



# CUSTOMISED PRICE-QUALITY PATH

FINANCIAL AND MODELLING  
INFORMATION REPORT

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# 1 INTRODUCTION

## Key messages

- This document details how we derived our revenue requirement from our expenditure forecasts and other input assumptions
- This document is part of a suite of documents that in combination form our CPP submission

## 1.1 PURPOSE

This document outlines the revenue requirement we are proposing the Commerce Commission (Commission) approves to allow us to recover the cost of forecast expenditure.

The revenue requirement has been determined in accordance with the Commission Input Methodologies (IMs). This document provides an overview of the revenue requirement calculation and outlines how the IMs have been applied, how the expenditure forecasts apply in deriving our revenue requirement and the non-expenditure forecast assumptions that have been determined and applied.

## 1.2 HOW THIS REPORT RELATES TO OTHER SUBMISSION DOCUMENTS

The Financial and modelling information report is one of the documents that together form our CPP submission.

The documents that make up the CPP submission and a description of their contents are outlined in Table 1.1.

Table 1.1: CPP Proposal documents

CPP PROPOSAL DOCUMENT	CONTENTS
<b>Application</b>	Explains the reasons for seeking a CPP and provides an overview of the CPP proposal, including proposed expenditure, quality and service standards and revenue and price impact information
<b>Asset management plan</b>	Outlines our long-term strategy for managing our network and the asset management approaches we use
<b>Financial and modelling information report</b>	Details how we derived our revenue requirement from our expenditure forecasts and other inputs
<b>CPP financial model</b>	Calculates our revenue requirement from expenditure forecasts and other inputs consistent with the Commerce Commission IMs
<b>Consultation report</b>	Outlines how we have consulted with our stakeholders, the views of our stakeholders and how we have taken into account those views
<b>Independent verifier report</b>	The independent review of our submission prior to application

## 1.3 STRUCTURE OF THIS DOCUMENT

The structure of the document is based on the revenue requirement calculation. The document starts by discussing the outcome of the calculation and then discusses how the calculation, as specified in the

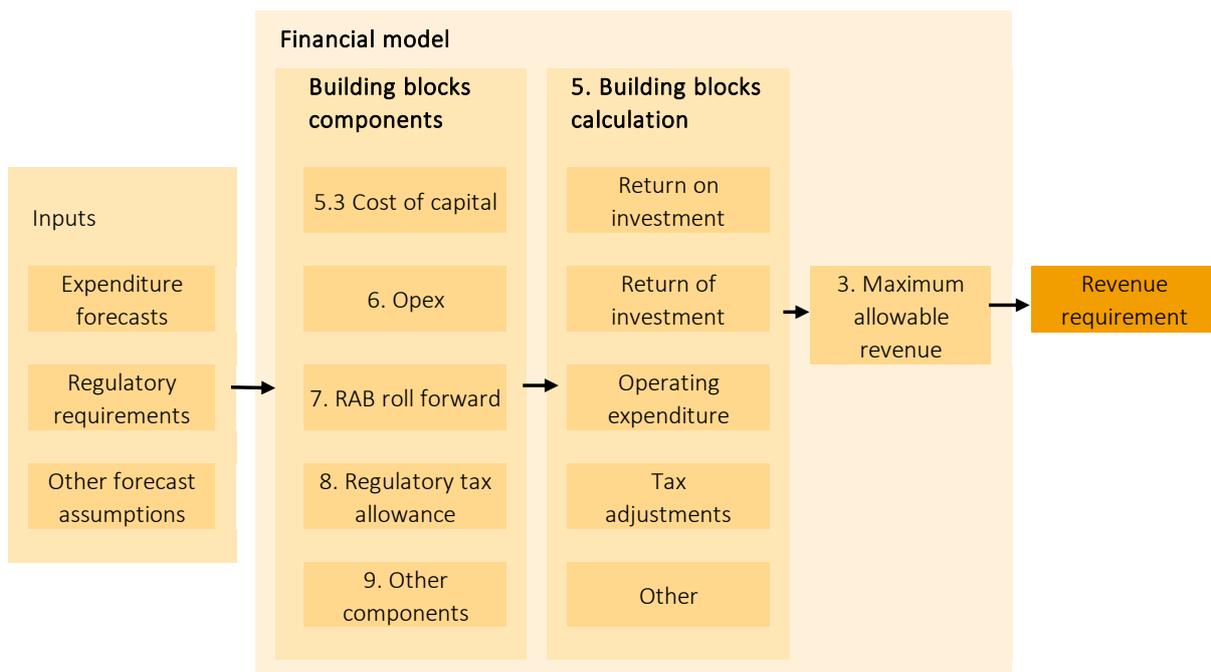
IMs, is applied. The discussion is grouped around the key building blocks calculations and its components.

We discuss the expenditure forecasts and other forecast assumptions in the sections where they apply. An explanation of the expenditure forecasts is detailed in the Application appendices. The other forecast assumptions are described and explained in this document.

The other forecast assumptions are the assumptions other than expenditure forecast assumptions required to determine the revenue requirement. They, amongst other things, provide for capital expenditure to be realised over time (RAB roll-forward), real expenditure to be escalated to nominal expenditure, shared costs to be allocated to the regulated business and for the calculation of a regulatory tax allowance.

The structure of this document is outlined in figure 1.1 and described in more detail in table 1.2. The numbers in figure 1.1 are references to the chapters or sections in which each building blocks component or calculation is discussed within the report.

Figure 1.1: Document structure



This document also outlines how we have presented comparable historical expenditure (chapter 10) and our preliminary forecast of pass-through and recoverable costs (chapter 11).

Table 1.2: Document structure

CHAPTER		DESCRIPTION
1	<b>Introduction</b>	This chapter
2	<b>Regulatory requirements</b>	Describes the regulations our revenue requirement has been determined under and notes the variations, modifications and exemptions we have requested.
3	<b>Revenue requirement</b>	Summarises the outcome of the revenue requirement calculation
4	<b>Maximum allowable revenue</b>	Outlines how we have smoothed allowable revenues across the CPP period to remove fluctuations associated with annual variances in expenditure and how we have proposed for necessary revenue increases to be realised
5	<b>Building blocks allowable revenues</b>	Outlines how allowable revenues have been determined based on the building block revenue calculation
6	<b>Operating expenditure</b>	Describes how forecast operating expenditure, used in the building blocks calculation, is determined from the expenditure forecasts
7	<b>RAB roll-forward</b>	Describes how the regulatory asset base value used in the building blocks calculation is determined, including how the value of commissioned assets, depreciation and revaluations are calculated
8	<b>Regulatory tax allowance</b>	Describes how the regulatory tax allowance, tax adjustment and deferred tax balance is determined
9	<b>Other components</b>	Describes how the timing assumptions are determined
10	<b>Historical disclosures</b>	Outlines how we have presented historical financial information in our proposal
11	<b>Pass-through and recoverable costs</b>	Outlines how we have presented the pass-through and recoverable costs that are required to be disclosed
	Appendix A: 5 year CPP disclosures	
	Appendix B: Related party transactions	
	Appendix C: Recoverable costs	

## 2 REGULATORY REQUIREMENTS

### Key messages

- Our proposed revenue requirement has been prepared in accordance with the Commerce Commission IMs
- Our proposal includes a financial model that substantiates how the revenue requirement is calculated
- Variations, modifications and exemptions requested from the Commerce Commission are discussed in the relevant sections of this document
- Historical and forecast financial information is disclosed in accordance with the periods specified by the IMs

### 2.1 COMMERCE COMMISSION INPUT METHODOLOGIES (IMs)

The revenue requirement is derived consistent with the IMs.<sup>1</sup> The IMs are the methodologies, rules and processes, established by the Commission, we are required to follow in deriving our proposed revenue requirement.

Suppliers of electricity distribution services are subject to the regulatory provisions under subpart 9 of Part 4 of the Commerce Act 1986. Subpart 9 provides that electricity distribution businesses, as suppliers of electricity lines services, are subject to default/customised price-quality regulation.

The Commission set the IMs on 22 December 2010 and most recently amended them in January 2020.

The determination includes input methodologies for asset valuation, cost allocation, regulatory tax, cost of capital, regulatory rules and processes and includes the determination of allowable revenues (revenue requirement) under a customised price-quality path (CPP).

The revenue requirement and associated disclosures outlined in this report have been made consistent with the IMs except for the variation, modifications and exemptions noted below.

#### 2.1.1 Variation to cost allocation requirement

We have requested a variation to the IM requirements as they relate to the operating expenditure forecast cost allocation. The variation allows for our proposal to reflect our expected change to operating expenditure sharing arrangements during the CPP period. Section 6.1 provides further details of the variation and its impact.

Section 3.6 of the Application outlines other requested variations for operating expenditure incentives and recovery of incurred costs. Neither of these variations impact the revenue requirement.

#### 2.1.2 Modifications and exemptions

The revenue requirement disclosures have been made consistent with the IMs except for the modifications and exemptions set out in table 2.1. We have provided, in the relevant sections of this

<sup>1</sup> Commerce Commission, Electricity Distribution Services Input Methodologies Determination 2012, 29 January 2020.

document, a detailed discussion on each of the modifications and exemptions that relate to the revenue requirement disclosures. Table 2.1 provides references to those discussions.

All the modifications and exemptions relate to the CPP disclosure requirements and don't affect the revenue requirement outcome.

**Table 2.1: Modifications and exemptions**

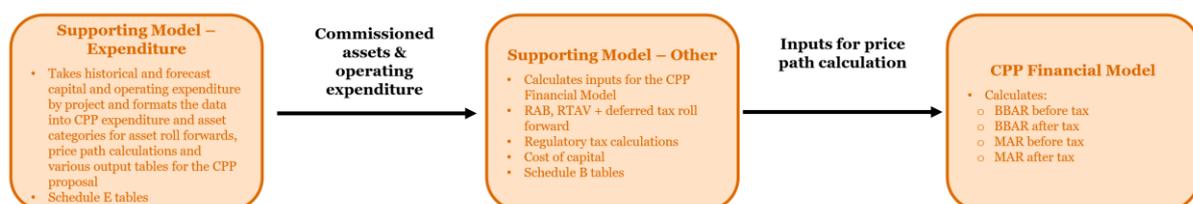
IM MODIFICATION OR EXEMPTION	STATUS	REFERENCE
Definition of 'current period' - IM clause 1.1.4	Approved 5 June 2020	section 2.3.2
Cost allocation information, Schedule B – clause 5.4.9(4)(d)	Approved 29 May 2020	section 6.1 and 7.2.1
Regulatory tax allowance information, other regulated income – clause 5.4.19(2)	Approved 29 May 2020	section 8.1
Provision of initial differences information by asset category – clause 5.4.22(1)	Approved 29 May 2020	section 8.3.1
Amortisation of revaluations – clause 5.4.23	Approved 29 May 2020	section 8.3.2
Regulatory tax asset lives – clause 5.4.26	Approved 29 May 2020	section 8.6.3

Appendix S of the Application outlines another exemption relating to the priority of proposal disclosure. This exemption does not impact the revenue requirement or disclosures discussed in this report.

## 2.2 CPP FINANCIAL MODEL

The CPP financial models determine the revenue requirement consistent with the IMs and are based on the input assumptions outlined in this document. The CPP financial model is part of our proposal.

**Figure 2.1: CPP Financial model**



The CPP financial model is consistent with the Commission's CPP financial model template produced for the Orion CPP which was also subsequently used for Powerco's CPP. The supporting models have been developed based on the IMs and source data.

The CPP financial models form part of our CPP submission. This document outlines how the CPP financial models address the IM requirements and provides further detail of the forecasting assumptions that are applied in addition to the expenditure forecasts that are outlined in the Application.

## 2.3 FORECAST PERIOD

Price path information is presented in this report and in the financial models for the:

- Assessment period (comprising the two disclosure years prior to the CPP period)
- CPP period (comprising the 3 disclosures years commencing on 1 April 2021)
- 5 year CPP period (comprising the 5 disclosure years commencing on 1 April 2021)
- Next period or Forecast period (comprising the Assessment period and both CPP periods)

References to the Current period refer to the 5 disclosure years preceding the next period.

Figure 2.2: Forecast period

Current period					Next period / forecast period						
					Assessment period		CPP period			5 year CPP period	
R15	16	17	18	19	20	21	22	23	24	25	26

### 2.3.1 CPP period disclosure

Our CPP proposal is based on a 3 year CPP period, being the 3 years beginning 1 April 2021. Accordingly, this paper outlines the financial outcomes based on the 3 year CPP period. The definition of a ‘CPP regulatory period’ at Clause 1.1.4(2) of the IMs also requires us to disclose information for a 5 year CPP period being the 5 years beginning 1 April 2021.

This paper presents the 5 year CPP period information where it is consistent with the 3 year information (i.e. expenditure forecasts). Where the 3 year CPP information is different from the 5 year CPP information (i.e. as a result of revenue smoothing) we have in the body of this report, disclosed the 3 year CPP information. For completeness, Appendix A discloses the 5 year CPP information where the body of the report only discloses 3 year CPP information.

### 2.3.2 Current period disclosure

The Current period, as outlined above, is the subject of an approved modification to the IM definition.

The IMs define the “current period” as the “five years preceding the disclosure year in which the CPP application is submitted”. Our submission date of 12 June is very soon after the conclusion of the disclosure year ended 31 March 2020. The consequence is that it is not possible for us to provide actual historical information for the period 1 April 2019 to 31 March 2020. The information is not yet available.

The requested modification is to change the definition of “current period” so that it means the disclosure years from 1 April 2014 to 31 March 2019.

