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# Reconsideration of customised price-quality path for Aurora Energy (Capacity Event) 2024

**Draft decision** 

Date: 24 October 2024

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#### **Overview**

### Aurora applied to us to reconsider and amend its customised price path for a capacity event

- Aurora Energy Limited (Aurora) applied to us to reconsider and amend its Electricity Distribution Customised Price-Quality Path Determination 2021 [2021] NZCC 3 (Aurora CPP) to increase its allowable revenue to recover increased consumer connection expenditure and expenditure for five growth and security projects totalling \$46.323 million over five years.
- Aurora is subject to price-quality regulation by the Commerce Commission (Commission) under Part 4 of the Commerce Act. As such, the revenue it can recover from its consumers is limited. Aurora has applied to the Commission for these limits to be reconsidered to take into account additional capacity requirements that were uncertain or unforeseeable at the time the original revenue limits were set. Reconsideration of revenue limits is only permitted under certain circumstances and this paper sets out our draft decision on Aurora's application.

#### Our draft decision is to amend Aurora's CPP to include an additional allowance

- Our draft decision is to amend Aurora's price-quality path to include an additional \$44.602 million capex allowance over five years to reflect the change in costs resulting from a capacity event.
- 4 This paper details the reasons for our draft decision, with the following structure:
  - 4.1 Attachment A Legal framework
  - 4.2 Attachment B Methodology for assessing expenditure
  - 4.3 Attachment C Draft amendment of Aurora's customised price path
  - 4.4 Attachment D Assessment of consumer connection capex
  - 4.5 Attachment E Assessment of Growth and Security projects

#### Summary of Aurora's application and our draft decision

Our draft decision is to reconsider and amend Aurora's CPP on the basis that we are satisfied that the additional consumer connection capex, and all five of the growth and security projects meet the criteria to be considered for a capacity event reconsideration.

- In some cases, our draft decision approves a level of capex that differs from what Aurora requested in their application, as we consider this reflects an appropriate level of compensation for the change in costs resulting from the capacity event. Where this occurs, we have provided our reasons in the relevant attachments (Attachments D and E).
- 7 Table 1 below summarises the capex we have approved by project or expenditure category in our draft decision. For full descriptions of the projects, please refer to Aurora's application.<sup>1</sup>

Table 1 Summary of Aurora's reconsideration application

	Aurora's application		
Reconsideration mechanism	Capacity event		
Sub-type	Connection capex and system grow	vth	
Project description	Aurora has requested a reconsideration of their CPP under the capacity event reconsideration mechanism due to higher than forecast consumer demand.		
Application link	Aurora Energy's Application for Requality Path	consideration of its Customised Price-	
	Requested	Draft approval	
Attachment D: Connection capex	\$25.967 m	\$25.967 m	
Attachment E: Five growth and s	ecurity projects		
Attachment E1: Riverbank switching station conversion	\$6.522 m	\$6.522 m	
Attachment E2: Upper Clutha auto-transformer	\$5.351 m	\$4.098 m	
Attachment E3: Cardrona zone substation transformer upgrade	\$3.615 m	\$3.738 m	
Attachment E4: Bendigo distribution reinforcement	\$3.223 m	\$2.632 m	
Attachment E5: Frankton Transformer Upgrade	\$1.645 m	\$1.645 m	
Capex Total	\$46.323 m \$44.602 m		
Impact on revenues	The additional capex allowance will increase Aurora's overall revenue for the five-year CPP by 1.4% (including revenue that will be recovered in the following regulatory period)		

<sup>&</sup>lt;sup>1</sup> Aurora Energy, <u>Aurora Energy's Application for Reconsideration of its Customised Price-quality Path</u>, (22 December 2023).

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imated consumer bill impact	Additional revenue will not be reflected in prices until the next regulatory
	period (RY 2027). Estimating the bill impact expected in the next
	regulatory period is complex due to a range of factors. See Attachment C
	for further information.

#### Submissions on this paper

- We seek your views on the matters discussed in this paper and the proposed drafting of the amended Aurora Energy Limited Electricity Distribution Customised Price-Quality Path Determination [2021] by 4pm, Thursday 7 November 2024.
- 9 Please address your submission to Ben Woodham c/o <a href="infrastructure.regulation@comcom.govt.nz">infrastructure.regulation@comcom.govt.nz</a> with 'Aurora capacity event reconsideration consultation' in the subject line of your email.
- We prefer submissions in both a format suitable for word processing (such as a Microsoft Word document), as well as a 'locked' format (such as a PDF) for publication on our website.

#### **Confidential submissions**

- 11 While we encourage public submissions so that all information can be tested in an open and transparent manner, we recognise that there may be cases where parties that make submissions wish to provide information in confidence. We offer the following guidance:
  - 11.1 If it is necessary to include confidential material in a submission, the information should be clearly marked, with reasons why that information is considered to be confidential.
  - 11.2 Where commercial sensitivity is asserted, submitters must explain why publication of the information would be likely to unreasonably prejudice their commercial position or that of another person who is the subject of the information.
  - 11.3 Both confidential and public versions of the submission should be provided.
  - 11.4 The responsibility for ensuring that confidential information is not included in a public version of a submission rests entirely with the party making the submission.

- Parties can also request that we make orders under section 100 of the Commerce Act 1986 in respect of information that should not be made public. Any request for a section 100 order must be made when the relevant information is supplied to us and must identify the reasons why the relevant information should not be made public. We will provide further information on section 100 orders if requested by parties. A key benefit of such orders is to enable confidential information to be shared with specified parties on a restricted basis for the purpose of making submissions. Any section 100 order will apply for a limited time only as specified in the order. Once an order expires, we will follow our usual process in response to any request for information under the Official Information Act 1982.
- Please note that all submissions and cross-submissions we receive, including any parts that we do not publish, can be requested under the Official Information Act 1982. This means we would be required to release material that we do not publish unless good reasons exist under the Official Information Act 1982 to withhold it. We would normally consult with the party that has provided the information before any disclosure is made.
- We request that you provide multiple versions of your submission if it contains confidential information or if you wish for the published electronic copies to be 'locked'. This is because we intend to publish all submissions on our website. Where relevant, please provide both an 'unlocked' electronic copy of your submission, and a clearly labelled 'public' version.

### Attachment A Legal framework

- A1 This attachment explains the legal instruments that govern our decision-making, and the approach we have taken to evaluate Aurora's application to reconsider its price path.
- A2 Part 4 of the Commerce Act 1986 provides for the regulation of the price and quality of services in markets where there is little or no competition or likelihood that there will be a substantial increase in competition. Aurora is subject to price-quality regulation under Part 4 of the Commerce Act.
- A3 In 2021, the Commission approved Aurora's proposal to move from the default price-quality path to a customised price-quality path (CPP) for a five-year period.<sup>2</sup> As part of the CPP process, the Commission varied the input methodologies that apply during the CPP period to provide, among other things, a capacity event reconsideration (Aurora CPP IM variations).<sup>3</sup>

# The price path and quality standards may only be reconsidered in limited circumstances

- We determined Aurora's CPP on an *ex-ante* (forecast) basis to cover the regulatory period from 2021 to 2026 (the regulatory period). Once determined, the customised price path and quality standards may not be reconsidered (reopened) within the regulatory period, except in limited circumstances.<sup>4</sup> Those circumstances must be specified in the IMs that apply to Aurora.
- A5 Under clause 5.6.7(2)(f) of the Aurora CPP IM variations, one of the specified circumstances where we may reconsider the customised price path is if Aurora demonstrates a need for additional capacity that meets the criteria for a 'capacity event' under clause 5.6.6A of the Aurora CPP IM variations.

<sup>&</sup>lt;sup>2</sup> Commerce Commission, <u>Decision on Aurora Energy's proposal for a customised price-quality path, final decision</u>, (31 March 2021), (Aurora CPP reasons paper).

Commerce Commission, Decision on Aurora Energy's proposal for a customised price-quality path, final decision, (31 March 2021), (Aurora CPP reasons paper), at [B33], [I28]-[I33]; Therefore, Aurora is subject to the Electricity Distribution Services Input Methodologies Determination 2012 [2012] NZCC 26 (as amended) and the variations to that IM Determination as set out in Schedule 12 of the Aurora Energy Limited Electricity Distribution Customised Price-Quality Path Determination 2021 [2021] NZCC 3.

<sup>&</sup>lt;sup>4</sup> Sections 52T(1)(c)(ii) and 53ZB of the Commerce Act.

## The capacity event reconsideration enables Aurora to provide additional capacity that was uncertain or unforeseeable at the time the CPP was set

- Ad Aurora applied for a three-year CPP period because of uncertain expenditure forecasts in the medium to long term. However, the Commission decided to set the CPP for a term of five years. This is because we considered that the benefits from the revenue and quality certainty associated with a five-year CPP outweighed the risk and effect of revenue over-recovery or under-recovery.
- A7 To address some of the uncertainty in years four and five of the CPP and to enable Aurora to seek approval for projects later in the CPP period when demand was more certain, we introduced limited reconsideration mechanisms into the IMs, by agreement with Aurora. Those mechanisms are:<sup>7</sup>
  - A7.1 The capacity event reconsideration, for costs that were caused by a change in security of supply, or an increase in demand or generation on Aurora's network. This is the subject of the current application; and
  - A7.2 The risk event reconsideration, for costs related to the condition of the network where the need or solution was uncertain when the CPP was determined.

#### Criteria for a capacity event reconsideration

- A8 Clause 5.6.6A of the Aurora CPP IM variations defines a 'capacity event' as an event for which an EDB demonstrates that—
  - A8.1 the EDB's network needs additional capacity to provide electricity distribution services;
  - A8.2 the additional capacity has the primary driver of meeting established or reasonably anticipated demand for
    - A8.2.1 connection capex;
    - A8.2.2 system growth capex;
    - A8.2.3 asset relocation capex; or
    - A8.2.4 a combination of connection capex and system growth capex;

<sup>&</sup>lt;sup>5</sup> Aurora Energy, <u>Customised Price-Quality Path Application</u>, (12 June 2020) at [3]; Aurora Energy, <u>Submission on Aurora Energy's Issues paper</u>, (20 August 2020), at [189].

Commerce Commission, <u>Decision on Aurora Energy's proposal for a customised price-quality path, final decision</u>, (31 March 2021), at [3.22].

Commerce Commission, <u>Decision on Aurora Energy's proposal for a customised price-quality path, final decision</u>, (31 March 2021), at [I27] and [B33)].

