

**IN THE HIGH COURT OF NEW ZEALAND
DUNEDIN REGISTRY**

CIV-2019-412-134

**I TE KŌTI MATUA O AOTEAROA
ŌTEPOTI ROHE**

UNDER

Parts 4 and 6 of the Commerce Act 1986

BETWEEN

COMMERCE COMMISSION, a body corporate
established under section 8 of the Commerce Act
1986 having its offices at 44 The Terrace,
Wellington

Plaintiff

AND

AURORA ENERGY LIMITED, a company having its
registered office at 10 Halsey Street, Dunedin

Defendant

AGREED SUMMARY OF FACTS

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1. INTRODUCTION

- 1.1 The contravening conduct in this case relates to the defendant's failure to comply with quality standards imposed on it under s 52P of the Commerce Act 1986 (the **Act**) for the years ending:
- (a) 31 March 2016 (the **2016 Assessment Period**);
 - (b) 31 March 2017 (the **2017 Assessment Period**);
 - (c) 31 March 2018 (the **2018 Assessment Period**); and
 - (d) 31 March 2019 (the **2019 Assessment Period**).
- 1.2 The defendant, Aurora Energy Limited (**Aurora**), is a company with its registered office at 10 Halsey Street, Dunedin. Aurora carries on business as an electricity distribution company in the Dunedin, Central Otago and Queenstown Lakes areas. A map showing the area to which Aurora distributes is attached. Aurora is a supplier of electricity lines services that are subject to regulation under Part 4 of the Act, including quality standards imposed on it under s 52P.
- 1.3 Under s 87(1)(a) of the Act, the court may order a person to pay a pecuniary penalty if the court is satisfied that the defendant has contravened any such price-quality requirements applying to regulated services. In setting the amount of pecuniary penalty, the court must take into account all of the matters listed in s 87(4):

- (a) the nature and extent of the contravention (see Part 6 below);
- (b) the nature and extent of any loss or damage suffered by any person as a result of the contravention (see Part 7 below);
- (c) the circumstances in which the contravention took place (including whether the contravention was intentional, inadvertent, or caused by negligence) (see Part 8); and
- (d) whether or not the person has previously been found by the court in proceedings under this Part to have engaged in similar conduct (see Part 9).

1.4 In reaching the agreed recommended penalty, the parties have taken into account the mitigating features set out in Part 10 below.

2. PART 4 OF THE COMMERCE ACT 1986

2.1 Part 4 of the Act provides for the regulation of goods and services in markets where there is little or no competition and little or no likelihood of a substantial increase in competition.

2.2 The electricity lines services supplied by Aurora are subject to:

- (a) information disclosure regulation; and
- (b) price-quality regulation.

2.3 The purposes of price-quality regulation include:

- (a) limiting the ability of suppliers to extract excessive profits; and
- (b) providing incentives to suppliers to provide services at a quality that reflects consumer demands.

2.4 Under the Act, the Commerce Commission (**Commission**) is required to publish input methodologies that set out the rules,

requirements and processes that apply to regulation of services under Part 4 of the Act.

- 2.5 Section 52P of the Act requires the Commission to make determinations specifying the requirements that apply to each regulated supplier.

3. PRICE-QUALITY REQUIREMENTS

- 3.1 Aurora is a supplier of regulated services to whom a determination under s 52P of the Act applies.

- 3.2 The relevant s 52P determinations are:

- (a) the Electricity Distribution Services Default Price-Quality Path Determination 2010 dated 30 November 2009 (**DPP 2010**) which applied from 1 April 2010 to 31 March 2013;
- (b) the Electricity Distribution Services Default Price-Quality Path Determination 2012 dated 30 November 2012 (**DPP 2012**) which applied from 1 April 2013 to 31 March 2015; and
- (c) the Electricity Distribution Services Default Price-Quality Path Determination 2015 dated 28 November 2014 (**DPP 2015**) which applies from 1 April 2015 to 31 March 2020, (together, “**the DPPs**”).

- 3.3 DPP 2015 has been amended since 28 November 2014, but the relevant provisions were not affected.

4. APPLICABLE QUALITY STANDARDS

- 4.1 Under the DPPs:

- (a) Aurora supplies “**Electricity Lines Services**” as defined in the DPPs.
- (b) Aurora is a “**Non-exempt EDB**” as defined in the DPPs and where “**EDB**” refers to an electricity distribution business.
- (c) An “**Assessment Period**” is defined:

- (i) in DPP 2010 and DPP 2012 as a period of 12 months ending on an "**Assessment Date**", where Assessment Date means a date as at which compliance with the default price-quality path must be demonstrated, being 31 March of each of the years 2011 to 2015; and
 - (ii) in DPP 2015 as a 12 month period commencing on 1 April and ending on 31 March of the following year for which compliance with price-quality requirements is assessed.
- (d) The quality of a Non-exempt EDB's Electricity Lines Services is assessed under the DPPs in terms of the system average interruption duration index (**SAIDI**) and system average interruption frequency index (**SAIFI**).
- (e) SAIDI is a measure of the average outage duration per customer over the Assessment Period, and is expressed in terms of minutes per Assessment Period.
- (f) SAIFI measures the average number of service interruptions per customer over the Assessment Period.

