

31 AUGUST 2024

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 2024, 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, 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 2024.

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 2012* (**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 prepared and certified in accordance with clause 11.5 of the Determination on 29 August 2024. A copy of the 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 2024.

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 2024 CPP Assessment Period		
Term	Description	Value (\$000)
Actual Allowable Revenue (AAR)	Actual Net Allowable Revenue <i>plus</i> Actual Pass-through Costs and Recoverable Costs <i>plus</i> Revenue Wash-up Draw Down Amount.	165,682
Actual Revenue (AR)	Sum of Actual Revenue From Prices <i>plus</i> Other Regulated Income.	142,786
Revenue Foregone (RV)	Actual Net Allowable Revenue x (Revenue Reduction Percentage – 20%) when Revenue Reduction Percentage is greater than 20%, otherwise nil.	Nil
Wash-up Amount	$AAR - AR - RV$	22,896

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 third CPP Assessment Period is shown in Table 2.

Table 2: Actual Allowable Revenue for the 2024 CPP Assessment Period

Actual Allowable Revenue for the 2024 CPP Assessment Period		
Term	Description	Value (\$000)
Actual Net Allowable Revenue (ANAR)	The amount calculated in the manner specified in paragraph (3) of Schedule 1.5.	105,284
Actual Pass-through Costs	Sum of all Pass-through Costs that were incurred or approved by the Commission in the CPP Assessment Period.	2,173
Actual Recoverable Costs	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.	43,649
Revenue Wash-up Draw Down Amount	The Revenue Wash-up Draw Down Amount is the Opening Wash-up Account Balance specified in schedule 1.6.	14,576
Total Actual Allowable Revenue (AAR)	Actual Net Allowable Revenue + Actual Pass-through Costs and Recoverable Costs + Revenue Wash-up Draw Down Amount	165,682

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 + ΔCPI_t) x (1 - X)

where:

ΔCPI is the derived change in the CPI to be applied for the CPP Assessment Period, calculated in accordance with the following formula —

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

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 third CPP Assessment Period is shown in Table 3.

Table 3: Actual Net Allowable Revenue for the 2024 CPP Assessment Period

Actual Net Allowable Revenue for the 2024 CPP Assessment Period		
Term	Description	Value (\$000)
Actual Net Allowable Revenue of the previous CPP Assessment Period	Amount specified as Actual Net Allowable Revenue for the second CPP Assessment Period.	105,472
ΔCPI_t	ΔCPI_t is the derived change in the CPI to be applied for the CPP Assessment Period	5.1%
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 $\times (1 + \Delta\text{CPI}_t) \times (1 - X)$	105,284

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 third 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 2023*.

2.4. ACTUAL REVENUE

22. Clause 4.2 of the Determination defines Actual Revenue as the sum of Actual Revenue From Prices plus Other Regulated Income.

Table 4: Actual Revenue for the 2024 CPP Assessment Period

Actual Revenue for the 2024 CPP Assessment Period		
Term	Description	Value (\$000)
Actual Revenue from Prices	Actual prices for the CPP Assessment Period multiplied by actual quantities for the CPP Assessment Period.	143,776
Other Regulated Income	Other income associated with supply of Electricity Lines Services.	(991)
Total Actual Revenue (AR)	Sum of Actual Revenue From Prices plus Other Regulated Income	142,786

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:

$$\text{Actual Net Allowable Revenue} \times (\text{Revenue Reduction Percentage} - 20\%); \text{ and}$$
- 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 -2.1%, as demonstrated in Table 5.

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

Table 5: Revenue foregone for the 2024 CPP Assessment Period

Revenue Foregone for the 2024 CPP Assessment Period		
Term	Description	Value (\$000)
Actual Net Allowable Revenue (ANAR)	The amount calculated in the manner specified in paragraph (3) of Schedule 1.5.	105,284
Actual Revenue From Prices	Actual prices for the CPP Assessment Period multiplied by actual Quantities for the CPP Assessment Period	143,776
Forecast Revenue From Prices	Actual prices for the CPP Assessment Period multiplied by Forecast Quantities for the CPP Assessment Period	140,874
Revenue Reduction Percentage (RRP)	$1 - (\text{Actual Revenue From Prices} / \text{Forecast Revenue From Prices})$	(2.1%)
Revenue Foregone (RV)	Actual Net Allowable Revenue x (RRP- 20%) when RRP is greater than 20%, otherwise nil	Nil

3. QUALITY STANDARDS

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 2024 CPP Assessment Period - SAIDI

Planned interruptions quality standard for the 2024 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 SAIDI Assessed Value for the third CPP Assessment Period	121.83
Planned accumulated SAIDI	356.67

Table 7: Planned interruptions quality standard compliance for the 2024 CPP Assessment Period - SAIFI

Planned interruptions quality standard for the 2024 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 SAIFI Assessed Value for the third CPP Assessment Period	0.7561
Planned accumulated SAIFI	2.1854

- 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 Determination for the CPP Assessment Period ending 31 March 2024.

- 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 specified in clause 9.4, for that CPP Assessment Period.
- 32. Aurora Energy has complied with the unplanned interruption quality standard as demonstrated in Table 8 and Table 9.

Table 8: Unplanned interruptions quality standard compliance for the 2024 CPP Assessment Period - SAIDI

Unplanned interruptions quality standard for the 2024 CPP Assessment Period - SAIDI	
Sum of Unplanned SAIDI Assessed Values ≤ Unplanned SAIDI Limit	
Unplanned SAIDI Limit	124.94
Unplanned SAIDI Assessed Value	95.48
Compliance result	Compliant

Table 9: Unplanned interruptions quality standard compliance for the 2024 CPP Assessment Period - SAIFI

Unplanned interruptions quality standard for the 2024 CPP Assessment Period - SAIFI	
Sum of Unplanned SAIFI Assessed Values ≤ Unplanned SAIFI Limit	
Unplanned SAIFI limit	2.0710
Unplanned SAIFI assessed value	1.3096
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 2024.
- 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 2024 CPP Assessment Period - SAIDI

Extreme Event quality standard for the 2024 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 12 demonstrate Aurora Energy’s planned SAIDI and SAIFI Assessed Values for the CPP Assessment Period.

Table 11: Planned SAIDI Assessed Value for the 2024 CPP Assessment Period

Planned SAIDI Assessed Value for the 2024 CPP Assessment Period		
Term	Description	Value
Class B non-notified interruptions		8.19
Class B Notified Interruptions falling outside the Notified Interruption Window		15.29
SAIDI _B	Sum of Class B non-notified interruptions	23.48
Class B Notified Interruptions falling inside the Notified Interruption Window		191.83
Class B Intended Interruptions Cancelled Without Notice		4.88
Class B Intended Interruptions Cancelled With Notice		0
SAIDI _N	Sum of Class B Notified Interruptions	196.71
Planned SAIDI Assessed Value	SAIDI _B + (SAIDI _N / 2)	121.83

Table 12: Planned SAIFI Assessed Value for the 2024 CPP Assessment Period

Planned SAIFI Assessed Value for the 2024 CPP Assessment Period		
Term	Description	Value
Planned SAIFI Assessed Value	Sum of SAIFI Values for Class B Interruptions commencing within the CPP Assessment Period	0.7561

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 four 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 2024 CPP Assessment Period

Unplanned SAIDI Major Events during the 2024 CPP Assessment Period			
Start	End	Pre-normalised unplanned SAIDI value	Normalised SAIDI value
13/07/2023 03:30 PM	15/07/2023 07:00 AM	5.84	0.58
20/09/2023 03:30 AM	22/09/2023 12:30 PM	19.92	2.31
18/01/2024 09:30 AM	20/01/2024 08:30 AM	10.90	0.44
23/01/2024 12:00 AM	24/01/2024 11:00 PM	10.46	0.14

3.5.3. SAIFI Major Events

- 40. Aurora Energy experienced four 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 2024 CPP Assessment Period

Unplanned SAIFI Major Events during the 2024 CPP Assessment Period			
Start	End	Pre-normalised unplanned SAIFI value	Normalised SAIFI value
20/09/2023 05:00 AM	22/09/2023 12:30 PM	0.2899	0.0351
07/01/2024 08:30 AM	09/01/2024 07:30 AM	0.1293	0.0031
18/01/2024 01:30 PM	20/01/2024 08:30 AM	0.0796	0.0058
23/01/2024 12:00 AM	24/01/2024 11:00 PM	0.0842	0.0024

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 2024 CPP Assessment Period

Quality Incentive Adjustment calculation for the 2024 CPP Assessment Period		
Term	Description	Value (\$)
SAIDI planned adjustment	$(SAIDI_{planned, target} - SAIDI_{planned, assessed}) \times 0.5 \times IR$	(354,630)
SAIDI unplanned adjustment	$(SAIDI_{unplanned, target} - SAIDI_{unplanned, assessed}) \times IR$	(105,634)
Total adjustment	SAIDI planned adjustment + SAIDI unplanned adjustment	(460,264)
Revenue at risk	$0.02 \times ANAR$	2,105,680
Total penalty/reward		(460,264)
67th Percentile Estimate of Post-tax WACC		4.23%
Quality Incentive Adjustment		(500,026)

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

Table 17: Quality Incentive Adjustment inputs for the 2024 CPP Assessment Period

Quality Incentive Adjustment inputs for the 2024 CPP Assessment Period		
Term	Units	Value
Planned interruptions		
SAIDI Planned Interruption Cap	minutes	195.96
SAIDI Planned Interruption Collar	minutes	0
SAIDI Planned Interruption Target	minutes	72.16
Planned SAIDI Assessed Value	minutes	121.83
Incentive Rate	\$	14,279
Actual Net Allowable Revenue (ANAR)	\$	105,284,000

Quality Incentive Adjustment



Minimum of the Planned SAIDI Cap and assessed value	minutes	121.83
Planned SAIDI subject to incentive	minutes	(49.67)
Adjustment (IR x 0.5)	\$	7,140
SAIDI planned adjustment	\$	(354,630)
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	95.48
Minimum of the Unplanned SAIDI Cap and assessed value	minutes	95.48
Unplanned SAIDI subject to incentive	minutes	(7.40)
Adjustment (IR)	\$	14,279
SAIDI unplanned adjustment	\$	(105,634)

5. MISCELLANEOUS STATEMENTS

5.1. AMALGAMATION, MERGER, MAJOR TRANSACTION, TRANSFER

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 entered into an agreement for an Amalgamation, Merger, Major Transaction, or Transfer in the CPP Assessment Period ending 31 March 2024, so has not been required to notify the Commission.

5.2. RY23 NOTIFICATION OF TRANSFER

47. 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 was included in Aurora Energy's RY23 Annual Compliance Statement at Appendix H.
48. 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.

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
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)	
the start time (hh:mm am/pm) of the SAIDI Major Event;	Clause 11.5(f)(vii)(C)	Appendix F
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)	N/A
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 "Stephen Thompson".

Stephen Richard Thompson

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

Janice Evelyn Fredric

29 August 2024

Appendix C. ASSURANCE REPORT

AUDIT NEW ZEALAND
Mana Arotake Aotearoa

Independent Assurance Report

**To the directors of Aurora Energy Limited and to the Commerce Commission
on the Annual Compliance Statement
for the assessment period ended 31 March 2024
as required by the Aurora Energy Limited Electricity Distribution Customised
Price-Quality Path Determination 2021**

The Auditor-General is the auditor of Aurora Energy Limited (the company). The Auditor-General has appointed me, Chantelle Gernetzky, using the staff and resources of Audit New Zealand, to undertake a reasonable assurance engagement, on his behalf, on whether the Annual Compliance Statement on pages 3 to 21 and 26 to 63 for the assessment period ended on 31 March 2024 has been prepared, in all material respects, in compliance with the Aurora Energy Limited Electricity Distribution Customised Price-Quality Path Determination 2021 (the Determination).

Opinion

In our opinion, in all material respects:

- as far as appears from our examination, the information used in the preparation of the Annual Compliance Statement has been properly extracted from the company's accounting and other records, sourced from its financial and non-financial systems; and
- the company has complied with clauses 11.5 and 11.6 of the Determination in preparing the Annual Compliance Statement for the assessment period ended 31 March 2024.

Basis for opinion

We conducted our engagement in accordance with the International Standard on Assurance Engagements (New Zealand) 3000 (Revised) Assurance Engagements Other Than Audits or Reviews of Historical Financial Information ("ISAE (NZ) 3000 (Revised)") and the Standard on Assurance Engagements (SAE) 3100 (Revised) Compliance Engagements ("SAE 3100 (Revised)"), issued by the New Zealand Auditing and Assurance Standards Board. We have obtained sufficient recorded evidence and explanations that we required to provide a basis for our opinion.

Directors' responsibilities

The directors of the company are responsible for:

- the preparation of the Annual Compliance Statement under clause 11.4 and in accordance with the requirements in clauses 11.5 and 11.6 of the Determination; and

- the identification of risks that may threaten compliance with the clauses identified above and controls which will mitigate those risks and monitor ongoing compliance.

Auditor's responsibilities

Our responsibilities, in terms of clause 11.5(e) and schedule 8(1)(b)(vi) and 8(1)(c) of the Determination, are to express an opinion on whether:

- as far as appears from our examination, the information used in the preparation of the Annual Compliance Statement has been properly extracted from the company's accounting and other records, sourced from its financial and non-financial systems; and
- the Annual Compliance Statement, for the assessment period ended 31 March 2024, has been prepared, in all material respects, in accordance with the requirements in clauses 11.5 and 11.6 of the Determination.

