.0000
0.0015	6/08/2022 3:00	0.0000	0.0000	7/10/2022 0:30	0.0000	0.0000	4/11/2022 12:00	0.0000	0.0000
0.0015	6/08/2022 3:30	0.0000	0.0000	7/10/2022 1:00	0.0000	0.0000	4/11/2022 12:30	0.0000	0.0000
0.0015	6/08/2022 4:00	0.0000	0.0000	7/10/2022 1:30	0.0000	0.0000	4/11/2022 13:00	0.0000	0.0000
0.0015	6/08/2022 4:30	0.0000	0.0000	7/10/2022 2:00	0.0000	0.0000	4/11/2022 13:30	0.0000	0.0000
0.0015	6/08/2022 5:00	0.0000	0.0000	7/10/2022 2:30	0.0000	0.0000	4/11/2022 14:00	0.0000	0.0000
0.0015	6/08/2022 5:30	0.0000	0.0000	7/10/2022 3:00	0.0000	0.0000			
0.0015	6/08/2022 6:00	0.0000	0.0000	7/10/2022 3:30	0.0000	0.0000			
0.0015	6/08/2022 6:30	0.0000	0.0000	7/10/2022 4:00	0.0000	0.0000			



Normalisation of RY23 SAIFI Major Events

Normalisation of RY23 SAIFI Major Events									
Aurora Energy's SAIFI Unplanned Boundary Value									0.0737
1/48th of the SAIFI Unplanned Boundary Value	4 August 2022 Major Event			5 October 2022 Major Event			2 November 2022 Major Event		
	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour
0.0015	6/08/2022 7:00	0.0000	0.0000	7/10/2022 4:30	0.0000	0.0000			
0.0015	6/08/2022 7:30	0.0005	0.0005	7/10/2022 5:00	0.0000	0.0000			
0.0015	6/08/2022 8:00	0.0000	0.0000	7/10/2022 5:30	0.0000	0.0000			
0.0015	6/08/2022 8:30	0.0000	0.0000	7/10/2022 6:00	0.0000	0.0000			
0.0015	6/08/2022 9:00	0.0000	0.0000	7/10/2022 6:30	0.0000	0.0000			
0.0015	6/08/2022 9:30	0.0000	0.0000	7/10/2022 7:00	0.0000	0.0000			
0.0015	6/08/2022 10:00	0.0000	0.0000	7/10/2022 7:30	0.0000	0.0000			
0.0015	6/08/2022 10:30	0.0000	0.0000						
0.0015	6/08/2022 11:00	0.0000	0.0000						
0.0015	6/08/2022 11:30	0.0000	0.0000						
0.0015	6/08/2022 12:00	0.0000	0.0000						
0.0015	6/08/2022 12:30	0.0000	0.0000						
0.0015	6/08/2022 13:00	0.0000	0.0000						
0.0015	6/08/2022 13:30	0.0000	0.0000						
0.0015	6/08/2022 14:00	0.0000	0.0000						
<b>Total</b>		<b>0.1038</b>	<b>0.0233</b>		<b>0.1253</b>	<b>0.0031</b>		<b>0.1035</b>	<b>0.0123</b>