4.2 The relevant quality standards are set out in clause 9 of the DPPs (**Quality Standards**):

- (a) Clause 9.1 of DPP 2010 provides:

Compliance with Quality Standards

A Non-exempt EDB must, in respect of each Assessment Period other than the First Assessment Period, either:

- (a) comply with the annual reliability assessment specified in clause 9.2 for that Assessment Period; or
- (b) have complied with those annual reliability assessments for the two immediately preceding extant Assessment Periods.

- (b) Clause 9.1 of DPP 2012 provides:

Compliance with Quality Standards

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

(a) comply with the annual reliability assessment specified in clause 9.2 for that Assessment Period;
or

(b) have complied with those annual reliability assessments for the two immediately preceding Assessment Periods.

(c) Clause 9.1 of DPP 2015 provides:

Compliance with Quality Standards

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

(a) comply with the annual reliability assessment specified in clause 9.2 for that Assessment Period;
or

(b) have complied with the annual reliability assessments in each of the two preceding Assessment Periods.

4.3 To comply with the annual reliability assessments, clause 9.2 of the DPPs provides that:

- (a) A Non-exempt EDB's SAIDI assessed value for a given Assessment Period must not exceed the maximum specified in the relevant DPP (**SAIDI Limit**); and
- (b) A Non-exempt EDB's SAIFI assessed value for a given Assessment Period must not exceed the maximum specified in the relevant DPP (**SAIFI Limit**).

4.4 The purpose of the Quality Standards is to hold regulated suppliers responsible for the quality of their Electricity Lines Services and the reliability of their electricity distribution networks.

5. APPLICABLE SAIDI AND SAIFI LIMITS

5.1 The SAIDI and SAIFI Limits for Aurora for the period 1 April 2010 to 31 March 2015 (that is, the 2011, 2012, 2013, 2014 and 2015 Assessment Periods) were calculated in accordance with Schedule 3 of DPP 2010 and Schedule 2 of DPP 2012 as follows:

- (a) the SAIDI historic average, based on the relevant reference period, was 84.3;
- (b) the SAIFI historic average, based on the relevant reference period, was 1.47;
- (c) the SAIDI Limit was 98.3; and
- (d) the SAIFI Limit was 1.67.

5.2 The SAIDI and SAIFI Limits for Aurora the period 1 April 2015 to 31 March 2020 (that is, the 2016 to 2020 Assessment Periods) are set out in Schedule 4A of DPP 2015 as follows:

- (a) the SAIDI historic average, based on the relevant reference period, was 74.5;
- (b) the SAIFI historic average, based on the relevant reference period, was 1.29;
- (c) the SAIDI Limit is 83.4; and
- (d) the SAIFI Limit is 1.45.

5.3 The SAIDI and SAIFI Limits are set to allow for a reasonable degree of variability in performance.

- (a) The limits are set at one standard deviation above the individual Non-exempt EDB's historical SAIDI and SAIFI averages, as measured over the applicable reference period;
- (b) For a Quality Standard to be contravened, a Non-exempt EDB must exceed the annual reliability assessment in the

particular year and in either of the preceding two years;
and

- (c) To limit the impact of one-off events such as severe storms, the numbers of SAIDI minutes and SAIFI incidents that can arise in a single day are subject to upper limits. This process is known as normalisation.

5.4 DPP 2015 also includes a Quality Incentive Scheme (**Scheme**) which links a Non-exempt EDB's revenue to the reliability of the network.

6. NATURE AND EXTENT OF CONTRAVENTIONS

6.1 Under clause 11 of the DPPs, every Non-exempt EDB is required to submit an annual compliance statement for each Assessment Period within 50 working days following the end of the Assessment Period.

6.2 The compliance statement must include:

- (a) SAIDI and SAIFI assessed values, as provided for by the DPPs, for the Assessment Period;
- (b) a description of the policies and procedures used for recording the SAIDI and SAIFI assessed values for the Assessment Period; and
- (c) the SAIDI and SAIFI calculations used in determining the SAIDI and SAIFI assessed values.