To meet these responsibilities, we planned and performed procedures in accordance with ISAE (NZ) 3000 (Revised) and SAE 3100 (Revised), to obtain reasonable assurance about whether the company has complied, in all material respects, with clauses 11.5 and 11.6 of the Determination.

In relation to the wash-up amount set out in clause 8.6 of the Determination, our procedures included recalculating the wash-up amount in accordance with schedule 1.6 of the Determination and assessing it against the amounts and disclosures contained on pages 4 to 7 of the Annual Compliance Statement.

In relation to the quality standards in clause 9 of the Determination, our procedures included examination, on a test basis, of evidence relevant to the values and disclosures contained on pages 8 to 12 of the Annual Compliance Statement.

In relation to the quality incentive adjustment set out in schedule 4 of the Determination, our procedures included recalculating the quality incentive adjustment in accordance with schedule 4 of the Determination and assessing it against the amounts and disclosures contained on pages 13 to 14 of the Annual Compliance Statement.

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

Inherent limitations

Because of the inherent limitations of an assurance engagement, together with the internal control structure, it is possible that fraud, error or non-compliance with clauses 11.5 and 11.6 of the Determination may occur and not be detected. A reasonable assurance engagement throughout the assessment period does not provide assurance on whether compliance with clauses 11.5 and 11.6 of the Determination will continue in the future.

Restricted use

This report has been prepared for use by the directors of the company and the Commerce Commission in accordance with clause 11.5(e) of the Determination and is provided solely for the purpose of establishing whether the compliance requirements have been met. We disclaim any assumption of responsibility for any reliance on this report to any person other than the directors of the company and the Commerce Commission, or for any other purpose than that for which it was prepared.

Independence and quality control

We complied with the Auditor-General's:

- independence and other ethical requirements, which incorporate the requirements of Professional and Ethical Standard 1 International Code of Ethics for Assurance Practitioners (including International Independence Standards) (New Zealand) (PES 1) issued by the New Zealand Auditing and Assurance Standards Board; and
- quality management requirements, which incorporate Professional and Ethical Standard 3 Quality Management for Firms that perform Audits or Reviews of Financial Statements, or other Assurance or Related Services Engagements (PES 3) issued by the New Zealand Auditing and Assurance Standards Board. PES 3 requires our firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

The Auditor-General, and his employees, and Audit New Zealand and its employees may deal with the company on normal terms within the ordinary course of trading activities of the company. Other than any dealings on normal terms within the ordinary course of trading activities of the company, this assurance engagement, the assurance engagement on the Electricity Distribution Information Disclosures, the assurance engagement on the Annual Delivery Report, and the annual audit of the company's financial statements and statement of service performance, we have no relationship with or interests in the company.

A handwritten signature in black ink, appearing to be "Chantelle Gernetzky".

Chantelle Gernetzky
Audit New Zealand
On behalf of the Auditor-General
Dunedin, New Zealand
29 August 2024

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 2024 CPP Assessment Period

Actual and forecast Pass-through Costs for the 2024 CPP Assessment Period				
Actual Pass-through Costs	Actual (\$000)	Forecast (\$000)	Forecast variance (\$000)	Explanation for variances
Local Authority rates	\$1,455	\$1,189	\$266	Variance predominantly due to an increase in the rateable value of road reserves.
Commerce Act levies	\$406	\$325	\$81	Increase for Commerce Commission's IM review.
Electricity Authority levies	\$249	\$278	(\$28)	Increase in annual levy rates less than forecast.
Utilities Disputes levies	\$63	\$67	(\$5)	Case related levies lower than forecast.
Total actual pass-through costs	2,173	1,859	314	

RECOVERABLE COSTS

Table 19: Actual and forecast recoverable costs for the 2024 CPP Assessment Period

Actual and forecast recoverable costs for the 2024 CPP Assessment Period				
Actual recoverable costs	Actual (\$000)	Forecast (\$000)	Forecast variance (\$000)	Explanation for variances
Opex Incentive Amount	\$20,937	\$20,937	\$0	In line with forecast
Capex Incentive Amount	(\$1,537)	(\$1,537)	\$0	In line with forecast
Transpower - Connection Charge	\$5,213	\$5,213	\$0	In line with forecast
Transpower - Benefits Based Charge	\$2,783	\$2,783	\$0	In line with forecast
Transpower - Residual Charge	\$16,817	\$16,817	\$0	In line with forecast
Transpower - Transitional Cap Adjustment	\$77	\$77	\$0	In line with forecast
Transpower - New Investment Charge	\$693	\$0	\$693	Not forecast. Also includes new investment charges for Frankton GXP upgrades.
System Operator services	\$0	\$0	-	-
Avoided Transmission Costs	\$0	\$0	-	-
Distributed Generation Allowance	\$0	\$0	-	-
Claw-back	\$0	\$0	-	-
Standard application fee for a CPP proposal	\$0	\$0	-	-
Commerce Commission assessment fee for a CPP proposal	\$0	\$0	-	-
Verifier fee under a CPP proposal	\$0	\$0	-	-
Auditor's fee associated with a CPP proposal	\$0	\$0	-	-
Engineer's fee associated with a CPP proposal	\$0	\$0	-	-
Catastrophic Event Allowance	\$0	\$0	-	-

Extended Reserve Allowance	\$0	\$0	-	
Quality Incentive Adjustment	(\$567)	(\$567)	\$0	In line with forecast
Capex Wash-up Adjustment	(\$808)	(\$808)	\$0	In line with forecast
Transmission asset wash-up adjustment	\$0	\$0	-	-
2013-15 NPV wash-up allowance	\$0	\$0	-	-
Reconsideration event allowance	\$0	\$0	-	-
Engineer's fee associated with a proposal of quality standard variation	\$0	\$0	-	-
Urgent Project Allowance	\$0	\$0	-	-
Fire and Emergency Management New Zealand (FENZ) levies	\$40	\$29	\$11	Increase in material damage insurance cover.
Innovation Project Allowance	\$0	\$0	-	-
Total actual recoverable costs	\$43,649	\$42,945	\$704	

Appendix E. ACTUAL REVENUE FROM PRICES

49. Aurora Energy's Forecast Revenue From Prices for the third CPP Assessment Period disclosed in Aurora Energy's Price-Setting Compliance Statement for the period 1 April 2023 to 31 March 2024 was \$140,874,406.
50. Table 20, shows the actual Prices and Quantities for Actual Revenue From Prices for the 2024 CPP Assessment Period and includes \$9,788 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 2024 CPP Assessment Period

Load Group	Charge Type	Charge Applied	Actual Quantities as at 31 March 2024	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 2024
Fixed charges - Dunedin								
Residential 15	Number	Daily	18,033,618	\$ -	\$ 0.4500	\$ -	\$ 8,115,128	\$ 8,115,128
Residential 8	Number	Daily	203,046	\$ -	\$ 0.1230	\$ -	\$ 24,965	\$ 24,965
Unmetered Supply	Number	Daily	1,464	\$ 0.0806	\$ -	\$ 118	\$ -	\$ 118
L0	Number	Daily	37,275	\$ 0.5364	\$ 0.1898	\$ 19,995	\$ 7,074	\$ 27,069
L0A	Number	Daily	65,193	\$ 1.1136	\$ 0.3779	\$ 72,591	\$ 24,645	\$ 97,236
Load Group 1A	Number	Daily	146,235	\$ 0.0608	\$ -	\$ 8,870	\$ -	\$ 8,870
Load Group 1A	Total Capacity kVA	Daily	1,168,776	\$ 0.0473	\$ 0.0289	\$ 55,277	\$ 33,794	\$ 89,071
Load Group 1A	Total CPD kW	Daily	142,686	\$ 0.6121	\$ 0.1764	\$ 87,334	\$ 25,172	\$ 112,506
Load Group 1	Number	Daily	1,022,739	\$ 0.0608	\$ -	\$ 62,036	\$ -	\$ 62,036
Load Group 1	Total Capacity kVA	Daily	15,336,510	\$ 0.0283	\$ 0.0296	\$ 434,087	\$ 453,894	\$ 887,981
Load Group 1	Total CPD kW	Daily	2,359,084	\$ 0.6693	\$ 0.1890	\$ 1,578,942	\$ 445,861	\$ 2,024,803
Load Group 2	Number	Daily	1,162,858	\$ 0.1199	\$ -	\$ 139,543	\$ -	\$ 139,543
Load Group 2	Total Capacity kVA	Daily	59,504,673	\$ 0.0363	\$ 0.0407	\$ 2,160,040	\$ 2,421,851	\$ 4,581,891
Load Group 2	Total CPD kW	Daily	8,239,624	\$ 0.6921	\$ 0.1781	\$ 5,702,641	\$ 1,467,480	\$ 7,170,120
Load Group 3	Number	Daily	40,728	\$ 1.8622	\$ -	\$ 75,846	\$ -	\$ 75,846
Load Group 3	Total Capacity kVA	Daily	7,947,861	\$ 0.0703	\$ 0.0613	\$ 558,738	\$ 487,202	\$ 1,045,940
Load Group 3	Total KVA-KM	Daily	44,148,463	\$ 0.0016	\$ -	\$ 70,638	\$ -	\$ 70,638
Load Group 3	Total CPD kW	Daily	1,904,336	\$ 0.5556	\$ 0.1498	\$ 1,058,049	\$ 285,270	\$ 1,343,319
Load Group 3A	Number	Daily	34,469	\$ 1.8622	\$ -	\$ 64,191	\$ -	\$ 64,191
Load Group 3A	Total Capacity kVA	Daily	10,438,128	\$ 0.0317	\$ 0.0864	\$ 330,888	\$ 901,854	\$ 1,232,742
Load Group 3A	Total KVA-KM	Daily	56,697,667	\$ 0.0016	\$ -	\$ 90,717	\$ -	\$ 90,717
Load Group 3A	Total CPD kW	Daily	3,223,362	\$ 0.5693	\$ 0.1735	\$ 1,835,060	\$ 559,253	\$ 2,394,314
Load Group 4	Number	Daily	27,441	\$ 5.1233	\$ -	\$ 140,588	\$ -	\$ 140,588
Load Group 4	Total Capacity kVA	Daily	19,489,145	\$ 0.0058	\$ 0.0678	\$ 113,037	\$ 1,321,364	\$ 1,434,401
Load Group 4	Total KVA-KM	Daily	109,094,754	\$ 0.0016	\$ -	\$ 174,551	\$ -	\$ 174,551
Load Group 4	Total CPD kW	Daily	5,350,073	\$ 0.4725	\$ 0.1523	\$ 2,527,910	\$ 814,816	\$ 3,342,726
Load Group 5	Number	Daily	2,196	\$ 5.1233	\$ -	\$ 11,251	\$ -	\$ 11,251
Load Group 5	Total Capacity kVA	Daily	6,880,800	\$ 0.0058	\$ 0.0727	\$ 39,909	\$ 500,234	\$ 540,143
Load Group 5	Total KVA-KM	Daily	47,810,946	\$ 0.0016	\$ -	\$ 76,498	\$ -	\$ 76,498
Load Group 5	Total CPD kW	Daily	2,077,776	\$ 0.3131	\$ 0.1433	\$ 650,552	\$ 297,745	\$ 948,297
Other Charges	Other Charge (\$)	Annual	23,452	\$ 1.0000	\$ -	\$ 23,452	\$ -	\$ 23,452
Transformer Charges	Other Charge (\$)	Annual	464,275	\$ 1.0000	\$ -	\$ 464,275	\$ -	\$ 464,275
Street Lighting	Fixed	Daily	366	\$ 400.5215	\$ 184.2789	\$ 146,590	\$ 67,446	\$ 214,037
Street Lighting	Fixed	Daily	366	\$ 787.2432	\$ 171.3644	\$ 288,130	\$ 62,718	\$ 350,848
Non-Standard	Fixed	Annual	1	\$ 146,060	\$ -	\$ 146,060	\$ -	\$ 146,060
Variable charges - Dunedin								
Residential DN	kWh	Volume	44,308,401	\$ 0.1191	\$ 0.0148	\$ 5,276,616	\$ 655,592	\$ 5,932,208
Residential DN	kWh	Volume	7,346,278	\$ 0.1191	\$ 0.0148	\$ 874,943	\$ 108,724	\$ 983,667
Residential DN	kWh	Volume	8,737,677	\$ 0.1191	\$ 0.0148	\$ 1,040,659	\$ 129,316	\$ 1,169,975
Residential DN	kWh	Volume	273,839,562	\$ 0.0687	\$ 0.0148	\$ 18,816,219	\$ 4,051,593	\$ 22,867,812
Residential DN	kWh	Volume	46,350,903	\$ 0.0687	\$ 0.0148	\$ 3,184,307	\$ 685,992	\$ 3,870,299
Residential DN	kWh	Volume	41,937,469	\$ 0.0687	\$ 0.0148	\$ 2,881,108	\$ 620,671	\$ 3,501,779
Residential DN	kWh	Volume	386,641	\$ 0.0075	\$ 0.0148	\$ 2,901	\$ 5,720	\$ 8,621
Unmetered Supply DN	kWh	Volume	3,974	\$ 0.0288	\$ 0.0148	\$ 114	\$ 59	\$ 173
Residential DN	kWh	Volume	4,226,946	\$ 0.0319	\$ 0.0148	\$ 134,840	\$ 62,562	\$ 197,402
Total Dunedin						\$ 51,420,108	\$ 24,637,995	\$ 76,058,103