- A8.3 when the CPP was determined, the need for the additional capacity—
  - A8.3.1 was not sufficiently certain; or
  - A8.3.2 could not reasonably have been foreseen by a prudent EDB; and
- A8.4 providing the additional capacity—
  - A8.4.1 would require the EDB to incur costs of at least two million dollars of capex during the CPP regulatory period above any allowance provided for that additional capacity in the DPP or CPP; and
  - A8.4.2 meets the expenditure objective.

#### Our discretion to reconsider and amend the Aurora customised price path

- Our decision to reconsider and amend Aurora's CPP price path is a two-step process: first, we assess whether the application meets the criteria for a 'capacity event' under clause 5.6.6A of the Aurora CPP IM variations. Then, if we are satisfied the application meets the clause 5.6.6A criteria, under clauses 5.6.7(1)(b) and 5.6.8(1) of the IMs, we exercise our discretion on whether to reconsider and amend Aurora's CPP price path.
- Our discretion to reconsider the price path is guided by the extent to which reconsidering the price path in these circumstances would promote the long term benefit of consumers, in accordance with the section 52A purpose of Part 4 of the Commerce Act. The expenditure objective is one of our considerations in assessing the Part 4 purpose.

#### The costs that qualify for the capacity event reconsideration

- A11 The Part 4 purpose requires us to promote the long-term benefit of consumers of services in markets where there is little to no competition, or likelihood of an increase in competition. We do that by promoting the outcomes such that suppliers:
  - A11.1 have incentives to innovate and invest;
  - A11.2 have incentives to improve efficiency and provide services at a quality that reflects consumer demands;
  - A11.3 share the benefits of efficiency gains with consumers, including through lower prices; and
  - A11.4 are limited in their ability to extract excessive profits.

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<sup>8</sup> Commerce Act 1986, s 52A.

A12 Section 53K of the Commerce Act sets out the purpose of default and customised price-quality regulation:

The purpose of default/customised price-quality regulation is to provide a relatively low-cost way of setting price-quality paths for suppliers of regulated goods or services, while allowing the opportunity for individual regulated suppliers to have alternative price-quality paths that better meet their particular circumstances.

- A13 We have interpreted that purpose to mean that:
  - A13.1 DPPs are set in a relatively low-cost way, and are not intended to meet all the circumstances that an EDB may face; and
  - A13.2 CPPs are intended to be tailored to meet the particular circumstances of the individual EDB.
- A14 Aurora's capacity event reconsideration was introduced into the CPP IM variations against this background. Accordingly, we consider the CPP reconsideration variations to be distinguishable from the default price path (DPP) reconsideration mechanisms.
- A15 The capacity event reconsideration was introduced through IM variations that apply to Aurora only, following the CPP process. At the time of Aurora's CPP application, there was uncertainty in Aurora's demand forecasts, in particular for growth and security, and consumer connection projects. <sup>10</sup> This reconsideration mechanism was introduced to allow Aurora to seek additional expenditure for projects if demand became more certain and Aurora could demonstrate that it needed additional capacity to service to its consumers. Due to the unique circumstances that led to Aurora's CPP, the approach we have taken in respect of this reconsideration is also specific to Aurora.
- A16 For this draft decision, our interpretation of the capacity event definition included in the Aurora CPP IM variations is that the Commission may amend Aurora's CPP to take account of costs incurred by Aurora in respect of a capacity event prior to the date at which Aurora applied for the reconsideration.

Commerce Commission, <u>Decision on Aurora Energy's proposal for a customised price-quality path, final decision</u>, (31 March 2021), at [128].

<sup>&</sup>lt;sup>10</sup> Commerce Commission, <u>Decision on Aurora Energy's proposal for a customised price-quality path, final decision</u>, (31 March 2021), at [I30] and [D12].

A17 This differs from the approach taken in respect of most other reconsideration mechanisms in the EDB IMs that apply to DPPs. 11 The different approach reflects the specific circumstances surrounding the Aurora CPP decision and the intent of the specific reconsideration mechanisms in the Aurora CPP IM variations.

This can be seen in the other reconsideration mechanisms, which do not allow the Commission to amend the pricepath to account for costs already incurred or assets already commissioned, except to the extent the IMs expressly provide for this outcome e.g. using a reconsideration event allowance.

### Attachment B Methodology for assessing expenditure

- B1 This attachment explains the methodology we have used to assess whether expenditure meets the expenditure objective.
- We have outlined the evidence Aurora have provided and the outcome of our assessment for individual projects or expenditure categories in the following attachments:
  - B2.1 Attachment D: Assessment of Consumer Connection Capex
  - B2.2 Attachment E: Assessment of growth and security projects

#### Level of scrutiny applied to proposed expenditure

- Our proportionate scrutiny principle means the configuration of the DPP, CPP, and the price path change mechanisms (including reconsiderations) within them, should generally aim to accommodate EDBs' circumstances at a level of cost and scrutiny that is commensurate with the materiality of the changes to prices or quality experienced by consumers, within the constraints of the DPP/CPP regime. Changes that would lead to material increases in prices or a material change in the quality of service should attract greater scrutiny.<sup>12</sup>
- There are also a number of other factors we will take into account when considering the appropriate level of scrutiny, such as the level of confidence we already have that the proposed application delivers long-term benefits to consumers and reflects efficient costs. This could be increased by:
  - B4.1 the extent to which the supplier's previous forecasts were fit for purpose;
  - 84.2 scrutiny already applied for example, through the Commission's summary and analysis functions, or under the CPP;
  - B4.3 the extent to which a forecast departs from historical trends; and
  - B4.4 the level of control the supplier has over a cost.

<sup>12</sup> Commerce Commission, <u>Default price quality paths for electricity distribution businesses from 1 April 2025, Issues Paper</u>, (2 November 2023), at [B42].

#### How we assessed whether the expenditure objective was met

- B5 For additional capex to be approved as part of the capacity event reconsideration, it must meet the expenditure objective.
- B6 The EDB IMs define expenditure objective as follows:

**expenditure objective** means the objective that **capital expenditure** and **operating expenditure** reflect the efficient costs that a prudent **non-exempt EDB** would require to-

- (a) meet or manage the expected demand for **electricity distribution services**, at appropriate service standards, during the **CPP regulatory period** and over the longer term; and
- (b) comply with applicable regulatory obligations associated with those **electricity distribution services**;<sup>13</sup>.

#### Top-down/systematic approach

- Our review process was similar to the process undertaken in the CPP, which was to carry out a top-down assessment of relevant methodologies, and then use a bottom-up test of projects to see if those methodologies have been applied in practice.<sup>14</sup>
- We were able to rely upon analysis undertaken as part of the top-down review of the original CPP, which focussed on the requirements that affect all aspects of the forecast capital and operational expenditure in a CPP proposal. This includes the policy and planning standards used, and the approach to prioritisation, demand forecasts, cost estimation methods (including contingencies), procurement efficiency and deliverability.<sup>15</sup>

#### **Connection Capex**

B9 The summary of our assessment of the consumer connection capex can be found in Attachment D. The section below outlines the methodology we applied to assess the capex against the expenditure objective.

<sup>&</sup>lt;sup>13</sup> Commerce Commission, <u>Electricity Distribution Services Input Methodologies Determination 2012</u>, (Consolidated 23 April 2024), see definition of expenditure objective.

Commerce Commission, <u>Decision on Aurora Energy's proposal for a customised price-quality path, final decision</u>, (31 March 2021), at [D55].

<sup>&</sup>lt;sup>15</sup> Commerce Commission, <u>Decision on Aurora Energy's proposal for a customised price-quality path, final decision</u>, (31 March 2021), at [5.28].

- B10 To test whether the proposed connection capex was prudent and efficient, we reviewed the following:<sup>16</sup>
  - B10.1 the updated forecasting model; and
  - B10.2 whether the capital contributions assumed in the application (forecast and actual) are consistent with Aurora's capital contribution policy.<sup>17</sup>

#### Connection capex forecasting methodology

- In the original CPP, Farrierswier reviewed the consumer connection capex and considered that Aurora's general forecasting approach was reasonable in its verification report.<sup>18</sup>
- In respect of this application, Aurora submits that expenditure has been forecast using the latest version of its forecasting tool. We are satisfied that the use of a base-step-trend modelling approach is consistent with the methodology we accepted when we set the CPP.
- On this basis, we consider that Aurora's forecasts are consistent with the expenditure objective as they reflect a prudent estimate of the costs required to meet the expected demand for electricity distribution services.

#### Evidence consumer connection capex is efficient

- Aurora's capital contributions policy provides the opportunity for customers to select from a range of contractors authorised by Aurora to undertake the work, subject to Aurora's approval of the final design and costs. <sup>19</sup> The ability for consumers to choose between contractors can provide competition and reduce costs for consumers.
- We are satisfied the efficiency element of the expenditure objective has been met, as competition is a means of incentivising efficient pricing. We have not applied further scrutiny of these costs, as we consider it would be disproportionate for the nature of this reconsideration application.

 $<sup>^{\</sup>rm 16}$   $\,$  Aurora response to RFI Q101 – Connection Capex, 17 June 2024.

<sup>&</sup>lt;sup>17</sup> Aurora Energy, <u>Capital Contributions Policy</u>, (1 July 2021).

<sup>&</sup>lt;sup>18</sup> Farrierswier Consulting Pty Ltd and GHD Pty Ltd, <u>Verification report - Aurora Energy CPP application</u>, (8 June 2020), Appendix C.15, at 239-245.

<sup>&</sup>lt;sup>19</sup> Aurora Energy, Asset Management Plan 2024, at 57.

#### **Growth and security projects**

- B16 The summary of our assessment of the growth and security projects can be found in Attachment E. The section below outlines the methodology we applied to assess the capex against the expenditure objective.
- Our top-down review for the CPP reconsideration looked at practices, processes and policies that would aid our assessment of whether the proposed growth and security projects would meet the expenditure objective. These included:
  - B17.1 needs assessment and options analysis; and
  - B17.2 project cost forecasting.
- B18 Aurora supplied additional information to support our top-down/bottom-up analysis. This included:
  - B18.1 A business case analysis for a sample project;<sup>20</sup> and
  - B18.2 the price book used to forecast costs.<sup>21</sup>
- These elements were already scrutinised as part of the CPP process, so we focused our attention on any changes implemented since the original CPP application. We were satisfied that the methodologies used to generate this application were comparable to those we accepted at the time of the CPP, or improved in cases where updates have been made over time (ie, refining the price book based on information from completed projects).
- Aurora have refined its price book as new market information has become available.<sup>22</sup> These refinements have improved the accuracy of its price book since it was used for cost estimations in the CPP. As Aurora have maintained or improved its cost estimation, we were satisfied that the forecast costs in the application met the expenditure objective, in that they reflect a reasonable estimation of costs an EDB would need to incur to undertake the work.