6.3 The SAIDI assessed values stated by Aurora in its compliance statements were as follows:

- (a) for the 2011 Assessment Period, 111.0;
- (b) for the 2012 Assessment Period, 115.9;
- (c) for the 2013 Assessment Period, 74.6;
- (d) for the 2014 Assessment Period, 94.5;
- (e) for the 2015 Assessment Period, 130.0;

- (f) for the 2016 Assessment Period, 126.0; and
- (g) for the 2017 Assessment Period, 108.6;
- (h) for the 2018 Assessment Period, 253.2; and
- (i) for the 2019 Assessment Period, 185.5.

6.4 The SAIFI assessed values stated by Aurora in its compliance statements were as follows:

- (a) for the 2011 Assessment Period, 1.48;
- (b) for the 2012 Assessment Period, 1.79;
- (c) for the 2013 Assessment Period, 1.10;
- (d) for the 2014 Assessment Period, 1.36;
- (e) for the 2015 Assessment Period, 1.56;
- (f) for the 2016 Assessment Period, 2.01;
- (g) for the 2017 Assessment Period, 1.54;
- (h) for the 2018 Assessment Period, 3.18; and
- (i) for the 2019 Assessment Period, 2.12.

6.5 Aurora contravened the Quality Standard for the 2016 Assessment Period.

- (a) Aurora failed to comply with the annual reliability assessment for the 2016 Assessment Period because:
 - (i) Aurora's SAIDI assessed value was 126.0 and therefore exceeded the 2016 SAIDI Limit of 83.4 stated above at paragraph 5.2(c); and
 - (ii) Aurora's SAIFI assessed value was 2.01 and therefore exceeded the 2016 SAIFI Limit of 1.45 stated above at paragraph 5.2(d).
- (b) Aurora failed to comply with the annual reliability assessment for the 2015 Assessment Period because

Aurora's SAIDI assessed value was 130.0 and therefore exceeded the 2015 SAIDI Limit of 98.3 stated above at paragraph 5.1(c).

6.6 Aurora contravened the Quality Standard for the 2017 Assessment Period.

- (a) Aurora failed to comply with the annual reliability assessment for the 2017 Assessment Period because Aurora's SAIDI assessed value was 108.6 and therefore exceeded the 2017 SAIDI Limit of 83.4 stated above at paragraph 5.2(c);
- (b) Aurora failed to comply with the annual reliability assessment for the 2016 Assessment Period as set out in paragraph 6.5(a); and
- (c) Aurora failed to comply with the annual reliability assessment for the 2015 Assessment Period as set out in paragraph 6.5(b).

6.7 Aurora contravened the Quality Standard for the 2018 Assessment Period.

- (a) Aurora failed to comply with the annual reliability assessment for the 2018 Assessment Period because:
 - (i) Aurora's SAIDI assessed value was 253.2 and therefore exceeded the 2018 SAIDI Limit of 83.4 stated above at paragraph 5.2(c);
 - (ii) Aurora's SAIFI assessed value was 3.18, and therefore exceeded the 2018 SAIFI Limit of 1.45 stated above at paragraph 5.2(d);
- (b) Aurora failed to comply with the annual reliability assessment for the 2017 Assessment Period as set out in paragraph 6.6(a); and

- (c) Aurora failed to comply with the annual reliability assessment for the 2016 Assessment Period as set out in paragraph 6.5(a).

6.8 Aurora contravened the Quality Standard for the 2019 Assessment Period.

- (a) Aurora failed to comply with the annual reliability assessment for the 2019 Assessment Period because:
- (i) Aurora's SAIDI assessed value was 185.5 and therefore exceeded the 2019 SAIDI Limit of 83.4 stated above at paragraph 5.2(c);
 - (ii) Aurora's SAIFI assessed value was 2.12, and therefore exceeded the 2019 SAIFI Limit of 1.45 stated above at paragraph 5.2(d);
- (b) Aurora failed to comply with the annual reliability assessment for the 2018 Assessment Period as set out in paragraph 6.7(a); and
- (c) Aurora failed to comply with the annual reliability assessment for the 2017 Assessment Period as set out in paragraph 6.6(a).

6.9 In summary, Aurora's annual reliability performance for the 2011 to 2019 Assessment Periods was as follows:

Assessment Period	SAIDI Limit	Assessed SAIDI	SAIDI Outcome	SAIFI Limit	Assessed SAIFI	SAIFI Outcome	Annual reliability assessment	Quality Standard
2011	98.3	111.0	exceeded	1.67	1.48	within	exceeded	compliant
2012	98.3	115.9	exceeded	1.67	1.79	exceeded	exceeded	contravened
2013	98.3	74.6	within	1.67	1.10	within	within	compliant
2014	98.3	94.5	within	1.67	1.36	within	within	compliant
2015	98.3	130.0	exceeded	1.67	1.56	within	exceeded	compliant
2016	83.4	126.0	exceeded	1.45	2.01	exceeded	exceeded	contravened
2017	83.4	108.6	exceeded	1.45	1.54	exceeded	exceeded	contravened