Load Group	Charge Type	Charge Applied	Actual Quantities as at 31 March 2024	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 2024
Fixed charges - Clyde/Cromwell								
Residential 15	Number	Daily	6,732,149	\$ -	\$ 0.4500	\$ -	\$ 3,029,467	\$ 3,029,467
Residential 8	Number	Daily	34,063	\$ -	\$ 0.1230	\$ -	\$ 4,188	\$ 4,188
L0	Number	Daily	39,846	\$ 0.5326	\$ 1.1413	\$ 21,222	\$ 45,477	\$ 66,699
LOA	Number	Daily	122,143	\$ 1.0155	\$ 2.3335	\$ 124,029	\$ 285,030	\$ 409,059
Load Group 1A	Number	Daily	123,725	\$ 0.0459	\$ -	\$ 5,676	\$ -	\$ 5,676
Load Group 1A	Total Capacity kVA	Daily	989,030	\$ 0.0496	\$ 0.0103	\$ 49,063	\$ 10,198	\$ 59,261
Load Group 1A	Total CPD kW	Daily	121,135	\$ 0.7290	\$ 0.0421	\$ 88,307	\$ 5,101	\$ 93,408
Load Group 1	Number	Daily	659,074	\$ 0.0459	\$ -	\$ 30,235	\$ -	\$ 30,235
Load Group 1	Total Capacity kVA	Daily	9,880,535	\$ 0.0373	\$ 0.0012	\$ 368,460	\$ 11,878	\$ 380,338
Load Group 1	Total CPD kW	Daily	1,449,084	\$ 0.7966	\$ 0.0023	\$ 1,154,338	\$ 3,329	\$ 1,157,667
Load Group 2	Number	Daily	799,553	\$ 0.0928	\$ -	\$ 74,210	\$ -	\$ 74,210
Load Group 2	Total Capacity kVA	Daily	40,425,077	\$ 0.0509	\$ 0.0329	\$ 2,057,588	\$ 1,330,034	\$ 3,387,623
Load Group 2	Total CPD kW	Daily	4,336,743	\$ 0.5396	\$ 0.1792	\$ 2,340,110	\$ 777,144	\$ 3,117,253
Load Group 3	Number	Daily	33,518	\$ 1.5900	\$ -	\$ 53,294	\$ -	\$ 53,294
Load Group 3	Total Capacity kVA	Daily	6,247,004	\$ 0.0394	\$ 0.0707	\$ 246,132	\$ 441,665	\$ 687,796
Load Group 3	Total KVA-KM	Daily	196,340,341	\$ 0.0011	\$ -	\$ 215,974	\$ -	\$ 215,974
Load Group 3	Total CPD kW	Daily	701,819	\$ 0.7727	\$ 0.3022	\$ 542,295	\$ 212,090	\$ 754,385
Load Group 3A	Number	Daily	22,938	\$ 1.5900	\$ -	\$ 36,471	\$ -	\$ 36,471
Load Group 3A	Total Capacity kVA	Daily	6,729,404	\$ 0.0079	\$ 0.0203	\$ 53,161	\$ 136,609	\$ 189,770
Load Group 3A	Total KVA-KM	Daily	200,599,410	\$ 0.0011	\$ -	\$ 220,660	\$ -	\$ 220,660
Load Group 3A	Total CPD kW	Daily	1,075,048	\$ 0.9560	\$ 0.0807	\$ 1,027,746	\$ 86,756	\$ 1,114,502
Load Group 4	Number	Daily	17,216	\$ 4.2752	\$ -	\$ 73,601	\$ -	\$ 73,601
Load Group 4	Total Capacity kVA	Daily	12,841,466	\$ 0.0641	\$ 0.0479	\$ 823,138	\$ 580,206	\$ 1,403,344
Load Group 4	Total KVA-KM	Daily	475,791,090	\$ 0.0010	\$ -	\$ 475,791	\$ -	\$ 475,791
Load Group 4	Total CPD kW	Daily	2,061,182	\$ 0.6152	\$ 0.1845	\$ 1,268,039	\$ 379,771	\$ 1,647,810
Load Group 5	Number	Daily	387	\$ 4.2752	\$ -	\$ 1,655	\$ -	\$ 1,655
Load Group 5	Total Capacity kVA	Daily	969,096	\$ 0.0350	\$ 0.0269	\$ 33,918	\$ 26,069	\$ 59,987
Load Group 5	Total KVA-KM	Daily	62,587,843	\$ 0.0011	\$ -	\$ 68,847	\$ -	\$ 68,847
Load Group 5	Total CPD kW	Daily	50,562	\$ 0.7000	\$ 0.4041	\$ 35,393	\$ 20,432	\$ 55,826
Other Charges	Other Charge (\$)	Annual	9,896	\$ 1.0000	\$ -	\$ 9,896	\$ -	\$ 9,896
Transformer Charges	Other Charge (\$)	Annual	233,153	\$ 1.0000	\$ -	\$ 233,153	\$ -	\$ 233,153
Non-Standard	Number	Annual	1	\$ 495,602	\$ -	\$ 495,602	\$ -	\$ 495,602
Non-Standard	Number	Annual	1	\$ 30,764	\$ -	\$ 30,764	\$ -	\$ 30,764
Variable charges - Clyde/Cromwell								
Residential CYD/CML	kWh	Volume	83,452,423	\$ 0.1563	\$ 0.0304	\$ 13,042,703	\$ 2,537,363	\$ 15,580,066
Residential CYD/CML	kWh	Volume	11,238,674	\$ 0.1563	\$ 0.0304	\$ 1,756,606	\$ 341,653	\$ 2,098,259
Residential CYD/CML	kWh	Volume	12,140,903	\$ 0.1563	\$ 0.0304	\$ 1,897,624	\$ 369,082	\$ 2,266,706
Residential CYD/CML	kWh	Volume	27,248,284	\$ 0.0496	\$ 0.0304	\$ 1,351,526	\$ 828,342	\$ 2,179,869
Residential CYD/CML	kWh	Volume	780,286	\$ 0.0390	\$ 0.0304	\$ 30,432	\$ 23,721	\$ 54,152
Street Lighting kWh CYD/CML	kWh	Volume	936,161	\$ 0.0399	\$ 0.0439	\$ 37,353	\$ 41,097	\$ 78,450
Street Lighting Lamps CYD/CML	#amps	Daily	1,685,209	\$ 0.0292	\$ -	\$ 49,208	\$ -	\$ 49,208
Total Clyde/Cromwell						\$ 30,404,428	\$ 11,526,702	\$ 41,931,130

Load Group	Charge Type	Charge Applied	Actual Quantities as at 31 March 2024	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 2024
Fixed charges - Queenstown								
Residential 15	Number	Daily	3,632,789	\$ -	\$ 0.4500	\$ -	\$ 1,634,755	\$ 1,634,755
Residential 8	Number	Daily	39,424	\$ -	\$ 0.1230	\$ -	\$ 4,847	\$ 4,847
Load Group 0	Number	Daily	34,434	\$ 0.4081	\$ 0.5021	\$ 14,051	\$ 17,295	\$ 31,346
Load Group 0A	Number	Daily	69,272	\$ 0.7392	\$ 1.0456	\$ 51,208	\$ 72,427	\$ 123,635
Load Group 1A	Number	Daily	62,006	\$ 0.0471	\$ -	\$ 2,919	\$ -	\$ 2,919
Load Group 1A	Total Capacity kVA	Daily	496,048	\$ 0.0357	\$ 0.0200	\$ 17,706	\$ 9,921	\$ 27,627
Load Group 1A	Total CPD kW	Daily	61,913	\$ 0.4060	\$ 0.1829	\$ 25,135	\$ 11,326	\$ 36,460
Load Group 1	Number	Daily	309,453	\$ 0.0471	\$ -	\$ 14,568	\$ -	\$ 14,568
Load Group 1	Total Capacity kVA	Daily	4,641,795	\$ 0.0189	\$ 0.0391	\$ 87,721	\$ 181,503	\$ 269,224
Load Group 1	Total CPD kW	Daily	898,214	\$ 0.4294	\$ 0.2354	\$ 385,696	\$ 211,441	\$ 597,137
Load Group 2	Number	Daily	617,818	\$ 0.0714	\$ -	\$ 44,058	\$ -	\$ 44,058
Load Group 2	Total Capacity kVA	Daily	28,017,138	\$ 0.0360	\$ 0.0298	\$ 1,008,668	\$ 834,843	\$ 1,843,511
Load Group 2	Total CPD kW	Daily	4,188,539	\$ 0.4652	\$ 0.2216	\$ 1,948,491	\$ 928,184	\$ 2,876,675
Load Group 3	Number	Daily	10,852	\$ 1.4392	\$ -	\$ 15,620	\$ -	\$ 15,620
Load Group 3	Total Capacity kVA	Daily	2,051,612	\$ 0.1374	\$ 0.0750	\$ 281,892	\$ 153,870	\$ 435,762
Load Group 3	Total KVA-KM	Daily	30,836,500	\$ 0.0011	\$ -	\$ 33,920	\$ -	\$ 33,920
Load Group 3	Total CPD kW	Daily	496,923	\$ 0.4927	\$ 0.0010	\$ 244,834	\$ 497	\$ 245,331
Load Group 3A	Number	Daily	10,720	\$ 1.4392	\$ -	\$ 15,430	\$ -	\$ 15,430
Load Group 3A	Total Capacity kVA	Daily	3,111,621	\$ 0.1256	\$ 0.0619	\$ 390,819	\$ 192,610	\$ 583,429
Load Group 3A	Total KVA-KM	Daily	46,695,449	\$ 0.0011	\$ -	\$ 51,365	\$ -	\$ 51,365
Load Group 3A	Total CPD kW	Daily	694,048	\$ 0.5069	\$ 0.0024	\$ 351,813	\$ 1,666	\$ 353,479
Load Group 4	Number	Daily	9,156	\$ 4.0314	\$ -	\$ 36,911	\$ -	\$ 36,911
Load Group 4	Total Capacity kVA	Daily	6,682,500	\$ 0.0325	\$ 0.0651	\$ 217,181	\$ 435,031	\$ 652,212
Load Group 4	Total KVA-KM	Daily	79,282,588	\$ 0.0011	\$ -	\$ 87,211	\$ -	\$ 87,211
Load Group 4	Total CPD kW	Daily	1,742,076	\$ 0.2941	\$ 0.2192	\$ 512,345	\$ 381,863	\$ 894,208
Load Group 5	Number	Daily	-	\$ -	\$ -	\$ -	\$ -	\$ -
Load Group 5	Total Capacity kVA	Daily	-	\$ -	\$ -	\$ -	\$ -	\$ -
Load Group 5	Total KVA-KM	Daily	-	\$ -	\$ -	\$ -	\$ -	\$ -
Load Group 5	Total CPD kW	Daily	-	\$ -	\$ -	\$ -	\$ -	\$ -
Other Charges	Other Charge (\$)	Annual	1,512	\$ 1.0000	\$ -	\$ 1,512	\$ -	\$ 1,512
Transformer Charges	Other Charge (\$)	Annual	150,150	\$ 1.0000	\$ -	\$ 150,150	\$ -	\$ 150,150
Non-Standard	Number	Annual	1	\$ 30,890	\$ -	\$ 30,890	\$ -	\$ 30,890
Non-Standard	Number	Annual	1	\$ 98,494	\$ 111,402	\$ 98,494	\$ 111,402	\$ 209,897
Variable charges - Queenstown								
Residential FKN	kWh	Volume	64,051,652	\$ 0.1008	\$ 0.0232	\$ 6,445,422	\$ 1,479,723	\$ 7,925,145
Residential FKN	kWh	Volume	6,895,249	\$ 0.1008	\$ 0.0232	\$ 695,042	\$ 159,970	\$ 855,011
Residential FKN	kWh	Volume	7,559,469	\$ 0.1008	\$ 0.0232	\$ 761,994	\$ 175,380	\$ 937,374
Residential FKN	kWh	Volume	22,329,682	\$ 0.0240	\$ 0.0233	\$ 535,920	\$ 520,275	\$ 1,056,195
Residential FKN	kWh	Volume	592,973	\$ 0.0147	\$ 0.0233	\$ 8,717	\$ 13,816	\$ 22,533
Street Lighting kWh FKN	kWh	Volume	728,072	\$ 0.0125	\$ 0.0400	\$ 9,101	\$ 29,123	\$ 38,224
Street Lighting Lamps FKN	#amps	Daily	1,188,569	\$ 0	\$ -	\$ 41,956	\$ -	\$ 41,956