# 3 REVENUE REQUIREMENT

## Key messages

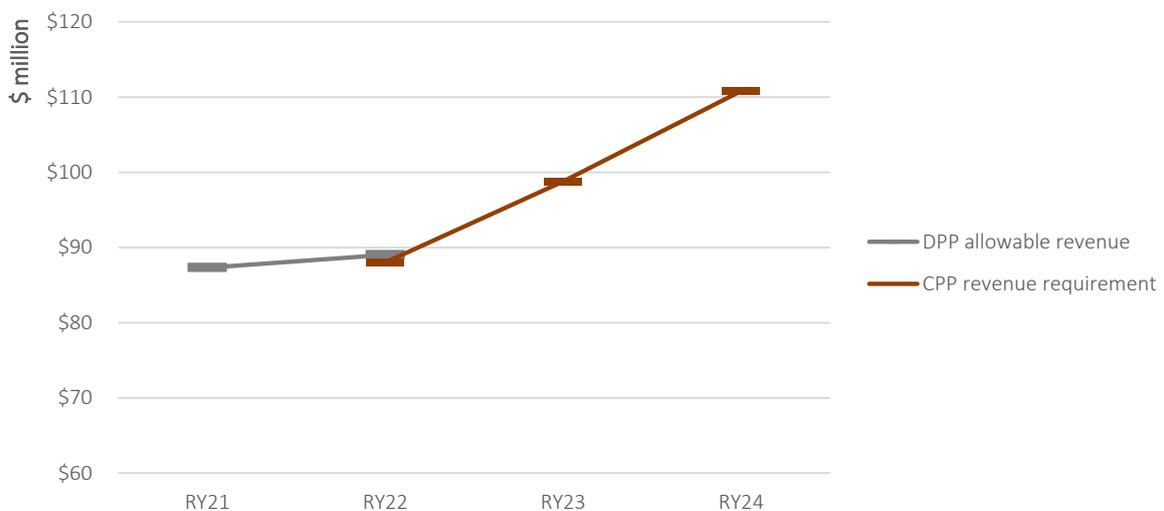
- Our revenue requirement is consistent with the maximum allowable revenues determined in accordance with the Commerce Commission IMs
- Prices are determined from our revenue requirement in accordance with our pricing methodology
- Our proposal outlines the expected impact of our revenue requirement on total power bills

## 3.1 REVENUE REQUIREMENT

Our investment plans will impact the prices customers pay for our distribution services. If our plan is approved, our revenue requirement will need to increase to cover the additional expenditure.

The revenue requirement resulting from our proposed expenditure is outlined in figure 3.1.

Figure 3.1: Revenue requirement



We have structured the revenue requirement so that the increase is realised during the CPP period after a small decrease at the beginning of the CPP period in RY22.

Chapters 4-9 outline how we have determined our revenue requirement consistent with the Commerce Commission IMs.

The Commission will assess whether our proposed investments as outlined in the Application are prudent and efficient and will approve the amount of revenue we are allowed to recover.

## 4 MAXIMUM ALLOWABLE REVENUES

### Key messages

- Our revenue requirement is the maximum allowable revenue, determined in accordance with the IMs, resulting from our proposed expenditure forecasts and past capital expenditure
- Maximum allowable revenue is determined by smoothing the building blocks allowable revenues
- We have structured the revenue requirement so that the increase is realised during the CPP period after a small decrease at the beginning of the CPP period

### 4.1 MAXIMUM ALLOWABLE REVENUES

Our revenue requirement is based on the maximum allowable revenues determined in accordance with the IMs.

Maximum allowable revenue (MAR) is the annual allowable revenue derived from the net present value (NPV) of the building blocks allowable revenue (BBAR) after tax after applying price smoothing and discounting assumptions.

The present value of the series of MAR after tax equals the NPV of BBAR after tax. In this document we refer to this NPV as the PV of annual allowable revenues. BBAR after tax is the revenue allowance determined using the building blocks calculation and before revenue smoothing. How the BBAR is determined is outlined in chapter 5.

The MAR before and after tax for the years of the CPP period are presented in table 4.1. MAR after tax is equal to MAR before tax less our regulatory tax allowance, which is the tax expense we expect to incur on our regulatory taxable profits.

Table 4.1: Maximum allowable revenue

\$M	RY22	RY23	RY24
MAR before tax	88.0	98.8	110.8
MAR after tax	82.7	93.0	104.5

Table 4.2 outlines the assumptions used to determine the maximum allowable revenues. The rest of this chapter outlines the purpose and reasoning for each assumption.

Table 4.2: Maximum allowable revenue assumptions

\$M	1-APR-21	RY22	RY23	RY24
Discounting assumption - Cost of capital (%)		4.57%	4.57%	4.57%
PV of annual allowable revenues	260.2			
CPI (%)			2.0%	2.0%
X factor (%)			(10.0%)	(10.0%)

## 4.2 PRESENT VALUE OF ANNUAL ALLOWABLE REVENUES

The present value of allowable revenues is the value of the BBAR after tax at the beginning of the CPP period (1 April 2021) when applying the cost of capital as the discount assumption. Chapter 5 outlines how the BBAR allowable revenues have been determined.

The PV of allowable revenues is used to determine the maximum allowable revenues for each year of the CPP period by factoring in the revenue smoothing and discount assumptions. The revenue smoothing assumptions are discussed below and the discount assumption is the same cost of capital assumption used to determine the PV of BBAR allowable revenues.

## 4.3 REVENUE SMOOTHING

The primary purpose of revenue smoothing is to remove fluctuations in revenue that would likely be the case if our final revenue requirement was based on BBAR allowable revenues.

Revenue smoothing also allows for revenue increases to be reflected as a one-off increase at the beginning of the CPP period, as gradual increases during the period or any combination of the two.

The remainder of this chapter outlines how we have determined the smoothed revenue in accordance with the IMs.

### 4.3.1 Inflation assumption

The CPI inflation rate is used in the determination of maximum allowable revenue to provide for increases in revenue during the CPP period that are consistent with forecast general increases in prices of consumer goods and services.

Clause 5.3.4(9) of the IMs defines ‘CPP Inflation rate’ as the amount determined in accordance with the formula-

$$[(CPI_1 + CPI_2 + CPI_3 + CPI_4) \div (CPI_1^{-4} + CPI_2^{-4} + CPI_3^{-4} + CPI_4^{-4})] - 1,$$

where-

$CPI_n$  means forecast CPI for the  $n$ th quarter of the disclosure year in question; and

$CPI_n^{-4}$  means forecast CPI for the equivalent quarter in the preceding disclosure year

The CPI inflation rate used in the CPP price path is outlined in table 4.3.

Table 4.3: CPI inflation rate

%	RY23	RY24
CPP inflation rate	2.0%	2.0%

### 4.3.2 X factor

The X factor alters the increase in prices during the CPP period. It is provided for in the determination of annual maximum allowable revenues so any necessary increases in revenue can be realised at the beginning of the CPP period, consistently throughout the CPP period, or through any combination of these two allowable methods.

The IMs require the PV of the annual allowable revenues resulting from the application of an X factor to be the same as if no X factor had been applied. We have taken into account the view of our customers and stakeholders in determining the X factor as there is no disadvantage to us in determining an X factor.

We have considered feedback from our consumers and stakeholders during consultation and determined that the revenue increases necessary to fund our expenditure programme are better realised during the CPP period rather than at the beginning of the period.

The customer advisory panel (CAP) highlighted that customers generally take time to modify their electricity usage. Accordingly, they advocated a slower rate of increase in our charges at the start of the CPP period to provide customers with additional time to respond to the higher prices.

Given the relatively short 3 year CPP period and consistent with feedback from our customer consultation process, we have applied a -10% X factor to the revenue smoothing calculation. This means there is a small decline in our revenue requirement at the beginning of the CPP period.

Section 4.3 of the Application outlines the reasons we have applied to use an X factor that is different to the DPP X factor. Outlining the reasons is a requirement of clause 5.4.8(4) of the IMs. Appendix K of the Application outlines the expected impact of the revenue requirement on customer prices which includes the impact of regulatory incentives.

## 5 BUILDING BLOCKS ALLOWABLE REVENUES

### Key messages

- The building blocks allowable revenue (BBAR) is determined under the IMs by calculating the allowable return on investment (return on capital), return of investment (depreciation), return on investment (revaluation), operating expenditure, tax and other allowances
- The PV of allowable revenue, determined by the building blocks calculation included in the IMs, is the key driver of Maximum Allowable Revenue (MAR)
- Timing assumptions are applied in the BBAR calculation to account for when revenues and expenses are deemed to incur during the year. The timing assumptions are specified in the IMs and are based on the cost of capital assumption

The building blocks allowable revenue (BBAR) is the allowable revenue prior to revenue smoothing.

The BBAR before and after tax for each year of the CPP period are presented in table 5.1

Table 5.1: Building blocks allowable revenue

\$M	1-APR-21	RY22	RY23	RY24	RY25	RY26
BBAR before tax		93.3	100.5	103.2	107.4	111.9
<b>BBAR after tax</b>		<b>88.0</b>	<b>94.8</b>	<b>96.8</b>	<b>100.4</b>	<b>104.5</b>
<b>PV of BBAR after tax - 3 year CPP period</b>	260.2					
PV of BBAR after tax - 5 year CPP period	430.8					

Table 5.1 outlines the Present value (PV) of BBAR for both a 3 year and 5 year CPP period. As outlined in section 2.3.1, we propose our next regulatory period be for a 3 year period. We are required, however, to provide information for both a 3 and 5 year CPP period. This chapter and the remaining chapters outline information for both the 3 year and 5 year periods.

The BBAR is determined from the building blocks outlined below.

### 5.1 BUILDING BLOCKS

The BBAR comprises the six allowances outlined in table 5.2. This section discusses what each of the allowances provides for.

Table 5.2: Building blocks allowances

\$M	RY22	RY23	RY24	RY25	RY26
Return on investment	26.1	29.1	32.1	35.2	37.9
Return of investment - depreciation	20.7	23.0	24.9	27.3	29.5
Return of investment - revaluations	(11.2)	(12.6)	(13.9)	(15.5)	(16.8)
Operating expenditure	52.8	55.9	54.3	54.1	54.6
Tax adjustments	5.3	5.7	6.4	7.0	7.4

\$M	Ry22	Ry23	Ry24	Ry25	Ry26
Other allowances	(0.5)	(0.6)	(0.6)	(0.7)	(0.8)
<b>BBAR before tax</b>	<b>93.3</b>	<b>100.5</b>	<b>103.2</b>	<b>107.4</b>	<b>111.9</b>

The return on investment allowance provides us with the ability to earn a return on our investment in the regulated business. It is determined from the cost of capital and the regulatory investment value. It compensates us for our cost of debt and allows shareholders to be compensated for their investment.

The return of investment allowance provides for the return of our past expenditure on regulated assets. It is more commonly referred to as depreciation.

The regulatory requirements also provide for the revaluation of assets. Revaluations reflect the increase in value of regulated assets that shareholders can earn a return on and a return of in future periods. Revaluations reduce the BBAR in the assessed year and have the effect of deferring returns to later periods.

The operating expenditure allowance provides for the return of operating expenditure incurred during the period. Operating expenditure includes the cost of operating and maintaining our assets, responding to emergencies, and administrating and managing our regulated business.

The tax adjustments building block is an allowance for the difference between regulatory profits and assumed taxable profits.

The regulatory regime also allows for a Term Credit Spread Differential (TCSD) allowance to cover the estimated costs a regulated entity would incur if it held debt securities for a longer period than that assumed in the cost of capital calculation. Consistent with historical disclosures we are not forecasting to enter any debt securities that qualify for the TCSD.

We also note therefore that no alternative methodology with equivalent effect was applied to the estimation of TCSD in accordance with 5.3.26(1)(c).

The formula for the building blocks calculation, as set out in IM clause 5.3.2, is detailed below. The formula includes the six allowances described above. The formula is structured around the timing factors discussed in section 9.1.

$$\begin{aligned}
 & (regulatory\ investment\ value \times cost\ of\ capital + total\ value\ of\ commissioned\ assets \times (TF_{VCA} - 1) \\
 & + term\ credit\ spread\ differential\ allowance \times TF - total\ revaluation) \div (TF_{rev} - corporate\ tax\ rate \\
 & \times TF) \\
 & + (total\ depreciation \times (1 - corporate\ tax\ rate \times TF) \\
 & + forecast\ operating\ expenditure \times TF \times (1 - corporate\ tax\ rate) \\
 & + (closing\ deferred\ tax - opening\ deferred\ tax) \times (TF - 1) \\
 & + (permanent\ differences + regulatory\ tax\ adjustments - utilised\ tax\ losses) \times corporate\ tax\ rate \\
 & \times TF) \div (TF_{rev} - corporate\ tax\ rate \times TF)
 \end{aligned}$$

The remainder of this chapter describes:

- regulatory investment value (RIV) which is used in the return on investment building blocks;
- cost of capital which is a key input assumption specified by the Commission; and
- regulatory tax allowance which is used to determine BBAR after tax

## 5.2 REGULATORY INVESTMENT VALUE

The RIV along with the cost of capital is a key input assumption in calculating the return on investment component of the BBAR. It is defined as

$$\text{total opening regulatory asset base (RAB) value} + \text{opening deferred tax}$$

The RIV included in the BBAR calculation is outlined in table 5.3.

**Table 5.3: Regulatory investment value**

\$M	RY22	RY23	RY24	RY25	RY26
Opening RAB	559.5	632.0	694.8	774.6	842.1
Opening deferred tax	(28.0)	(32.6)	(37.8)	(43.3)	(48.8)
<b>RIV</b>	<b>531.4</b>	<b>599.3</b>	<b>656.9</b>	<b>731.3</b>	<b>793.3</b>

For the remainder of this document we refer to the RAB value and deferred tax balances as building block assumptions rather than referring to the RIV. How the RAB value is derived is outlined in chapter 7 and the deferred tax balance is discussed in section 8.6.

## 5.3 COST OF CAPITAL

The cost of capital assumption is a key input that is used to determine:

- return on investment allowance in the BBAR calculation (section 5.4);
- PV of allowable revenues (4.2)
- timing factors (section 9.1)

Components of the cost of capital assumption also have an impact on the forecast revaluation rate, which impacts the return of investment and RAB roll-forward calculations (section 7.5).