Assessment Period	SAIDI Limit	Assessed SAIDI	SAIDI Outcome	SAIFI Limit	Assessed SAIFI	SAIFI Outcome	Annual reliability assessment	Quality Standard
2018	83.4	253.2	exceeded	1.45	3.18	exceeded	exceeded	contravened
2019	83.4	185.5	exceeded	1.45	2.12	exceeded	exceeded	contravened

6.10 For the 2015 Assessment Period:

- (a) Aurora had an average of 85,007 Installation Control Points (**ICPs**), which is used to represent the number of customers.
- (b) The total non-normalised service interruption experienced by Aurora's customers was 11,050,910 minutes (184,182 hours) or 130 minutes per customer.
- (c) After normalisation, the total service interruption experienced by Aurora's customers was 11,050,910 minutes (184,182 hours) or 130 minutes per customer.
- (d) After normalisation, the total service interruption experienced by Aurora's customers above the SAIDI Limit was 2,694,722 minutes (44,912 hours) or 32 minutes per customer.
- (e) Aurora therefore exceeded its SAIDI Limit by 32 SAIDI minutes, or 33 per cent.

6.11 For the 2016 Assessment Period:

- (a) Aurora had an average of 85,966 ICPs / customers.
- (b) The total non-normalised service interruption experienced by Aurora's customers was 20,125,500 minutes (335,425 hours) or 234 minutes per customer.
- (c) After normalisation, the total service interruption experienced by Aurora's customers was 10,831,716 minutes (180,529 hours) or 126 minutes per customer.
- (d) After normalisation, the total service interruption experienced by Aurora's customers above the SAIDI Limit

was 3,662,152 minutes (61,036 hours) or 43 minutes per customer.

- (e) Aurora therefore exceeded its SAIDI Limit by 43 SAIDI minutes, or 52 per cent.
- (f) The total non-normalised number of interruptions experienced by Aurora's customers was 213,196 customer interruptions.
- (g) After normalisation, the total number of interruptions experienced by Aurora's customers was 172,792 interruptions.
- (h) After normalisation, the total number of interruptions experienced by Aurora's customers above the SAIFI limit was 48,141, or 0.56 interruptions per customer.
- (i) Aurora therefore exceeded its SAIFI limit by 0.56 interruptions per customer, or 39 per cent.

6.12 For the 2017 Assessment Period:

- (a) Aurora had an average of 87,102 ICPs / customers.
- (b) The total non-normalised service interruption experienced by Aurora's customers was 14,769,886 minutes (246,165 hours) or 170 minutes per customer.
- (c) After normalisation, the total service interruption experienced by Aurora's customers was 9,460,148 minutes (157,669 hours) or 109 minutes per customer.
- (d) After normalisation, the total service interruption experienced by Aurora's customers above the SAIDI Limit was 2,195,841 minutes (36,597 hours) or 25 minutes per customer.

Aurora therefore exceeded its SAIDI Limit by 25 SAIDI minutes, or 30 per cent.

6.13 For the 2018 Assessment Period:

- (a) Aurora had an average of 88,588 ICPs / customers.
- (b) The total non-normalised service interruption experienced by Aurora's customers was 36,143,904 minutes (602,398 hours) or 408 minutes per customer.
- (c) After normalisation, the total service interruption experienced by Aurora's customers was 22,427,824 minutes (373,797 hours) or 253 minutes per customer.
- (d) After normalisation, the total service interruption experienced by Aurora's customers above the SAIDI Limit was 15,039,585 minutes (250,660 hours) or 170 minutes per customer.
- (e) Aurora therefore exceeded its SAIDI Limit by 170 SAIDI minutes, or 204 per cent.
- (f) The total non-normalised number of interruptions experienced by Aurora's customers was 364,983 customer interruptions.
- (g) After normalisation, the total number of interruptions experienced by Aurora's customers was 281,710 interruptions.
- (h) After normalisation, the total number of interruptions experienced by Aurora's customers above the SAIFI limit was 153,257, or 1.29 interruptions per customer.
- (i) Aurora therefore exceeded its SAIFI limit by 1.73 interruptions per customer, or 119 per cent.

6.14 For the 2019 Assessment Period:

- (a) Aurora had an average of 89,809 ICPs / customers.
- (b) The total non-normalised service interruption experienced by Aurora's customers was 28,945,441 minutes (482,424 hours) or 322 minutes per customer.