Load Group	Charge Type	Charge Applied	Actual Quantities as at 31 March 2024	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 2024
Fixed charges - Queenstown Sub								
Residential 15	Number	Daily	490,859	\$ -	\$ 0.4500	\$ -	\$ 220,887	\$ 220,887
Residential 8	Number	Daily	1,098	\$ -	\$ 0.1230	\$ -	\$ 135	\$ 135
Load Group 0	Number	Daily	5,124	\$ 0.4081	\$ 0.5021	\$ 2,091	\$ 2,574	\$ 4,665
Load Group 0A	Number	Daily	5,833	\$ 0.7392	\$ 1.0456	\$ 4,312	\$ 6,099	\$ 10,411
Load Group 1A	Number	Daily	6,372	\$ 0.0471	\$ -	\$ 300	\$ -	\$ 300
Load Group 1A	Total Capacity kVA	Daily	50,976	\$ 0.0357	\$ 0.0200	\$ 1,820	\$ 1,020	\$ 2,839
Load Group 1A	Total CPD kW	Daily	5,874	\$ 0.4060	\$ 0.1829	\$ 2,385	\$ 1,074	\$ 3,459
Load Group 1	Number	Daily	76,973	\$ 0.0471	\$ -	\$ 3,624	\$ -	\$ 3,624
Load Group 1	Total Capacity kVA	Daily	1,154,445	\$ 0.0189	\$ 0.0391	\$ 21,817	\$ 45,141	\$ 66,958
Load Group 1	Total CPD kW	Daily	223,763	\$ 0.4294	\$ 0.2354	\$ 96,085	\$ 52,674	\$ 148,759
Load Group 2	Number	Daily	81,583	\$ 0.0642	\$ -	\$ 5,240	\$ -	\$ 5,240
Load Group 2	Total Capacity kVA	Daily	3,906,570	\$ 0.0324	\$ 0.0268	\$ 126,572	\$ 104,697	\$ 231,268
Load Group 2	Total CPD kW	Daily	614,668	\$ 0.4187	\$ 0.1994	\$ 257,362	\$ 122,564	\$ 379,926
Load Group 3	Number	Daily	3,294	\$ 1.1873	\$ -	\$ 3,911	\$ -	\$ 3,911
Load Group 3	Total Capacity kVA	Daily	644,526	\$ 0.1134	\$ 0.0619	\$ 73,089	\$ 39,896	\$ 112,985
Load Group 3	Total KVA-KM	Daily	2,351,187	\$ 0.0009	\$ -	\$ 2,116	\$ -	\$ 2,116
Load Group 3	Total CPD kW	Daily	221,064	\$ 0.4065	\$ 0.0008	\$ 89,862	\$ 177	\$ 90,039
Load Group 3A	Number	Daily	2,928	\$ 1.1873	\$ -	\$ 3,477	\$ -	\$ 3,477
Load Group 3A	Total Capacity kVA	Daily	934,032	\$ 0.1036	\$ 0.0510	\$ 96,766	\$ 47,636	\$ 144,401
Load Group 3A	Total KVA-KM	Daily	3,621,996	\$ 0.0009	\$ -	\$ 3,260	\$ -	\$ 3,260
Load Group 3A	Total CPD kW	Daily	236,214	\$ 0.4182	\$ 0.0020	\$ 98,785	\$ 472	\$ 99,257
Load Group 4	Number	Daily	3,294	\$ 3.1244	\$ -	\$ 10,292	\$ -	\$ 10,292
Load Group 4	Total Capacity kVA	Daily	1,921,500	\$ 0.0252	\$ 0.0504	\$ 48,422	\$ 96,844	\$ 145,265
Load Group 4	Total KVA-KM	Daily	3,820,128	\$ 0.0008	\$ -	\$ 3,056	\$ -	\$ 3,056
Load Group 4	Total CPD kW	Daily	802,266	\$ 0.2280	\$ 0.1699	\$ 182,917	\$ 136,305	\$ 319,222
Load Group 5	Number	Daily	366	\$ 3.1243	\$ -	\$ 1,143	\$ -	\$ 1,143
Load Group 5	Total Capacity kVA	Daily	915,000	\$ 0.0090	\$ 0.0079	\$ 8,235	\$ 7,229	\$ 15,464
Load Group 5	Total KVA-KM	Daily	1,098,000	\$ 0.0013	\$ -	\$ 1,427	\$ -	\$ 1,427
Load Group 5	Total CPD kW	Daily	176,958	\$ 0.1592	\$ 0.2427	\$ 28,172	\$ 42,948	\$ 71,119
Other Charges	Other Charge (\$)	Annual	-	\$ -	\$ -	\$ -	\$ -	\$ -
Transformer Charges	Other Charge (\$)	Annual	65,100	\$ 1.0000	\$ -	\$ 65,100	\$ -	\$ 65,100
Non-Standard	Number	Annual	1	\$ 84,268	\$ 52,592	\$ 84,268	\$ 52,592	\$ 136,860
Variable charges - Queenstown Sub								
Residential FKN Sub	kWh	Volume	7,028,021	\$ 0.1008	\$ 0.0232	\$ 708,009	\$ 162,814	\$ 870,823
Residential FKN Sub	kWh	Volume	1,023,271	\$ 0.1008	\$ 0.0232	\$ 103,146	\$ 23,740	\$ 126,886
Residential FKN Sub	kWh	Volume	1,113,154	\$ 0.1008	\$ 0.0232	\$ 112,206	\$ 25,825	\$ 138,031
Residential FKN Sub	kWh	Volume	3,254,902	\$ 0.0240	\$ 0.0233	\$ 78,155	\$ 75,845	\$ 154,000
Residential FKN Sub	kWh	Volume	88,421	\$ 0.0147	\$ 0.0233	\$ 1,300	\$ 2,060	\$ 3,360
Total Queenstown						\$ 16,944,455	\$ 8,833,014	\$ 25,777,469
Total Network						\$ 98,768,991	\$ 44,997,710	\$ 143,766,701
Prior Year Wash-ups						\$ 7,550	\$ 2,238	\$ 9,788
Total Revenue						\$ 98,776,541	\$ 44,999,948	\$ 143,776,489

Appendix F. MAJOR EVENTS

Details of the four SAIDI Major Events and four 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.

13 JULY 2023 SAIDI MAJOR EVENT

Table 21: Details of 13 July 2023 SAIDI Major Event

Details of 13 July 2023 SAIDI Major Event	
Cause	Five (5) unplanned outages were caused by Defective equipment.
Start date	13 July 2023
Start time	3:30 pm
End date	15 July 2023
End time	7:00 am
Raw SAIDI Value	5.84 minutes
Replaced SAIDI Value	0.58 minutes
Location of the Major Event	Outage events 1 and 4: Cromwell, Central Otago Outage event 2: Fernhill, Queenstown Outage event 3: Port Chalmers, Dunedin Outage event 5: Wanaka, Central Otago
Main Equipment involved in the Major Event	Outage event 1 to 5: Distribution Lines (Excluding LV)
How Aurora Energy responded to the Major Event	During this period a high wind event was experienced across the network and the outages were a result of this. Field responses were initiated for each weather-related outage to patrol the feeders and determine if there was a legitimate cause for the trip and/or it was safe to reliven. In each case, repairs were identified as being required and carried out as necessary, after which supply was restored.
Any mitigating factors that may have prevented or minimised the Major Event	We do not believe that there were any factors, other than those discussed below, 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	We will continue to review, with an aim to improving our fault response practices, so that customers are impacted by unplanned outage events for no longer than necessary. We are 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.

20 SEPTEMBER 2023 SAIDI MAJOR EVENT

Table 22: Details of 20 September 2023 SAIDI Major Event

Details of 20 September 2023 SAIDI Major Event	
Cause	<p>Outage events 1, 2, 3, 7, 8, 11, 15, 16, 17, 18, 22, 25, 26, 27, 31, 35, 38 and 39: Defective equipment</p> <p>Outage events 4, 9, 12, 19, 21, 24, 28 and 30: Cause Unknown.</p> <p>Outage events 5, 6, 10, 13, 14, 20, 23, 29 and 34: Vegetation</p> <p>Outage events 32 and 33: Third-party interference (Vehicle damage and Other)</p> <p>Outage events 36 and 37: Adverse environment</p>
Start date	20 September 2023
Start time	3:30 am
End date	22 September 2023
End time	12:30 pm
Raw SAIDI Value	19.92 minutes
Replace SAIDI Value	2.31 minutes
Location of the Major Event	<p>Outage event 1: Mosgiel, Dunedin</p> <p>Outage events 2 and 18: Omakau, Central Otago</p> <p>Outage events 3, 4, 15, and 28: Alexandra, Central Otago</p> <p>Outage events 5, 17, 20, and 21: Camp Hill, Central Otago</p> <p>Outage events 7, 8, 35 and 39: Queenstown, Queenstown</p> <p>Outage event 9: Remarkables, Queenstown</p> <p>Outage events 10, 12, and 19: Arrowtown, Queenstown</p> <p>Outage event 10: Frankton, Queenstown</p> <p>Outage events 11, 23, 27 and 36: Cromwell, Central Otago</p> <p>Outage event 13: Outram, Dunedin</p> <p>Outage event 14: Berwick, Dunedin</p> <p>Outage event 24: Ettrick, Central Otago</p> <p>Outage events 16 and 29: Queensberry, Central Otago</p> <p>Outage events 32 and 33: East Taieri, Dunedin</p> <p>Outage event 6: Frankton, Queenstown</p> <p>Outage event 30: Lindis Crossing, Central Otago</p> <p>Outage event 34: Lauder Flat, Central Otago</p> <p>Outage events 22, 25 and 31: Roxburgh, Central Otago</p> <p>Outage events 26 and 37: Wanaka, Central Otago</p> <p>Outage event 38: Corstorphine, Dunedin</p>

<p>Main Equipment involved in the Major Event</p>	<p>Outage events 1 and 33: Distribution Cable (Excluding LV) Outage events 2, 4 to 7, 9, 11 to 25, 29, 32 and 34: Distribution Lines (Excluding LV) Outage events 3, 8, 10, 27, and 28: Subtransmission Lines Outage events 26, 30, 31, 35 to 39: Distribution Other (Excluding LV)</p>
<p>How Aurora Energy responded to the Major Event</p>	<p>During this period an extremely high wind event, together with one of the highest 24-hour periods of rainfall in the last 24 years, was experienced across the network and the outages were a result of this. A significant and sustained response was required by both our Network Operations Centre and our field service providers.</p> <p>For each outage we initiated field response to patrol the feeder to determine the cause of the trip and ascertain whether it was safe to liven.</p> <p>Field responses were initiated for each weather-related outage to patrol the feeders and determine if there was a legitimate cause for the trip and/or it was safe to reliven. In each case, repairs were identified as being required and carried out as necessary, after which supply was restored.</p>
<p>Any mitigating factors that may have prevented or minimised the Major Event</p>	<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>
<p>Description of any steps Aurora Energy proposes to take to mitigate the risk of future similar Major Events</p>	<p>Aurora Energy will continue to review, with an aim to improving, its fault response practices, 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>

18 JANUARY 2024 SAIDI MAJOR EVENT

Table 23: Details of 18 January 2024 SAIDI Major Event

Details of 18 January 2024 SAIDI Major Event	
Cause	Outage event 1: Third-party (Other) Outage events 2 and 5: Cause Unknown Outage events: 3, 4 and 6: Defective equipment
Start date	18 January 2024
Start time	9:30 am
End date	20 January 2024
End time	8:30 am
Raw SAIDI Value	10.90 minutes
Replace SAIDI Value	0.44 minutes
Location of the Major Event	Outage event 1: Green Island, Dunedin Outage events: 2, 5 and 6: Alexandra, Central Otago Outage event 3: Kaikorai Valley, Dunedin Outage event 4: Omakau, Central Otago
Main Equipment involved in the Major Event	Outage events 1, 5 and 6: Distribution Lines (Excluding LV) Outage event 2: Subtransmission lines Outage events 3 and 4: Distribution other (excluding LV)
How Aurora Energy responded to the Major Event	The main contributor to this major event was a subtransmission outage that impacted all consumers connected to the Clyde GXP. Field response was initiated to patrol the relevant feeder to determine the cause of the trip and ascertain whether it was safe to liven. No cause was found, and the feeders were relivened within approximately two hours of the fault occurring.
Any mitigating factors that may have prevented or minimised the Major Event	At the time the fault occurred, the feeders connected to the Clyde GXP were on N security due to the work being undertaken by Transpower.
Description of any steps Aurora Energy proposes to take to mitigate the risk of future similar Major Events	Following this outage, and the outage that occurred on 23 January impacting the same customers, the following steps were taken to mitigate the risk of a similar event occurring in the future: <ul style="list-style-type: none"> – We undertook detailed visual line inspections to look for any potential causes of the two faults. – The differential protection schemes on both lines were reinstated and ensured to be active. – A relevant radio link was inspected to ensure it is working correctly and a second was installed to provide greater resilience. – We undertook a specialist acoustic inspection to help identify any intermittent faults on the two sub-transmission

lines from Clyde to Alexandra and consider additional circuits.

- We undertook a review of the animal protection mitigations in place in this region, such as possum guards and improve, if benefits are justified.
- We reviewed our alarm configuration to potentially improve the visibility of important alarms and remove the distraction on unimportant events.

We have also commissioned an independent review of unplanned reliability on our network, which is currently underway.