Table 36: Normalisation of RY23 SAIFI Major Events, continued

Normalisation of RY23 SAIFI Major Events									
Aurora Energy's SAIFI Unplanned Boundary Value									0.0737
1/48th of the SAIFI Unplanned Boundary Value	8 December 2022 Major Event			21 February 2023 Major Event			20 March 2023 Major Event		
	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour
0.0015	8/12/2022 9:00	0.0334	0.0015	21/02/2023 16:00	0.0028	0.0015	20/03/2023 14:00	0.0000	0.0000
0.0015	8/12/2022 9:30	0.0059	0.0015	21/02/2023 16:30	0.0000	0.0000	20/03/2023 14:30	0.0000	0.0000
0.0015	8/12/2022 10:00	0.0059	0.0015	21/02/2023 17:00	0.0000	0.0000	20/03/2023 15:00	0.0000	0.0000
0.0015	8/12/2022 10:30	0.0000	0.0000	21/02/2023 17:30	0.0000	0.0000	20/03/2023 15:30	0.0000	0.0000
0.0015	8/12/2022 11:00	0.0000	0.0000	21/02/2023 18:00	0.0084	0.0015	20/03/2023 16:00	0.0000	0.0000
0.0015	8/12/2022 11:30	0.0000	0.0000	21/02/2023 18:30	0.0000	0.0000	20/03/2023 16:30	0.0098	0.0015
0.0015	8/12/2022 12:00	0.0000	0.0000	21/02/2023 19:00	0.0000	0.0000	20/03/2023 17:00	0.0000	0.0000
0.0015	8/12/2022 12:30	0.0031	0.0015	21/02/2023 19:30	0.0000	0.0000	20/03/2023 17:30	0.0000	0.0000
0.0015	8/12/2022 13:00	0.0000	0.0000	21/02/2023 20:00	0.0000	0.0000	20/03/2023 18:00	0.0006	0.0006
0.0015	8/12/2022 13:30	0.0000	0.0000	21/02/2023 20:30	0.0000	0.0000	20/03/2023 18:30	0.0000	0.0000
0.0015	8/12/2022 14:00	0.0000	0.0000	21/02/2023 21:00	0.0000	0.0000	20/03/2023 19:00	0.0000	0.0000
0.0015	8/12/2022 14:30	0.0000	0.0000	21/02/2023 21:30	0.0000	0.0000	20/03/2023 19:30	0.0000	0.0000
0.0015	8/12/2022 15:00	0.0000	0.0000	21/02/2023 22:00	0.0000	0.0000	20/03/2023 20:00	0.0000	0.0000
0.0015	8/12/2022 15:30	0.0000	0.0000	21/02/2023 22:30	0.0000	0.0000	20/03/2023 20:30	0.0000	0.0000
0.0015	8/12/2022 16:00	0.0000	0.0000	21/02/2023 23:00	0.0000	0.0000	20/03/2023 21:00	0.0000	0.0000
0.0015	8/12/2022 16:30	0.0000	0.0000	21/02/2023 23:30	0.0000	0.0000	20/03/2023 21:30	0.0000	0.0000
0.0015	8/12/2022 17:00	0.0000	0.0000	22/02/2023 0:00	0.0000	0.0000	20/03/2023 22:00	0.0000	0.0000