- (c) After normalisation, the total service interruption experienced by Aurora's customers was 16,658,671 minutes (277,644 hours) or 185.5 minutes per customer.
- (d) After normalisation, the total service interruption experienced by Aurora's customers above the SAIDI Limit was 9,168,601 minutes (152,810 hours) or 102.1 minutes per customer.
- (e) Aurora therefore exceeded its SAIDI Limit by 102.1 SAIDI minutes, or 122 per cent.
- (f) The total non-normalised number of interruptions experienced by Aurora's customers was 235,300 customer interruptions.
- (g) After normalisation, the total number of interruptions experienced by Aurora's customers was 190,395 interruptions.
- (h) After normalisation, the total number of interruptions experienced by Aurora's customers above the SAIFI limit was 60,172, or 0.67 interruptions per customer.
- (i) Aurora therefore exceeded its SAIFI limit by 0.67 interruptions per customer, or 46 per cent.

6.15 Aurora complied with its SAIFI limit in the 2015 and 2017 Assessment Periods.

7. LOSS OR DAMAGE SUFFERED

7.1 Outages on an EDB's distribution network (whether planned or unplanned) can cause that EDB's customers to suffer loss or damage. Such harm may include the cost of backup power and/or other mitigation steps. Examples of the types of harm that particular categories of customers may typically suffer include:

- (a) for industrial consumers, interruption to industrial processes (such as the ability to receive raw materials, to conduct production processes, and to distribute the end

product), and consequential harm including wasted product, staff downtime, and the costs of cleaning and disposal required to recalibrate the supply chain;

- (b) for service-based commercial consumers, forced closure / interruption of service with consequential loss of revenue, loss of perishable items and wasted staff costs; and
- (c) for residential consumers, loss of perishable items, loss of heating and hot water, and revenue for consumers who work from home.

7.2 Aurora's contraventions of the Quality Standard for the 2016, 2017, 2018, and 2019 Assessment Periods have caused significant loss to consumers.

7.3 The parties have not been able to agree on a quantification of the loss. However, the parties have agreed that the extent of loss caused by the contraventions is at least equivalent to the penalty that the parties intend to propose (\$8,060,000 before discount) and that the extent of loss caused by the contraventions is such that the proposed penalty is warranted.

8. CIRCUMSTANCES OF THE CONTRAVENTIONS

8.1 The circumstances leading up to the contraventions are set out below. Aurora's conduct in the lead up to, and during, the contraventions for the 2016 and 2017 Assessment Periods meant that the contraventions in the 2018 and 2019 Assessment Periods were virtually inevitable. However, from the end of the 2017 Assessment Period onwards, Aurora took a number of steps to address its non-compliance with the Quality Standards. The additional circumstances relating to the contraventions in the 2018 and 2019 Assessment Periods are addressed in paragraphs 8.20 to 8.24.

Failure to implement recommendations from 2012 contravention

- 8.2 Aurora contravened the Quality Standards for the 2012 Assessment Period by exceeding the SAIDI limit in 2011 and the SAIDI and SAIFI limit in 2012. The Commission did not bring proceedings against Aurora in respect of that contravention. Instead, it issued a warning letter to Aurora.
- 8.3 In 2013 the Commission engaged Strata Energy Consulting Limited (**Strata**) to produce a report on the circumstances of the 2012 contravention. That report identified a number of factors that contributed to the contravention and made recommendations to address those. The factors included:
- (a) Aurora's asset management strategies; and
 - (b) the inadequacy of Aurora's budget for vegetation and asset management.
- 8.4 The report also found that there were "apparent and serious inconsistencies between Aurora's published and disclosed asset condition data and the information on asset condition that Strata obtained on site."
- 8.5 While Aurora took some steps towards addressing the findings and recommendations in the 2013 Strata report in the period leading up to the 2016 and 2017 Assessment Periods, Aurora did not have a planned response to the findings and recommendations of the 2013 Strata report. Its failure to do so was not in accordance with good industry practice.

Failures by Aurora caused, or contributed to extent of, the contraventions

- 8.6 There has been a material deterioration in Aurora's service quality in the 2015 to 2019 Assessment Periods from the relevant reference period (Aurora's recent performance is reflected in the table in paragraph 6.7 above).

- 8.7 Aurora's conduct in the period leading up to and including the 2016 and 2017 Assessment Periods was a key driver of its contraventions of the Quality Standards.
- 8.8 Aurora failed in the respects listed below to exercise the degree of skill, diligence, prudence and foresight which would reasonably and ordinarily be expected from a skilled and experienced EDB:

Data Management Practices

- (a) Lifecycle asset management requires decision-making that is based on meaningful, accurate, and timely asset data.¹
- (b) Although, having regard to the recommendations of the 2013 Strata Report, Aurora took some steps to improve its data management practices, aspects of Aurora's data management practices failed to meet the degree of skill, diligence, prudence and foresight which would reasonably and ordinarily be expected from a skilled and experienced EDB, namely:
 - (i) Aurora failed to ensure its asset condition data was of a sufficient standard on which to base asset management decisions, despite the 2013 Strata report having identified that there were serious inconsistencies between Aurora's asset condition data and the actual condition of some assets.
 - (ii) Aurora failed to ensure its fault cause data was of a sufficient standard on which to base asset management decisions.
 - (iii) Aurora's data governance practices were inadequate—for example, due to the lack of data quality metrics and the lack of independent