23 JANUARY 2024 SAIDI MAJOR EVENT

Table 24: Details of 23 January 2024 SAIDI Major Event

Details of 23 January 2024 SAIDI Major Event	
Cause	– Outage Event 1: Vegetation Outage Event 2: Cause unknown
Start date	23 January 2024
Start time	12:00 am
End date	24 January 2024
End time	11:00 pm
Raw SAIDI Value	10.46 minutes
Replace SAIDI Value	0.14 minutes
Location of the Major Event	Outage event 1: Dalefield, Queenstown Outage event 2: Clyde, Central Otago
Main Equipment involved in the Major Event	Outage event 1: Distribution Lines (Excluding LV) Outage event 2: Subtransmission Lines.
How Aurora Energy responded to the Major Event	Initiated field response to patrol the feeder to determine the cause of the trip and ascertain whether it was safe to liven. No fault was found, whereafter supply was restored.
Any mitigating factors 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	Please see Table 23 above related to 18 January 2024 SAIDI Major Event.

20 SEPTEMBER 2023 SAIFI MAJOR EVENT

Table 25: Details of 20 September 2023 SAIFI Major Event

Details of 20 September 2023 SAIFI Major Event	
Cause	Please see Table 22 above related to 20 September 2023 SAIDI Major Event.
Start date	20 September 2023
Start time	5:00 am
End date	22 September 2023
End time	12:30 pm
Raw SAIFI Value	0.2899 interruption
Replace SAIFI Value	0.0351 interruptions
Location of the Major Event	
Main Equipment involved in the Major Event	
How Aurora Energy responded to the Major Event	
Any mitigating factors that may have prevented or minimised the Major Event	Please see Table 22 above related to 20 September 2023 SAIDI Major Event.
Description of any steps Aurora Energy proposes to take to mitigate the risk of future similar Major Events	

7 JANUARY 2024 SAIFI MAJOR EVENT

Table 26: Details of 7 January 2024 SAIFI Major Event

Details of 7 January 2024 SAIFI Major Event	
Cause	Two (2) unplanned outages were caused by Human error and Third party interference.
Start date	7 January 2024
Start time	8:30 am
End date	9 January 2024
End time	7:30 am
Raw SAIFI Value	0.1293 interruptions
Replaced SAIFI Value	0.0031 interruptions
Location of the Major Event	Both Outage events were in Cromwell, Central Otago
Main Equipment involved in the Major Event	Outage event 1: Subtransmission Other Outage event 2: Distribution Lines (Excluding LV)
How Aurora Energy responded to the Major Event	<p>Outage event 1: After the unsolicited trip of CML CB1052, we identified that Queensberry zone substation was paralleled without all the necessary differential protection blocking (suppression) first applied. This caused a spill/differential current to flow between the differential protection scheme measuring points which in turn caused the protection scheme to operate as per design. The immediate actions taken included:</p> <ul style="list-style-type: none"> • network restored; and • planned work for the day cancelled and rescheduled.. <p>Outage event 2: A foreign object momentarily clashed with the line. Line patrolled for further damage, reinstated.</p>
Any mitigating factors that may have prevented or minimised the Major Event	We do not believe that there were any factors, other than that discussed below, 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	More familiarisation training to be provided to network co-ordinators on the topic of differential protection schemes.

18 JANUARY 2024 SAIFI MAJOR EVENT

Table 27: Details of 18 January 2024 SAIFI Major Event

Details of 18 January 2024 SAIFI Major Event	
Cause	Outage event 1: Third-party (Other) Outage events 2 and 5: Cause Unknown Outage events: 3, 4 and 6: Defective equipment.
Start date	18 January 2024
Start time	1:30 pm
End date	20 January 2024
End time	8:30 am
Raw SAIFI Value	0.0796 interruptions
Replace SAIFI Value	0.0058 interruptions
Location of the Major Event	
Main Equipment involved in the Major Event	
How Aurora Energy responded to the Major Event	
Any mitigating factors that may have prevented or minimised the Major Event	Please see Table 23 above related to 18 January 2024 SAIFI Major Event.
Description of any steps Aurora Energy proposes to take to mitigate the risk of future similar Major Events	

23 JANUARY 2024 SAIFI MAJOR EVENT

Table 28: Details of 23 January 2024 SAIFI Major Event

Details of 23 January 2024 SAIFI Major Event	
Cause	Outage Event 1: Vegetation Outage Event 2: Cause unknown
Start date	23 January 2024
Start time	12:00 am
End date	24 January 2024
End time	11:00 pm
Raw SAIFI Value	0.0842 interruptions
Replace SAIFI Value	0.0024 interruptions
Location of the Major Event	
Main Equipment involved in the Major Event	
How Aurora Energy responded to the Major Event	
Any mitigating factors that may have prevented or minimised the Major Event	Please see Table 24 above related to 23 January 2024 SAIFI Major Event.
Description of any steps Aurora Energy proposes to take to mitigate the risk of future similar Major Events	

NORMALISATION OF RY24 MAJOR EVENTS

Table 29: Normalisation of RY24 SAIDI Major Events

Normalisation of RY24 SAIDI Major Events												
Aurora Energy's SAIDI Unplanned Boundary Value												5.69
1/48th of the SAIDI Unplanned Boundary Value	13 July 2023 Major Event			20 September 2023 Major Event			18 January 2024 Major Event			23 January 2024 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	13/07/2023 15:30	0.0000	0.0000	20/09/2023 3:30	0.0000	0.0000	18/01/2024 9:30	0.0000	0.0000	23/01/2024 0:00	0.0000	0.0000
0.1185	13/07/2023 16:00	0.0000	0.0000	20/09/2023 4:00	0.0000	0.0000	18/01/2024 10:00	0.0000	0.0000	23/01/2024 0:30	0.0000	0.0000
0.1185	13/07/2023 16:30	0.0000	0.0000	20/09/2023 4:30	0.0000	0.0000	18/01/2024 10:30	0.0000	0.0000	23/01/2024 1:00	0.0000	0.0000
0.1185	13/07/2023 17:00	0.0000	0.0000	20/09/2023 5:00	0.0000	0.0000	18/01/2024 11:00	0.0000	0.0000	23/01/2024 1:30	0.0000	0.0000
0.1185	13/07/2023 17:30	0.0000	0.0000	20/09/2023 5:30	0.0000	0.0000	18/01/2024 11:30	0.0000	0.0000	23/01/2024 2:00	0.0000	0.0000
0.1185	13/07/2023 18:00	0.0000	0.0000	20/09/2023 6:00	0.0000	0.0000	18/01/2024 12:00	0.0000	0.0000	23/01/2024 2:30	0.0000	0.0000
0.1185	13/07/2023 18:30	0.0000	0.0000	20/09/2023 6:30	0.0000	0.0000	18/01/2024 12:30	0.0000	0.0000	23/01/2024 3:00	0.0000	0.0000
0.1185	13/07/2023 19:00	0.0000	0.0000	20/09/2023 7:00	0.0000	0.0000	18/01/2024 13:00	0.0000	0.0000	23/01/2024 3:30	0.0000	0.0000
0.1185	13/07/2023 19:30	0.0000	0.0000	20/09/2023 7:30	0.0000	0.0000	18/01/2024 13:30	0.0000	0.0000	23/01/2024 4:00	0.0000	0.0000
0.1185	13/07/2023 20:00	0.0000	0.0000	20/09/2023 8:00	0.0000	0.0000	18/01/2024 14:00	0.0805	0.0805	23/01/2024 4:30	0.0000	0.0000
0.1185	13/07/2023 20:30	0.0000	0.0000	20/09/2023 8:30	0.0000	0.0000	18/01/2024 14:30	0.0000	0.0000	23/01/2024 5:00	0.0000	0.0000
0.1185	13/07/2023 21:00	0.0000	0.0000	20/09/2023 9:00	0.0018	0.0018	18/01/2024 15:00	0.0000	0.0000	23/01/2024 5:30	0.0000	0.0000
0.1185	13/07/2023 21:30	0.0000	0.0000	20/09/2023 9:30	0.0000	0.0000	18/01/2024 15:30	0.0000	0.0000	23/01/2024 6:00	0.0000	0.0000
0.1185	13/07/2023 22:00	0.0000	0.0000	20/09/2023 10:00	0.0000	0.0000	18/01/2024 16:00	0.0000	0.0000	23/01/2024 6:30	0.0000	0.0000
0.1185	13/07/2023 22:30	0.0000	0.0000	20/09/2023 10:30	0.0000	0.0000	18/01/2024 16:30	0.0000	0.0000	23/01/2024 7:00	0.0000	0.0000

Normalisation of RY24 SAIDI Major Events

Aurora Energy's SAIDI Unplanned Boundary Value												5.69
1/48th of the SAIDI Unplanned Boundary Value	13 July 2023 Major Event			20 September 2023 Major Event			18 January 2024 Major Event			23 January 2024 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	13/07/2023 23:00	0.0000	0.0000	20/09/2023 11:00	0.0000	0.0000	18/01/2024 17:00	0.0000	0.0000	23/01/2024 7:30	0.0000	0.0000
0.1185	13/07/2023 23:30	0.0000	0.0000	20/09/2023 11:30	2.0125	0.1185	18/01/2024 17:30	0.0000	0.0000	23/01/2024 8:00	0.0000	0.0000
0.1185	14/07/2023 0:00	0.0000	0.0000	20/09/2023 12:00	0.0000	0.0000	18/01/2024 18:00	0.0000	0.0000	23/01/2024 8:30	0.0000	0.0000
0.1185	14/07/2023 0:30	0.0000	0.0000	20/09/2023 12:30	0.0000	0.0000	18/01/2024 18:30	0.0000	0.0000	23/01/2024 9:00	0.0244	0.0244
0.1185	14/07/2023 1:00	0.0000	0.0000	20/09/2023 13:00	0.0738	0.0738	18/01/2024 19:00	0.0000	0.0000	23/01/2024 9:30	0.0000	0.0000
0.1185	14/07/2023 1:30	0.0000	0.0000	20/09/2023 13:30	1.7931	0.1185	18/01/2024 19:30	0.0000	0.0000	23/01/2024 10:00	0.0000	0.0000
0.1185	14/07/2023 2:00	0.0000	0.0000	20/09/2023 14:00	0.0000	0.0000	18/01/2024 20:00	0.0000	0.0000	23/01/2024 10:30	0.0000	0.0000
0.1185	14/07/2023 2:30	0.0000	0.0000	20/09/2023 14:30	0.6749	0.1185	18/01/2024 20:30	0.0000	0.0000	23/01/2024 11:00	0.0000	0.0000
0.1185	14/07/2023 3:00	0.0000	0.0000	20/09/2023 15:00	0.0000	0.0000	18/01/2024 21:00	0.0000	0.0000	23/01/2024 11:30	0.0000	0.0000
0.1185	14/07/2023 3:30	0.0000	0.0000	20/09/2023 15:30	0.0000	0.0000	18/01/2024 21:30	0.0000	0.0000	23/01/2024 12:00	0.0000	0.0000
0.1185	14/07/2023 4:00	0.0000	0.0000	20/09/2023 16:00	0.0621	0.0621	18/01/2024 22:00	0.0000	0.0000	23/01/2024 12:30	0.0000	0.0000
0.1185	14/07/2023 4:30	0.0000	0.0000	20/09/2023 16:30	0.2857	0.1185	18/01/2024 22:30	0.0000	0.0000	23/01/2024 13:00	0.0000	0.0000
0.1185	14/07/2023 5:00	0.0000	0.0000	20/09/2023 17:00	0.0237	0.0237	18/01/2024 23:00	0.0000	0.0000	23/01/2024 13:30	0.0000	0.0000
0.1185	14/07/2023 5:30	0.0000	0.0000	20/09/2023 17:30	0.0000	0.0000	18/01/2024 23:30	0.0000	0.0000	23/01/2024 14:00	0.0000	0.0000
0.1185	14/07/2023 6:00	0.0000	0.0000	20/09/2023 18:00	0.0645	0.0645	19/01/2024 0:00	0.0000	0.0000	23/01/2024 14:30	0.0000	0.0000
0.1185	14/07/2023 6:30	0.0000	0.0000	20/09/2023 18:30	0.0000	0.0000	19/01/2024 0:30	0.0000	0.0000	23/01/2024 15:00	0.0000	0.0000
0.1185	14/07/2023 7:00	0.0000	0.0000	20/09/2023 19:00	0.0000	0.0000	19/01/2024 1:00	0.0000	0.0000	23/01/2024 15:30	0.0000	0.0000
0.1185	14/07/2023 7:30	1.5255	0.1185	20/09/2023 19:30	0.0000	0.0000	19/01/2024 1:30	0.0000	0.0000	23/01/2024 16:00	0.0000	0.0000