As specified in clause 5.3.22 of the IMs, the cost of capital applied in the revenue requirement calculation is the cost of capital applied in the DPP for the same period as our CPP. Table 5.4 outlines the cost of capital assumption.

**Table 5.4: Cost of capital**

%	RY22	RY23	RY24	RY25	RY26
Cost of capital	4.57%	4.57%	4.57%	4.57%	4.57%

## 5.4 BUILDING BLOCKS ASSUMPTIONS

The BBAR calculation is made up of input assumptions as outlined in table 5.5, which are grouped into the building block allowances. The table also references where each of the input assumptions are discussed in this document.

Table 5.5: Building blocks assumptions

\$M EXCEPT AS NOTED	RY22	RY23	RY24	RY25	RY26	REFERENCE
<b>Return on investment</b>						
Opening RAB	559.5	632.0	694.8	774.6	842.1	Section 7.2
Opening deferred tax	(28.1)	(32.7)	(37.9)	(43.3)	(48.8)	Section 8.6
Commissioned assets	82.7	73.7	91.3	79.8	72.5	Section 7.1
Cost of capital (%)	4.57%	4.57%	4.57%	4.57%	4.57%	Section 5.3
<b>Return of investment</b>						
Depreciation	20.7	23.0	24.9	27.3	29.5	Section 7.4
Revaluations	(11.2)	(12.6)	(13.9)	(15.5)	(16.8)	Section 7.5
<b>Operating expenditure</b>						
Operating expenditure	52.8	55.9	54.3	54.1	54.6	Chapter 6
<b>Tax</b>						
Permanent differences	(1.2)	(1.1)	(0.9)	(0.5)	(0.5)	Section 8.2
Regulatory tax adjustments	0.4	0.0	(0.3)	(0.6)	(0.8)	Section 8.3
Regulatory tax allowance	5.3	5.7	6.4	7.0	7.4	Chapter 8
<b>Other components</b>						
TCSD allowance	-	-	-	-	-	Section 5.1
Timing assumptions	(refer Table 9.1)					Section 9.1

## 6 OPERATING EXPENDITURE

### Key messages

- The operating expenditure allowance is based on our forecast operating expenditure outlined in the Application
- The operating expenditure allowance has been adjusted to allocate shared costs to the regulated part of the business and escalated to take into account forecast input price increases
- Related party transactions are valued based on arms-length transaction values

Forecast operating expenditure reflects our operating expenditure forecast for the forecast period in accordance with clause 5.3.2(6)(a) of the IMs. This has not yet been assessed by the Commission against the expenditure objective, as described in clause 5.3.2(6)(b).

The forecast operating expenditure for the CPP period is outlined in table 6.1

**Table 6.1: Forecast operating expenditure**

REAL RY20 \$M	RY22	RY23	RY24	RY25	RY26
Operating expenditure	51.8	53.4	50.4	48.9	48.4

### 6.1 COST ALLOCATION

In RY18 we changed our operating model and began to self-perform business support functions that had previously been provided by Delta Utility Services (Delta). As part of this transition we entered a shared services agreement with Delta relating to accounting and financial, technology help desk, device management and ICT advisory services. We have since terminated the shared accounting and financial services agreement and the remaining shared technology support will be phased out by RY23 when we forecast there will be no cost sharing with Delta for business support services.

Table 6.2 shows the proportion of total business support operational expenditure which is allocated to electricity distribution services in each year, from RY19 to the end of the CPP period. The RY19 value is 93.6%, consistent with our information disclosures. We are forecasting that value to move to 100% by RY23.

**Table 6.2: Cost allocation**

%	RY19	RY20	RY21	RY22	RY23	RY24	RY25	RY26
Business support - % allocated to electricity distribution	93.6%	97.7%	98.6%	99.6%	100.0%	100.0%	100.0%	100.0%

Our method for allocating not directly attributable business support operating expenditure is as follows:

- we have applied the accounting-based allocation approach (ABAA).
- we have used labour hours as the allocator, which is a causal allocator.

The Application Schedule B tables include information supporting the allocation described above.

### 6.1.1 Operating expenditure forecast cost allocation IM variation

IM clause 5.3.5(1)(a) requires that the allocation of operational expenditure in future years be consistent with the allocation used in the last year for which information disclosures have been made, which is RY19.

As explained above, maintaining the historical sharing position throughout the CPP period would not reflect the operating model transition we are making, and would understate the reasonable forecast of our operational expenditure and revenue requirement.

We have sought a variation to this IM requirement for the purpose of this CPP application, so that our operational expenditure forecast and revenue requirement can reflect the forecast cost sharing arrangements which are consistent with the proportions stated in Table 6.2 above.

Table 6.3 shows the impact on forecast operational expenditure over the CPP period, from using the proposed allocation rather than maintaining the RY19 allocation.

**Table 6.3: Difference in forecast operating expenditure between cost allocation approaches**

REAL RY20 \$M – OPERATING EXPENDITURE	RY20	RY21	RY22	RY23	RY24	RY25	RY26
Proposed allocation	49.0	50.8	51.8	53.4	50.4	48.9	48.4
RY19 allocation	48.3	50.0	50.8	52.4	49.4	47.9	47.4
Difference (\$)	0.7	0.8	0.9	1.0	1.0	1.0	1.0
Difference (%)	1.4%	1.6%	1.8%	2.0%	2.0%	2.1%	2.1%

The Supporting model – expenditure includes functionality that allows financial information to be presented consistent with the variation or aligned to the RY19 allocations. The switch is in the Global inputs sheet at row 128.

### 6.1.2 Cost allocation information modification

IM clause 5.4.9 requires that the cost allocation information in Schedule B must be provided for the disclosure year prior to submitting the CPP proposal (which, based on a submission date of on or around 12 June 2020, is the year ended 31 March 2020 for Aurora) if it has not already been disclosed in accordance with an ID Determination at the time the CPP proposal is submitted.

We note that we will not be in a position to include audited information up to 31 March 2020 as part of this CPP proposal in June 2020. On this basis, we requested a modification to clause 5.4.9(4)(d) so that we may disclose cost allocation information in Schedule B for the 2019 disclosure year (our most recently available audited full year data) on condition that we provide the corresponding 2020 disclosure year information as soon as it is available.

We requested a modification to clause 5.4.9(4)(d) to require us to provide some of the required cost allocation information in schedule B for all years of the ‘next period’ (2021 – 2026 disclosure years). This is a higher threshold of required information under clause 5.4.9(4)(d)(ii), which requires the cost allocation information be provided for the next period “where a value in units in an allocator metric has

been changed by at least 5% from the value used in the disclosure year prior to submitting the CPP proposal". We note this additional information will help demonstrate the application of our new proposed cost allocation methodology discussed in section 6.1.1 and the changes to operating expenditure sharing arrangements during the CPP period.

We sought, and the Commission has approved a modification to this requirement so that:

- In our CPP proposal we:
  - For the Schedule B information that relates to historical operational expenditure allocations, provide the information that relates to asset allocations for RY19 instead of RY20<sup>2</sup>; and
  - For the Schedule B information that relates to forecast operational expenditure allocations, provide forecast information for each of RY20 to RY26.
- We provide actual RY20 information at the time of the year-end financial information disclosures for that year.

We also confirm that the allocation methodology used to forecast closing RAB value and forecast operating expenditure for RY20 is the same as the allocation methodology used for the closing RAB value and operating expenditure for RY19.

## 6.2 RIGHT OF USE ASSETS

In 2016, a new financial reporting standard, New Zealand Equivalent to International Financial Reporting Standard 16 Leases was issued.<sup>3</sup> The standard fundamentally changed the accounting treatment of operating leases for lessees by requiring the capitalisation of operating lease expenditure.

To accommodate the change in accounting treatment of operating leases:

- Operating lease payments are disclosed as operating expenditure in the analysis of expenditure (consistent with historical treatment); and
- Operating lease payments are removed from operating expenditure and the right of use asset is treated as capital expenditure in the BBAR model prior to the determination of allowable revenue (consistent with the new accounting treatment).

Our operating leases that are covered by the new NZ IFRS requirements relate to vehicle, land, building and equipment leases.

The adjustment removes the annual lease payments from operating expenditure, the value of existing leases are added to RY20 capital expenditure and the value of new leases are added to capital expenditure in the year the lease is forecast to commence. The value of the commissioned asset is the present value of lease payments.

<sup>2</sup> The CPP financial model and Application Appendix N: IM Schedule B Cost Allocation information discloses RY19 cost allocation information after the adjustment and reclassifications outlined in Chapter 10 of this report.

<sup>3</sup> New Zealand Equivalent to International Financial Reporting Standard 16 Leases (NZ IFRS 16). Accessible at <https://www.xrb.govt.nz/accounting-standards/for-profit-entities/>

**Table 6.4 Right of use assets adjustment**

REAL RY20 \$M	RY22	RY23	RY24	RY25	RY26
Operating expenditure - expenditure analysis	51.8	53.4	50.4	48.9	48.4
Operating lease annual payments adjustment	(1.4)	(1.3)	(1.1)	(0.8)	(0.8)
<b>Operating expenditure - BBAR</b>	<b>50.4</b>	<b>52.1</b>	<b>49.3</b>	<b>48.1</b>	<b>47.7</b>

There is also a consequential permanent tax difference in the tax calculation and an adjustment to the deferred tax balance. The permanent tax difference reflects the difference between the annual lease payments and the RAB depreciation/revaluation impact. Deferred tax is adjusted, such that the prevailing GAAP deferred tax balance for a right of use asset is included in the opening deferred tax balance in the year the asset is commissioned.

### 6.3 COST ESCALATION

Our operational expenditure forecasts are prepared in RY20 real dollars so expenditure is comparable over time. Real dollar forecasts exclude the forecast impact of input cost increases.

Real expenditure forecasts are escalated to nominal dollar values using cost escalators. Accordingly, nominal dollar values are the forecast expenditure expected to be incurred after taking into account forecast input cost increases.

The real RY20 and nominal dollar forecasts included in the BBAR are outlined in Table 6.5.

**Table 6.5: Cost escalation**

\$M	RY22	RY23	RY24	RY25	RY26
Operating expenditure - real RY20	50.4	52.1	49.3	48.1	47.7
Escalation	2.4	3.8	4.9	6.0	7.0
<b>Operating expenditure - nominal</b>	<b>52.8</b>	<b>55.9</b>	<b>54.3</b>	<b>54.1</b>	<b>54.6</b>

The cost escalators applied in our forecast are determined from independently forecast price indices.

#### Approach to escalation

We have separated our real operational expenditure into two components: Labour and other. The split between components is determined in each Opex portfolio with regard to the underlying expenditure. For example, a portfolio that is entirely salary costs would be given a component split of 100% labour and 0% other.

**Figure 6.1: Approach to operational expenditure cost escalation**



Our approach to price escalation is based on the approaches applied and accepted by the Commission in the Powerco and Orion CPP proposals. As noted in the Powerco CPP proposal, the applied approach is based on approaches applied internationally.<sup>4</sup>

The Commission stated in its final Orion CPP determination that, overall, they considered this approach to be appropriate.<sup>5</sup>

For the forecast period we apply separate escalators to the two components. For labour we use a forecast of all industries Labour Cost Index (LCI) and for the non-labour component we use a forecast of the all industries Producer Price Index (PPI).

#### Independently determined price indices

We engaged Sapere Research Group (Sapere) to independently determine price indices for the cost escalation applied in our forecasts.

The price indices applied in the escalation of forecast capital expenditure are outlined in table 6.6.

**Table 6.6: Sapere operational expenditure escalators**

%	RY22	RY23	RY24	RY25	RY26
LCI - All sectors	2.0%	2.4%	2.6%	2.1%	1.9%
PPI – Inputs	2.7%	2.6%	2.3%	2.3%	2.4%

#### Cost escalator weightings

The operating expenditure escalators are applied to forecast expenditure by cost escalator weightings. The cost escalator weightings are outlined in Table 6.7.

**Table 6.7: Cost escalator weightings**

%	LABOUR	OTHER
Preventive maintenance	60%	40%
Corrective maintenance	60%	40%
Reactive maintenance	70%	30%
Vegetation	70%	30%
SONS	90%	10%
People costs	90%	10%

<sup>4</sup> Powerco, Customised price-quality path (CPP) Financial and modelling information, 12 June 2017, Section 6.4.7

<sup>5</sup> Commerce Commission Final decision for Setting the customised price-quality path for Orion New Zealand Limited [2013] NZCC 21, 29 November 2013, Paragraph N27

%	LABOUR	OTHER
IT Opex	90%	10%
Premises, plant and insurance	-	100%
Governance and administration	-	100%

## 6.4 RELATED PARTY TRANSACTIONS

This section outlines the operational expenditure related party transactions we are forecasting to incur during the forecast period.

All of our expenditure forecasts have been prepared based on the needs of the business with reference to the market value of our business's input requirements. In some instances, the forecasted costs will be incurred through parties that are related to us.

Table 6.8 outlines the value of operating expenditure we are contracted or committed to acquire from related parties during the forecast period. We may from time to time in the normal course of business operations also acquire other operating expenditure services from related parties.

**Table 6.8: Forecast operating expenditure related party transactions**

\$M	RY22	RY23	RY24	RY25	RY26
Operational expenditure - related party transactions	16.3	14.9	14.0	0.2	0.2

Related parties that have provided us services in recent years and the value of those services in the RY19 year are outlined in table 6.9.