¹ Asset life cycle management processes are put in place to ensure sustainable delivery of services to a defined standard at an effective cost. Good industry practice requires that asset management processes are based on good asset condition information and a strong risk management analytical framework.

auditing of data, and as evidenced by the extent of errors in data submitted to the Commission.²

Asset Life Cycle Management Practices

- (c) Aurora's asset life cycle management practices failed to meet the degree of skill, diligence, prudence and foresight which would reasonably and ordinarily be expected from a skilled and experienced EDB, namely:
 - (i) Aurora's forecast expenditure for replacement or renewal of network assets from at least 2010 to 2016 did not take into account the condition of the assets and was inadequate.
 - (ii) Without adequate justification, Aurora failed to spend \$36.7m of its forecast expenditure for replacement and renewal of network assets between 2010 and 2017. That underspend contributed to increased interruptions to customer supply in 2016, 2017, 2018, and 2019.
 - (iii) Aurora's inadequate forecast expenditure for replacement or renewal of network assets from at least 2010 to 2016 and its failure to spend \$36.7m of forecast expenditure between 2010 and 2017 has led to significant proportions of Aurora's network assets having low condition/health grades (largely based on age) and being at or near the end of their lives.
 - (iv) The underlying cause of outages attributed by Aurora to weather-related incidents was partially due to the failure of the assets caused by deteriorated asset condition.
 - (v) Aurora's expenditure forecasts were formed predominantly on a 'top down' basis, with budgets

² For example, mistakenly re-disclosing identical asset condition grades from a previous year, or mistakenly classifying the condition of certain assets as "unknown".

materially influenced by affordability rather than a prudent response to 'bottom up' network requirements to address identified network performance and condition risks.

- (vi) Aurora failed to provide a sufficiently detailed analysis for deferring asset replacement and renewal expenditure.
- (vii) Aurora failed to implement appropriate risk mitigation approaches when making asset management planning decisions—for example, when deciding whether and when to replace or repair assets.
- (viii) Aurora's investment planning process did not provide appropriate steps to highlight and address potential issues in its historical and proposed investment strategies;
- (ix) Aurora failed to support its investment decision-making through the use of robust technical, economic and risk analysis.

Reliability Management Practices

- (d) Aurora's reliability management practices failed to meet the degree of skill, diligence, prudence and foresight which would reasonably and ordinarily be expected from a skilled and experienced EDB, namely:
 - (i) Aurora failed to undertake adequate post-event investigations into the causes of interruptions in order to help avoid similar interruptions in future and to improve operational responses to interruptions.
 - (ii) Aurora's approach to risk management was relatively immature, with little evidence of risk-based prioritisation of its work programme.

- (iii) Aurora failed to mitigate the impact of planned outages on its reliability performance by ensuring that its capital works programme was implemented in a timely manner so that planned outages could be spread over a number of years.
- (iv) Aurora failed to adequately understand the contribution of equipment failure to SAIDI levels, despite the 2013 Strata report having identified that future quality standard compliance would depend in part on this action.

Vegetation management practices

- (e) Although Aurora took steps to improve aspects of its vegetation management as recommended by the 2013 Strata report, including improving vegetation management data, developing strategies and increasing expenditure, aspects of Aurora's vegetation management practices continued to fail to meet the degree of skill, diligence, prudence and foresight which would reasonably and ordinarily be expected from a skilled and experienced EDB, namely:
 - (i) The number and impact of vegetation related faults in the period 2013-2017 would have been reduced had Aurora increased its cutting activity in high risk areas earlier than it did. Aurora failed to take action at the appropriate time, despite the 2013 Strata report having identified vegetation management as a cause of Aurora's 2012 Quality Standard contravention.
 - (ii) Aurora failed to separately record forecast vegetation management expenditure before 2014 and actual vegetation management expenditure before 2013.

- (iii) Continuing vegetation related interruptions were one of the major contributing causes to Aurora's non-compliance with the quality standards, especially in areas exposed to extreme weather.
- (iv) Aurora failed to publish a vegetation management plan for the years 2013 to 2016, despite the 2013 Strata report having recommended that Aurora take this action.

8.9 Aurora accepts that it is at fault for the failures referred to in paragraph 8.8 and that those failures have either caused each of its contraventions of the Quality Standards or caused that contravention to be greater than it would otherwise be.