<sup>&</sup>lt;sup>20</sup> Aurora response to RFI Q103 – Business Case Analysis, 7 June 2024.

<sup>&</sup>lt;sup>21</sup> Aurora response to RFI Q104 – Price Book, 29 May 2024.

<sup>&</sup>lt;sup>22</sup> Aurora response to RFI Q104 – Price Book, 29 May 2024.

- B21 For our bottom-up test, we reviewed the detailed business case analysis of one of the projects and reviewed project cost estimations against the price book. We elected to review one project as a sample, rather than all five, as a means of applying proportionate scrutiny. We considered that a detailed review of one project was sufficient to test whether methodologies we had assessed were used when developing the application projects and cost forecasts.
- B22 The project we selected was the Riverbank switching station conversion. The sample business case analysis provided evidence that Aurora had:
  - B22.1 considered a range of solutions;
  - B22.2 undertaken an economic analysis of short-listed options to determine the final solution and the optimum timing for the project;
  - B22.3 proposed a solution that complies with Aurora's security of supply guidelines;<sup>23</sup>
  - B22.4 considered the deliverability of the preferred option; and
  - B22.5 developed a detailed cost estimate for the project, utilising the price book they disclosed for our top-down review.
- B23 Our review of the business case analysis satisfied us that Aurora took the steps that we would expect from a prudent EDB when developing a proposal, and the methodology Aurora used would likely result in expenditure proposals that are prudent and reflect efficient costs.

#### Assessing commissioned costs

2023), at [25].

- B24 Two of the projects, Bendigo and Cardrona, were largely or entirely commissioned before the date of application. In these instances, our draft decision is based on the commissioned cost of the projects, rather than the forecast cost included in the application.<sup>24</sup>
- B25 In Aurora's application, Aurora noted that the projects were competitively tendered, and therefore reflect the efficient costs within the local market.<sup>25</sup>

<sup>&</sup>lt;sup>23</sup> Aurora Energy, <u>Asset Management Plan 2024</u>, at [115], Table 10-1: Security of Supply criteria for GXPs, subtransmission and distribution networks.

<sup>&</sup>lt;sup>24</sup> Aurora response to RFI Q107 – Commissioning Dates, 4 June 2024.

<sup>&</sup>lt;sup>25</sup> Aurora Energy, <u>Aurora Energy's Application for Reconsideration of its Customised Price-quality Path</u>, (22 December

- B26 For both projects, Aurora sought separate tenders for design and construction.

  Aurora received multiple responses for each tender, which indicates some level of competition to undertake the work and allowed Aurora to select from a range of offerings.
- B27 As Aurora received multiple proposals, we are satisfied the costs likely reflect local market rates, and therefore are reasonably efficient. On this basis, we have accepted that the Cardrona and Bendigo constructed costs meet the efficiency element of the expenditure objective.

# Attachment C Draft amendment of Aurora's customised price path

- This attachment outlines our draft decision under clause 5.6.8(1) of the EDB IMs to amend Aurora's customised price path (CPP) to include the additional net costs incurred in undertaking the capacity event projects.
- C2 We first set out how the customised price path is amended by updating the forecast net allowable revenue (FNAR) and forecast value of commissioned assets (FVCA) for the amended years of the CPP regulatory period.

#### Our draft decision is to amend Aurora's customised price path

- C3 The Commission may amend the price path to the extent reasonably necessary to take account of the change in costs necessary to reflect the Commission's decision in relation to the capacity event (clause 5.6.8(1) and (3)).
- C4 To give effect to our decision, it is necessary to amend the components of the pricepath that, together, set Aurora's allowable revenue for the regulatory period. Those components are:
  - C4.1 forecast net allowable revenue (FNAR) for all disclosure years;<sup>26</sup> and
  - C4.2 forecast value of commissioned assets (FVCA) for all disclosure years.<sup>27</sup>
- Our decision is to amend the FNAR and FVCA for all disclosure years in the regulatory period. This is necessary to give effect to our decision in a manner that complies with the IMs.<sup>28</sup> These amendments do not affect our assessment of Aurora's price path compliance for years already completed.
- C6 Our draft decision under clause 5.6.8(1) is to reconsider and amend Aurora's customised price path as outlined in Table C1 and Table C2 below.

<sup>&</sup>lt;sup>26</sup> Commerce Commission, <u>Aurora Energy Limited Electricity Distribution Customised Price-Quality Path Determination</u> 2021, (31 March 2021), at Schedule 1.3.

<sup>&</sup>lt;sup>27</sup> Commerce Commission, <u>Aurora Energy Limited Electricity Distribution Customised Price-Quality Path Determination</u> 2021, (31 March 2021), at Schedule 2.2.

<sup>&</sup>lt;sup>28</sup> Commerce Commission, <u>Electricity Distribution Services Input Methodologies Determination 2012</u>, (Consolidated 23 April 2024), clauses 3.1.1(6)-(7) and 3.1.3(13)(h)-(i).

Table C1 FNAR (\$000s) for Aurora over the CPP period

CPP assessment period ending	31 March 2022	31 March 2023	31 March 2024	31 March 2025	31 March 2026
FNAR in CPP <sup>29</sup>	103,663	99,660	96,596	93,722	90,867
FNAR after reconsideration	105,065	101,007	97,902	94,990	92,096
	Table	e C2 FVCA (	\$000s) for the	CPP regulatory	period
CPP assessment period ending	31 March 2022	31 March 2023	31 March 2024	31 March 2025	31 March 2026
Forecast value of commissioned assets in CPP <sup>30</sup>	76,398	65,392	77,959	71,489	65,748
Forecast value of commissioned assets after reconsideration	84,484	71,271	89,309	81,717	74,807

#### Amending the price path promotes the purpose of Part 4 regulation

C7 We consider our draft decision amends the price path by no more than is reasonably necessary to account for the change in costs experienced by Aurora as a result of the capacity event.

Commerce Commission, <u>Aurora Energy Limited Electricity Distribution Customised Price-Quality Path Determination</u> 2021, (31 March 2021), at Schedule 1.3

<sup>&</sup>lt;sup>30</sup> Commerce Commission, <u>Aurora Energy Limited Electricity Distribution Customised Price-Quality Path Determination</u> <u>2021</u>, (31 March 2021), at Schedule 2.2, [2].

- C8 We likewise consider that amending Aurora's price path in these circumstances promotes, in particular, the s 52A(1)(a) and (b) limbs of the Part 4 purpose. It does so by incentivising Aurora to:<sup>31</sup>
  - C8.1 invest in upgraded, and new assets; and
  - C8.2 provide services in a timely manner at a quality that reflects consumer demands.

#### Inclusion of commissioned costs

- C9 For two of the projects, Bendigo and Cardrona, the projects were largely or entirely commissioned before the date of application. In these instances, our draft decision is based on the commissioned costs of the project, rather than the forecast cost included in the application.
- C10 Usually allowances are set based on forecast costs and any efficiency or inefficiency realised in the completion of the project is shared between Aurora and its consumers through the incremental rolling incentive scheme (IRIS) mechanism. This promotes the purpose of Part 4 regulation, as it shares with consumers the benefits of efficiency gains in the supply of the regulated goods or services, including through lower prices.<sup>32</sup> For these projects, the actual costs are known, so this mechanism for efficiency sharing does not apply.
- C11 Across the two commissioned projects, the use of actual costs will result in a net saving for consumers, as shown in Table C3 below. The effect of this is to allocate all of the efficiency gains (and losses) to consumers.

Section 52A(1) of the Commerce Act provides: the purpose of...Part [4] is to promote the long-term benefit of consumers in markets referred to in s 52 by promoting outcomes that are consistent with outcomes produced in competitive markets such that suppliers of regulated goods or services—

<sup>(</sup>a) have incentives to innovate and to invest, including in replacement, upgraded, and new assets; and

<sup>(</sup>b) have incentives to improve efficiency and provide services at a quality that reflects consumer demands; and

<sup>(</sup>c) share with consumers the benefits of efficiency gains in the supply of the regulated goods or services, including through lower prices; and

<sup>(</sup>d) are limited in their ability to extract excessive profits.

<sup>32</sup> Commerce Act, s 52A(1)(c).

Table C3 Difference between forecast and actual project costs

Commissioned assets (\$000s) nominal	Forecast / application	Actual <sup>33</sup>	Difference
Cardrona zone substation transformer upgrade	3,615	3,738	123
Bendigo distribution reinforcement	3,223	2,632	-591
Total	6,838	6,370	- 468

## Our proposed price path amendment provides for costs that meet the expenditure objective

- C12 Having decided to reconsider and amend the customised price path, our amendment must comply with clause 5.6.8(2) of the EDB IMs, which requires us take into account the expenditure objective in determining the extent of any amendment to the price path.
- C13 To achieve this, we have amended the price path to account for expenditure that we have deemed to meet the expenditure objective. See Attachment B for how we have assessed if the proposed expenditure meets the expenditure objective.

#### Capital contributions appear to be consistent with Aurora's capital contributions policy

- C14 The capacity event reconsideration criteria do not place requirements on capital contributions, unlike some other demand-driven reconsideration mechanisms.<sup>34</sup> However, when considering how to amend the price path to reflect the change in costs due to the capacity event, we consider that those costs should adhere to the capital contributions policy.
- C15 When the CPP was set, Aurora targeted a customer contribution rate of 60% for new connections.<sup>35</sup> This rate was assessed as part of the CPP process and accepted in the final decision.<sup>36</sup> The target rate was then used by Aurora to develop its capital contributions policy, which outlines how contributions toward the cost of establishing new and upgraded connections are determined.<sup>37</sup>

<sup>&</sup>lt;sup>33</sup> Aurora response to RFI Q107 – Commissioning Dates, 4 June 2024

Other demand-driven reconsideration mechanisms require that the amount of capital contribution to be received by the EDB for that project or programme is sufficient in the circumstances and is in accordance with that EDB's usual policy on capital contributions. Commerce Commission, Electricity Distribution Services Input Methodologies

Determination 2012, (Consolidated 23 April 2024), at 'unforeseeable major capex project' clause 4.5.5A (g) and 'foreseeable major capex project' clause 4.5.5B (f).

<sup>35</sup> Commerce Commission, <u>Decision on Aurora Energy's proposal for a customised price-quality path, final decision</u>, (31 March 2021), at [D277].

Commerce Commission, <u>Decision on Aurora Energy's proposal for a customised price-quality path, final decision</u>, (31 March 2021), at [D282] to [D289].

<sup>&</sup>lt;sup>37</sup> Aurora Energy, <u>Customised Price-Quality Path Application</u>, (12 June 2020), footnote 38.