**Table 6.9: Related parties that provide us services and the RY19 value of transactions**

RELATED PARTY	DESCRIPTION	RY19 TRANSACTION VALUE \$M
<b>Delta Utility Services Limited (Delta)</b>	A multi-utility services contractor providing a range of electrical and other services to local authority and private sector clients.	49.8 <sup>6</sup>
<b>Dunedin City Holdings Limited (DCHL)</b>	DCHL owns and provides governance and oversight of its subsidiary and associated companies on behalf of the ultimate shareholder, Dunedin City Council.	0.2
<b>Dunedin International Airport Limited (DIAL)</b>	Operates Dunedin airport.	0.0
<b>Dunedin Venues Management Limited (DVML)</b>	Sources and secures events and facilitates community access to venues.	0.0

Delta Utility Services Limited (Delta), a related party, is one of our three service providers for asset construction and maintenance services. The following section outlines how in 2018 we restructured our procurement of services to increase contestability, including services that had predominantly been

<sup>6</sup> This expenditure is in relation to operating and capital expenditure

provided by Delta. We also outline how the terms of our contractual relationship with Delta were negotiated to create contestability between our three service providers.

### Delta Utility Services Limited (Delta)

Prior to 2017 our network was managed, operated and maintained by our sister company Delta who also delivered asset construction services as part of our capital works programme. A change in our operating structure followed a 2016 independent review<sup>7</sup> undertaken by Deloitte on behalf of our shareholder, Dunedin City Holdings Limited.

Under the new structure, Delta is an arms-length service provider subject to full commercial terms. Since the separation, we have transited to a new way of doing business.

In August 2018, we appointed two additional service providers to carry out asset renewal, maintenance and development works - Unison Contracting based in Dunedin and Connetics based in Central Otago. To ensure a controlled switchover to the new suppliers, and to allow Delta's new operating model to bed in, we agreed to negotiate performance based contract terms to take effect from 1 April 2019.

The new contract terms have since been formalised in the field services agreements (FSA) we have entered with each contractor. Each FSA has been established on the basis of a 3 year review, which is intended to provide us with an opportunity on a regular basis to refresh and test our contractual relationships. We expect the levels of contestability in our works programmes will continue to increase over time.

Traditionally Delta has delivered a large portion of our network operating and capital expenditure works. The skills required to operate on, and knowledge of our network that it has gained over many years, together with the fact that our alternative service providers have only been operating on the network for a relatively short period of time means that Delta remains, at this point, the contractor on our network that is best placed to perform certain types of work, for example first response and fault repair and vegetation management.

### Value of related party transactions

The forecast values of the related party transactions outlined in table 6.8 were established by applying the forecast approaches described for each portfolio in the Application.

We are comfortable our forecast values of operating expenditure related party transactions are no greater than an arm's length transaction value through the application of:

- Base-step-trend forecasting approach; and
- Price x Quantity assumptions that are consistent with historical unit rates.

Historical operating expenditure related party values used in the forecasts have been confirmed as compliant with the IM transaction value requirements in the RY19 Information Disclosure<sup>8</sup> or the subsequent Independent Reasonable Assurance Report.<sup>9</sup>

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<sup>7</sup> Deloitte, Review of Aurora Energy Limited / Delta Utility Services Limited – Network Safety Concerns, December 2016.

<sup>8</sup> <https://www.auroraenergy.co.nz/assets/publication-articles/2019-Information-Disclosures.pdf> page 81-84.

<sup>9</sup> KPMG, Independent Reasonable Assurance Report to the Directors of Aurora Energy Limited and the New Zealand Commerce Commission, 7 May 2020.

### Related party transaction disclosure requirements

Appendix B outlines information on historical and forecast related party transactions and our processes for procuring those services.

## 6.5 INTERNAL COST CAPITALISATION

In accordance with GAAP we capitalise to the cost of assets internally incurred expenditure. Our internally incurred expenditure consists of the cost of employees that are directly attributable to the creation of an asset.

Capitalising internal costs ensures there is consistency between the treatment of costs incurred externally and internally.

The two areas where internal cost capitalisation is applied are network and IT capital expenditure.

In determining forecast operational expenditure we have excluded internal staffing costs forecast to be capitalised.

# 7 RAB ROLL-FORWARD

## Key messages

- The RAB value is rolled forward each year by adding the value of commissioned assets and revaluations to the opening RAB value and deducting depreciation and disposals.
- Revaluations are calculated consistent with the IMs and are determined based on information sourced from Statistics New Zealand.
- Depreciation is determined consistent with the IMs and relies on asset life assumptions specified in the IMs
- The value of commissioned assets is determined from forecast capital expenditure after taking into account right-of-use assets, cost escalation, financing and works under construction assumptions
- Related party transactions are valued based on arms-length transaction values
- Assets sold or removed from the suppliers possession (Disposals) are removed from the RAB in each disclosure year

The RAB roll forward and its components are key drivers in the building blocks calculation. The opening RAB and value of commissioned assets are drivers of the return on investment building block and the depreciation and revaluation components make up the return of investment building block.

The closing RAB value is also used to determine the next years return on investment and return of investment building blocks.

This chapter outlines how each of the RAB roll-forward components have been determined and disclosed consistent with the IMs.

## 7.1 VALUE OF COMMISSIONED ASSETS

The value of commissioned assets is the value of assets that are forecast to be added to the RAB during the forecast period. It is determined from the capital expenditure forecast, as outlined in the Application, and after factoring in the right-of-use assets adjustment, cost of finance, cost escalations, and capitalisation timing assumptions.

Where expenditure on an asset which forms or is forecast to form part of the cost of that asset under GAAP is incurred or forecast to be incurred after that asset is commissioned or forecast to be commissioned, such expenditure is treated as relating to a separate asset.

The value of commissioned assets and its components for the Next Period are shown in Table 7.1 below.

Table 7.1 Value of commissioned assets

\$M	RY20	RY21	RY22	RY23	RY24	RY25	RY26
Capital expenditure (real RY20 \$m)	54.7	65.7	72.5	78.1	77.1	68.5	60.1
ROU assets (real RY20\$)	4.9	0.1	0.5	0.3	0.5	0.1	-
Cost escalation	-	1.4	2.9	4.9	6.3	6.7	7.3
Cost of finance	0.8	0.9	0.6	0.9	0.7	0.7	0.5

\$M	RY20	RY21	RY22	RY23	RY24	RY25	RY26
Opening WUC	43.3	43.0	39.4	33.2	43.6	37.0	33.2
Closing WUC	43.0	39.4	33.2	43.6	37.0	33.2	28.7
<b>Commissioned assets</b>	<b>60.7</b>	<b>71.8</b>	<b>82.7</b>	<b>73.7</b>	<b>91.3</b>	<b>79.8</b>	<b>72.5</b>

Our capital expenditure forecasts are outlined in the CPP proposal. These real RY20 forecast expenditure values are collated in the CPP Financial Model: Supporting Model – Expenditure where escalation and the costs of finance is applied to determine total nominal dollar forecasts. The forecast value of commissioned assets is then determined in the CPP Financial Model: Supporting Model – Other after taking into account capitalisation timing assumptions.

### 7.1.1 Capital expenditure forecast

The capital expenditure forecast reflects our capital expenditure forecast for the forecast period. It is disclosed in Real RY20 dollars.

Forecast capital expenditure reflects our capital expenditure forecast for the forecast period in accordance with clause 5.3.11(6)(a) of the IMs. This has not yet been assessed by the Commission against the expenditure objectives, as described in clause 5.3.11(6)(b).

Further explanation of how the capital expenditure forecast has been determined is included in the Application.

Capital expenditure forecasts have been determined by applying GAAP to the asset that is forecast to be created except as required by clause 5.3.11. The remainder of this section outlines how the clause 5.3.11 requirements for determining the value of forecast capital expenditure have been applied.

Section 7.3.2 to 7.3.8 then outlines how commissioned asset values have been determined from the capital expenditure forecast and other associated forecast assumptions.

#### Intangible assets

All intangible assets, excluding finance leases or identifiable non-monetary assets, have a nil value in accordance with 5.3.11(1)(a).

Any costs that are recoverable costs are not included in forecast capital expenditure consistent with clause 5.3.11(1)(j).

#### Easements

Our capital expenditure forecasts do not include any costs for easements, therefore clause 5.3.11(1)(b) and (c) do not apply.

#### Spares

In preparing our forecast expenditure we have assumed that the current level of network spares will remain the same throughout the next period. Our forecast value of commissioned assets therefore does not include any network spares.

The treatment is consistent with clause 5.3.11(1)(d).

#### Acquisitions from other regulated businesses

Our expenditure forecasts do not include any forecast acquisitions from other regulated entities that have been used by that regulated supplier in the supply of regulated goods or services, therefore clause 5.3.11(e) does not apply.

We do not provide any other regulated services, therefore clause 5.3.11(f) does not apply.

#### Transfers from another part of the business

We have not forecast any asset transfers from another part of our business, therefore there is a nil disclosure in accordance with clause 5.4.14(1)(c)(ii).

#### Related party transactions

As outlined in section 7.7, we have historically and intend to incur during the forecast period capital expenditure through related party transactions.

The treatment of capital expenditure related party transactions is consistent with clause 5.3.11(7) and therefore 5.3.11(1)(g) for the reasons outlined in section 7.7.

#### Capital contributions and vested assets

Our forecast expenditure includes assets that are partially funded by capital contributions. Where assets are forecast to be partially funded by capital contributions forecast expenditure for the asset is determined net of the capital contribution.

Our forecast does not include any value for vested assets that exceeds the amount of consideration provided or forecast to be provided by Aurora.

The treatment is consistent with clause 5.3.11(1)(h) and (i).

#### Innovation project allowance

We have not forecast any innovation project allowance therefore clause 5.3.11(1)(k) does not apply.

#### Internal cost capitalisation

Section 6.5 outlines how internal costs that are forecast to be capitalised are excluded from our operating expenditure forecasts.

Our forecast capital expenditure does not distinguish between internally or externally sourced resources. Where internal capitalised costs are not sufficient to meet forecast capital project requirements, we complement the internal resources with external resources.

Complementing internal resources with external resources is aligned with how we have historically managed our resourcing requirements. With capital projects requirements increasing over the forecast period we are comfortable there is more than sufficient scope for internal costs excluded from operational expenditure to be capitalised.

### 7.1.2 Right of use assets

To accommodate the change in accounting treatment of operating leases, as outlined in section 6.2:

- Operating lease payments are disclosed as forecast operating expenditure in the analysis of expenditure (consistent with historical treatment); and

- Operating lease payments are removed from operating expenditure and the right of use asset is treated as capital expenditure in the BBAR model prior to the determination of allowable revenue (consistent with the new accounting treatment).

Table 7.2 outlines the net effect of the adjustment to our capital expenditure forecasts. As outlined in section 6.2, the value of the commissioned asset is the present value of the lease payments.

**Table 7.2: Right-of-use asset adjustment**

REAL RY20 \$M	RY20	RY21	RY22	RY23	RY24	RY25	RY26
Capital expenditure - expenditure analysis	54.7	65.7	72.5	78.1	77.1	68.5	60.1
Right of use asset adjustment	4.9	0.1	0.5	0.3	0.5	0.1	-
<b>Capital expenditure - BBAR</b>	<b>59.6</b>	<b>65.9</b>	<b>73.0</b>	<b>78.3</b>	<b>77.5</b>	<b>68.6</b>	<b>60.1</b>

### 7.1.3 Asset allocation – assets commissioned during forecast period

We are not forecasting any capital expenditure other than what is directly attributable to the regulated portion of our business.

### 7.1.4 Cost escalation – capital expenditure

Our capital expenditure forecasts are prepared in RY20 real dollars so expenditure is comparable over time. Real dollar forecasts exclude the forecast impact of input cost increases.

Real expenditure forecasts are escalated to nominal dollar values using cost escalators. Accordingly, nominal dollar values are the forecast expenditure expected to be incurred after taking into account forecast input cost increases.

The real RY20 and nominal dollar forecasts included in the BBAR are outlined in Table 7.3.

**Table 7.3: Cost escalation**

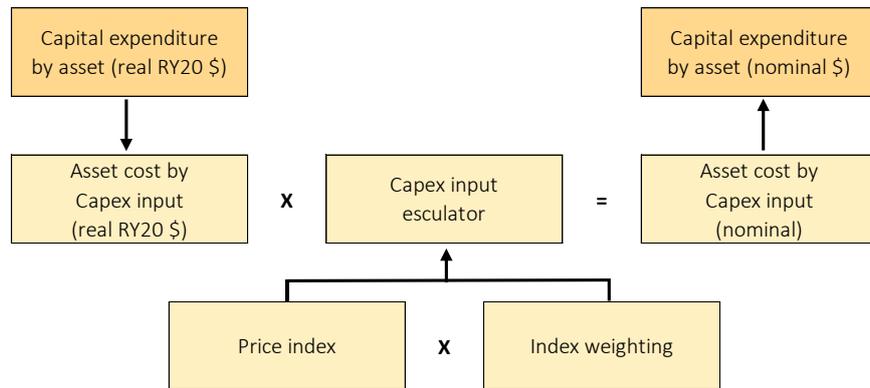
\$M	RY20	RY21	RY22	RY23	RY24	RY25	RY26
Capital expenditure - real RY20	59.6	65.9	73.0	78.3	77.5	68.6	60.1
Escalation	-	1.4	2.9	4.9	6.3	6.7	7.3
<b>Capital expenditure - nominal</b>	<b>59.6</b>	<b>67.3</b>	<b>75.9</b>	<b>83.2</b>	<b>83.8</b>	<b>75.4</b>	<b>67.5</b>

The cost escalators applied in our forecast are determined from independently forecast price indices.

#### Approach to escalation

We escalate real expenditure by applying weighted average price escalators to asset types through the application of Capex input escalators. The weighted average price escalator is determined from the independently determined price indices and forecast cost weightings.

Figure 7.1: Approach to capital expenditure cost escalation



Our approach to price escalation is based on the approaches applied and accepted by the Commission in the Powerco and Orion CPP proposals. As noted in the Powerco CPP proposal, the applied approach is based on approaches applied internationally.<sup>10</sup>

The Commission stated in its final Orion CPP determination that, overall, they considered this approach to be appropriate.<sup>11</sup>

#### Independently determined price indices

We engaged Sapere Research Group (Sapere) to independently determine price indices for the cost escalation applied in our forecasts.