Normalisation of RY24 SAIDI Major Events

Aurora Energy's SAIDI Unplanned Boundary Value												5.69
1/48th of the SAIDI Unplanned Boundary Value	13 July 2023 Major Event			20 September 2023 Major Event			18 January 2024 Major Event			23 January 2024 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	14/07/2023 8:00	0.0000	0.0000	20/09/2023 20:00	0.0155	0.0155	19/01/2024 2:00	0.0000	0.0000	23/01/2024 16:30	0.0000	0.0000
0.1185	14/07/2023 8:30	0.0000	0.0000	20/09/2023 20:30	0.0000	0.0000	19/01/2024 2:30	0.0000	0.0000	23/01/2024 17:00	0.0000	0.0000
0.1185	14/07/2023 9:00	0.0000	0.0000	20/09/2023 21:00	0.1324	0.1185	19/01/2024 3:00	0.0000	0.0000	23/01/2024 17:30	0.0000	0.0000
0.1185	14/07/2023 9:30	0.0000	0.0000	20/09/2023 21:30	0.0000	0.0000	19/01/2024 3:30	0.0000	0.0000	23/01/2024 18:00	0.0000	0.0000
0.1185	14/07/2023 10:00	0.0000	0.0000	20/09/2023 22:00	0.0000	0.0000	19/01/2024 4:00	0.0000	0.0000	23/01/2024 18:30	0.0000	0.0000
0.1185	14/07/2023 10:30	2.2842	0.1185	20/09/2023 22:30	0.0000	0.0000	19/01/2024 4:30	0.0000	0.0000	23/01/2024 19:00	0.0000	0.0000
0.1185	14/07/2023 11:00	0.0000	0.0000	20/09/2023 23:00	0.0496	0.0496	19/01/2024 5:00	0.0000	0.0000	23/01/2024 19:30	0.0000	0.0000
0.1185	14/07/2023 11:30	0.0000	0.0000	20/09/2023 23:30	0.0000	0.0000	19/01/2024 5:30	0.0000	0.0000	23/01/2024 20:00	0.0000	0.0000
0.1185	14/07/2023 12:00	0.0000	0.0000	21/09/2023 0:00	0.0000	0.0000	19/01/2024 6:00	0.0000	0.0000	23/01/2024 20:30	0.0000	0.0000
0.1185	14/07/2023 12:30	1.3757	0.1185	21/09/2023 0:30	0.4175	0.1185	19/01/2024 6:30	0.0000	0.0000	23/01/2024 21:00	0.0000	0.0000
0.1185	14/07/2023 13:00	0.0000	0.0000	21/09/2023 1:00	0.0000	0.0000	19/01/2024 7:00	0.0000	0.0000	23/01/2024 21:30	0.0000	0.0000
0.1185	14/07/2023 13:30	0.0000	0.0000	21/09/2023 1:30	0.0000	0.0000	19/01/2024 7:30	0.0000	0.0000	23/01/2024 22:00	0.0000	0.0000
0.1185	14/07/2023 14:00	0.0011	0.0011	21/09/2023 2:00	0.0000	0.0000	19/01/2024 8:00	0.0000	0.0000	23/01/2024 22:30	0.0000	0.0000
0.1185	14/07/2023 14:30	0.0016	0.0016	21/09/2023 2:30	0.0310	0.0310	19/01/2024 8:30	0.0000	0.0000	23/01/2024 23:00	0.0000	0.0000
0.1185	14/07/2023 15:00	0.5511	0.1185	21/09/2023 3:00	0.2188	0.1185	19/01/2024 9:00	10.3138	0.1185	23/01/2024 23:30	10.4404	0.1185
0.1185	14/07/2023 15:30	0.0219	0.0219	21/09/2023 3:30	0.0000	0.0000	19/01/2024 9:30	0.0000	0.0000	24/01/2024 0:00	0.0000	0.0000
0.1185	14/07/2023 16:00	0.0767	0.0767	21/09/2023 4:00	0.0000	0.0000	19/01/2024 10:00	0.0000	0.0000	24/01/2024 0:30	0.0000	0.0000
0.1185	14/07/2023 16:30	0.0000	0.0000	21/09/2023 4:30	0.0096	0.0096	19/01/2024 10:30	0.0000	0.0000	24/01/2024 1:00	0.0000	0.0000

Normalisation of RY24 SAIDI Major Events

Aurora Energy's SAIDI Unplanned Boundary Value												5.69
1/48th of the SAIDI Unplanned Boundary Value	13 July 2023 Major Event			20 September 2023 Major Event			18 January 2024 Major Event			23 January 2024 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	14/07/2023 17:00	0.0000	0.0000	21/09/2023 5:00	0.0000	0.0000	19/01/2024 11:00	0.0000	0.0000	24/01/2024 1:30	0.0000	0.0000
0.1185	14/07/2023 17:30	0.0000	0.0000	21/09/2023 5:30	0.0000	0.0000	19/01/2024 11:30	0.0000	0.0000	24/01/2024 2:00	0.0000	0.0000
0.1185	14/07/2023 18:00	0.0000	0.0000	21/09/2023 6:00	0.0000	0.0000	19/01/2024 12:00	0.0000	0.0000	24/01/2024 2:30	0.0000	0.0000
0.1185	14/07/2023 18:30	0.0000	0.0000	21/09/2023 6:30	0.0286	0.0286	19/01/2024 12:30	0.0000	0.0000	24/01/2024 3:00	0.0000	0.0000
0.1185	14/07/2023 19:00	0.0000	0.0000	21/09/2023 7:00	0.0031	0.0031	19/01/2024 13:00	0.0005	0.0005	24/01/2024 3:30	0.0000	0.0000
0.1185	14/07/2023 19:30	0.0000	0.0000	21/09/2023 7:30	0.0000	0.0000	19/01/2024 13:30	0.0000	0.0000	24/01/2024 4:00	0.0000	0.0000
0.1185	14/07/2023 20:00	0.0000	0.0000	21/09/2023 8:00	0.0000	0.0000	19/01/2024 14:00	0.0000	0.0000	24/01/2024 4:30	0.0000	0.0000
0.1185	14/07/2023 20:30	0.0000	0.0000	21/09/2023 8:30	0.0000	0.0000	19/01/2024 14:30	0.0000	0.0000	24/01/2024 5:00	0.0000	0.0000
0.1185	14/07/2023 21:00	0.0000	0.0000	21/09/2023 9:00	0.6816	0.1185	19/01/2024 15:00	0.0000	0.0000	24/01/2024 5:30	0.0000	0.0000
0.1185	14/07/2023 21:30	0.0000	0.0000	21/09/2023 9:30	0.0000	0.0000	19/01/2024 15:30	0.0000	0.0000	24/01/2024 6:00	0.0000	0.0000
0.1185	14/07/2023 22:00	0.0000	0.0000	21/09/2023 10:00	0.3720	0.1185	19/01/2024 16:00	0.0000	0.0000	24/01/2024 6:30	0.0000	0.0000
0.1185	14/07/2023 22:30	0.0000	0.0000	21/09/2023 10:30	0.0000	0.0000	19/01/2024 16:30	0.0000	0.0000	24/01/2024 7:00	0.0000	0.0000
0.1185	14/07/2023 23:00	0.0000	0.0000	21/09/2023 11:00	2.8079	0.1185	19/01/2024 17:00	0.0000	0.0000	24/01/2024 7:30	0.0000	0.0000
0.1185	14/07/2023 23:30	0.0000	0.0000	21/09/2023 11:30	0.6252	0.1185	19/01/2024 17:30	0.0000	0.0000	24/01/2024 8:00	0.0000	0.0000
0.1185	15/07/2023 0:00	0.0000	0.0000	21/09/2023 12:00	0.0908	0.0908	19/01/2024 18:00	0.0000	0.0000	24/01/2024 8:30	0.0000	0.0000
0.1185	15/07/2023 0:30	0.0000	0.0000	21/09/2023 12:30	0.0000	0.0000	19/01/2024 18:30	0.0000	0.0000	24/01/2024 9:00	0.0000	0.0000
0.1185	15/07/2023 1:00	0.0000	0.0000	21/09/2023 13:00	7.2746	0.1185	19/01/2024 19:00	0.0000	0.0000	24/01/2024 9:30	0.0000	0.0000
0.1185	15/07/2023 1:30	0.0000	0.0000	21/09/2023 13:30	0.0000	0.0000	19/01/2024 19:30	0.0000	0.0000	24/01/2024 10:00	0.0000	0.0000

Normalisation of RY24 SAIDI Major Events

Aurora Energy's SAIDI Unplanned Boundary Value												5.69
1/48th of the SAIDI Unplanned Boundary Value	13 July 2023 Major Event			20 September 2023 Major Event			18 January 2024 Major Event			23 January 2024 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	15/07/2023 2:00	0.0000	0.0000	21/09/2023 14:00	0.2214	0.1185	19/01/2024 20:00	0.0000	0.0000	24/01/2024 10:30	0.0000	0.0000
0.1185	15/07/2023 2:30	0.0000	0.0000	21/09/2023 14:30	0.0000	0.0000	19/01/2024 20:30	0.0000	0.0000	24/01/2024 11:00	0.0000	0.0000
0.1185	15/07/2023 3:00	0.0000	0.0000	21/09/2023 15:00	0.0000	0.0000	19/01/2024 21:00	0.0000	0.0000	24/01/2024 11:30	0.0000	0.0000
0.1185	15/07/2023 3:30	0.0000	0.0000	21/09/2023 15:30	0.1066	0.1066	19/01/2024 21:30	0.0000	0.0000	24/01/2024 12:00	0.0000	0.0000
0.1185	15/07/2023 4:00	0.0000	0.0000	21/09/2023 16:00	0.0000	0.0000	19/01/2024 22:00	0.2467	0.1185	24/01/2024 12:30	0.0000	0.0000
0.1185	15/07/2023 4:30	0.0000	0.0000	21/09/2023 16:30	0.0000	0.0000	19/01/2024 22:30	0.0000	0.0000	24/01/2024 13:00	0.0000	0.0000
0.1185	15/07/2023 5:00	0.0000	0.0000	21/09/2023 17:00	0.0000	0.0000	19/01/2024 23:00	0.0000	0.0000	24/01/2024 13:30	0.0000	0.0000
0.1185	15/07/2023 5:30	0.0000	0.0000	21/09/2023 17:30	0.0014	0.0014	19/01/2024 23:30	0.0000	0.0000	24/01/2024 14:00	0.0000	0.0000
0.1185	15/07/2023 6:00	0.0000	0.0000	21/09/2023 18:00	0.0000	0.0000	20/01/2024 0:00	0.0000	0.0000	24/01/2024 14:30	0.0000	0.0000
0.1185	15/07/2023 6:30	0.0000	0.0000	21/09/2023 18:30	0.0066	0.0066	20/01/2024 0:30	0.0000	0.0000	24/01/2024 15:00	0.0000	0.0000
0.1185	15/07/2023 7:00	0.0000	0.0000	21/09/2023 19:00	0.0000	0.0000	20/01/2024 1:00	0.2565	0.1185	24/01/2024 15:30	0.0000	0.0000
0.1185				21/09/2023 19:30	0.0000	0.0000	20/01/2024 1:30	0.0000	0.0000	24/01/2024 16:00	0.0000	0.0000
0.1185				21/09/2023 20:00	0.0000	0.0000	20/01/2024 2:00	0.0000	0.0000	24/01/2024 16:30	0.0000	0.0000
0.1185				21/09/2023 20:30	0.0791	0.0791	20/01/2024 2:30	0.0000	0.0000	24/01/2024 17:00	0.0000	0.0000
0.1185				21/09/2023 21:00	0.0000	0.0000	20/01/2024 3:00	0.0000	0.0000	24/01/2024 17:30	0.0000	0.0000
0.1185				21/09/2023 21:30	1.7545	0.1185	20/01/2024 3:30	0.0000	0.0000	24/01/2024 18:00	0.0000	0.0000
0.1185				21/09/2023 22:00	0.0000	0.0000	20/01/2024 4:00	0.0000	0.0000	24/01/2024 18:30	0.0000	0.0000
0.1185				21/09/2023 22:30	0.0000	0.0000	20/01/2024 4:30	0.0000	0.0000	24/01/2024 19:00	0.0000	0.0000

Normalisation of RY24 SAIDI Major Events

Aurora Energy's SAIDI Unplanned Boundary Value												5.69
1/48th of the SAIDI Unplanned Boundary Value	13 July 2023 Major Event			20 September 2023 Major Event			18 January 2024 Major Event			23 January 2024 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				21/09/2023 23:00	0.0000	0.0000	20/01/2024 5:00	0.0000	0.0000	24/01/2024 19:30	0.0000	0.0000
0.1185				21/09/2023 23:30	0.0000	0.0000	20/01/2024 5:30	0.0000	0.0000	24/01/2024 20:00	0.0000	0.0000
0.1185				22/09/2023 0:00	0.0000	0.0000	20/01/2024 6:00	0.0000	0.0000	24/01/2024 20:30	0.0000	0.0000
0.1185				22/09/2023 0:30	0.0000	0.0000	20/01/2024 6:30	0.0000	0.0000	24/01/2024 21:00	0.0000	0.0000
0.1185				22/09/2023 1:00	0.0000	0.0000	20/01/2024 7:00	0.0000	0.0000	24/01/2024 21:30	0.0000	0.0000
0.1185				22/09/2023 1:30	0.0000	0.0000	20/01/2024 7:30	0.0000	0.0000	24/01/2024 22:00	0.0000	0.0000
0.1185				22/09/2023 2:00	0.0000	0.0000	20/01/2024 8:00	0.0000	0.0000	24/01/2024 22:30	0.0000	0.0000
0.1185				22/09/2023 2:30	0.0000	0.0000	20/01/2024 8:30	0.0000	0.0000	24/01/2024 23:00	0.0000	0.0000
0.1185				22/09/2023 3:00	0.0000	0.0000						
0.1185				22/09/2023 3:30	0.0000	0.0000						
0.1185				22/09/2023 4:00	0.0000	0.0000						
0.1185				22/09/2023 4:30	0.0000	0.0000						
0.1185				22/09/2023 5:00	0.0000	0.0000						
0.1185				22/09/2023 5:30	0.0000	0.0000						
0.1185				22/09/2023 6:00	0.0016	0.0016						
0.1185				22/09/2023 6:30	0.0000	0.0000						
0.1185				22/09/2023 7:00	0.0000	0.0000						
0.1185				22/09/2023 7:30	0.0000	0.0000						