Normalisation of RY23 SAIFI Major Events

Normalisation of RY23 SAIFI Major Events									
Aurora Energy's SAIFI Unplanned Boundary Value									0.0737
1/48th of the SAIFI Unplanned Boundary Value	8 December 2022 Major Event			21 February 2023 Major Event			20 March 2023 Major Event		
	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour
0.0015	8/12/2022 17:30	0.0000	0.0000	22/02/2023 0:30	0.0000	0.0000	20/03/2023 22:30	0.0000	0.0000
0.0015	8/12/2022 18:00	0.0000	0.0000	22/02/2023 1:00	0.0000	0.0000	20/03/2023 23:00	0.0000	0.0000
0.0015	8/12/2022 18:30	0.0000	0.0000	22/02/2023 1:30	0.0000	0.0000	20/03/2023 23:30	0.0000	0.0000
0.0015	8/12/2022 19:00	0.0000	0.0000	22/02/2023 2:00	0.0000	0.0000	21/03/2023 0:00	0.0000	0.0000
0.0015	8/12/2022 19:30	0.0000	0.0000	22/02/2023 2:30	0.0000	0.0000	21/03/2023 0:30	0.0000	0.0000
0.0015	8/12/2022 20:00	0.0000	0.0000	22/02/2023 3:00	0.0000	0.0000	21/03/2023 1:00	0.0000	0.0000
0.0015	8/12/2022 20:30	0.0000	0.0000	22/02/2023 3:30	0.0000	0.0000	21/03/2023 1:30	0.0000	0.0000
0.0015	8/12/2022 21:00	0.0010	0.0010	22/02/2023 4:00	0.0000	0.0000	21/03/2023 2:00	0.0000	0.0000
0.0015	8/12/2022 21:30	0.0022	0.0015	22/02/2023 4:30	0.0000	0.0000	21/03/2023 2:30	0.0000	0.0000
0.0015	8/12/2022 22:00	0.0000	0.0000	22/02/2023 5:00	0.0000	0.0000	21/03/2023 3:00	0.0000	0.0000
0.0015	8/12/2022 22:30	0.0000	0.0000	22/02/2023 5:30	0.0173	0.0015	21/03/2023 3:30	0.0033	0.0015
0.0015	8/12/2022 23:00	0.0000	0.0000	22/02/2023 6:00	0.0000	0.0000	21/03/2023 4:00	0.0000	0.0000
0.0015	8/12/2022 23:30	0.0000	0.0000	22/02/2023 6:30	0.0000	0.0000	21/03/2023 4:30	0.0000	0.0000
0.0015	9/12/2022 0:00	0.0000	0.0000	22/02/2023 7:00	0.0173	0.0015	21/03/2023 5:00	0.0011	0.0011
0.0015	9/12/2022 0:30	0.0000	0.0000	22/02/2023 7:30	0.0000	0.0000	21/03/2023 5:30	0.0000	0.0000
0.0015	9/12/2022 1:00	0.0000	0.0000	22/02/2023 8:00	0.0000	0.0000	21/03/2023 6:00	0.0003	0.0003
0.0015	9/12/2022 1:30	0.0000	0.0000	22/02/2023 8:30	0.0076	0.0015	21/03/2023 6:30	0.0000	0.0000
0.0015	9/12/2022 2:00	0.0000	0.0000	22/02/2023 9:00	0.0000	0.0000	21/03/2023 7:00	0.0000	0.0000



Normalisation of RY23 SAIFI Major Events

Normalisation of RY23 SAIFI Major Events									
Aurora Energy's SAIFI Unplanned Boundary Value									0.0737
1/48th of the SAIFI Unplanned Boundary Value	8 December 2022 Major Event			21 February 2023 Major Event			20 March 2023 Major Event		
	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour
0.0015	9/12/2022 2:30	0.0000	0.0000	22/02/2023 9:30	0.0000	0.0000	21/03/2023 7:30	0.0056	0.0015
0.0015	9/12/2022 3:00	0.0000	0.0000	22/02/2023 10:00	0.0000	0.0000	21/03/2023 8:00	0.0082	0.0015
0.0015	9/12/2022 3:30	0.0000	0.0000	22/02/2023 10:30	0.0000	0.0000	21/03/2023 8:30	0.0000	0.0000
0.0015	9/12/2022 4:00	0.0000	0.0000	22/02/2023 11:00	0.0000	0.0000	21/03/2023 9:00	0.0000	0.0000
0.0015	9/12/2022 4:30	0.0000	0.0000	22/02/2023 11:30	0.0092	0.0015	21/03/2023 9:30	0.0210	0.0015
0.0015	9/12/2022 5:00	0.0000	0.0000	22/02/2023 12:00	0.0000	0.0000	21/03/2023 10:00	0.0010	0.0010
0.0015	9/12/2022 5:30	0.0000	0.0000	22/02/2023 12:30	0.0000	0.0000	21/03/2023 10:30	0.0086	0.0015
0.0015	9/12/2022 6:00	0.0000	0.0000	22/02/2023 13:00	0.0000	0.0000	21/03/2023 11:00	0.0000	0.0000
0.0015	9/12/2022 6:30	0.0000	0.0000	22/02/2023 13:30	0.0000	0.0000	21/03/2023 11:30	0.0000	0.0000
0.0015	9/12/2022 7:00	0.0000	0.0000	22/02/2023 14:00	0.0001	0.0001	21/03/2023 12:00	0.0000	0.0000
0.0015	9/12/2022 7:30	0.0000	0.0000	22/02/2023 14:30	0.0000	0.0000	21/03/2023 12:30	0.0000	0.0000
0.0015	9/12/2022 8:00	0.0000	0.0000	22/02/2023 15:00	0.0000	0.0000	21/03/2023 13:00	0.0104	0.0015
0.0015	9/12/2022 8:30	0.1112	0.0015	22/02/2023 15:30	0.0477	0.0015	21/03/2023 13:30	0.0087	0.0015
0.0015	9/12/2022 9:00	0.0000	0.0000	22/02/2023 16:00	0.0000	0.0000	21/03/2023 14:00	0.0000	0.0000
0.0015	9/12/2022 9:30	0.0019	0.0015	22/02/2023 16:30	0.0000	0.0000	21/03/2023 14:30	0.0074	0.0015
0.0015	9/12/2022 10:00	0.0000	0.0000	22/02/2023 17:00	0.0268	0.0015	21/03/2023 15:00	0.0093	0.0015
0.0015	9/12/2022 10:30	0.0000	0.0000	22/02/2023 17:30	0.0557	0.0015	21/03/2023 15:30	0.0059	0.0015
0.0015	9/12/2022 11:00	0.0000	0.0000	22/02/2023 18:00	0.0000	0.0000	21/03/2023 16:00	0.0000	0.0000