C16 We sought additional information to understand whether the proposed additional consumer connection capex adhered to its capital contributions policy. 38 Based on a more detailed breakdown of costs, we were able to confirm at an aggregate level that contribution from consumers for commissioned and forecast connections were consistent with Aurora's contribution policy. On this basis, we were satisfied that the additional capex requested is consistent with Aurora's published capital contribution policy and is reflective of the change in costs due to the capacity event.

#### Aurora's investment will not impact consumer bills until RY 2027

- C17 To assist the consultation process, we have undertaken some analysis to quantify how our draft decision will impact consumer prices.
- C18 The Aurora CPP included a cap on the rate at which Aurora can increase revenue charged to consumers to reduce potential price shocks for consumers. As a result, the recovery of some of Aurora's revenues will be delayed until the next regulatory period.<sup>39</sup>
- This draft decision will increase Aurora's forecast net allowable revenue for the CPP by \$6.553 million, however the effect of the cap means that the increase in revenue will accrue in the wash up balance, to be recovered in the following regulatory period, rather than flowing through to prices during the CPP. Therefore, the additional investments will not be reflected in consumer bills until Aurora transitions from its CPP to DPP4 (RY2027).

Most of the additional investment will occur in the Central Otago/Wanaka pricing region

- C20 Aurora has three pricing regions, each with its own proportion of the regulated asset base (RAB) and revenue. Therefore, changes in the overall revenue cannot be used as a proxy for assessing price impact for consumers.
- C21 The bulk of the proposed investment will be incurred in, and recovered from, Aurora's Central Otago/Wanaka pricing region. Therefore, we targeted this region when quantifying the potential impact of the amendment on future revenues and prices.

<sup>&</sup>lt;sup>38</sup> Aurora response to RFI Q101 – Connection Capex, 17 June 2024.

Commerce Commission, <u>Decision on Aurora Energy's proposal for a customised price-quality path, final decision</u>, (31 March 2021), at [X69].

Aurora was able to provide a breakdown of how expenditure, including consumer connection capex, would be incurred between the pricing regions.<sup>40</sup> In Table C4 below we have updated breakdown of expenditure by region to reflect the sums approved in the draft decision, and estimated the resulting increase in forecast revenue.

Table C4 Capacity event commissioned assets by pricing area

Pricing Area	Total commissioned assets (\$000s) (estimated)	Draft increase in FNAR over the CPP (\$000s) (estimated) 41
Dunedin	6,391	939
Central Otago/ Wanaka	28,484	4,185
Queenstown	9,728	1,429
Total	44,602	6,553

#### Quantifying the impact on Central Otago/Wanaka prices

- As shown in Table C4, our draft decision increases Aurora's total revenue for the CPP by \$6.553 million, and around \$4.185 million of this revenue will be allocated to (and recovered from) Central Otago/Wanaka consumers.
- C24 This additional revenue, when added to the overall revenue assigned to Central Otago/Wanaka over the CPP, would lead to an increase of less than 3%.<sup>42</sup>
- C25 How revenue is recovered through consumer bills is determined by Aurora's pricing methodology. However, if overall change in revenue is used as a proxy for price changes at the consumer bill level, we expect this reconsideration to have a relatively modest impact on bills for consumers in the Central Otago/Wanaka pricing region, and a lower impact on other regions on the network.

<sup>&</sup>lt;sup>40</sup> Aurora response to RFI Q105 – Price Impact, 19 June 2024.

These estimates do not include the impact of the Aurora WACC change reconsideration, which will apply to revenues from RY 2026.

<sup>&</sup>lt;sup>42</sup> Based on the assumption that roughly a third of overall CPP revenue is assigned to the Central Otago/Wanaka pricing region, given it constitutes 34.1% of the regulated asset base; Aurora Energy, <a href="Pricing Methodology">Pricing Methodology</a>, (1 April 2024), at Table 4, Regulated Asset Base for Central pricing area is 34.1%

#### The impact on future prices can only be approximated

- C26 It is not feasible for us to estimate how the recovery of revenue in RY 2027 will impact bills in Central Otago/Wanaka, as this will depend on a range of factors that have not been determined at the time of this decision, including but not limited to:
  - C26.1 the rate at which Aurora draws down its wash up balance in the next regulatory period;
  - C26.2 the outcome of the final DPP4 decision;
  - the amendment of the Aurora CPP to apply the updated WACC rate in RY 2026 (Aurora WACC change reconsideration); and
  - C26.4 Aurora's transition from its CPP to DPP4, which will be determined in 2025.

#### 

Our draft decision is to approve an additional \$25.967 million of consumer connection capex, on the basis that we are satisfied that it meets the capacity event criteria. This attachment sets out our assessment of the proposed consumer connection capex against the criteria for a 'capacity event', as defined in clause 5.6.6A of the Aurora CPP IM variations.

#### D2 Table D1 below:

- D2.1 summarises the 'capacity event' reconsideration criteria (Capacity Event Reconsideration), which are set out in full at Attachment A;
- D2.2 sets out Aurora's views and evidence per its application on whether the Capacity Event Reconsideration criteria has been met; and
- D2.3 provides our draft decision on whether the criteria have been met. See Attachment B for our assessment methodology.
- D3 The view and evidence set out in the middle row of the table was presented by Aurora in its application. Additional text added by the Commission to assist the reader is denoted by [square brackets]. Further information on Aurora's consumer connection capex can be found in its application.
- D4 Where we were unable to assess whether the criterion was met based on evidence provided in Aurora's application, we requested additional information from Aurora. Where additional information was used to inform our decision, we have noted in Table D1 the paragraphs where this is discussed.

Table D1 Summary of Aurora's consumer connections against capacity event criteria

Criteria Aurora's view and evidence43 Our assessment EDB IMs, clause 5.6.6A Capacity event 'Capacity event' means an event for which an EDB demonstrates that— (a) the EDB's network Paragraph 14: Criterion has been met needs additional Figure 1, below, shows the difference between Additional information capacity to provide our forecast of maximum coincident system was required to electricity distribution demand (which underpinned our CPP growth establish that increase services; and security expenditure) and the out-turn for demand for new RY2020 to RY2022 which, in turn, informs our connections was forecasts for subsequent years. This view driving additional demonstrates that demand growth has expenditure recovered more quickly, and has been more Refer paragraphs D6 sustained, than was predicted at the time our D9 CPP proposal was submitted. Figure 1: Maximum coincident system demand - CPP projections vs actual and 2023 forecast<sup>6</sup> 350.0 300.0 'Assessment' Period = CPP Forecast • - AMP 2023 Forecast (b) the additional Criterion has been met Primary driver is connection capex capacity has the See Section 4.2 of the application primary driver of Expenditure meets the meeting established or definition of reasonably anticipated connection capex.44 demand for -(i) connection capex; (ii) system growth capex; (iii) asset relocation capex; or (iv) a combination of connection capex and system growth capex;

<sup>&</sup>lt;sup>43</sup> Aurora Energy, <u>Aurora Energy's Application for Reconsideration of its Customised Price-quality Path</u>, (22 December 2023).

<sup>&</sup>lt;sup>44</sup> Commerce Commission, <u>Electricity Distribution Services Input Methodologies Determination 2012</u>, (Consolidated 23 April 2024), see definition of connection capex.

#### Criteria Aurora's view and evidence43 Our assessment (c) when the CPP was Paragraphs 2 - 3: Criterion has been met determined, the need At the time our CPP proposal was submitted, on 12 June 2020, We are satisfied that for the additional New Zealand was less than four months into its COVID-19 Aurora could not have capacity pandemic response. This had a material impact on our proposal, reasonably foreseen (i) was not sufficiently as there was considerable uncertainty as to how enduring the the increase in certain; or effects of the pandemic would be - our national border demand, as the remained closed and tourism had all but ceased, with a uncertainty created by (ii) could not significant impact on our Central Otago/Wānaka and COVID-19 was reasonably have been unprecedented. Queenstown sub-networks, in particular. In response, our foreseen by a prudent proposal was based on a subdued forecast for electricity growth, EDB; and Refer paragraph D10 resulting in scaled-back capital expenditure forecasts for growth D14 and security projects, and for consumer connections. On 31 March 2021, when the Commerce Commission (the Commission) made its final decision on our CPP proposal, the future was no more certain. The border remained closed, except for limited entry for New Zealand citizens via managed isolation; however, some domestic tourism was becoming possible. Consequently, the Commission's final decision carried through our suppressed expectations, in terms of the final allowances for system growth and consumer connection capex. Paragraphs 115 - 116: During our development of our CPP, we had forecast net consumer contribution expenditure of \$24.6 million (constant \$2020) over the 5-year CPP period. During verification, in order to accommodate the uncertainty created by the emerging COVID-19 pandemic, we reduced our forecast expenditure to \$22.5 million, by reducing our RY2022 and RY2023 forecasts by 25%. The final determination approved 5-year expenditure that was reduced by a further \$3.2 million to \$19.3 million, including removal of a tourism-related connection upgrade that the independent verifier had recommended be considered contingent. (d) providing the \$25.967 million over five years Criterion has been met additional capacity— Expenditure required above the allowance (i) would require the EDB to incur costs of at provided for least two million connection capex in the CPP exceeds two dollars of capex during million dollars the CPP regulatory period above any allowance provided for that additional capacity in the DPP or CPP; and

Criteria	Aurora's view and evidence <sup>45</sup>	Our assessment
(ii) meets the expenditure objective.	Paragraph 6:  The capital expenditure included in this application has been prepared on a basis consistent with the Commission's prudent and efficient expenditure objective.	Criterion has been met Upon assessing additional information we were satisfied the expenditure met the expenditure objective. Refer Attachment B paragraphs B9 - B15 for details of this assessment.

#### Additional consumer connections are required

- Clause 5.6.6A(a) of the Aurora CPP IM Variations requires the EDB to demonstrate that their network needs additional capacity to provide electricity distribution services.
- D7 The information set out in Aurora's application did not contain the level of detail required to assess how much of the increase in expenditure was driven by demand for additional new connections.
- D8 Aurora was able to supply additional information regarding the quantity of requests for new connections and connection upgrades they had been receiving.<sup>46</sup>
- D9 By reviewing the connection requests, we confirmed that an increase in demand for new connections was driving the increase in capex, rather than escalating costs. This satisfied us that there was an increased demand for electricity supply services, and that Aurora's network needs additional capacity.

## Increased demand for new consumer connections was not reasonably foreseeable or sufficiently certain at the time of the CPP

D10 Clause 5.6.6A(c) of the Aurora CPP IM Variations requires that the need for additional capacity should not have been sufficiently certain or could not have been reasonably foreseen by a prudent EDB, at the time the CPP was determined.