Normalisation of RY24 SAIDI Major Events

Normalisation of RY24 SAIDI Major Events												
Aurora Energy's SAIDI Unplanned Boundary Value												
5.69												
1/48th of the SAIDI Unplanned Boundary Value	13 July 2023 Major Event			20 September 2023 Major Event			18 January 2024 Major Event			23 January 2024 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				22/09/2023 8:00	0.0000	0.0000						
0.1185				22/09/2023 8:30	0.0000	0.0000						
0.1185				22/09/2023 9:00	0.0000	0.0000						
0.1185				22/09/2023 9:30	0.0000	0.0000						
0.1185				22/09/2023 10:00	0.0000	0.0000						
0.1185				22/09/2023 10:30	0.0000	0.0000						
0.1185				22/09/2023 11:00	0.0000	0.0000						
0.1185				22/09/2023 11:30	0.0006	0.0006						
0.1185				22/09/2023 12:00	0.0000	0.0000						
0.1185				22/09/2023 12:30	0.0000	0.0000						
Total SAIDI		5.84	0.58		19.92	2.31		10.90	0.44		10.46	0.14

Table 30: Normalisation of RY24 SAIFI Major Events

Normalisation of RY24 SAIFI Major Events												
Aurora Energy's SAIFI Unplanned Boundary Value												0.0737
1/48th of the SAIFI Unplanned Boundary Value	20 September 2023 Major Event			7 January 2024 Major Event			18 January 2024 Major Event			23 January 2024 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	Half hour commencing	Raw SAIFI Value for half-hour	Normalised SAIFI Value for half-hour
0.0015	20/09/2023 5:00	0.0000	0.0000	7/01/2024 8:30	0.0000	0.0000	18/01/2024 13:30	0.0000	0.0000	23/01/2024 0:00	0.0000	0.0000
0.0015	20/09/2023 5:30	0.0000	0.0000	7/01/2024 9:00	0.0000	0.0000	18/01/2024 14:00	0.0011	0.0011	23/01/2024 0:30	0.0000	0.0000
0.0015	20/09/2023 6:00	0.0000	0.0000	7/01/2024 9:30	0.0000	0.0000	18/01/2024 14:30	0.0000	0.0000	23/01/2024 1:00	0.0000	0.0000
0.0015	20/09/2023 6:30	0.0000	0.0000	7/01/2024 10:00	0.0000	0.0000	18/01/2024 15:00	0.0000	0.0000	23/01/2024 1:30	0.0000	0.0000
0.0015	20/09/2023 7:00	0.0000	0.0000	7/01/2024 10:30	0.0000	0.0000	18/01/2024 15:30	0.0000	0.0000	23/01/2024 2:00	0.0000	0.0000
0.0015	20/09/2023 7:30	0.0000	0.0000	7/01/2024 11:00	0.0000	0.0000	18/01/2024 16:00	0.0000	0.0000	23/01/2024 2:30	0.0000	0.0000
0.0015	20/09/2023 8:00	0.0000	0.0000	7/01/2024 11:30	0.0000	0.0000	18/01/2024 16:30	0.0000	0.0000	23/01/2024 3:00	0.0000	0.0000
0.0015	20/09/2023 8:30	0.0000	0.0000	7/01/2024 12:00	0.0000	0.0000	18/01/2024 17:00	0.0000	0.0000	23/01/2024 3:30	0.0000	0.0000
0.0015	20/09/2023 9:00	0.0000	0.0000	7/01/2024 12:30	0.0000	0.0000	18/01/2024 17:30	0.0000	0.0000	23/01/2024 4:00	0.0000	0.0000
0.0015	20/09/2023 9:30	0.0000	0.0000	7/01/2024 13:00	0.0000	0.0000	18/01/2024 18:00	0.0000	0.0000	23/01/2024 4:30	0.0000	0.0000
0.0015	20/09/2023 10:00	0.0000	0.0000	7/01/2024 13:30	0.0000	0.0000	18/01/2024 18:30	0.0000	0.0000	23/01/2024 5:00	0.0000	0.0000
0.0015	20/09/2023 10:30	0.0000	0.0000	7/01/2024 14:00	0.0000	0.0000	18/01/2024 19:00	0.0000	0.0000	23/01/2024 5:30	0.0000	0.0000
0.0015	20/09/2023 11:00	0.0000	0.0000	7/01/2024 14:30	0.0000	0.0000	18/01/2024 19:30	0.0000	0.0000	23/01/2024 6:00	0.0000	0.0000
0.0015	20/09/2023 11:30	0.0213	0.0015	7/01/2024 15:00	0.0000	0.0000	18/01/2024 20:00	0.0000	0.0000	23/01/2024 6:30	0.0000	0.0000
0.0015	20/09/2023 12:00	0.0000	0.0000	7/01/2024 15:30	0.0000	0.0000	18/01/2024 20:30	0.0000	0.0000	23/01/2024 7:00	0.0000	0.0000
0.0015	20/09/2023 12:30	0.0000	0.0000	7/01/2024 16:00	0.0000	0.0000	18/01/2024 21:00	0.0000	0.0000	23/01/2024 7:30	0.0000	0.0000

Normalisation of RY24 SAIFI Major Events

Aurora Energy's SAIFI Unplanned Boundary Value												0.0737
1/48th of the SAIFI Unplanned Boundary Value	20 September 2023 Major Event			7 January 2024 Major Event			18 January 2024 Major Event			23 January 2024 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	Half hour commencing	Raw SAIFI Value for half-hour	Normalised SAIFI Value for half-hour
0.0015	20/09/2023 13:00	0.0013	0.0013	7/01/2024 16:30	0.0000	0.0000	18/01/2024 21:30	0.0000	0.0000	23/01/2024 8:00	0.0000	0.0000
0.0015	20/09/2023 13:30	0.0168	0.0015	7/01/2024 17:00	0.0000	0.0000	18/01/2024 22:00	0.0000	0.0000	23/01/2024 8:30	0.0000	0.0000
0.0015	20/09/2023 14:00	0.0000	0.0000	7/01/2024 17:30	0.0000	0.0000	18/01/2024 22:30	0.0000	0.0000	23/01/2024 9:00	0.0009	0.0009
0.0015	20/09/2023 14:30	0.0084	0.0015	7/01/2024 18:00	0.0000	0.0000	18/01/2024 23:00	0.0000	0.0000	23/01/2024 9:30	0.0000	0.0000
0.0015	20/09/2023 15:00	0.0000	0.0000	7/01/2024 18:30	0.0000	0.0000	18/01/2024 23:30	0.0000	0.0000	23/01/2024 10:00	0.0000	0.0000
0.0015	20/09/2023 15:30	0.0000	0.0000	7/01/2024 19:00	0.0000	0.0000	19/01/2024 0:00	0.0000	0.0000	23/01/2024 10:30	0.0000	0.0000
0.0015	20/09/2023 16:00	0.0020	0.0015	7/01/2024 19:30	0.0000	0.0000	19/01/2024 0:30	0.0000	0.0000	23/01/2024 11:00	0.0000	0.0000
0.0015	20/09/2023 16:30	0.0032	0.0015	7/01/2024 20:00	0.0000	0.0000	19/01/2024 1:00	0.0000	0.0000	23/01/2024 11:30	0.0000	0.0000
0.0015	20/09/2023 17:00	0.0001	0.0001	7/01/2024 20:30	0.0000	0.0000	19/01/2024 1:30	0.0000	0.0000	23/01/2024 12:00	0.0000	0.0000
0.0015	20/09/2023 17:30	0.0000	0.0000	7/01/2024 21:00	0.0000	0.0000	19/01/2024 2:00	0.0000	0.0000	23/01/2024 12:30	0.0000	0.0000
0.0015	20/09/2023 18:00	0.0006	0.0006	7/01/2024 21:30	0.0000	0.0000	19/01/2024 2:30	0.0000	0.0000	23/01/2024 13:00	0.0000	0.0000
0.0015	20/09/2023 18:30	0.0000	0.0000	7/01/2024 22:00	0.0000	0.0000	19/01/2024 3:00	0.0000	0.0000	23/01/2024 13:30	0.0000	0.0000
0.0015	20/09/2023 19:00	0.0000	0.0000	7/01/2024 22:30	0.0000	0.0000	19/01/2024 3:30	0.0000	0.0000	23/01/2024 14:00	0.0000	0.0000
0.0015	20/09/2023 19:30	0.0000	0.0000	7/01/2024 23:00	0.0000	0.0000	19/01/2024 4:00	0.0000	0.0000	23/01/2024 14:30	0.0000	0.0000
0.0015	20/09/2023 20:00	0.0001	0.0001	7/01/2024 23:30	0.0000	0.0000	19/01/2024 4:30	0.0000	0.0000	23/01/2024 15:00	0.0000	0.0000
0.0015	20/09/2023 20:30	0.0000	0.0000	8/01/2024 0:00	0.0000	0.0000	19/01/2024 5:00	0.0000	0.0000	23/01/2024 15:30	0.0000	0.0000
0.0015	20/09/2023 21:00	0.0010	0.0010	8/01/2024 0:30	0.0000	0.0000	19/01/2024 5:30	0.0000	0.0000	23/01/2024 16:00	0.0000	0.0000
0.0015	20/09/2023 21:30	0.0000	0.0000	8/01/2024 1:00	0.0000	0.0000	19/01/2024 6:00	0.0000	0.0000	23/01/2024 16:30	0.0000	0.0000

Normalisation of RY24 SAIFI Major Events

Aurora Energy's SAIFI Unplanned Boundary Value												0.0737
1/48th of the SAIFI Unplanned Boundary Value	20 September 2023 Major Event			7 January 2024 Major Event			18 January 2024 Major Event			23 January 2024 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	Half hour commencing	Raw SAIFI Value for half-hour	Normalised SAIFI Value for half-hour
0.0015	20/09/2023 22:00	0.0000	0.0000	8/01/2024 1:30	0.0000	0.0000	19/01/2024 6:30	0.0000	0.0000	23/01/2024 17:00	0.0000	0.0000
0.0015	20/09/2023 22:30	0.0000	0.0000	8/01/2024 2:00	0.0000	0.0000	19/01/2024 7:00	0.0000	0.0000	23/01/2024 17:30	0.0000	0.0000
0.0015	20/09/2023 23:00	0.0010	0.0010	8/01/2024 2:30	0.0000	0.0000	19/01/2024 7:30	0.0000	0.0000	23/01/2024 18:00	0.0000	0.0000
0.0015	20/09/2023 23:30	0.0000	0.0000	8/01/2024 3:00	0.0000	0.0000	19/01/2024 8:00	0.0000	0.0000	23/01/2024 18:30	0.0000	0.0000
0.0015	21/09/2023 0:00	0.0000	0.0000	8/01/2024 3:30	0.0000	0.0000	19/01/2024 8:30	0.0000	0.0000	23/01/2024 19:00	0.0000	0.0000
0.0015	21/09/2023 0:30	0.0057	0.0015	8/01/2024 4:00	0.0000	0.0000	19/01/2024 9:00	0.0726	0.0015	23/01/2024 19:30	0.0000	0.0000
0.0015	21/09/2023 1:00	0.0000	0.0000	8/01/2024 4:30	0.0000	0.0000	19/01/2024 9:30	0.0000	0.0000	23/01/2024 20:00	0.0000	0.0000
0.0015	21/09/2023 1:30	0.0000	0.0000	8/01/2024 5:00	0.0000	0.0000	19/01/2024 10:00	0.0000	0.0000	23/01/2024 20:30	0.0000	0.0000
0.0015	21/09/2023 2:00	0.0000	0.0000	8/01/2024 5:30	0.0000	0.0000	19/01/2024 10:30	0.0000	0.0000	23/01/2024 21:00	0.0000	0.0000
0.0015	21/09/2023 2:30	0.0013	0.0013	8/01/2024 6:00	0.0000	0.0000	19/01/2024 11:00	0.0000	0.0000	23/01/2024 21:30	0.0000	0.0000
0.0015	21/09/2023 3:00	0.0013	0.0013	8/01/2024 6:30	0.0000	0.0000	19/01/2024 11:30	0.0000	0.0000	23/01/2024 22:00	0.0000	0.0000
0.0015	21/09/2023 3:30	0.0000	0.0000	8/01/2024 7:00	0.0000	0.0000	19/01/2024 12:00	0.0000	0.0000	23/01/2024 22:30	0.0000	0.0000
0.0015	21/09/2023 4:00	0.0000	0.0000	8/01/2024 7:30	0.0000	0.0000	19/01/2024 12:30	0.0000	0.0000	23/01/2024 23:00	0.0000	0.0000
0.0015	21/09/2023 4:30	0.0096	0.0015	8/01/2024 8:00	0.1137	0.0015	19/01/2024 13:00	0.0001	0.0001	23/01/2024 23:30	0.0833	0.0015
0.0015	21/09/2023 5:00	0.0000	0.0000	8/01/2024 8:30	0.0000	0.0000	19/01/2024 13:30	0.0000	0.0000	24/01/2024 0:00	0.0000	0.0000
0.0015	21/09/2023 5:30	0.0000	0.0000	8/01/2024 9:00	0.0000	0.0000	19/01/2024 14:00	0.0000	0.0000	24/01/2024 0:30	0.0000	0.0000
0.0015	21/09/2023 6:00	0.0000	0.0000	8/01/2024 9:30	0.0000	0.0000	19/01/2024 14:30	0.0000	0.0000	24/01/2024 1:00	0.0000	0.0000
0.0015	21/09/2023 6:30	0.0043	0.0015	8/01/2024 10:00	0.0000	0.0000	19/01/2024 15:00	0.0000	0.0000	24/01/2024 1:30	0.0000	0.0000