Normalisation of RY23 SAIFI Major Events

Normalisation of RY23 SAIFI Major Events									
Aurora Energy's SAIFI Unplanned Boundary Value									0.0737
1/48th of the SAIFI Unplanned Boundary Value	8 December 2022 Major Event			21 February 2023 Major Event			20 March 2023 Major Event		
	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour
0.0015	9/12/2022 11:30	0.0000	0.0000	22/02/2023 18:30	0.0192	0.0015	21/03/2023 16:30	0.0000	0.0000
0.0015	9/12/2022 12:00	0.0000	0.0000	22/02/2023 19:00	0.0000	0.0000	21/03/2023 17:00	0.0000	0.0000
0.0015	9/12/2022 12:30	0.0000	0.0000	22/02/2023 19:30	0.0000	0.0000	21/03/2023 17:30	0.0046	0.0015
0.0015	9/12/2022 13:00	0.0000	0.0000	22/02/2023 20:00	0.0000	0.0000	21/03/2023 18:00	0.0000	0.0000
0.0015	9/12/2022 13:30	0.0000	0.0000	22/02/2023 20:30	0.0000	0.0000	21/03/2023 18:30	0.0000	0.0000
0.0015	9/12/2022 14:00	0.0000	0.0000	22/02/2023 21:00	0.0000	0.0000	21/03/2023 19:00	0.0000	0.0000
0.0015	9/12/2022 14:30	0.0041	0.0015	22/02/2023 21:30	0.0000	0.0000	21/03/2023 19:30	0.0000	0.0000
0.0015	9/12/2022 15:00	0.0000	0.0000	22/02/2023 22:00	0.0001	0.0001	21/03/2023 20:00	0.0000	0.0000
0.0015	9/12/2022 15:30	0.0000	0.0000	22/02/2023 22:30	0.0000	0.0000	21/03/2023 20:30	0.0000	0.0000
0.0015	9/12/2022 16:00	0.0000	0.0000	22/02/2023 23:00	0.0000	0.0000	21/03/2023 21:00	0.0000	0.0000
0.0015	9/12/2022 16:30	0.0000	0.0000	22/02/2023 23:30	0.0000	0.0000	21/03/2023 21:30	0.0000	0.0000
0.0015	9/12/2022 17:00	0.0000	0.0000	23/02/2023 0:00	0.0000	0.0000	21/03/2023 22:00	0.0000	0.0000
0.0015	9/12/2022 17:30	0.0000	0.0000	23/02/2023 0:30	0.0000	0.0000	21/03/2023 22:30	0.0000	0.0000
0.0015	9/12/2022 18:00	0.0000	0.0000	23/02/2023 1:00	0.0000	0.0000	21/03/2023 23:00	0.0000	0.0000
0.0015	9/12/2022 18:30	0.0000	0.0000	23/02/2023 1:30	0.0000	0.0000	21/03/2023 23:30	0.0000	0.0000
0.0015	9/12/2022 19:00	0.0000	0.0000	23/02/2023 2:00	0.0000	0.0000	22/03/2023 0:00	0.0000	0.0000
0.0015	9/12/2022 19:30	0.0000	0.0000	23/02/2023 2:30	0.0000	0.0000	22/03/2023 0:30	0.0000	0.0000
0.0015	9/12/2022 20:00	0.0000	0.0000	23/02/2023 3:00	0.0000	0.0000	22/03/2023 1:00	0.0000	0.0000