<sup>&</sup>lt;sup>45</sup> Aurora Energy, <u>Aurora Energy's Application for Reconsideration of its Customised Price-quality Path</u>, (22 December 2023)

<sup>&</sup>lt;sup>46</sup> Aurora response to RFI Q101 – Connection Capex, 17 June 2024.

- D11 Aurora submitted its CPP application at the beginning of the COVID-19 pandemic, when there was uncertainty regarding the pandemic's impact and how long it would last. Aurora made high level adjustments to forecasts based on the expected impact of COVID-19, including reducing forecast consumer connection capex by 20% in RY 2021 and by 25% in RY 2022 and RY 2023.<sup>47</sup>
- D12 The verifier considered Aurora's modelling of COVID-19 effects was not unreasonable, but additionally concluded a major tourism operator driven connection should be considered contingent due to COVID-19 considerations, totalling \$2.1 million of the proposed expenditure.<sup>48</sup>
- D13 In our decision on the CPP, we agreed with the verifier and removed the associated \$2.1 million from the allowance for consumer connection allowance and noted that if the tourism connection became more certain, Aurora could utilise the capacity event reconsideration mechanism to seek approval for additional funding.<sup>49</sup>
- D14 We consider that the need for additional capacity could not have been reasonably foreseen by a prudent EDB. Neither the verifier, nor the Commission, disagreed with Aurora's approach to incorporate the impact of COVID-19 in consumer connection capex forecasts.

<sup>&</sup>lt;sup>47</sup> Aurora Energy, <u>Aurora Energy's Application for Reconsideration of its Customised Price-quality Path</u>, (22 December 2023), section G4.2, at [563].

<sup>&</sup>lt;sup>48</sup> Farrierswier Consulting Pty Ltd and GHD Pty Ltd, <u>Verification report - Aurora Energy CPP application</u>, (8 June 2020), Appendix C.15, at 239-245.

<sup>&</sup>lt;sup>49</sup> Commerce Commission, <u>Decision on Aurora Energy's proposal for a customised price-quality path, final decision</u>, (31 March 2021), at [D293].

# Attachment E Assessment of growth and security projects

This attachment summarises our draft decision on the growth and security projects included in Aurora's capacity event application. Our methodology for assessing expenditure is detailed in Attachment B. Table E1 (below) provides an overview of the capex we have approved for each project in our draft decision.

**Table E1** Overview of Growth and Security Projects

	Requested <sup>50</sup>	Draft approval
Attachment E1: Riverbank switching station conversion	\$6.522 m	\$6.522 m
Attachment E2: Upper Clutha auto-transformer	\$5.351 m	\$4.098 m
Attachment E3: Cardrona zone substation transformer upgrade	\$3.615 m	\$3.738 m
Attachment E4: Bendigo distribution reinforcement	\$3.223 m	\$2.632 m
Attachment E5: Frankton Transformer Upgrade	\$1.645 m	\$1.645 m
Total	\$20.358 m	\$19.888 m

- E2 Individual assessments of each project are summarised in Attachments E1 E5. Each project summary contains a table that:
  - E2.1 summarises the 'capacity event' reconsideration criteria (Capacity Event Reconsideration), which are set out in full at Attachment A;
  - E2.2 sets out Aurora's views and evidence per its application on whether the Capacity Event Reconsideration criteria has been met; and
  - E2.3 provides our draft decision on whether the criteria have been met. See Attachment B for our assessment methodology.

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<sup>&</sup>lt;sup>50</sup> Aurora Energy, <u>Aurora Energy's Application for Reconsideration of its Customised Price-quality Path</u>, (22 December 2023).

- E3 The view and evidence set out in the middle row of the table was presented by Aurora in its application. Additional text added by the Commission to assist the reader is denoted by [square brackets]. Further information on Aurora's consumer connection capex can be found in its application.
- Where we were unable to assess whether the criterion was met based on evidence provided in Aurora's application, we requested additional information from Aurora. Where additional information was used to inform our decision, we have noted in the project summary table the paragraphs where this is discussed.

### **Attachment E1: Riverbank switching station conversion**

Our draft decision is to approve an additional \$6.522 million of capex for the Riverbank switching station conversion project, on the basis that we are satisfied that it meets the capacity event criteria. See Table E2 (below) for a summary of our assessment.

Table E2 Summary of Aurora's Riverbank switching station conversion project against capacity event criteria

Criteria	Aurora's view and evidence <sup>51</sup>	Our assessment
EDB IMs, clause 5.6.6A	Capacity event	
'Capacity event' means a	an event for which an EDB demonstrates that—	
(a) the EDB's network	Section 3.1.2:	Criterion has been met
needs additional capacity to provide electricity distribution services;	The Wānaka zone substation has a firm 11 kV capacity of 24 MVA, which is constrained by both the 11 kV winding of the transformer and by the 1,250 Amp rating of the 11 kV switchboard. The peak demand on the Wānaka zone substation during RY2022 was 27.2 MVA, exceeding the substation's firm capacity. The Wānaka zone substation has a transfer capacity of just 2 MW, meaning that at-risk load is 1.2 MVA and growing with each subsequent year.	Our view is that Aurora needs to invest in additional capacity before the end of the CPP to maintain the quality of electricity distribution services.
	The load at Wānaka is category Z1 (for security-of-supply), so consumers should not experience any interruption for a single cable, line or transformer fault. Once the substation is operating above the firm capacity, transformer and line faults will likely cause a total loss of supply at the substation as the remaining supply will trip on overload (note that switchgear has a small thermal time lag and cannot be overloaded for any significant length of time). The load will then need to be restored slowly up to the capacity of a single transformer, which would result in significant outages for consumers.  Demand at Wānaka is expected to grow at approximately 2% per annum [refer Table 3, below]. Hence, to meet demand growth, it is planned to install a 24 MVA 66/11 kV transformer, associated 66kV switchgear, and an 11 kV switchboard at the Riverbank Road switching station.  The Wānaka and Riverbank Road zone substations demand forecasts are shown in Table 3 [see application p 12].	Additional capacity is required otherwise Aurora cannot supply the actual and forecast demand without increasing the risk consumers will experience outages in the event of an equipment failure.  The proposed investment is consistent with maintaining Aurora's current security-of-supply policy. 52
	There is a pressing need to resolve this constraint, which will deliver the following benefits:	
	<ul> <li>Improved security for the Wānaka region.</li> <li>Increased firm capacity of 48 MVA from the combined Wānaka and Riverbank substations.</li> </ul>	

<sup>&</sup>lt;sup>51</sup> Aurora Energy, <u>Aurora Energy's Application for Reconsideration of its Customised Price-quality Path</u>, (22 December 2023).

<sup>&</sup>lt;sup>52</sup> Aurora Energy, <u>Asset Management Plan 2024</u>, at [10.12] and Table 10-1.

Criteria	Aurora's view and evidence <sup>51</sup>	Our assessment
	<ul> <li>Provision of additional 11 kV feeders into the Wānaka area, reducing load on existing feeders and enabling better back-feed ability in planned and unplanned events.</li> <li>Significantly reduced risk of a HILP event, involving the total loss of the Wānaka and Camp Hill substation, which would see significant outages in the Wānaka and Hāwea area.</li> </ul>	
(b) the additional capacity has the	Primary driver is system growth capex	Criterion has been met
primary driver of meeting established or reasonably anticipated demand for –		Expenditure meets the definition of system growth capex. <sup>53</sup>
(i) connection capex;		
(ii) system growth capex;		
(iii) asset relocation capex; or		
(iv) a combination of connection capex and system growth capex;		
(c) when the CPP was	Foreseen, but timing not sufficiently certain	Criterion has been met.
determined, the need for the additional capacity—		Refer paragraphs E6 - E10
(i) was not sufficiently certain; or		
(ii) could not reasonably have been foreseen by a prudent EDB; and		
(d) providing the additional capacity—	Forecast expenditure of \$6.522 million	Criterion has been met
auditional capacity—		Expenditure exceeds two million dollars and there were no related projects provided in the CPP allowances to address the network constraint

<sup>&</sup>lt;sup>53</sup> Commerce Commission, <u>Electricity Distribution Services Input Methodologies Determination 2012</u>, (Consolidated 23 April 2024), see definition of system growth capex.

Criteria	Aurora's view and evidence <sup>51</sup>	Our assessment
(i) would require the EDB to incur costs of at least two million dollars of capex during the CPP regulatory period above any allowance provided for that additional capacity in the DPP or CPP; and		
(ii) meets the expenditure objective.	Paragraph 6:	Criterion has been met
	The capital expenditure included in this application has been prepared on a basis consistent with the Commission's prudent and efficient expenditure objective.	See discussion of expenditure objective assessment in Attachment B paragraphs B16 - B23

#### Need for additional capacity was foreseen, but timing was not sufficiently certain

- Clause 5.6.6A(c) requires that the need for additional capacity should not have been sufficiently certain or could not have been reasonably foreseen by a prudent EDB, at the time the CPP was determined.
- E7 Additional information from Aurora's 2020 asset management plan (AMP) was used to establish the forecast demand growth at the Wanaka substation at the time of the CPP, so we could consider what was reasonably known at the time.<sup>54</sup>
- The Wanaka zone substation has a firm capacity of 24 MW and a transfer capacity of 2MW (totalling 26MW).<sup>55</sup> In its 2020 AMP, Aurora had forecast that the demand at the Wanaka zone substation might start exceeding this capacity towards the end of the CPP. At the time, Aurora noted that the installation of a transformer at Riverbank switching station in RY 2028 was planned to reduce the load at Wanaka substation.<sup>56</sup>

<sup>&</sup>lt;sup>54</sup> Aurora Energy, <u>Asset Management Plan 2020</u>, at 107, Table 6.6: Cromwell GXP zone substation demand forecast.

<sup>&</sup>lt;sup>55</sup> Aurora Energy, <u>Aurora Energy's Application for Reconsideration of its Customised Price-quality Path</u>, (22 December 2023), at [32].

<sup>&</sup>lt;sup>56</sup> Aurora Energy, <u>Asset Management Plan 2020</u>, at 107.

- E9 As demand growth has exceeded the 2020 forecasts, Aurora has brought forward the installation of the new transformer, resulting in additional capex being incurred during the CPP.
- E10 Based on comparing the application forecast with the 2020 AMP forecasts, we have reached the view that demand was not sufficiently certain at the time the CPP was set.<sup>57</sup> It was foreseeable that demand would exceed existing capacity, at some stage, depending on Wanaka and surrounding growth. However, there was a high level of uncertainty in growth forecasts due to the impact of COVID-19.

<sup>57</sup> Aurora Energy, <u>Aurora Energy's Application for Reconsideration of its Customised Price-quality Path</u>, (22 December 2023), at 12 table 3.