The price indices applied in the escalation forecast capital expenditure are outlined in table 7.4.

Table 7.4: Sapere Capital expenditure forecast price indices

%	CURRENCY	RY20	RY21	RY22	RY23	RY24	RY25	RY26
Aluminium	USD	(0.4%)	2.3%	2.2%	2.3%	2.2%	2.3%	2.4%
Copper	USD	1.1%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%
Steel	USD	(0.5%)	(1.5%)	(1.5%)	(1.5%)	(1.4%)	(1.6%)	(1.4%)
Other capital goods	NZD	2.6%	2.3%	2.1%	2.0%	1.9%	1.9%	2.0%
Engineers	NZD	2.1%	2.5%	2.0%	2.4%	2.7%	2.1%	2.0%
Professional	NZD	2.5%	2.2%	1.8%	2.2%	2.4%	1.9%	1.7%
Project managers	NZD	2.1%	2.5%	2.0%	2.4%	2.7%	2.1%	2.0%
IT labour costs	NZD	2.1%	2.5%	2.0%	2.4%	2.7%	2.1%	2.0%
Capex labour	NZD	2.1%	2.6%	2.2%	2.6%	2.8%	2.3%	2.2%

US dollar based forecasts are converted to NZ dollars by applying a forecast exchange rate. The forecast exchange rates applied by Sapere are outlined in table 7.5.

<sup>10</sup> Powerco, Customised price-quality path (CPP) Financial and modelling information, 12 June 2017, Section 6.4.7

<sup>11</sup> Commerce Commission Final decision for Setting the customised price-quality path for Orion New Zealand Limited [2013] NZCC 21, 29 November 2013, Paragraph N27

**Table 7.5: Forecast NZD/USD exchange rate**

	Ry20	Ry21	Ry22	Ry23	Ry24	Ry25	Ry26
Forecast NZD/USD exchange rate	0.6436	0.6436	0.6436	0.6436	0.6436	0.6436	0.6436

### Cost escalator weightings

The price indices are applied to capex cost input escalators by applying cost escalator weightings. The cost escalator weightings are a management judgement derived from our review of cost escalator weightings applied in Powerco and Orion’s CPP proposals.

The cost escalator weightings applied in our escalation calculation are outlined in table 7.6.

**Table 7.6: Cost escalator weightings**

CAPEX INPUT ESCALATOR	INDEX	WEIGHTING
Labour	Capex labour	85%
	Project managers	4%
	Professional	4%
	IT labour costs	4%
	Engineers	4%
Cables	Aluminium	95%
	Copper	5%
Conductor	Aluminium	100%
Transformers	Steel	45%
	Copper	50%
	Other capital goods	5%
Switchgear	Copper	75%
	Steel	25%
Other	Other capital goods	100%

The capex input cost escalator is then applied to forecast expenditure by input component. Expenditure by input component is determined based on management allocation assumptions as outlined in Table 7.7.

**Table 7.7: Input components**

IM ASSET CATEGORY	LABOUR	CABLES	CONDUCTOR	TRANSFORMERS	SWITCHGEAR	OTHER
Support structures - all	50%					50%
Power transformers	40%			60%		
Indoor switchgear	40%				60%	
Outdoor switchgear	20%				80%	
Buildings and grounds	50%					50%

IM ASSET CATEGORY	LABOUR	CABLES	CONDUCTOR	TRANSFORMERS	SWITCHGEAR	OTHER
Ancillary zone substation equipment - 22. Ripple injection plant	40%					60%
Ancillary zone substation equipment - 24. Zone substations other Items	50%					50%
Ground mounted switchgear	20%				80%	
Pole mounted switches - 31. 22 / 11 kV disconnecter 3ph, 2ph (Excl pole)	20%					80%
Pole mounted switches - 32. 22 / 11 kV load break switch (Excl Pole)	40%					60%
Reclosers and sectionalisers - 34. 22 / 11 kV Sectionaliser or recloser (Excl pole)	40%					60%
Pole mount fuses - 33. 22 / 11 kV dropout fuse 3ph, 2ph (Excl pole)	50%					50%
Low voltage enclosures	50%					50%
Ancillary distribution substation equipment	50%					50%
Distribution transformers - all	20%			80%		
Secondary systems - all	80%					20%
Cables - HV	70%	30%				
Cables - LV	60%	40%				
Overhead conductors - all	80%		20%			
Other network assets - all						100%
Non-network assets - all						100%

### 7.1.5 Capitalisation timing assumptions

The capitalisation timing assumptions are used to determine interest during construction, annual commissioned assets value and year end works under construction balances.

We use two approaches for applying capitalisation timing assumptions, being specific date commissioning and simple commissioning.

#### Specific date commissioning

Specific date commissioning is applied to portfolios that include projects with a value greater than \$500k and that have non-uniform forecast commissioning periods. For specific date commissioning portfolios we apply specific dates for commissioning which generally aligns to the year of the final expenditure on each project.

The specific date commissioning portfolios are:

- subtransmission cables
- zone substations
- growth - major projects
- specific ICT projects

### Simple commissioning

Simple commissioning is applied to all other portfolios. Simple commissioning modelling assumes projects within each portfolio have a uniform commissioning period.

The modelling determines the value of commissioned assets as the value of capital expenditure with adjustments for changes in opening and closing works under construction. Section 7.3.7 outlines how closing works under construction balances are forecast.

### 7.1.6 Cost of financing

We apply a cost of financing to capital projects in accordance with GAAP. Our capitalisation policy is to capitalise interest only on projects that take longer than 12 months to construct and have a project value greater than \$250k.

We have forecast capitalised interest by applying the cost of finance to:

- specific date commissioning portfolios; and
- simple commissioning portfolios that have a forecast commissioning period of greater than 12 months.

Section 7.1.5 details how the specific date or simple commissioning approaches are applied to portfolios.

For portfolios where we apply cost of financing, the cost of financing is calculated by applying the forecast financing cost assumption to the opening works under construction balance on a monthly compounding basis.

The forecast borrowing cost is based on our RY20 incremental borrowing cost rate, which is the rate we forecast to incur on funds for our capital expenditure investment. It was determined using principles set out in GAAP.

The total borrowing costs forecast to be capitalised is not forecast to exceed the amount of borrowing costs forecast to be incurred during each of the disclosure years.

Clauses 5.3.11(4)(e) to 5.3.11(4)(i) are not applicable to our CPP proposal as there is no forecast financing costs on capital contributions and no forecast income from assets while they are under construction.

Table 7.8 outlines our forecast financing cost assumption and annual cost of financing.

**Table 7.8: Cost of financing**

\$M – EXCEPT WHERE NOTED	RY20	RY21	RY22	RY23	RY24	RY25	RY26
Forecast borrowing costs (%)	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Cost of financing	0.8	0.9	0.6	0.9	0.7	0.7	0.5

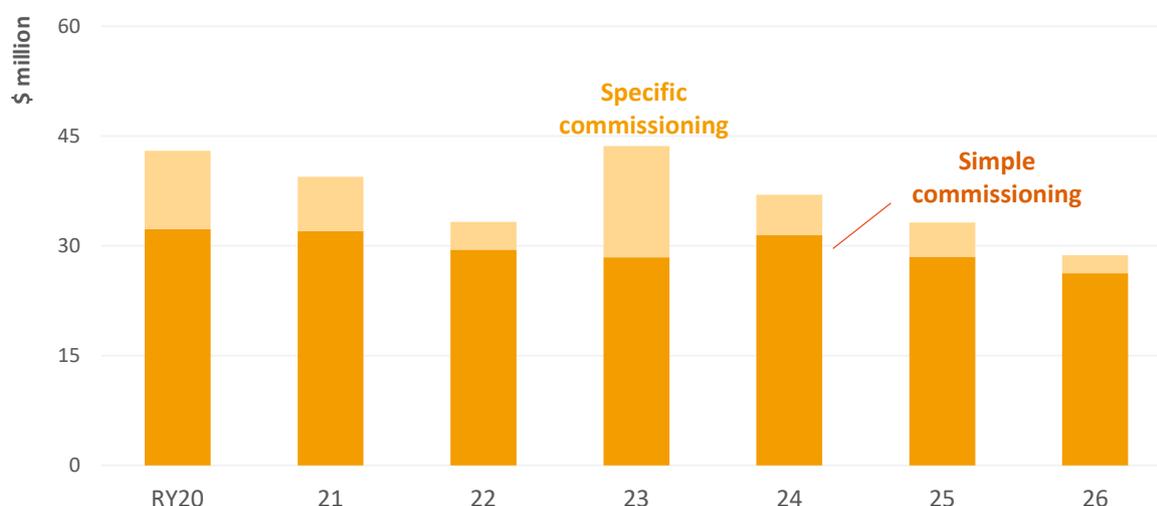
### 7.1.7 Works under construction

As outlined in section 7.1.5 we have applied specific date commissioning and simple commissioning assumptions in the determination of commissioned assets. These commissioning approaches impact the value of commissioned assets and closing works under construction.

Our modelling also considers the relationship between the value of capital expenditure in each year with the value of closing works under construction, whereby the closing value of works under construction is determined in relation to the value of forecast capital expenditure in each year. This is referred to as the closing works under construction ratio.

Figure 7.2 demonstrates the impact of the commissioning approaches and works under construction ratios have on the works under construction balances for the forecast period.

Figure 7.2: Works under construction closing balances



Movements in the specific date commissioning works under construction reflects the timing of the expenditure and commissioning for the projects they relate to.

Movements in the works under construction for simple commissioning portfolios aligns with variations in capital expenditure for those portfolios. We have also applied a reduction in the works under construction ratio to reflect management’s on-going efficiency improvement expectation on capitalisation procedures.

Table 7.9 outlines management’s assumption for the simple commissioning works under construction ratio.

Table 7.9: Simple commissioning works under construction ratio

%	RY20	RY21	RY22	RY23	RY24	RY25	RY26
Simple commissioning works under construction ratio	65.5%	52.8%	40.0%	40.0%	40.0%	40.0%	40.0%

Table 7.10 outlines the movements in the works under construction balance

**Table 7.10: Works under construction**

\$M	Ry20	Ry21	Ry22	Ry23	Ry24	Ry25	Ry26
Opening works under construction	43.3	43.0	39.4	33.2	43.6	37.0	33.2
Capital expenditure	59.6	67.3	75.9	83.2	83.8	75.4	67.5
Cost of financing	0.8	0.9	0.6	0.9	0.7	0.7	0.5
Commissioned assets	60.7	71.8	82.7	73.7	91.3	79.8	72.5
<b>Closing Works under construction</b>	<b>43.0</b>	<b>39.4</b>	<b>33.2</b>	<b>43.6</b>	<b>37.0</b>	<b>33.2</b>	<b>28.7</b>

Capital expenditure and works under construction amounts disclosed in this report are net of capital contributions. Appendix G of the Application provides an overview of the value and forecast approach of capital contributions.

## 7.2 RAB ROLL-FORWARD

The forecast RAB and its roll-forward components for the Next period are outlined in table 7.11 below.

**Table 7.11 RAB roll-forward**

\$M	Ry20	Ry21	Ry22	Ry23	Ry24	Ry25	Ry26
Opening RAB	447.1	497.7	559.5	632.0	694.8	774.6	842.1
Commissioned assets	60.7	71.8	82.7	73.7	91.3	79.8	72.5
Depreciation	(16.8)	(18.8)	(20.7)	(23.0)	(24.9)	(27.3)	(29.5)
Revaluations	7.6	9.4	11.2	12.6	13.9	15.5	16.8
Disposals	(0.8)	(0.7)	(0.6)	(0.5)	(0.4)	(0.4)	(0.5)
<b>Closing RAB</b>	<b>497.7</b>	<b>559.5</b>	<b>632.0</b>	<b>694.8</b>	<b>774.6</b>	<b>842.1</b>	<b>901.4</b>

Descriptions of each of the RAB roll-forward components are outlined in the remainder of this chapter.

## 7.3 OPENING RAB VALUE

The opening RAB value for the start of the forecast period, being the RAB value as at 1 April 2019, is the closing RAB value from the most recent disclosures made consistent with the information disclosure requirements. The opening RAB values for each of the remaining disclosure years of the next period are the closing RAB value of the previous forecast year.

### 7.3.1 Asset allocations – existing assets

Our opening RAB value includes a portion of the value of assets that are shared between the regulated and non-regulated portion of our business. The portion included in the opening RAB value represents the value of shared assets that relate to our regulated business and has been determined consistent with the information disclosure requirements as they applied for Ry19.

In accordance with IM clause 5.3.6 the asset allocation ratios applied in allocating existing shared assets throughout the forecast period are the ratios we used to determine the Ry19 RAB values. As outlined

in section 7.1.3, we are not forecasting to acquire any assets during the forecast period that are not directly attributable to our regulated business.

The assets that are shared between our regulated and non-regulated businesses are IT and office equipment assets. The value of our existing shared assets allocated to the regulated business is \$0.6m and represents 0.1% of our RAB as at 31 March 2019.

In applying the regulatory requirements in determining our allocations for the RY19 disclosure, we note that:

- we applied the information disclosure cost allocation input methodologies, being IM clauses 2.1.2-2.1.5;
- we elected to apply the accounting-based allocation approach (ABAA);
- consistent with the IMs we have applied labour hours as a causal allocator;
- the values allocated to regulated services do not exceed the total regulated services asset values.

In accordance with the IM clause 5.4.9 and our requested modification Tables 1 and 2 of Schedule B have been provided for the RY19 year.

The Table 5 disclosure notes that no proxy allocators have been applied.

We also confirm:

- no material sales of assets are expected, between the start of the assessment period and the date of the CPP application. We are confident this is highly improbable. Accordingly there have not been any changes to cost allocators as a result – as per IM clause 5.3.5(2); and
- no alternative methodologies with equivalent effect have been applied for asset allocation and accordingly there is no asset allocation disclosure made consistent with clause 5.3.26.