Normalisation of RY23 SAIFI Major Events									
Aurora Energy's SAIFI Unplanned Boundary Value									0.0737
1/48th of the SAIFI Unplanned Boundary Value	8 December 2022 Major Event			21 February 2023 Major Event			20 March 2023 Major Event		
	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour
0.0015	9/12/2022 20:30	0.0000	0.0000	23/02/2023 3:30	0.0000	0.0000	22/03/2023 1:30	0.0000	0.0000
0.0015	9/12/2022 21:00	0.0000	0.0000	23/02/2023 4:00	0.0000	0.0000	22/03/2023 2:00	0.0000	0.0000
0.0015	9/12/2022 21:30	0.0000	0.0000	23/02/2023 4:30	0.0000	0.0000	22/03/2023 2:30	0.0000	0.0000
0.0015	9/12/2022 22:00	0.0000	0.0000	23/02/2023 5:00	0.0000	0.0000	22/03/2023 3:00	0.0001	0.0001
0.0015	9/12/2022 22:30	0.0000	0.0000	23/02/2023 5:30	0.0000	0.0000	22/03/2023 3:30	0.0000	0.0000
0.0015	9/12/2022 23:00	0.0000	0.0000	23/02/2023 6:00	0.0000	0.0000	22/03/2023 4:00	0.0000	0.0000
0.0015	9/12/2022 23:30	0.0000	0.0000	23/02/2023 6:30	0.0000	0.0000	22/03/2023 4:30	0.0000	0.0000
0.0015	10/12/2022 0:00	0.0000	0.0000	23/02/2023 7:00	0.0000	0.0000	22/03/2023 5:00	0.0000	0.0000
0.0015	10/12/2022 0:30	0.0000	0.0000	23/02/2023 7:30	0.0000	0.0000	22/03/2023 5:30	0.0000	0.0000
0.0015	10/12/2022 1:00	0.0000	0.0000	23/02/2023 8:00	0.0000	0.0000	22/03/2023 6:00	0.0000	0.0000
0.0015	10/12/2022 1:30	0.0000	0.0000	23/02/2023 8:30	0.0000	0.0000	22/03/2023 6:30	0.0000	0.0000
0.0015	10/12/2022 2:00	0.0000	0.0000	23/02/2023 9:00	0.0016	0.0015	22/03/2023 7:00	0.0000	0.0000
0.0015	10/12/2022 2:30	0.0000	0.0000	23/02/2023 9:30	0.0000	0.0000	22/03/2023 7:30	0.0000	0.0000
0.0015	10/12/2022 3:00	0.0000	0.0000	23/02/2023 10:00	0.0000	0.0000	22/03/2023 8:00	0.0000	0.0000
0.0015	10/12/2022 3:30	0.0000	0.0000	23/02/2023 10:30	0.0004	0.0004	22/03/2023 8:30	0.0000	0.0000
0.0015	10/12/2022 4:00	0.0000	0.0000	23/02/2023 11:00	0.0000	0.0000	22/03/2023 9:00	0.0000	0.0000
0.0015	10/12/2022 4:30	0.0000	0.0000	23/02/2023 11:30	0.0000	0.0000			
0.0015	10/12/2022 5:00	0.0000	0.0000	23/02/2023 12:00	0.0013	0.0013			