Aurora knew or ought to have known of the increasing risk of non-compliance

8.10 In the period leading up to the contraventions, Aurora failed by a significant extent to exercise the degree of skill, diligence, prudence and foresight which would reasonably and ordinarily be expected from a skilled and experienced EDB, because Aurora had knowledge of factors that increased the risk of a contravention but failed to take appropriate steps to address those factors. Those factors ultimately contributed to the contraventions occurring. In particular:

- (a) Aurora was made aware of the deteriorating state of its network on a number of occasions, including:
 - (i) in 2010 Aurora was informed that a "very high percentage of plant (cables, switchgear and transformers) [was] at the end of its reasonably expected service life", leading to a "significant risk of a sudden rapid deterioration in performance";³

³ Deteriorating asset health is likely to contribute to non-compliance events. Where an asset is categorised as "near end of life" it should typically be replaced within one to three years. Failure to do so leads to an increased risk of deterioration in reliability.

- (ii) in 2013 an internal asset manager identified that an additional \$99m was required to be spent in order to address the historic underspend on asset replacement and renewal expenditure; and
 - (iii) the 2013 Strata report identified the increasing incidence of equipment failure as a cause of Aurora's 2012 contravention of quality standards.
- (b) Since at least 2012, Aurora has known that:
 - (i) its network required a substantial increase in capital expenditure on various equipment, including cables, switchgear, transformers and poles, to decrease the risk of non-compliance with the quality standards;
 - (ii) there were significant weaknesses in asset management processes;
 - (iii) there were issues with the availability and unreliability of data for asset management decision making; and
 - (iv) there was a lack of alignment between financial and asset management.
- (c) Aurora could have developed and delivered asset replacement programmes designed to help ensure that it complied with the Quality Standards but failed to do so.
- (d) If Aurora considered it could not avoid non-compliance, it could have:
 - (i) obtained additional funding from its owner; or
 - (ii) applied for a customised price-quality path (CPP).

Its first steps in seeking to undertake material levels of new capital expenditure in order to address the deteriorating state of the network occurred in September

2016 (i.e. towards the end of the 2017 Assessment Period).

8.11 In the period leading up to the 2016 and 2017 contraventions Aurora knew that there was a real risk that a Quality Standard contravention would result if it failed to take appropriate steps to address the factors outlined above. Aurora nevertheless took that risk by failing to take appropriate steps to address those factors. Given the level of knowledge Aurora had (as set out in paragraphs 8.10(a)-8.10(d) above), it was unreasonable for Aurora to take that risk.

8.12 Aurora accepts that its failures are such that they warrant the penalty that the parties have agreed to recommend to the court.

Outsourcing of network management functions to Delta as agent

8.13 Prior to 1 July 2017, Aurora outsourced the day-to-day network management, operation and maintenance activities of the Aurora network to Delta Utility Services Limited (**Delta**) pursuant to an Asset Services Contract and an Administration and Financial Services Agreement.

8.14 Aurora and Delta are both wholly owned subsidiaries of Dunedin City Holdings Limited.

8.15 Prior to 1 July 2017, Aurora had no employees of its own. Aurora and Delta had the same directors, and the Chief Executive Officer of Delta was deemed to be the Chief Executive Officer of Aurora.

8.16 Prior to 1 July 2017, while managing, operating, and maintaining Aurora's network, Delta:

- (a) was acting as Aurora's agent and within the scope of its actual (and apparent) authority; and
- (b) had actual (and apparent) authority to effect legal relations on behalf of Aurora.

8.17 Aurora (through its board) made the high level budget and expenditure decisions, approved dividends and managed the

contractual relationship with Delta, and Delta provided advice and implemented the approved plans.

- 8.18 Aurora accepts, for the purposes of this proceeding, that Delta's management and operation of Aurora's network in the period up to 1 July 2017 is attributable to Aurora. Accordingly, paragraphs 0 to 8.11 do not distinguish between the two.
- 8.19 From 1 July 2017, Aurora and Delta were structurally separated. Separate Board and management structures were implemented. The Asset Services Contract and Administration and Financial Services Agreement referred to in paragraph 8.13 above were terminated with effect from 1 July 2017 and replaced with an Interim Asset Services Agreement and Interim Shared Services Agreement pursuant to which responsibility for asset management functions reverted to Aurora and Delta's role was limited to providing field services to Aurora. Aurora and Delta have progressively implemented operational separation, although some shared services integration remains in place.