## 7.4 DEPRECIATION

Depreciation is an annual deduction from the RAB value. It is also part of the building blocks allowable revenue calculation.

Depreciation is based on the value and expected useful lives of existing assets and assets commissioned during the forecast period. Assets commissioned during the forecast period are depreciated using a straight line depreciation methodology and the asset lives set out in Schedule A Table A.2 of the IMs. Existing assets are depreciated in accordance with their remaining lives as at 31 March 2019.

Depreciation for the forecast period is detailed in Table 7.12.

**Table 7.12: Depreciation by asset category**

\$M	RY20	RY21	RY22	RY23	RY24	RY25	RY26
Subtransmission lines	0.7	0.7	0.8	1.0	1.2	1.3	1.4
Subtransmission cables	0.5	0.5	0.7	0.7	0.7	0.9	0.9
Zone substations	3.2	3.4	3.8	4.2	4.5	4.9	5.5
Distribution and LV lines	3.9	4.3	4.7	5.3	5.9	6.5	7.1
Distribution and LV cables	4.3	4.5	4.6	4.8	5.0	5.2	5.5

\$M	RY20	RY21	RY22	RY23	RY24	RY25	RY26
Distribution substations and transformers	2.0	2.2	2.3	2.5	2.8	3.0	3.3
Distribution switchgear	1.2	1.4	1.5	1.7	1.9	2.0	2.3
Other network assets	0.8	1.1	1.1	1.2	1.2	1.3	1.3
Non-network assets	0.2	0.8	1.1	1.6	1.8	2.0	2.3
<b>Total depreciation</b>	<b>16.8</b>	<b>18.8</b>	<b>20.7</b>	<b>23.0</b>	<b>24.9</b>	<b>27.3</b>	<b>29.5</b>

No alternative depreciation methodologies have been applied.

#### Land and easements

In accordance with clause 5.3.7(3) of the IMs no depreciation is calculated on land and easements, other than for fixed life easements.

#### Network spares

In accordance with clause 5.3.7(3) of the IMs, network spares have been depreciated after GAAP depreciation commenced. As no spares are forecast to be acquired during the Next Period, this constraint does not apply to additional CPP assets.

#### Unallocated depreciation constraint

In accordance with clause 5.3.9 of the IMs, depreciation for each asset group is calculated in such a way that total depreciation over time does not exceed the sum of total revaluation and either the initial RAB value or commissioned asset value.

## 7.5 REVALUATIONS

Revaluations are an annual addition to the RAB value and form part of the building blocks allowable revenue calculation. The value of the revaluations is determined in accordance with clause 5.3.10 of the IMs.

Clause 5.3.10 requires the opening RAB to be revalued each year by applying the CPP revaluation rate. Assets which have reached their physical asset life, are disposed of or lost are not revalued.

The revaluation is derived in accordance with the formula set out in clause 5.3.10(4) of the IMs and determined using the CPI published in Monetary Policy Statements issued by the Reserve Bank of New Zealand.

Table 7.13 outlines the revaluation rate and resulting revaluation amount included in the building blocks calculation.

Table 7.13: Revaluations

\$M – EXCEPT WHERE NOTED	RY20	RY21	RY22	RY23	RY24	RY25	RY26
Revaluation rate (%)	1.7%	1.9%	2.0%	2.0%	2.0%	2.0%	2.0%
Revaluations	7.6	9.4	11.2	12.6	13.9	15.5	16.8

## 7.6 ASSET DISPOSALS

Disposed assets are assets which are sold or transferred, and accordingly their asset values are removed from the RAB. The forecast value of asset disposals during the forecast period is outlined in table 7.14.

**Table 7.14: Asset disposals**

\$M	RY20	RY21	RY22	RY23	RY24	RY25	RY26
Asset disposals	0.8	0.7	0.6	0.5	0.4	0.4	0.5

Asset disposals are forecast using a base-step-trend approach using RY19 as the base year. The forecast then assumes a reduction in the level of asset disposals during the first four years of the forecast as our pole replacement programme reduces.

No assets that are forecast to be sold are directly attributable to regulated business. Accordingly, the forecast asset disposal amount is both the allocated and unallocated amounts.

No assets are forecast to be sold to a related party or transferred to another part of the EDB.

## 7.7 RELATED PARTY TRANSACTIONS

This section outlines the capital expenditure related party transactions we are forecasting to incur during the forecast period.

All our expenditure forecasts have been prepared based on the needs of the business with reference to the market value of our business's input requirements. In some instances, the forecasted costs will be incurred through parties that are related to us.

Table 7.15 outlines the value of capital expenditure we are contracted to acquire through related parties during the forecast period. We may from time to time in the normal course of business operations also acquire other capital expenditure services from related parties.

**Table 7.15: Forecast capital expenditure related party transactions**

\$M	RY20	RY21	RY22	RY23	RY24	RY25	RY26
Capital expenditure – related party transactions	17.1	12.9	12.4	12.9	13.0	-	-

Section 6.4 also outlines how in 2018 we restructured our procurement of services to increase contestability, including services that had predominantly been provided by Delta.

### Value of related party transactions

The forecast values of the related party transactions outlined in table 7.15 were established by applying the forecast approaches described for each portfolio in the Application.

We have certified that the values of our capital expenditure related party transactions are no greater than an arm's length transaction value and meet other related party transaction IM requirements on the basis that forecasts are either:

- based on unit rates that represent market values; or

- determined using a base-step-trend forecast approach.

Our Price x Quantity forecasts are based on actual cost data from historical projects and standard industry markets rates. We also engaged a third party to conduct a review of our pricebook by developing its own independent view of unit costs based on engineering estimates, review of other electricity distribution networks' cost information and budgetary equipment prices from manufacturers.

Historical capital expenditure related party values relied on to determine base-step-trend capital expenditure forecasts have been audited and found to be compliant with the IM transaction value requirements in our RY19 Information Disclosure<sup>12</sup> or the subsequent Independent Reasonable Assurance Report.<sup>13</sup>

#### Related party transaction disclosure requirements

Appendix B outlines information on historical related party transactions and our process for procuring those services.

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<sup>12</sup> <https://www.auroraenergy.co.nz/assets/publication-articles/2019-Information-Disclosures.pdf> page 81-84.

<sup>13</sup> KPMG, Independent Reasonable Assurance Report to the Directors of Aurora Energy Limited and the New Zealand Commerce Commission, 7 May 2020.

# 8 REGULATORY TAX ALLOWANCE

## Key messages

- The regulatory tax allowance is an allowance for the tax expense we are expected to incur
- It is determined based on a calculation prescribed in the IMs. The main driver is forecast regulated profit derived from forecast revenues and expenses as outlined earlier in this document
- The regulatory tax calculation also requires forecasts for such things as temporary and permanent differences in taxable income. Where such forecasts are required, we have generally applied a base-step-trend forecast approach

The regulatory tax allowance is the tax expense we would be expected to incur if the regulated business was a stand-alone taxable entity. Accordingly it is determined based on regulated profit/(loss) and adjusted for permanent differences and other regulatory tax adjustments.

Table 8.1 outlines the regulatory tax allowance calculation and includes references to where each part of the calculation is discussed in the chapter.

**Table 8.1: Regulatory tax allowance calculation**

\$M EXCEPT AS NOTED	RY22	RY23	RY24	RY25	RY26	REFERENCE
Regulatory profit/(loss) before tax	19.8	21.6	23.9	26.0	27.7	Section 8.1
Regulatory tax adjustments	(0.8)	(1.1)	(1.2)	(1.2)	(1.3)	Section 8.3
<b>Regulatory taxable income</b>	<b>19.0</b>	<b>20.5</b>	<b>22.8</b>	<b>24.9</b>	<b>26.4</b>	
Utilised tax losses	-	-	-	-	-	Section 8.4
<b>Regulatory net taxable income</b>	<b>19.0</b>	<b>20.5</b>	<b>22.8</b>	<b>24.9</b>	<b>26.4</b>	
Corporate tax rate (5)	28.0%	28.0%	28.0%	28.0%	28.0%	Section 8.5
<b>Regulatory tax allowance</b>	<b>5.3</b>	<b>5.7</b>	<b>6.4</b>	<b>7.0</b>	<b>7.4</b>	

Regulatory taxable income is defined in clause 5.3.13(3) of the IMs.

*Regulatory profit / (loss) before tax + permanent differences + regulatory tax adjustments*

Regulatory net taxable income is defined in clause 5.3.13(2) of the IMs.

*Regulatory taxable income – utilised tax losses*

Forecast regulatory tax allowance is defined in clause 5.3.13(1) of the IMs.

*Forecast regulatory tax allowance is, where regulatory net taxable income is-*

*(a) nil or a positive number, the tax effect of regulatory net taxable income; and*

*(b) a negative number, nil*

Section 8.6 of this chapter also discusses the deferred tax balance, which is included in the RIV and forms part of the return on capital calculation.

## 8.1 REGULATORY PROFIT/(LOSS) BEFORE TAX

The regulatory profit / (loss) is determined from the forecast revenue and expenses as outlined earlier in this document.

Regulatory profit / (loss) before tax is defined in clause 5.3.13(4) of the IMs.

*Building blocks allowable revenue before tax – operating expenditure – total depreciation*

Table 8.2 outlines the regulatory profit / (loss) calculation and references where each of the components are discussed in the document.

**Table 8.2: Regulatory profit / (loss) before tax**

\$M	RY22	RY23	RY24	RY25	RY26	REFERENCE
BBAR before tax	93.3	100.5	103.2	107.4	111.9	Chapter 5
Operating expenditure	52.8	55.9	54.3	54.1	54.6	Chapter 6
Total depreciation	20.7	23.0	24.9	27.3	29.5	Chapter 7
<b>Regulatory profit/(loss) before tax</b>	<b>19.8</b>	<b>21.6</b>	<b>23.9</b>	<b>26.0</b>	<b>27.7</b>	

Clause 5.4.19 requires forecast tax information relating to ‘other regulated income’ to be provided for each year of the CPP period. We have sought and the Commission has approved an exemption on the basis that other regulated income is not a part of the regulatory tax allowance calculation and it is not forecast as part of the CPP BBAR.

## 8.2 PERMANENT DIFFERENCES

Permanent differences account for differences between regulatory profit and regulatory taxable income that are not timing differences.

Forecast permanent differences for the forecast period are presented in table 8.3.

**Table 8.3: Permanent differences**

\$M	RY22	RY23	RY24	RY25	RY26
Non-deductible entertainment	0.0	0.0	0.0	0.0	0.0
<b>Positive permanent differences</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
Lease payments	1.4	1.4	1.2	0.9	0.9
ROU asset depreciation/ revaluation	(0.2)	(0.3)	(0.3)	(0.3)	(0.4)
<b>Negative permanent differences</b>	<b>1.2</b>	<b>1.2</b>	<b>0.9</b>	<b>0.5</b>	<b>0.5</b>
Discretionary discounts and customer rebates	-	-	-	-	-
<b>Permanent differences</b>	<b>(1.2)</b>	<b>(1.1)</b>	<b>(0.9)</b>	<b>(0.5)</b>	<b>(0.5)</b>

Positive permanent differences comprises non-deductible entertainment. These are forecast using a base-step-trend forecast approach. We have not forecast an adjustment to the base year assumption and have escalated the base year by CPI.

Negative permanent differences comprise operating leases and ROU assets. It reflects the difference between operating lease payments (deductible but not included in regulatory profit) and the regulatory depreciation/revaluation of ROU assets (included in regulatory profit but not taxable or deductible). Operating lease payments are derived from our forecasts, and regulatory depreciation/revaluation is calculated in accordance with the method described in Section 7.

Aurora does not have any discretionary discounts or customer rebates, and is not forecasting to have any during the CPP period.

## 8.3 REGULATORY TAX ADJUSTMENTS

Regulatory tax adjustments are defined in clause 5.3.16 of the IMs.

*Amortisation of initial differences in asset values + amortisation of revaluations – notional deductible interest*

Each of the regulatory tax adjustment components are discussed below.

### 8.3.1 Amortisation of initial differences in asset values

Amortisation of initial differences in asset values adjusts the regulatory tax expense for the effect of initial differences between the sum of the initial RAB values and the sum of the regulatory tax asset values as at 1 April 2009.

Forecast amortisation of initial differences in asset values for the forecast period is presented in Table 8.4.

**Table 8.4: Amortisation of initial differences in asset values**

\$M	RY20	RY21	RY22	RY23	RY24	RY25	RY26
Opening unamortised balance	89.2	84.1	79.0	73.9	68.9	63.9	58.9
<b>Amortisation of initial difference</b>	<b>4.8</b>	<b>4.9</b>	<b>4.9</b>	<b>4.9</b>	<b>4.9</b>	<b>4.9</b>	<b>4.9</b>
Average weighted remaining useful life	17.9	16.9	15.9	14.9	13.9	12.9	11.9

The value of amortisation of initial differences in asset values is determined in accordance with the calculation prescribed in clause 5.3.17 of the IMs. The input assumptions are the amortised opening initial difference and the weighted average remaining life of relevant assets. The opening weighted average remaining life of 26 years was determined at 1 April 2009 and reduces by 1 each year.

The amortisation roll-forward also includes a minor adjustment for the effect of asset disposals. This is forecast consistent with the disposals forecast (section 7.6).

Clause 5.4.22(1) requires the opening unamortised balance of the initial difference in asset values to be disclosed by asset category. We have requested and the Commission has approved an exemption to allow us to disclose the total aggregated opening unamortised balance. As per IM clause 5.3.17, the annual roll-forward is derived at an aggregate level, rather than being built up from asset-level information.