Normalisation of RY23 SAIFI Major Events									
Aurora Energy's SAIFI Unplanned Boundary Value									0.0737
1/48th of the SAIFI Unplanned Boundary Value	8 December 2022 Major Event			21 February 2023 Major Event			20 March 2023 Major Event		
	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour	Half hour commencing	Raw SAIFI Value for half hour	Normalised SAIFI Value for half hour
0.0015	10/12/2022 5:30	0.0000	0.0000	23/02/2023 12:30	0.0000	0.0000			
0.0015	10/12/2022 6:00	0.0000	0.0000	23/02/2023 13:00	0.0000	0.0000			
0.0015	10/12/2022 6:30	0.0000	0.0000	23/02/2023 13:30	0.0000	0.0000			
0.0015	10/12/2022 7:00	0.0000	0.0000	23/02/2023 14:00	0.0000	0.0000			
0.0015	10/12/2022 7:30	0.0000	0.0000	23/02/2023 14:30	0.0012	0.0012			
0.0015	10/12/2022 8:00	0.0000	0.0000	23/02/2023 15:00	0.0004	0.0004			
				23/02/2023 15:30	0.0000	0.0000			
				23/02/2023 16:00	0.0000	0.0000			
				23/02/2023 16:30	0.0000	0.0000			
				23/02/2023 17:00	0.0000	0.0000			
<b>Total</b>		<b>0.1688</b>	<b>0.0133</b>		<b>0.2170</b>	<b>0.0203</b>		<b>0.1059</b>	<b>0.0215</b>

## Appendix G. POLICIES AND PROCEDURES FOR CAPTURING AND RECORDING INTERRUPTIONS AND CALCULATING SAIDI/SAIFI

### CAPTURING AND RECORDING INTERRUPTIONS

Records for all Interruptions (planned and unplanned) on the Aurora Energy network are maintained in Aurora Energy's outage management system (OMS) and in databases. The relevant procedure for recording Interruption information is set out in document AE-0004-G08 Outage Reporting and Outage Database Manual.

Aurora Energy's outage management system (OMS), GE PowerOn Advantage, connects the network asset and customer models to accurately understand customer impact of outage events.

An OMS incident is generated within the OMS as soon as an Interruption occurs and an OMS fault report completed by the Network Operations Centre. All details on the OMS fault reports are checked by the Network Operations Team Lead or Network Access Team Lead before being completed and then recorded in the electronic database.

The Network Operations Team is responsible for ensuring that all data related to an interruption is entered into the electronic database. The electronic database holds all the data attributes for each Interruption required to calculate SAIDI Assessed Values and SAIFI Assessed Values.

Monitoring the quality of Interruption information entered into the database is the responsibility of the Network Operations Team Lead and the Network Access Team Lead. Quality assurance checks are performed daily, weekly, fortnightly and at month-end. Identifying and resolving problems with quality of data is performed weekly and again at month end.

The database is used to collect data on Interruptions where equipment is removed from service. It therefore includes all Planned and Unplanned Interruptions, as well as those involving all HV fuses and where LV fuses supply multiple ICPs. Momentary interruptions due to circuit reclosers at zone substations less than one minute are also included.

### SUCCESSIVE INTERRUPTIONS

We record and report on successive Interruptions, for the purposes of both SAIDI and SAIFI, if restoration of supply occurred for longer than one minute.

We recognise any stage of an outage event that interrupts consumers for a second time, or interrupts 'new' consumers as a result of fault finding, as an additional interruption, strictly in line with the definition of Interruption in the Determination.

### REVIEW OF INTERRUPTIONS

Each month, all Interruptions are reviewed by the Regulatory team, together with the Network Operations Manager, for consistency of coding.

A monthly summary of reliability performance is discussed at a monthly governance group meeting and is then reported to the Directors of Aurora Energy.

At the end of March each year, further analysis is carried out prior to the production of the reports for publication of the Statement and for information disclosure. These reports are scrutinised by the Network Operations Manager and the Regulatory team for consistency of coding and to ensure that only those interruptions that are consistent with the definition of “Interruption” are included in the Class B or C Interruptions.

## RETENTION OF DOCUMENTATION

Retention of network Interruption documentation and database records are maintained for a sufficient period as required by law or regulation.

## CALCULATING SAIDI AND SAIFI

### Meeting the definition of “Interruption”

Interruptions that meet the definition of an “Interruption” in the Determination are the only interruptions that contribute to Aurora Energy’s SAIDI Assessed Value and SAIFI Assessed Value.