#### Attachment E2: Upper Clutha auto-transformer

- Our draft decision is to approve an additional \$4.098 million capex for the Upper Clutha auto-transformer project, on the basis that we are satisfied it meets the capacity event criteria. Aurora requested \$5.351 million for the Upper Clutha auto-transformer project; our draft decision to approve a lower sum reflects our expectation that existing allowance for the constraint should be reallocated to this project.
- E12 See Table E3 (below) for a summary of our assessment.

Table E3 Summary of Aurora's Upper Clutha auto-transformer project against capacity event criteria

Criteria	Aurora's view and evidence 58	Our assessment
EDB IMs, clause 5.6.6A	Capacity event	
'Capacity event' means	an event for which an EDB demonstrates that—	
(a) the EDB's network needs additional capacity to provide electricity distribution services;	See Section 3.2.2 of the application  The Upper Clutha region is supplied by two 54km, 66kV subtransmission circuits, via two 66/33kV, 30 MVA autotransformers located at Cromwell. The auto-transformers have a summer rating of 30 MVA and a winter rating of 36 MVA.  The total electricity demand on the Upper Clutha subtransmission circuits was 36.2 MVA during the winter RY2023, exceeding the firm capacity of the circuits by 4.2 MVA. Growth in the Upper Clutha region is strong and persistent and, without intervention, the Upper Clutha sub-transmission circuits will remain constrained.	Criterion has been met  Our view is that Aurora needs to invest in additional capacity before the end of the CPP to maintain the quality of electricity distribution services.  Additional capacity is required otherwise Aurora cannot supply the actual and forecast demand without increasing the risk consumers will experience outages in the event of an equipment failure.  The proposed investment is consistent with maintaining Aurora's current security-of-supply policy. 59

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<sup>&</sup>lt;sup>58</sup> Aurora Energy, <u>Aurora Energy's Application for Reconsideration of its Customised Price-quality Path</u>, (22 December 2023).

<sup>&</sup>lt;sup>59</sup> Aurora Energy, <u>Asset Management Plan 2024</u>, at [10.12] and Table 10-1.

Criteria	Aurora's view and evidence 58	Our assessment
(b) the additional capacity has the primary driver of meeting established or reasonably anticipated demand for —  (i) connection capex;	Primary driver is system growth capex.	Criterion has been met  Expenditure meets the definition of system growth capex. <sup>60</sup>
(ii) system growth capex;		
(iii) asset relocation capex; or		
(iv) a combination of connection capex and system growth capex;		
(c) when the CPP was determined, the need for the additional capacity—	Foreseen, but timing not sufficiently certain.	Criterion has been met.  Refer paragraphs E13 - E15
(i) was not sufficiently certain; or		
(ii) could not reasonably have been foreseen by a prudent EDB; and		
(d) providing the additional capacity—  (i) would require the EDB to incur costs of at least two million dollars of capex during the CPP regulatory period above any allowance provided for that additional capacity in the DPP or CPP; and	Forecast expenditure of \$5.351 million	Criterion has been met  See further discussion on allowance provided for additional capacity in the CPP in paragraphs E17 - E26

<sup>&</sup>lt;sup>60</sup> Commerce Commission, <u>Electricity Distribution Services Input Methodologies Determination 2012</u>, (Consolidated 23 April 2024), see definition of system growth capex.

Criteria	Aurora's view and evidence	Our assessment
(ii) meets the expenditure objective.	Section 1 paragraph 6 of application.  The capital expenditure included in this application has been prepared on a basis consistent with the Commission's prudent and efficient expenditure objective.	Criterion has been met  See discussion of expenditure objective assessment in Attachment B paragraphs B16 - B23

### Need for additional capacity was foreseen, but timing was not sufficiently certain

- Clause 5.6.6A(c) requires that the need for additional capacity was not sufficiently certain or could not reasonably have been foreseen by a prudent EDB. Aurora's application did not provide sufficient information to assess this criterion.
- E14 We requested further clarification from Aurora, and they submitted that <sup>61</sup>

The Upper Clutha subtransmission lines supply all the Cromwell GXP zone substations except for the Cromwell zone substation itself. The increasing demand on the Upper Clutha subtransmission lines is driven by general growth in the area, highlighted by the increases in forecasted growth in the Wanaka and Cardrona substations

In 2020 we did not specifically forecast for Upper Clutha subtransmission like we do now. 62

Our view is that that the uncertainty in regional load growth due to COVID-19 meant that the need for additional capacity on the Upper Clutha subtransmission lines was not sufficiently certain when the CPP was determined.

### **Existing funding for the Upper Clutha constraint**

When amending the price path, we haven taken into account the allowance already provided in the CPP for addressing the growth and/or security constraint. The capacity event threshold refers to costs above any allowance provided for that additional capacity in the CPP. <sup>63</sup> Furthermore, we must not amend the price path more than what is reasonably necessary to take into account the change in costs. <sup>64</sup>

<sup>&</sup>lt;sup>61</sup> Aurora response to RFI Q109 – Unforeseen Security Projects, 5 August 2024.

<sup>&</sup>lt;sup>62</sup> Aurora Energy, <u>Asset Management Plan 2024</u>, at 123, Table 10-8: Cromwell sub-transmission.

<sup>&</sup>lt;sup>63</sup> Commerce Commission, <u>Aurora Energy Limited Electricity Distribution Customised Price-Quality Path Determination</u> 2021, (31 March 2021), Schedule 12, at [5.1].

<sup>&</sup>lt;sup>64</sup> Commerce Commission, <u>Electricity Distribution Services Input Methodologies Determination 2012</u>, (Consolidated 23 April 2024), clause 5.6.8(3)(a).

CPP already provided some funding for Upper Clutha 66 kV subtransmission circuit

- When setting the CPP, Aurora had forecast a lower level of growth and associated security constraints on the Upper Clutha network. In the CPP application Aurora proposed an opex solution as an alternative to traditional capex upgrades. 65
- E18 The Upper Clutha Distributed Energy Resource (DER) project was part of a suite of projects that Aurora proposed to provide firm (N-1) security for the two Cromwell Riverbank 66 kV circuits to meet forecast demand growth. This solution involved Aurora making payments for flexibility provided by third-party owned small-scale distributed generation and battery systems to defer investment in its network. 66
- In the CPP, Aurora was funded \$3 million of opex to run the Upper Clutha DER project to manage the constraint at peak times. This allowance was based on forecast need until the end of the CPP.<sup>67</sup>

Benefits of non-network flexibility solutions

- Non-network flexibility solutions (including DER) can enable EDBs to defer larger capital investments such as substation upgrades, and/or manage the timing of such investments when there is uncertainty around demand and forecasting when the upgrade is needed. Using this flexibility to optimise the timing of large investments can improve the efficiency of investment and benefit consumers through lower prices.
- In Aurora's case, the Upper Clutha DER project was able to assist in in delivering security of supply until the need for further upgrades became certain, and the associated assets could be commissioned. Given the uncertainty regarding how COVID-19 would impact the local tourism and development in the area, a nonnetwork solution enabled Aurora to avoid funding upgrades before they were required, while also maintaining security levels in the event demand accelerated faster than anticipated.

Aurora Energy, <u>Customised Price-Quality Path Application</u>, (12 June 2020), Attachment I, Section I.5. Upper Clutha DER Opex Solution.

Commerce Commission, <u>Decision on Aurora Energy's proposal for a customised price-quality path, final decision</u>, (31 March 2021), at [D416].

<sup>&</sup>lt;sup>67</sup> Aurora Energy, <u>Customised Price-Quality Path Application</u>, (12 June 2020), Attachment I, figure 92.

### Transitioning between security solutions

As demand has been higher than forecast in the CPP, Aurora decided to bring forward capital investment to alleviate the Upper Clutha constraint. As a result, Aurora have requested \$5.351 million to fund the Upper Clutha Auto-Transformer Upgrade as a part of this reconsideration application, with the new asset to be commissioned in November 2024 (RY 2025).

### Impact on additional allowance provided

- We sought further information from Aurora to understand how the need for DER would be impacted. We compared the CPP forecast opex for DER over RY 2025 and RY 2026 with an updated forecast of expected DER opex over these years. The reduction in forecast opex was around \$1.253 million, which is a significant portion of the overall \$3 million allowance provided for the project. <sup>68</sup>
- As the transformer is replacing the need for the non-network solution, we consider it appropriate for the remaining non-network solution allowances in RY 2025 and RY 2026 to be redirected to the new transformer before further increasing Aurora's overall allowance.
- To reflect our expectation that \$1.253 million of opex budget should be redirected to the new transformer, our draft decision is to 'top up' Aurora's overall allowance, rather than provide for the full capex sum requested for the transformer.
- As the forecast net allowable revenue is an envelope within which capex and opex are substitutable and expenditure incentives are equivalent, we have subtracted the estimated opex saving directly from the forecast capex for the new transformer. This is equivalent in present value terms to reallocating the existing opex allowance to the new capex investment. Our draft decision will result in a net increase to the capex allowance of \$4.098 million for the project.

 $^{68}$  Aurora response to RFI Q109 - Unforeseen Security Projects, 5 August 2024.

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## Attachment E3: Cardrona zone substation transformer upgrade

- Our draft decision is to approve an additional \$3.738 million capex for the Cardrona zone substation transformer upgrade project, on the basis that we are satisfied it meets the capacity event criteria. As the project was commissioned prior to the application, our draft decision is to amend the price path based on the commissioned cost of the project (\$3.738 million), rather than forecast cost supplied in the application (\$3.615 million). See Attachment C, paragraphs C9 C11 for further discussion on our use of commissioned costs.
- E28 See Table E4 (below) for a summary of our assessment.

Table E4 Summary of Aurora's Cardrona zone substation transformer upgrade project against capacity event criteria

Criteria	Aurora's view and evidence <sup>70</sup>	Our assessment
EDB IMs, clause 5.6.6A	Capacity event	
'Capacity event' means	an event for which an EDB demonstrates that—	
(a) the EDB's network needs additional capacity to provide electricity distribution services;	Both the Cardrona and Soho Basin ski areas have significant development plans that will see over 6.5 MVA of demand added to the CARL secondary network in the period to RY2031.  New Mt Cardrona Station residential development that will comprise 437 residential and commercia lots. Construction of the wastewater treatment plant, access road and main power supply began in 2020, with the first sales taking place in 2021.  There is a need to increase the capacity of the Cardrona zone substation to meet this forecast increase in demand.	Criterion has been met  Aurora needs to invest in additional capacity before the end of the CPP to supply increased consumer demand.  Forecasts indicate Aurora will not be able to supply actual and forecast consumer demand with the existing 5/6.7 MVA transformer. <sup>71</sup>
(b) the additional capacity has the primary driver of meeting established or reasonably anticipated demand for —  (i) connection capex;	Primary driver is system growth capex	Criterion has been met  Expenditure meets the definition of system growth capex. <sup>72</sup>

<sup>&</sup>lt;sup>69</sup> Aurora response to RFI Q107 – Commissioning Dates, 4 June 2024

Aurora Energy, <u>Aurora Energy's Application for Reconsideration of its Customised Price-quality Path</u>, (22 December 2023).