Determining values by asset category would require an allocation of the aggregate opening balance each year. This would be costly and add complexity. The Commission determined that disclosing the aggregated total would not detract, to an extent that is more than minor, from the Commission’s evaluation or determination of the CPP proposal or the ability of interested persons to consider and provide their views on the CPP proposal.

### 8.3.2 Amortisation of revaluations

Forecast amortisation of revaluations for the forecast period are presented in table 8.5

Table 8.5: Forecast amortisation of revaluations

\$M	RY22	RY23	RY24	RY25	RY26
Total depreciation	20.7	23.0	24.9	27.3	29.5
Adjusted depreciation	18.4	20.3	21.7	23.6	25.2
<b>Amortisation of revaluations</b>	<b>2.3</b>	<b>2.8</b>	<b>3.2</b>	<b>3.8</b>	<b>4.3</b>

Amortisation of revaluations reflects the difference between RAB depreciation and adjusted depreciation. Adjusted depreciation is defined as total depreciation for all assets, calculated as if no amount of revaluation is included in the calculation of any opening RAB value following the determination of the initial RAB.

RAB depreciation is described in section 7.4. Adjusted depreciation is calculated on the same basis but with no revaluations included in the asset value.

We have sought and the Commission has approved an exemption to IM clause 5.4.23 which requires disclosure of information about the unamortised balance of revaluations. As per IM clause 5.3.18, amortisation of revaluations is calculated as the difference between adjusted depreciation and tax depreciation. There is no annual unamortised balance created. An average weighted remaining useful life is not available and is not used in deriving this amount therefore the information cannot be provided.

### 8.3.3 Notional deductible interest

Notional deductible interest adjusts regulated profit/(loss) before tax for deductible interest we are assumed to incur and therefore are assumed to receive a deduction for.

Notional deductible interest is defined in clause 5.3.16(2).

$$(((\text{regulatory investment value} + \text{RAB proportionate investment}) \times \text{leverage} \times \text{cost of debt}) + \text{TCS D}) / \sqrt{1 + \text{cost of debt}}$$

Table 8.6 outlines the notional deductible interest calculation for the forecast period and includes references to where inputs to the calculation have been discussed in this report.

**Table 8.6: Notional deductible interest**

\$M	RY22	RY23	RY24	RY25	RY26	REFERENCE
Regulatory investment value	531.4	599.3	656.9	731.3	793.3	Section 5.2
RAB proportionate investment	41.2	36.7	45.5	39.8	36.1	Financial model
Leverage (%)	42.0%	42.0%	42.0%	42.0%	42.0%	Section 8.3.3
Cost of debt (%)	2.9%	2.9%	2.9%	2.9%	2.9%	Section 8.3.3
TCS D	-	-	-	-	-	Section 9.1
<b>Notional deductible interest</b>	<b>6.9</b>	<b>7.7</b>	<b>8.5</b>	<b>9.3</b>	<b>10.0</b>	

The leverage assumption used is consistent with clause 2.4.2(1) of the IMs.

The cost of debt assumption is consistent with the cost of debt used in the DPP determination for the same period.

## 8.4 TAX LOSSES

There are no opening or current period tax losses and we have not forecast any tax losses during the forecast period.

## 8.5 CORPORATE TAX RATE

The regulatory tax calculation uses a corporate tax rate of 28% for all years for the forecast consistent with the definition of corporate tax rate as specified in clause 1.1.4 of the IMs.

## 8.6 DEFERRED TAX

Deferred tax accounts for the value of timing differences in regulatory profits compared to regulatory taxable income. The deferred tax balance is included in the determination of RIV which is discussed further in section 5.2.

Consistent with clause 5.3.19(2) the deferred tax roll-forward for each year of the forecast period is outlined in table 8.7 and includes references to where each component is discussed in this chapter.

**Table 8.7: Deferred tax roll-forward**

\$M	RY20	RY21	RY22	RY23	RY24	RY25	RY26	REFERENCE
Opening deferred tax	(20.3)	(24.4)	(28.0)	(32.6)	(37.8)	(43.3)	(48.8)	
ROU assets adjustment	(1.4)	(0.0)	(0.1)	(0.1)	(0.1)	(0.0)	-	Section 6.2
less: tax effect of amortisation of initial difference in asset values	1.4	1.4	1.4	1.4	1.4	1.4	1.4	Section 8.3.1
less: deferred tax balance relating to asset disposals	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	Section 8.6.3
add: tax effect of depreciation temporary differences	(2.8)	(3.5)	(4.7)	(5.3)	(5.7)	(6.0)	(6.3)	Section 8.6.1
add: tax effect of positive temporary differences	1.3	1.4	1.5	1.6	1.7	1.9	2.0	Section 8.6.2

\$M	RY20	RY21	RY22	RY23	RY24	RY25	RY26	REFERENCE
add: tax effect of negative temporary differences	-	-	-	-	-	-	-	Section 8.6.2
<b>Closing deferred tax</b>	<b>(24.4)</b>	<b>(28.0)</b>	<b>(32.6)</b>	<b>(37.8)</b>	<b>(43.3)</b>	<b>(48.8)</b>	<b>(54.5)</b>	

### 8.6.1 Depreciation temporary differences

The tax effect of depreciation temporary differences is the tax effect of the difference between the adjusted depreciation (regulatory depreciation excluding revaluations) and tax depreciation.

### 8.6.2 Other temporary differences

Forecast temporary differences other than depreciation temporary differences for the forecast period and their tax effect are outlined in table 8.8.

Table 8.8: Temporary differences

\$M	RY22	RY23	RY24	RY25	RY26
Deferred Tax impact of CIW Income	5.3	5.6	6.1	6.6	7.1
Doubtful Debt Provision	0.0	0.0	0.0	0.0	0.0
Employee Entitlements & Provisions	0.0	0.0	0.0	0.0	0.0
<b>Positive temporary differences</b>	<b>5.3</b>	<b>5.7</b>	<b>6.1</b>	<b>6.6</b>	<b>7.2</b>
multiplied by the corporate tax rate	28%	28%	28%	28%	28%
<b>Tax effect of positive temporary differences</b>	<b>1.5</b>	<b>1.6</b>	<b>1.7</b>	<b>1.9</b>	<b>2.0</b>
Negative temporary differences	-	-	-	-	-
<b>Tax effect of negative temporary differences</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

There are three positive temporary differences, which arise from timing differences between regulatory profit and taxable profit. These differences are temporary in that they are a reversal of a difference in a prior disclosure year, or are forecast to reverse in a subsequent disclosure year.

The three items relate to:

- capital contributions amortisation;
- doubtful debt provision; and
- employee entitlements and provisions.

The capital contribution amortisation is forecast based on the forecast of commissioned assets and capital contributions. It reflects the spread of forecast capital contributions over 10 years.

The other two differences are forecast using a base-step-trend approach. RY19 is used as the base year, and escalated at CPI.

Consistent with historical disclosures, there are no negative temporary differences forecast during the forecast period.

### 8.6.3 Regulatory tax asset values

The primary purpose of the regulatory tax asset value forecast is to determine tax depreciation which is applied in the roll-forward of the deferred tax balance.

The regulatory tax asset value roll-forward for the forecast period is outlined in table 8.9.

**Table 8.9: Regulatory tax asset values roll-forward**

\$M	RY20	RY21	RY22	RY23	RY24	RY25	RY26
Opening regulatory tax asset value	267.2	303.3	354.6	408.8	449.3	505.6	549.1
less: Regulatory tax value of disposals	0.5	0.4	0.4	0.3	0.3	0.3	0.3
add: Regulatory tax value of commissioned assets	61.7	81.2	89.7	80.0	98.5	88.9	83.1
less: Tax depreciation	25.1	29.4	35.1	39.2	41.9	45.1	47.8
add: Change in cost allocation	-	-	-	-	-	-	-
<b>Closing regulatory tax asset value</b>	<b>303.3</b>	<b>354.6</b>	<b>408.8</b>	<b>449.3</b>	<b>505.6</b>	<b>549.1</b>	<b>584.1</b>

The regulatory tax asset value (RTAV) of commissioned assets is consistent with the value of commissioned assets used for the RAB, with two differences:

- capital contributions are not deducted from the regulatory tax value of commissioned assets; and
- there are no ROU assets added to the RTAV in respect of operating leases.

Forecast disposals from RTAV are derived from the forecast RAB disposal values, adjusted pro-rata by the difference between RAB and RTAV each year. Tax depreciation is calculated in accordance with tax legislation using the rates specified by Inland Revenue. Consistent with our approach to calculating income tax, and therefore consistent with the IMs, we use the diminishing value method for determining tax depreciation.

We have sought and the Commission has approved a modification to clause 5.4.26 to allow us to disclose the diminishing value depreciation rate rather than the remaining useful life of assets as assets being depreciated using the diminishing value approach do not have a remaining useful life.

Tax asset values and tax depreciation rates applied are outlined in the CPP Financial Model: Supporting Model – Other.

Consistent with our treatment of asset allocations as outlined in sections 7.2.1 and 7.3.3 we have not applied any change in cost allocations during the forecast period.

### 8.6.4 Tax effect of depreciation temporary differences

The tax effect of depreciation temporary differences is the tax effect of the difference between the adjusted depreciation (regulatory depreciation excluding revaluations) and tax depreciation.

## 9 OTHER COMPONENTS

### 9.1 TIMING ASSUMPTIONS

Timing factors are required by the IMs to be applied within the BBAR calculation to reflect when, on average, forecast income and expenses are deemed to be incurred during the year.

The BAR formula incorporates the following cashflow assumptions:

- $TF_{VCA}$  which is applied to the total value of commissioned assets, and which also incorporates the  $PV_{VCA}$  term;
- $TF_{rev}$  which is applied to the total revaluation building block; and
- $TF$  which is applied to the remaining BBAR building blocks.

Table 9.1 outlines the timing factors included in the BBAR before tax series.

**Table 9.1: Timing factors**

	Ry22	Ry23	Ry24	Ry25	Ry26
$TF_{VCA}$	1.023	1.023	1.023	1.023	1.023
$TF_{rev}$	1.018	1.018	1.018	1.018	1.018
$TF$	1.023	1.023	1.023	1.023	1.023

#### $TF_{VCA}$ and $PV_{VCA}$

$TF_{VCA}$  is the timing factor adjustment term which adjusts the value of commissioned assets to year-end terms. Its value depends on the commissioning dates of the new assets added to the RAB each year.

$TF_{VCA}$  is defined as  $PV_{VCA} \times (1 + \text{cost of capital}) / \text{total value of commissioned assets}$ .  $PV_{VCA}$  is the total value of commissioned assets in year-start terms.

#### $TF_{REV}$

$TF_{REV}$  is the timing factor adjustment term which adjusts revenue to year end terms. It is defined as  $(1 + \text{cost of capital})^{148/365}$ .

#### $TF$

$TF$  is the timing factor adjustment term for all other building block components which converts them to year-end terms. It applies to the TCSD allowance, forecast operating expenditure and regulatory tax building blocks.  $TF$  is defined as  $(1 + \text{cost of capital})^{182/365}$ .

# 10 HISTORICAL DISCLOSURES

Operational and capital expenditure is disclosed in the Application consistent with how we seek to manage our business. We refer to these as portfolios.

Expenditure information consistent with the regulatory expenditure categories is disclosed in the schedules to the CPP Proposal. The two disclosures are consistent in total except for the right-of-use assets adjustment outlined in sections 6.2 and 7.3.2.

The expenditure applied in the BBAR calculation is consistent with the schedules of the CPP Proposal.

The historical expenditure disclosures are consistent with previous information disclosed in accordance with the information disclosure requirements other than:

- a minor adjustment has been made to align historical expenditure disclosures with a revised regulatory treatment of Fire and Emergency Levies;
- some SONS and Business support expenditure has been reclassified to align with our forecast expenditure classifications; and
- historical expenditure has been escalated to real RY20 dollars.

We also note that in RY16 and RY19 we restated historical expenditure previously disclosed.

## Fire and emergency levies adjustment

Historical business support operating expenditure has been adjusted to account for the 26 November 2019 amendment to clause 3.1.3 of the IM Requirements whereby Fire and Emergency levies are now accounted for as a Recoverable cost and therefore not operating expenditure. This adjustment aligns historical disclosures with how forecast expenditure has been prepared.

## Historical expenditure reclassification

Forecast expenditure has been categorised differently to how historical expenditure has typically been allocated between SONS and Business support. We have reclassified a net \$1.5m of RY19 SONS expenditure to business support expenditure to align with our forecast expenditure categorisation.

## Historical expenditure escalation

Historical expenditure has also been escalated to RY20 dollars using the IM specification for the CPP inflation rate as outlined in clause 5.3.4(9) of the IMs.

Table 10.1 outlines the escalation rates and escalation indices applied in escalating historical expenditure.

**Table 10.1: Historical expenditure escalation**

	RY16	RY17	RY18	RY19
CPI inflation rate	0.3%	1.1%	1.6%	1.7%

Historical expenditure disclosed in the Application is in RY20 dollars. Supporting schedules include both nominal and real RY20 dollar disclosures.

#### Previous restatement of historical expenditure

Our RY16 and RY19 Information disclosures, made in accordance with the information disclosure requirements, included a restatement of historical expenditure disclosures.<sup>14</sup> The restatement disclosure was made in accordance with clause 2.12.1 of those requirements.

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<sup>14</sup> <https://www.auroraenergy.co.nz/assets/Disclosures/ID-2016/Information-Disclosure.pdf> pages 58-60  
<https://www.auroraenergy.co.nz/assets/publication-articles/2019-Information-Disclosures.pdf> pages 85-97

# 11 PASS-THROUGH AND RECOVERABLE COSTS

Pass-through and recoverable costs are a regulatory mechanism that allow us to recover costs that are outside of our control or are uncertain in terms of the amount. The Commission has put these costs into two categories. The first category is called ‘pass-through costs’ and the second is called ‘recoverable costs’.

Pass-through costs are those costs that are outside the control of the suppliers and can be passed through to consumers without the Commission needing to undertake any assessment of these costs.