The following interruptions are therefore excluded from the calculations:

- interruptions where no consumers were affected;
- interruptions that occur on Aurora Energy’s low voltage network;
- interruptions that last for less than a period of 1 minute;
- interruptions that relate to extended reserves;
- interruptions that are a result of an automatic under voltage, under frequency, or rolling outage scheme or similar arrangement required as part of the system operator services or other instruction from an authorised regulator;
- interruptions that are a result of a breach of the contract under which the electricity is conveyed;
- interruptions that are as a result of a request from the consumer and only that consumer is affected by the interruption;
- interruptions that are as a result of a request by the consumer’s retailer; or
- interruptions that are for the purpose of isolating an unsafe installation.

### Meeting the definition of “Class B Interruption”

A “Class B Interruption” is defined in the Determination as meaning “*planned interruptions by Aurora*”.

We interpret this as meaning Planned Interruptions that are initiated by Aurora Energy. Planned interruptions that are initiated by Transpower or an external third party are excluded.

### Meeting the definition of “Class C interruption”

A “Class C Interruption” is defined in the Determination as meaning “*unplanned interruptions originating within the system fixed assets of Aurora*”. “*System fixed assets*” is defined in the Determination as meaning “*all fixed assets owned, provided, maintained, or operated by Aurora that are used or intended to be used for the supply of electricity lines services.*”

We interpret this as meaning Unplanned Interruptions that originate within our network. Unplanned Interruptions that originate on assets that are external to our network, but that interrupt the supply of electricity on our network, are excluded.

### Customer Interruption Minutes

The Customer Interruption Minutes value is used to calculate SAIDI. The value is calculated by applying the following formula:

$$\text{Interruption duration} \times \text{number of active ICPs affected by the interruption} = \text{Customer Interruption Minutes}$$

The interruption duration is the length of time between the Interruption start time and the Interruption restoration time, expressed in minutes.

### Total number of consumers on the network

Consumer numbers are derived from the geographic information system (GIS) for that segment of the circuit affected by the planned or unplanned interruption. Each month the ICPs in the GIS are reconciled with the active ICPs in the network connection database used for line charge billing to retailers. The network connection database is updated daily from the national registry and a full reconciliation with the national registry is carried out at the end of each month.

The consumer number used to calculate the SAIDI Assessed Value and the SAIFI Assessed Value is the average of the start period (April) consumer number billed to retailers and the end period (March) consumer number billed to retailers.

### Raw SAIDI value

The raw SAIDI value for an Interruption is calculated by applying the following formula:

$$\frac{\text{Customer Interruption Minutes}}{\text{Total number of consumers on the network}} = \text{Raw SAIDI value}$$

### Raw SAIFI value

The raw SAIFI value for an Interruption is calculated by applying the following formula:

$$\frac{\text{Number of customers affected}}{\text{Total number of consumers on the network}} = \text{Raw SAIFI value}$$

### Planned SAIDI Assessed Value

The Planned SAIDI Assessed Value is calculated in accordance with paragraph (2) of Schedule 3.1 of the Determination.

If a planned interruption meets the definition of:

- a “Class B Notified Interruption”; or
- an “Intended Interruption”

in the Determination, the SAIDI<sub>N</sub> value and SAIDI<sub>B</sub> value are calculated for that Interruption. The SAIDI<sub>B</sub> value, if any, is then attributed to that Interruption and half of the SAIDI<sub>N</sub> value, if any, resulting in one SAIDI value for the Interruption.

If a Planned Interruption does not meet either of the above definitions, the SAIDI<sub>B</sub> value (being the raw SAIDI value) is attributed to that Interruption.

The SAIDI Values calculated for every Class B Planned Interruption commencing within the CPP Assessment Period are then summed to determine the Planned SAIDI Assessed Value.

### Planned SAIFI Assessed Value

The Planned SAIFI Assessed Value is calculated in accordance with paragraph (3) of Schedule 3.1 of the Determination.

The raw SAIFI Values for every Class B Planned Interruption commencing within the CPP Assessment Period are then summed to determine the Planned SAIFI Assessed Value.