Aurora Energy, <u>Aurora Energy's Application for Reconsideration of its Customised Price-quality Path</u>, (22 December 2023), at Table 7.

Commerce Commission, <u>Electricity Distribution Services Input Methodologies Determination 2012</u>, (Consolidated 23 April 2024), see definition of system growth capex.

Criteria	Aurora's view and evidence <sup>70</sup>	Our assessment
(ii) system growth capex;		
(iii) asset relocation capex; or		
(iv) a combination of connection capex and system growth capex;		
(c) when the CPP was	Foreseen, but timing not sufficiently certain	Criterion has been met
determined, the need for the additional capacity—		Additional information was required
(i) was not sufficiently certain; or		Refer paragraphs E29 - E31
(ii) could not reasonably have been foreseen by a prudent EDB; and		
(d) providing the	Forecast expenditure of \$3.615 million	Criterion has been met
additional capacity—		Expenditure exceeds two
(i) would require the EDB to incur costs of		million dollars and there were no related projects
at least two million		provided in the CPP
dollars of capex		allowances to address the
during the CPP regulatory period above any allowance provided for that additional capacity in the DPP or CPP; and		network constraints at Cardrona zone substation.
(ii) meets the	Section 1 paragraph 6 of application.	Criterion has been met
expenditure objective.	The capital expenditure included in this application has been prepared on a basis consistent with the Commission's prudent and efficient expenditure objective.	See discussion of expenditure objective assessment in Attachment B paragraphs B24 - B27

# Need for additional capacity was foreseen, but timing was not sufficiently certain

- Clause 5.6.6A(c) requires that the need for additional capacity was not sufficiently certain or could not have been could not reasonably have been foreseen by a prudent EDB.
- E30 Additional information from Aurora's 2020 AMP was used to review the forecast demand growth at the Cardrona substation at the time of the CPP, so we could consider what was reasonably known at the time.

E31 In the AMP 2020 forecast Aurora did not anticipate that the capacity of the existing transformer would be exceeded during the CPP.<sup>73</sup> While the need to upgrade the transformer at some point in the future was foreseeable, the forecasts at the time, which anticipated a slowdown in growth due to COVID-19, did not provide sufficient certainty that the upgrade would be required during the CPP. We reached the view that Aurora was prudent not to include the Cardrona upgrade in the original CPP, and that this criterion of the reconsideration was met.

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Aurora Energy, Asset Management Plan 2020, at 107, Table 6.6: Cromwell GXP zone substation demand forecast.

### **Attachment E4: Bendigo distribution reinforcement**

- Our draft decision is to approve an additional \$2.632 million capex for the Bendigo distribution reinforcement project, on the basis we are satisfied it meets the capacity event criteria. As the project was largely completed at the time of the application, we have amended the price path to include the commissioned cost of the project (\$2.632 million), rather than the forecast cost supplied in the application (\$3.223 million).<sup>74</sup> See Attachment C, paragraphs C9 C11 for further discussion on our use of commissioned costs.
- E33 See Table E5 (below) for a summary of our assessment.

Table E5 Summary of Aurora's Bendigo distribution reinforcement project against capacity event criteria

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Criteria	Aurora's view and evidence <sup>75</sup>	Our assessment
EDB IMs, clause 5.6.6A	Capacity event	
'Capacity event' means	an event for which an EDB demonstrates that—	
(a) the EDB's network needs additional capacity to provide electricity distribution	Aurora has a firm contract to supply a new industrial load (Scapegrace distillery, bottling house, warehouse and barrel room) at a nominal capacity of 2.3 MVA.  Without distribution circuit reinforcement, Aurora Energy	Criterion has been met  Aurora needs to invest in additional
services;	would need to decline supply.	capacity before the end of the CPP, to provide electricity distribution services to a new consumer.
(b) the additional capacity has the	Primary driver is system growth capex	Criterion has been met
primary driver of meeting established or reasonably anticipated demand for –		Expenditure meets the definition of system growth capex. <sup>76</sup>
(i) connection capex;		
(ii) system growth capex;		

<sup>&</sup>lt;sup>74</sup> Aurora response to RFI Q107 – Commissioning Dates, 4 June 2024

Aurora Energy, <u>Aurora Energy's Application for Reconsideration of its Customised Price-quality Path</u>, (22 December 2023).

Commerce Commission, <u>Electricity Distribution Services Input Methodologies Determination 2012</u>, (Consolidated 23 April 2024), see definition of system growth capex.

Criteria	Aurora's view and evidence <sup>75</sup>	Our assessment
(iii) asset relocation capex; or		
(iv) a combination of connection capex and system growth capex;		
(c) when the CPP was determined, the need for the additional	Not reasonably foreseen.	Criterion has been met
capacity—		Our view is that this additional capacity
(i) was not sufficiently certain; or		could not have been reasonably foreseen,
(ii) could not reasonably have been foreseen by a prudent EDB; and		as the connection inquiry was received after the CPP was determined. <sup>77</sup>
(d) providing the additional capacity—	Forecast expenditure of \$3.223 million	Criterion has been met
(i) would require the EDB to incur costs of at least two million dollars of capex during the CPP regulatory period above any allowance provided for that additional capacity in the DPP or CPP; and		Expenditure exceeds two million dollars and there were no related projects provided in the CPP allowances to address the network constraints in the Bendigo area
(ii) meets the expenditure objective.		Criterion has been met
		See discussion of expenditure objective assessment in Attachment B paragraphs B24 - B27

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 $<sup>^{77}</sup>$  Aurora response to RFI Q102 – Consumer Commitment, 26 June 2024

# **Attachment E5: Frankton Transformer Upgrade**

- Our draft decision is to approve an additional \$1.645 million capex for the Frankton Transformer Upgrade project, on the basis that we are satisfied it meets the capacity event criteria.
- E35 See Table E6 (below) for a summary of our assessment.

Table E6 Summary of Aurora's Frankton Transformer Upgrade project against capacity event criteria