Aurora's actions to address its non-compliance

- 8.20 The penalties proposed by the parties are lower for the contraventions in the 2018 and 2019 Assessment Periods (\$1,060,000 before discount) than for the contraventions in the 2016 and 2017 Assessment Periods (\$7,000,000 before discount).
- 8.21 The parties agree this is appropriate. Aurora's culpability leading up to, and during, the 2015, 2016 and 2017 Assessment Periods is reflected in the penalties proposed for those contraventions.
- 8.22 Towards the end of the 2017 Assessment Period, Aurora initiated a major capital works programme to address its historic underinvestment and improve reliability. That work is ongoing.
- 8.23 Aurora also took additional steps that were in part in response to its contraventions, including:
- (a) appointing a new Chair in December 2016, and subsequently a new Board and CEO;

- (b) refraining from paying a dividend and drawing on shareholder funding to finance investment in the network;
- (c) undertaking a comprehensive review of its Asset Management Plan to address the failures set out in paragraph 8.8 above; and
- (d) implementing the structural separation of Aurora and Delta (effective from 1 July 2017).

8.24 Planned outages resulting from Aurora's remedial capital works programme were a significant contributor to the contraventions in the 2018 and 2019 Assessment Periods. In proposing penalties for those Assessment Periods, the parties have therefore given less weight to the planned outages to the extent that they were necessary to address historic under-maintenance of the network. In particular:

- (a) Planned outages occur where an EDB gives advance warning to consumers of an outage. Typically, they occur where an EDB intends to work on its network.
- (b) Aurora's network experienced a larger than normal number and duration of planned outages during the 2018 and 2019 Assessment Periods as a result of the major capital works programme it initiated in the 2017 Assessment Period to address its poor service performance:
 - (i) Between 2005 and 2014, Aurora's yearly planned outages averaged 7 SAIDI minutes.
 - (ii) Between 2015 and 2017 Aurora's average adjusted planned outages was 24.3 SAIDI minutes (20 per cent of assessed SAIDI).
 - (iii) In 2018 and 2019, planned outages accounted for 61 per cent of total SAIDI and 51 per cent of assessed SAIDI.

However, it is also noted that even if no planned outages had occurred (or if a normal level had occurred) the degree of contravention would have still been significant.

(c) The 2018 and 2019 figures are set out in the following table:

SAIDI/SAIFI	Limit	Total	Total from planned	Total from unplanned	Assessed	Assessed from planned	Assessed from unplanned
2018 SAIDI	83.4	408	290	118	253	145	108
2018 SAIFI	1.45	4.12	1.71	2.42	3.18	0.85	2.32
2019 SAIDI	83.4	322	154	168	185	77	108
2019 SAIFI	1.45	2.6	0.73	1.89	2.12	0.37	1.75

8.25 Aurora's lower culpability in the 2018 and 2019 Assessment Periods is partly offset by the extent of the contravention (set out in section 6 above) and the loss or damage suffered by consumers (set out in section 7 above) in respect of those Assessment Periods.

Financial benefit from contraventions

8.26 In the period leading up to the 2016 and 2017 Assessment Periods, Aurora failed to incur the expenditure required to comply with the Quality Standards. If Aurora had incurred the expenditure required, Aurora's return on investment would have been lower.

8.27 From the 2017 Assessment Period onwards, Aurora has been engaged in a programme to address the sub-standard state of its network. That has required Aurora to incur capital and operating expenditure significantly in excess of the allowances in the current DPP. The DPP framework requires Aurora to bear a proportion of that excess expenditure (35% of excess operating expenditure and 15% of excess capital expenditure), with the remainder able to be passed on to consumers. The consequence is that Aurora will incur

⁴ Because planned outages are seen to be less burdensome to consumers, DPP 2015 applies a 50% weighting to them when determining assessed SAIDI and SAIFI, but this was not the case under prior DPPs

significant unrecovered costs in order to remedy its past poor performance.

8.28 In addition, Aurora made service level payments to consumers as described below at paragraph 10.1(b).

8.29 The parties have not been able to agree what the overall financial effect to Aurora arising from its contraventions will be once its network is brought up to standard, including whether its historic underinvestment will ultimately be to its net benefit or net detriment.

9. PREVIOUS CONDUCT

9.1 There is no other relevant previous conduct to take into account in terms of s 87(4).

10. ADDITIONAL MATTERS THE PARTIES HAVE TAKEN INTO ACCOUNT IN RECOMMENDING THE PENALTIES

10.1 In addition to the matters described above, in recommending the penalties the parties have also taken into account:

- (a) Aurora's cooperation and admissions of liability;
- (b) Aurora's service level payments to consumers, amounting to \$1.0452 million over the course of the 2015 to 2019 Assessment Periods;
- (c) Aurora's efforts to work towards future compliance, including providing action plans to the Commission regarding steps it is taking towards future compliance;
- (d) Aurora's appointment of WSP Opus – an engineering consultancy – to undertake a review of the state of the network, and its publication of the resulting report. The review was undertaken subject to a tripartite deed between Aurora, WSP and the Commission, under which the parties agreed that WSP's primary duty would be owed to the Commission; and

- (e) Aurora's openness with the Commission regarding future compliance generally.

Dated this 18th day of December 2019



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