### Unplanned SAIDI Assessed Value

The Unplanned SAIDI Assessed Value is calculated in accordance with paragraph (2) of Schedule 3.2 of the Determination.

The following steps are followed to calculate the Unplanned SAIDI Assessed Value:

- **Step 1 – allocating SAIDI to a 30 minute period:** The raw SAIDI Value for an Interruption is allocated to the relevant 30 minute period that starts either on the half hour or half past the hour.

Aurora Energy does this by allocating the raw SAIDI Value for an Interruption to the 30 minute period that correlates to the Interruption start time.

For example, if the Interruption start time is 11:34 on 20 June 2022, the 30 minute period to which the raw SAIDI Value for that Interruption is allocated would be the 11:30 period on 20 June 2022. The duration of the Interruption has no bearing on the 30 minute period to which the raw SAIDI Values are allocated.

- **Step 2 – identifying a Major Event:** Major Events are identified where, in any 24-hour period, the SAIDI Value exceeds the SAIDI Unplanned Boundary Value. The 24-hour periods are rolled half-hourly. Consistent with the Commission’s commentary in its Reasons Paper on the Electricity Distribution Services Default Price-Quality Path Determination 2020<sup>1</sup>, a Major Event can last longer than 24 hours as long as the Major Event criteria is met.
- **Step 3 – replacement of SAIDI:** If a SAIDI Major Event is identified, the SAIDI Value for each 30 minute period within the SAIDI Major Event that exceeds 1/48<sup>th</sup> of Aurora Energy’s SAIDI Unplanned Boundary Value<sup>2</sup> is replaced with 1/48<sup>th</sup> of Aurora Energy’s SAIDI Unplanned Boundary Value. This new value becomes the normalised SAIDI Value for that 30 minute period.
- **Step 4 – sum of normalised SAIDI:** The Unplanned SAIDI Assessed Value is then calculated by summing the normalised SAIDI Values for every 30 minute period within the CPP Assessment Period.

### Unplanned SAIFI Assessed Value

The Unplanned SAIFI Assessed Value is calculated in accordance with paragraph (3) of Schedule 3.2 of the Determination, and the same steps as set out for calculating Unplanned SAIDI Assessed Value above at paragraph G.6.10 are followed, with the exception being the application of Aurora Energy’s SAIFI Unplanned Boundary Value, which is specified in Schedule 3.2 of the Determination as being 0.0737.

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<sup>1</sup> Default price-quality paths for electricity distribution businesses from 1 April 2020 – Final decision, Reasons Paper, 27 November 2019, paragraphs K69 to K74.

<sup>2</sup> Aurora Energy’s SAIDI Unplanned Boundary is specified in Schedule 3.2 of the Determination as being 5.69.



## Appendix H. NOTICE OF TRANSFER

### Transaction - Sale of Secondary Network



Wed 14/09/2022 8:20 am

Good morning

The purpose of this email is to give notice, under clause 10.1 of the Aurora Energy Limited Electricity Distribution Customised Price-Quality Path Determination 2021 (**CPP Determination**) that Aurora Energy Limited (**Aurora**) has entered into an agreement with an exempt electricity distribution business (**EDB**) that will result in a Transfer (as defined in the CPP Determination).

The general nature of the agreement and Transfer is as follows:

- Disposal of a secondary network (as defined in the Electricity Industry Participation Code) located in Te Anau.
- The secondary network comprises electricity distribution within a 186-lot subdivision, with 144 connected consumers (approx. 0.153% of total consumer base, as at 31 August 2022).
- The estimated RAB value of the secondary network is \$408k (approx. 0.00006% of total RAB value, as at 31 March 2022).
- Agreed sale price is the estimated Regulatory Investment Value of the assets (as defined in in clause the 5.3.2(2) of the Electricity Distribution Services Input Methodologies Determination 2012).

As the Transfer involves an exempt EDB, we understand that the Transfer will give rise to obligations under clauses 10.2 and 10.8 to 10.11 of the CPP Determination, and we will be in contact regarding these matters in due course.



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