EDB IMs, clause 5.6.6A Capacity event  'Capacity event' means an event for which an EDB demonstrates that—  Section 3.5.2 of application In the past few years, the Frankton zone has seen steady increases in the demand for electricity and there are clear indications that electricity demand will continue to grow. Peak electricity demand on the Frankton zone substation was 19.0 MW during RY2023 (winter 2022), exceeding its firm capacity by 4.0 MW. The Frankton zone substation has a transfer capacity of 3 MW, meaning that at-risk load is 1.0 MVA and growing with each subsequent year.  The load at Frankton is category Z1 (for security of supply), so consumers should not experience any interruption for a single cable, line or transformer fault. These faults may actually cause a total loss of supply at the substation as the smaller transformer. The load will then need to be restored slowly up to the capacity of the 15 MVA transformer.  There is a pressing need to resolve this security-of-supply constraint, which will deliver the following benefits:  Improved security-of-supply guidelines).	Criterion has been met Section 3.5.2 of application  In the past few years, the Frankton zone has seen steady increases in the demand for electricity and there are clear indications that electricity demand on the Frankton zone substation was 19.0 MW during RY2023 (winter 2022), exceeding its firm capacity by 4.0 MW. The Frankton zone substation has a transfer capacity of 3 MW, meaning that at-risk load is 1.0 MVA and growing with each subsequent year.  The load at Frankton is category 21 (for security of supply), so consumers should not experience any interruption for a single cable, line or transformer fault. These faults may actually cause a total loss of supply at the substation as the smaller transformer will likely trip on overload for loss of the larger transformer.  There is a pressing need to resolve this security-of-supply constraint, which will deliver the following benefits:  • Improved security-of-supply for the Frankton zone (brings Frankton back into compliance with Aurora Energy's security-of-supply guidelines).  • Firm capacity of 24 MVA at the Frankton zone substation.		against capacity cross concerns				
'Capacity event' means an event for which an EDB demonstrates that—  (a) the EDB's network needs additional capacity to provide electricity distribution services;  In the past few years, the Frankton zone has seen steady increases in the demand for electricity and there are clear indications that electricity demand will continue to grow. Peak electricity demand on the Frankton zone substation was 19.0 MW during RY2023 (winter 2022), exceeding its firm capacity of 3 MW. The Frankton zone substation has a transfer capacity of 3 MW. meaning that at-risk load is 1.0 MVA and growing with each subsequent year.  The load at Frankton is category Z1 (for security of supply), so consumers should not experience any interruption for a single cable, line or transformer fault. These faults may actually cause a total loss of supply at the substation as the smaller transformer will likely trip on overload for loss of the larger transformer. The load will then need to be restored slowly up to the capacity of the 15 MVA transformer.  There is a pressing need to resolve this security-of-supply constraint, which will deliver the following benefits:  Improved security-of-supply for the Frankton zone (brings Frankton back into compliance with Aurora Energy's security-of-supply guidelines).  Improved security-of-supply guidelines).  Firm capacity of 24 MVA at the Frankton zone substation.  There is a pressing need to resolve this security-of-supply constraint, which will deliver the following benefits:  Improved security-of-supply guidelines).  Firm capacity of 24 MVA at the Frankton zone substation as the smaller transformer and forecast demand without increasing the risk consumers will experience outages in the event of an equipment failure.  The proposed investment is consistent with maintaining Aurora's current security-of-surply-of-surply for the surple for the surple for the following benefits:	'Capacity event' means an event for which an EDB demonstrates that—  (a) the EDB's network needs additional capacity to provide electricity distribution services;  In the past few years, the Frankton zone has seen steady increases in the demand for electricity and there are clear indications that electricity demand will continue to grow. Peak electricity demand on the Frankton zone substation was 19.0 MW during RY2023 (winter 2022), exceeding its firm capacity of 3 MW. meaning that at-risk load is 1.0 MVA and growing with each subsequent year.  The load at Frankton is category Z1 (for security of supply), so consumers should not experience any interruption for a single cable, line or transformer fault. These faults may actually cause a total loss of supply at the substation as the smaller transformer will likely trip on overload for loss of the larger transformer. The load will then need to be restored slowly up to the capacity of the 15 MVA transformer.  There is a pressing need to resolve this security-of-supply constraint, which will deliver the following benefits:  • Improved security-of-supply guidelines).  • Improved security-of-supply guidelines).  • Improved security-of-supply guidelines).  • Improved security-of-supply guidelines).  • Firm capacity of 24 MVA at the Frankton zone substation.  There is a pressing need to resolve this risk consumers will experience outages in the event of an equipment failure.  The proposed investment is consistent with maintaining Aurora's current security-of-s	Criteria	Aurora's view and evidence 78	Our assessment			
(a) the EDB's network needs additional capacity to provide electricity distribution services;  In the past few years, the Frankton zone has seen steady increases in the demand for electricity and there are clear indications that electricity demand will continue to grow. Peak electricity demand on the Frankton zone substation was 19.0 MW during RY2023 (winter 2022), exceeding its firm capacity by 4.0 MW. The Frankton zone substation has a transfer capacity of 3 MW, meaning that at-risk load is 1.0 MVA and growing with each subsequent year.  The load at Frankton is category Z1 (for security of supply), so consumers should not experience any interruption for a single cable, line or transformer fault. These faults may actually cause a total loss of supply at the substation as the smaller transformer. The load will then need to be restored slowly up to the capacity of the 15 MVA transformer.  There is a pressing need to resolve this security-of-supply constraint, which will deliver the following benefits:  Improved security-of-supply guidelines).  Improved security-of-supply guidelines).  In the past few years, the Frankton zone has seen steady increases in the demand for electricity and there are clear indications that electricity demand will continue to grow. Peak electricity demand vill capacity before the end of the CPP to maintain the quality of electricity distribution services.  Additional capacity is required otherwise autora cannot supply the actual and forecast demand without increasing the risk consumers will experience outages in the event of an equipment failure.  Firm capacity of 24 MVA at the Frankton zone substation at the part of the capacity of the part	(a) the EDB's network needs additional capacity to provide electricity distribution services;  In the past few years, the Frankton zone has seen steady increases in the demand for electricity and there are clear indications that electricity demand will continue to grow. Peak electricity demand on the Frankton zone substation was 19.0 MW during RY2023 (winter 2022), exceeding its firm capacity of 3 MW, meaning that at-risk load is 1.0 MVA and growing with each subsequent year.  The load at Frankton is category Z1 (for security of supply), so consumers should not experience any interruption for a single cable, line or transformer fault. These faults may actually cause a total loss of supply at the substation as the smaller transformer. The load will then need to be restored slowly up to the capacity of the 15 MVA transformer.  There is a pressing need to resolve this security-of-supply constraint, which will deliver the following benefits:  Improved security-of-supply for the Frankton zone (brings Frankton back into compliance with Aurora Energy's security-of-supply guidelines).  Firm capacity of 24 MVA at the Frankton zone substation.  Criterion has been met  Our view is that Aurora needs to invest in additional capacity of meet the additional capacity of purce the end of the CPP to maintain the quality of electricity distribution services.  Additional capacity is required otherwise aurora cannot supply the actual and forecast demand without increasing the risk consumers will experience outages in the event of an equipment failure.  The proposed investment is consistent with maintaining Aurora's current security-of-suri	EDB IMs, clause 5.6.6A C	EDB IMs, clause 5.6.6A Capacity event				
In the past few years, the Frankton zone has seen steady increases in the demand for electricity and there are clear indications that electricity demand will continue to grow. Peak electricity demand on the Frankton zone substation was 19.0 MW during RY2023 (winter 2022), exceeding its firm capacity by 4.0 MW. The Frankton zone substation has a transfer capacity of 3 MW, meaning that at-risk load is 1.0 MVA and growing with each subsequent year.  The load at Frankton is category Z1 (for security of supply), so consumers should not experience any interruption for a single cable, line or transformer fault. These faults may actually cause a total loss of supply at the substation as the smaller transformer. The load will then need to be restored slowly up to the capacity of the 15 MVA transformer.  There is a pressing need to resolve this security-of-supply constraint, which will deliver the following benefits:  Improved security-of-supply for the Frankton zone (brings Frankton back into compliance with Aurora Energy's security-of-supply guidelines).  Improved security of 24 MVA at the Frankton zone substation.  The proposed investment is consistent with maintaining Aurora's current security-of-surity of surrent security-of-surity-of-surity of surply of surrent security-of-surity of surply su	needs additional capacity to provide electricity of provide electricity distribution services;  In the past few years, the Frankton zone has seen steady increases in the demand for electricity and there are clear indications that electricity demand will continue to grow. Peak electricity demand on the Frankton zone substation was 19.0 MW during RY2023 (winter 2022), exceeding its firm capacity by 4.0 MW. The Frankton zone substation has a transfer capacity of 3 MW, meaning that at-risk load is 1.0 MVA and growing with each subsequent year.  The load at Frankton is category Z1 (for security of supply), so consumers should not experience any interruption for a single cable, line or transformer fault. These faults may actually cause a total loss of supply at the substation as the smaller transformer. The load will then need to be restored slowly up to the capacity of the 15 MVA transformer.  There is a pressing need to resolve this security-of-supply constraint, which will deliver the following benefits:  Improved security-of-supply for the Frankton zone (brings Frankton back into compliance with Aurora Energy's security-of-supply guidelines).  Improved security of 24 MVA at the Frankton zone substation.  The proposed investment is consistent with maintaining Aurora's current security-of-surity maintaining Aurora's current security-of-surity maintaining Aurora's current security-of-suri	'Capacity event' means a	'Capacity event' means an event for which an EDB demonstrates that—				
SHIDIV DUILV	sapply poncy.	(a) the EDB's network needs additional capacity to provide electricity distribution	In the past few years, the Frankton zone has seen steady increases in the demand for electricity and there are clear indications that electricity demand will continue to grow. Peak electricity demand on the Frankton zone substation was 19.0 MW during RY2023 (winter 2022), exceeding its firm capacity by 4.0 MW. The Frankton zone substation has a transfer capacity of 3 MW, meaning that at-risk load is 1.0 MVA and growing with each subsequent year.  The load at Frankton is category Z1 (for security of supply), so consumers should not experience any interruption for a single cable, line or transformer fault. These faults may actually cause a total loss of supply at the substation as the smaller transformer will likely trip on overload for loss of the larger transformer. The load will then need to be restored slowly up to the capacity of the 15 MVA transformer.  There is a pressing need to resolve this security-of-supply constraint, which will deliver the following benefits:  • Improved security-of-supply for the Frankton zone (brings Frankton back into compliance with Aurora Energy's security-of-supply guidelines).  • Firm capacity of 24 MVA at the Frankton zone	Our view is that Aurora needs to invest in additional capacity before the end of the CPP to maintain the quality of electricity distribution services.  Additional capacity is required otherwise Aurora cannot supply the actual and forecast demand without increasing the risk consumers will experience outages in the event of an equipment failure.  The proposed investment is consistent with maintaining Aurora's current security-of-			

Aurora Energy, <u>Aurora Energy's Application for Reconsideration of its Customised Price-quality Path</u>, (22 December 2023).

<sup>&</sup>lt;sup>79</sup> Aurora Energy, <u>Asset Management Plan 2024</u>, at [10.12] and Table 10-1.

Criteria	Aurora's view and evidence <sup>78</sup>	Our assessment
(b) the additional capacity has the primary driver of meeting established or reasonably anticipated demand for —  (i) connection capex;  (ii) system growth capex;  (iii) asset relocation capex; or  (iv) a combination of connection capex and	Primary driver is system growth capex See Section 3.5.2 of the application	Criterion has been met  Expenditure meets the definition of system growth capex. 80
system growth capex; (c) when the CPP was determined, the need for the additional capacity— (i) was not sufficiently certain; or (ii) could not reasonably have been foreseen by a prudent EDB; and	Foreseen, but timing not sufficiently certain.	Criterion has been met.  Refer paragraphs E36 - E40
(d) providing the additional capacity—  (i) would require the EDB to incur costs of at least two million dollars of capex during the CPP regulatory period above any allowance provided for that additional capacity in the DPP or CPP; and	Forecast expenditure of \$1.645 million	Criterion has been met  Two million dollar threshold is met when combined with other projects

<sup>&</sup>lt;sup>80</sup> Commerce Commission, <u>Electricity Distribution Services Input Methodologies Determination 2012</u>, (Consolidated 23 April 2024), see definition of system growth capex.

Criteria	Aurora's view and evidence	Our assessment
(ii) meets the expenditure objective.	Section 1 paragraph 6 of application.  The capital expenditure included in this application has been prepared on a basis consistent with the Commission's prudent and efficient expenditure objective.	Criterion has subsequently been met  See discussion of expenditure objective assessment in Attachment B paragraphs B16 - B23

### Need for additional capacity was foreseen, but timing was not sufficiently certain

- Clause 5.6.6A(c) requires that the need for additional capacity was not sufficiently certain or could not reasonably have been foreseen by a prudent EDB.
- E37 Additional information from Aurora's 2020 AMP was used to establish the forecast demand growth at the Frankton substation at the time of the CPP so we could consider what was reasonably known at the time.
- In the 2020 AMP, Aurora disclosed the firm capacity of the Frankton Zone Substation had been exceeded in 2018.<sup>81</sup> At the time, Aurora noted they would monitor growth at Frankton to ensure that the plan to upgrade the smaller 15MVA transformer at this site in RY29 remains appropriate.<sup>82</sup>
- As demand growth has become more certain over time, Aurora reconsidered its need to invest. In its 2022 AMP, Aurora brought forward investment to address the constraint due to continued demand growth:

We have brought forward the project from RY29 to RY25 to replace the 15 MVA transformer with new 24 MVA transformer increasing the firm capacity. – This will also benefit the renewal project - Port Chalmers Transformer replacement as this project will utilise Frankton's 15 MVA transformer.<sup>83</sup>

We have moved the replacement of the smaller size transformer with 24MVA transformer to RY25 from RY29 due to strong demand growth. The smaller size transformer will be used in Port Chalmers to replace one of the aging transformers.<sup>84</sup>

<sup>&</sup>lt;sup>81</sup> Aurora Energy, Asset Management Plan 2020, at 107, Table 6.5: Frankton GXP zone substation demand forecast.

<sup>&</sup>lt;sup>82</sup> Aurora Energy, <u>Asset Management Plan 2020</u>, at 400, Schedule 12b.

<sup>&</sup>lt;sup>83</sup> Aurora Energy, <u>Asset Management Plan 2022</u>, at 139.

<sup>&</sup>lt;sup>84</sup> Aurora Energy, <u>Asset Management Plan 2022</u>, at 472, Schedule 12b.

E40 In the determining the CPP, we accepted Aurora's approach to monitoring growth at the Frankton substation, rather than committing to investment during the CPP.

Therefore, we consider the criterion has been met for this project to have been 'not sufficiently certain' at the time of the CPP.