Normalisation of RY24 SAIFI Major Events

Aurora Energy's SAIFI Unplanned Boundary Value												0.0737
1/48th of the SAIFI Unplanned Boundary Value	20 September 2023 Major Event			7 January 2024 Major Event			18 January 2024 Major Event			23 January 2024 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	Half hour commencing	Raw SAIFI Value for half-hour	Normalised SAIFI Value for half-hour
0.0015	21/09/2023 7:00	0.0000	0.0000	8/01/2024 10:30	0.0000	0.0000	19/01/2024 15:30	0.0000	0.0000	24/01/2024 2:00	0.0000	0.0000
0.0015	21/09/2023 7:30	0.0000	0.0000	8/01/2024 11:00	0.0000	0.0000	19/01/2024 16:00	0.0000	0.0000	24/01/2024 2:30	0.0000	0.0000
0.0015	21/09/2023 8:00	0.0000	0.0000	8/01/2024 11:30	0.0000	0.0000	19/01/2024 16:30	0.0000	0.0000	24/01/2024 3:00	0.0000	0.0000
0.0015	21/09/2023 8:30	0.0000	0.0000	8/01/2024 12:00	0.0000	0.0000	19/01/2024 17:00	0.0000	0.0000	24/01/2024 3:30	0.0000	0.0000
0.0015	21/09/2023 9:00	0.0152	0.0015	8/01/2024 12:30	0.0000	0.0000	19/01/2024 17:30	0.0000	0.0000	24/01/2024 4:00	0.0000	0.0000
0.0015	21/09/2023 9:30	0.0000	0.0000	8/01/2024 13:00	0.0000	0.0000	19/01/2024 18:00	0.0000	0.0000	24/01/2024 4:30	0.0000	0.0000
0.0015	21/09/2023 10:00	0.0149	0.0015	8/01/2024 13:30	0.0000	0.0000	19/01/2024 18:30	0.0000	0.0000	24/01/2024 5:00	0.0000	0.0000
0.0015	21/09/2023 10:30	0.0000	0.0000	8/01/2024 14:00	0.0000	0.0000	19/01/2024 19:00	0.0000	0.0000	24/01/2024 5:30	0.0000	0.0000
0.0015	21/09/2023 11:00	0.0341	0.0015	8/01/2024 14:30	0.0155	0.0015	19/01/2024 19:30	0.0000	0.0000	24/01/2024 6:00	0.0000	0.0000
0.0015	21/09/2023 11:30	0.0083	0.0015	8/01/2024 15:00	0.0000	0.0000	19/01/2024 20:00	0.0000	0.0000	24/01/2024 6:30	0.0000	0.0000
0.0015	21/09/2023 12:00	0.0014	0.0014	8/01/2024 15:30	0.0000	0.0000	19/01/2024 20:30	0.0000	0.0000	24/01/2024 7:00	0.0000	0.0000
0.0015	21/09/2023 12:30	0.0000	0.0000	8/01/2024 16:00	0.0000	0.0000	19/01/2024 21:00	0.0000	0.0000	24/01/2024 7:30	0.0000	0.0000
0.0015	21/09/2023 13:00	0.1085	0.0015	8/01/2024 16:30	0.0000	0.0000	19/01/2024 21:30	0.0000	0.0000	24/01/2024 8:00	0.0000	0.0000
0.0015	21/09/2023 13:30	0.0000	0.0000	8/01/2024 17:00	0.0000	0.0000	19/01/2024 22:00	0.0032	0.0015	24/01/2024 8:30	0.0000	0.0000
0.0015	21/09/2023 14:00	0.0071	0.0015	8/01/2024 17:30	0.0000	0.0000	19/01/2024 22:30	0.0000	0.0000	24/01/2024 9:00	0.0000	0.0000
0.0015	21/09/2023 14:30	0.0000	0.0000	8/01/2024 18:00	0.0000	0.0000	19/01/2024 23:00	0.0000	0.0000	24/01/2024 9:30	0.0000	0.0000
0.0015	21/09/2023 15:00	0.0000	0.0000	8/01/2024 18:30	0.0000	0.0000	19/01/2024 23:30	0.0000	0.0000	24/01/2024 10:00	0.0000	0.0000
0.0015	21/09/2023 15:30	0.0008	0.0008	8/01/2024 19:00	0.0000	0.0000	20/01/2024 0:00	0.0000	0.0000	24/01/2024 10:30	0.0000	0.0000

Normalisation of RY24 SAIFI Major Events

Aurora Energy's SAIFI Unplanned Boundary Value												0.0737
1/48th of the SAIFI Unplanned Boundary Value	20 September 2023 Major Event			7 January 2024 Major Event			18 January 2024 Major Event			23 January 2024 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	Half hour commencing	Raw SAIFI Value for half-hour	Normalised SAIFI Value for half-hour
0.0015	21/09/2023 16:00	0.0000	0.0000	8/01/2024 19:30	0.0000	0.0000	20/01/2024 0:30	0.0000	0.0000	24/01/2024 11:00	0.0000	0.0000
0.0015	21/09/2023 16:30	0.0000	0.0000	8/01/2024 20:00	0.0000	0.0000	20/01/2024 1:00	0.0027	0.0015	24/01/2024 11:30	0.0000	0.0000
0.0015	21/09/2023 17:00	0.0000	0.0000	8/01/2024 20:30	0.0000	0.0000	20/01/2024 1:30	0.0000	0.0000	24/01/2024 12:00	0.0000	0.0000
0.0015	21/09/2023 17:30	0.0001	0.0001	8/01/2024 21:00	0.0000	0.0000	20/01/2024 2:00	0.0000	0.0000	24/01/2024 12:30	0.0000	0.0000
0.0015	21/09/2023 18:00	0.0000	0.0000	8/01/2024 21:30	0.0000	0.0000	20/01/2024 2:30	0.0000	0.0000	24/01/2024 13:00	0.0000	0.0000
0.0015	21/09/2023 18:30	0.0033	0.0015	8/01/2024 22:00	0.0000	0.0000	20/01/2024 3:00	0.0000	0.0000	24/01/2024 13:30	0.0000	0.0000
0.0015	21/09/2023 19:00	0.0000	0.0000	8/01/2024 22:30	0.0000	0.0000	20/01/2024 3:30	0.0000	0.0000	24/01/2024 14:00	0.0000	0.0000
0.0015	21/09/2023 19:30	0.0000	0.0000	8/01/2024 23:00	0.0000	0.0000	20/01/2024 4:00	0.0000	0.0000	24/01/2024 14:30	0.0000	0.0000
0.0015	21/09/2023 20:00	0.0000	0.0000	8/01/2024 23:30	0.0000	0.0000	20/01/2024 4:30	0.0000	0.0000	24/01/2024 15:00	0.0000	0.0000
0.0015	21/09/2023 20:30	0.0022	0.0015	9/01/2024 0:00	0.0000	0.0000	20/01/2024 5:00	0.0000	0.0000	24/01/2024 15:30	0.0000	0.0000
0.0015	21/09/2023 21:00	0.0000	0.0000	9/01/2024 0:30	0.0000	0.0000	20/01/2024 5:30	0.0000	0.0000	24/01/2024 16:00	0.0000	0.0000
0.0015	21/09/2023 21:30	0.0160	0.0015	9/01/2024 1:00	0.0000	0.0000	20/01/2024 6:00	0.0000	0.0000	24/01/2024 16:30	0.0000	0.0000
0.0015	21/09/2023 22:00	0.0000	0.0000	9/01/2024 1:30	0.0000	0.0000	20/01/2024 6:30	0.0000	0.0000	24/01/2024 17:00	0.0000	0.0000
0.0015	21/09/2023 22:30	0.0000	0.0000	9/01/2024 2:00	0.0000	0.0000	20/01/2024 7:00	0.0000	0.0000	24/01/2024 17:30	0.0000	0.0000
0.0015	21/09/2023 23:00	0.0000	0.0000	9/01/2024 2:30	0.0000	0.0000	20/01/2024 7:30	0.0000	0.0000	24/01/2024 18:00	0.0000	0.0000
0.0015	21/09/2023 23:30	0.0000	0.0000	9/01/2024 3:00	0.0000	0.0000	20/01/2024 8:00	0.0000	0.0000	24/01/2024 18:30	0.0000	0.0000
0.0015	22/09/2023 0:00	0.0000	0.0000	9/01/2024 3:30	0.0000	0.0000	20/01/2024 8:30	0.0000	0.0000	24/01/2024 19:00	0.0000	0.0000
0.0015	22/09/2023 0:30	0.0000	0.0000	9/01/2024 4:00	0.0000	0.0000				24/01/2024 19:30	0.0000	0.0000

Normalisation of RY24 SAIFI Major Events

Aurora Energy's SAIFI Unplanned Boundary Value												0.0737
1/48th of the SAIFI Unplanned Boundary Value	20 September 2023 Major Event			7 January 2024 Major Event			18 January 2024 Major Event			23 January 2024 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	Half hour commencing	Raw SAIFI Value for half-hour	Normalised SAIFI Value for half-hour
0.0015	22/09/2023 1:00	0.0000	0.0000	9/01/2024 4:30	0.0000	0.0000				24/01/2024 20:00	0.0000	0.0000
0.0015	22/09/2023 1:30	0.0000	0.0000	9/01/2024 5:00	0.0000	0.0000				24/01/2024 20:30	0.0000	0.0000
0.0015	22/09/2023 2:00	0.0000	0.0000	9/01/2024 5:30	0.0000	0.0000				24/01/2024 21:00	0.0000	0.0000
0.0015	22/09/2023 2:30	0.0000	0.0000	9/01/2024 6:00	0.0000	0.0000				24/01/2024 21:30	0.0000	0.0000
0.0015	22/09/2023 3:00	0.0000	0.0000	9/01/2024 6:30	0.0000	0.0000				24/01/2024 22:00	0.0000	0.0000
0.0015	22/09/2023 3:30	0.0000	0.0000	9/01/2024 7:00	0.0000	0.0000				24/01/2024 22:30	0.0000	0.0000
0.0015	22/09/2023 4:00	0.0000	0.0000	9/01/2024 7:30	0.0000	0.0000				24/01/2024 23:00	0.0000	0.0000
0.0015	22/09/2023 4:30	0.0000	0.0000									
0.0015	22/09/2023 5:00	0.0000	0.0000									
0.0015	22/09/2023 5:30	0.0000	0.0000									
0.0015	22/09/2023 6:00	0.0000	0.0000									
0.0015	22/09/2023 6:30	0.0000	0.0000									
0.0015	22/09/2023 7:00	0.0000	0.0000									
0.0015	22/09/2023 7:30	0.0000	0.0000									
0.0015	22/09/2023 8:00	0.0000	0.0000									
0.0015	22/09/2023 8:30	0.0000	0.0000									
0.0015	22/09/2023 9:00	0.0000	0.0000									
0.0015	22/09/2023 9:30	0.0000	0.0000									

Normalisation of RY24 SAIFI Major Events

Aurora Energy's SAIFI Unplanned Boundary Value												0.0737
1/48th of the SAIFI Unplanned Boundary Value	20 September 2023 Major Event			7 January 2024 Major Event			18 January 2024 Major Event			23 January 2024 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	Half hour commencing	Raw SAIFI Value for half-hour	Normalised SAIFI Value for half-hour
0.0015	22/09/2023 10:00	0.0000	0.0000									
0.0015	22/09/2023 10:30	0.0000	0.0000									
0.0015	22/09/2023 11:00	0.0000	0.0000									
0.0015	22/09/2023 11:30	0.0000	0.0000									
0.0015	22/09/2023 12:00	0.0000	0.0000									
0.0015	22/09/2023 12:30	0.0000	0.0000									
Total SAIFI		0.2899	0.0351		0.1293	0.0031		0.0796	0.0058		0.0842	0.0024

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.

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_N value and SAIDI_B value are calculated for that Interruption. The SAIDI_B value, if any, is then attributed to that Interruption and half of the SAIDI_N 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_B 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 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 2023, the 30 minute period to which the raw SAIDI Value for that Interruption is allocated would be the 11:30 period on 20 June 2023. 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 2020¹, 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 1/48th of Aurora Energy's SAIDI Unplanned Boundary Value² is replaced with 1/48th 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 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.

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

² Aurora Energy's SAIDI Unplanned Boundary is specified in Schedule 3.2 of the Determination as being 5.69.

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