Recoverable costs are not completely outside the control of the supplier and there may be judgement involved as to how much should be passed through. Recoverable costs include such things as regulatory incentives, wash-ups and costs incurred in the development of a CPP proposal.

The regulatory mechanism requires these costs to be added or deducted from our revenue requirement.

## 11.1 HOW DO PASS-THROUGH AND RECOVERABLE COSTS EFFECT PRICES

Pass-through and recoverable costs are included in final prices and are in addition to the required revenue as outlined in Chapter 3.

Pass-through and recoverable costs are typically excluded from revenue requirement discussions due to the uncertainty of amount. This approach is consistent with the Commission’s price setting practices.

## 11.2 PASS-THROUGH AND RECOVERABLE COSTS DISCLOSURE

### 11.2.1 Pass-through costs

Clause 5.4.31 of the IMs requires information on proposed new pass-through costs to be disclosed. We do not propose including in our CPP any new pass-through costs that haven’t already been included in the Commission’s DPP decision.

### 11.2.2 Recoverable costs

Clause 5.4.32 of the IMs requires the disclosure of information of proposed recoverable costs defined in 3.1.3(1)(j) verifier fees, 3.1.3(1)(k) auditor’s costs and 3.1.3(1)(l) fees payable to an engineer.

We have not incurred any fees payable to an engineer for the purpose of meeting a requirement of clause 5.4.12(4)(b).

The recoverable costs we propose for CPP audit and verifier fees is summarised in table 11.1.

Table 11.1: Proposed recoverable costs

RECOVERABLE COST TYPE	RECOVERABLE COST AMOUNT	IM CLAUSE
Verifier fee for CPP proposal	672,238.20	3.1.3(1)(j)
Auditor fee for CPP Proposal	351,577.39	3.1.3(1)(k)

The following information relating to proposed recoverable costs has been provided separately to the Commission:

- RFP documents
- Terms of reference for the work undertaken
- Invoices for services undertaken in respect of the work; and
- Receipts for payments we have made.

Appendix C outlines individual invoices and accruals for the amounts disclosed in Table 11.1.

# APPENDIX A: 5 YEAR CPP DISCLOSURES

Our CPP proposal is based on a 3 year CPP period, being the 3 years beginning 1 April 2021. Accordingly, this paper outlines the financial outcomes based on the 3 year CPP period.

The definition of ‘CPP regulatory period’, as outlined in IM clause 1.1.4(2), also requires us to disclose information for the 5 year CPP period, being the 5 years beginning 1 April 2021.

This appendix discloses information relating to a 5 year CPP period that is different or has not previously been disclosed in this report.

**Table A4.1: Maximum allowable revenue – 5 year CPP period**

\$M	1-APR-21	RY22	RY23	RY24	RY25	RY26
MAR before tax		86.4	94.3	102.9	112.3	122.6
MAR after tax		81.0	88.5	96.5	105.3	115.2

**Table A4.2: Maximum allowable revenue assumptions – 5 year CPP period**

\$M	1-APR-21	RY22	RY23	RY24	RY25	RY26
Discounting assumption - Cost of capital (%)		4.57%	4.57%	4.57%	4.57%	4.57%
PV of MAR after tax	430.8					
CPI (%)			2.0%	2.0%	2.0%	2.0%
X factor (%)			(7.0%)	(7.0%)	(7.0%)	(7.0%)

The difference between a 3 year and 5 CPP relates only to the smoothing of the revenue requirement. All calculations included in the BBAR (pre-smoothing revenue requirement) are consistent between the 3 year and the 5 year CPP period disclosures.

The CPI and discount assumptions applied in the revenue smoothing are required by the IMs to be consistent for both periods.

We do, however, have flexibility in the application of the X factor. The X factor alters the increase in prices during the CPP period. It is provided for in the determination of annual maximum allowable revenues so any necessary increases in revenue can be realised at the beginning of the CPP period, consistently throughout the CPP period, or through any combination of these two allowable methods.

With a 5 year CPP period the required price rise can be spread across a longer period than is possible for a 3 year period.

Consistent with the determination of the X factor for the 3 year CPP period we have taken into account the view of our customer and stakeholders and determined that an X factor of -7% is appropriate. This means there is a small decline in our revenue requirement at the beginning of the CPP period.

# APPENDIX B: RELATED PARTY TRANSACTION DISCLOSURE

## INTRODUCTION

This appendix provides additional information about the services we procure from related parties and the organisations we procure them from. It also provides information on how we have procured the services and determined the terms of procurement. This appendix is in response to the IM clause D12 requirements.

Section B.1 provides details of the related parties that have provided services in RY19 or the assessment period. The table also includes an outline of the services they provided. We are not expecting any additional services to be provided by those parties in the next period. Section B.2 provides further information about services provided by Delta.

## SECTION B1 - OUR RELATED PARTIES AND THE SERVICES THEY PROVIDE

Table B.1 provides details of the related parties that we have had transactions with in RY19 and the assessment period. It also outlines the services they provided and the process we applied for procuring them. The table responds to IM clauses D12(1)–(4). Following the table is further information about the contracting arrangements we have with Delta and our other service providers under Field Services Agreements (FSA).

**Table B.1: Our related parties and the services they provide**

RELATED PARTY NAME AND DESCRIPTION	RELATIONSHIP WITH AURORA	SERVICES UNDERTAKEN IN RY19 AND EXPECTED TO BE PROVIDED IN THE NEXT PERIOD	PROCESS FOR PROCURING SERVICES DURING RY19 AND THE ASSESSMENT PERIOD	BASIS FOR ESTABLISHING FORECAST RELATED PARTY TRANSACTION VALUES	NATURE OF THE CONTRACT FOR ANY PERIODIC SERVICES
<p><b>Delta Utility Services Limited (Delta)</b></p> <p>Delta is a multi-utility services contractor providing a range of electrical and other services to local authority and private sector clients.</p>	<p>Aurora Energy and Delta are related because both companies are wholly owned subsidiaries of Dunedin City Holdings Ltd.</p>	<p>RY19 services are those outlined in table B.2</p> <p>We expect Delta to provide similar services in the assessment and next period</p> <p>No additional services are expected to be provided</p>	<p>We procured services from Delta through:</p> <ul style="list-style-type: none"> <li>- An interim agreement pending negotiation of the FSA</li> <li>- the FSA</li> <li>- customer initiated procurement</li> <li>- tender process</li> </ul>	<p>Related party transaction values were established by applying the forecast approaches described for each portfolio in the Application</p>	<p>The FSA is a periodic agreement. It is discussed in the commentary following this table</p>
<p><b>Dunedin City Holdings Limited (DCHL)</b></p> <p>DCHL owns and provides oversight of its subsidiary and associated companies on behalf of its shareholder, Dunedin City Council.</p>	<p>DCHL is the parent company and shareholder of Aurora Energy.</p>	<p>RY19 services</p> <ul style="list-style-type: none"> <li>- Management services</li> </ul> <p>Forecast expenditure includes provision for management services consistent with RY19</p> <p>No additional services are expected to be provided</p>	<p>Direct procurement</p>	<p>Related party transaction values were established by applying the forecast approaches described for each portfolio in the Application</p>	<p>There is no contract for periodic services</p>
<p><b>Dunedin International Airport Limited (DIAL)</b></p> <p>DIAL operates Dunedin airport.</p>	<p>Aurora Energy and DIAL are related because both companies are subsidiaries of Dunedin City Holdings Ltd.</p>	<p>RY19 services</p> <ul style="list-style-type: none"> <li>- Parking services</li> </ul> <p>Forecast expenditure includes provision for parking fees which we will likely incur through DIAL</p> <p>No additional services are expected to be provided</p>	<p>Direct procurement through DIAL standard terms</p>	<p>Related party transaction values were established by applying the forecast approaches described for each portfolio in the Application</p>	<p>There is no contract for periodic services</p>

RELATED PARTY NAME AND DESCRIPTION	RELATIONSHIP WITH AURORA	SERVICES UNDERTAKEN IN RY19 AND EXPECTED TO BE PROVIDED IN THE NEXT PERIOD	PROCESS FOR PROCURING SERVICES DURING RY19 AND THE ASSESSMENT PERIOD	BASIS FOR ESTABLISHING FORECAST RELATED PARTY TRANSACTION VALUES	NATURE OF THE CONTRACT FOR ANY PERIODIC SERVICES
<b>Dunedin Venues Management Limited (DVML)</b> DVML sources and secures events and facilitates community access to venues.	Aurora Energy and DVML are related because both companies are wholly owned subsidiaries of Dunedin City Holdings Ltd.	RY19 services - Venue hire services Forecast expenditure includes provision for venue hire services but we may not incur these services through DVML No additional services are expected to be provided	Consistent with our purchasing policy	Related party transaction values were established by applying the forecast approaches described for each portfolio in the Application	There is no contract for periodic services

Historically, Delta undertook both asset management and service provider roles on behalf of Aurora Energy, the asset owner. Following an independent review in early 2017, our shareholder, DCHL, sought formal separation of the two businesses. From 1 July 2017, Aurora Energy became a standalone regulated asset owner and manager, with accountability for providing electricity distribution services.

#### New arrangements with improved contestability between multiple suppliers

The separation reinforces that Aurora Energy has a clear responsibility to seek the best available services from the market on behalf of its customers. In order to achieve this we have negotiated 3 new performance based field service delivery contracts with Unison Contracting based in Dunedin, Connetics based in Central Otago and Delta which operates in both Dunedin and Central Otago. Our new FSA contracts with Unison Contracting, Connetics and Delta all took effect from 1 April 2019.

Each of the FSAs was established with a 3 year review, which is intended to provide us with an opportunity to refresh and test our contractual relationships on a regular basis. We expect the levels of contestability in our works programmes will continue to increase over time.

Given our specialised needs as an electricity distributor we need to select suppliers who can deliver what we need at a fair price and on time. We also need to consider the safety of both consumers and contractors on our network, the need to provide a continuing reliable supply of electricity to our customers, sustainability of the specialised skill sets necessary to deliver the work we require, the availability of resources in the current labour market and the viability of incumbent service providers.

### Description of the nature of the Delta contracting arrangement

Traditionally Delta has delivered a large portion of our network operating and capital expenditure works. The skills required to operate on, and knowledge of, our network that it has gained over years, together with the limited number of service providers on the network means that Delta remains, at this point in time, the contractor that is best placed to perform certain types of work, for example first response and fault repair and vegetation management. However, with Unison and Connetics having now established themselves as additional service providers, the aim is to increase the level of contestability of our works by providing the means and incentives for Unison and Connetics to offer alternative solutions and further embed themselves as long-term contractors on our network. We understand the need to provide Unison and Connetics with sufficient work to ensure their viability on our network, and we expect the level of contestability of our works programmes will continue to increase during the CPP period.

The initial term of the FSA agreements was for 3 years although the agreements provide for a 2 year extension provided service standard requirements are met.

### Competitive process used to establish FSA agreements

In December 2017, with the assistance of external procurement experts, we issued a Registration of Interest (ROI) process that sought new contractors in the Dunedin and Central Otago regions. A robust selection and engagement process took place before Unison and Connetics were ultimately appointed.

The resulting FSA agreements were developed to meet the following objectives:

- ensure our new service providers have sustainable volumes of work so that they commit sufficient resources locally to efficiently deliver work programmes;
- implement commercial incentive and dispute resolution processes to ensure pricing and commercial terms are competitive;
- introduce contestability to ensure competitive tension amongst suppliers and provide sufficient flexibility to manage deliverability risks; and
- involve other contractors through the broader, external tender market and through our new process for customer initiated works.

In our assessment, we concluded that the following high-level design choices would be optimal in balancing the competing considerations already noted:

- two contractors would be appointed in each of the Dunedin and Central Otago regions, with Delta also being appointed in each region. This approach balances the benefit of competition with the need to maintain continuity.
- all major capital projects will be procured through an external tender market, which will be open to all approved contractors. This approach increases the availability of potential resources and provides assurance that the outturn project costs are efficient.
- for Customer Initiated Works, customers would be able to select from any of the pre-qualified contractors and a small number of minor works contractors. This approach maximises customer choice and ensures that work can be completed efficiently in accordance with each customer's requirements. It also provides an effective method for managing deliverability risks if the volume of Customer Initiated Works is greater than expected.
- it is efficient for Delta to remain the primary or sole service provider in relation to a number of services, at least in the short-term, as explained below:

- for first response and fault repair, Delta remains best placed to provide the required stand-by capacity 24/7 across a number of disciplines. We concluded that it would not be efficient to allow multiple contractors to provide this service.
- for vegetation management, Delta would be responsible for the programmed work. Other vegetation contractors can be available for capital project vegetation clearance and also for tree owner direct engagement.
- for specialist customer services funded by Aurora Energy, such as stand-over services, high load escorts, cable locations, Delta would be appointed, as these services typically require strong local knowledge and rapid response times to meet customer expectations.
- supplier Panel Agreements provide an efficient method for procuring major assets, such as power transformers, and selecting specialist services, such as design consultants for substations. This procurement approach enables us to identify and actively manage any resourcing issues without impacting project timeframes.

Delivering cost effective solutions is important to our customers so in addition to the competitive process used to establish the FSA's we have also:

- independently confirmed the RY19 related party transactions are no greater than an arm's length transaction value. The one exception being an historical contract that was entered into in 2017, prior to the establishment of the new arm's length transaction value requirements.
- engaged engineering consultants to conduct an independent review of our pricebook, which sets out unit rates for estimating the costs of capital projects. Following the engineers review, we amended a number of unit rates to ensure they were consistent with other efficient rates. In addition to capital expenditure forecasting, these rates will inform the introduction of unit rates in the FSA, which will help ensure our rates remain competitive over time.

### Customer initiated procurement procedures

Together with the other approved contractors on our network Delta provides customer connection services at market value rates. Under our new customer initiated works model, customers or developers are able to choose their own designer and builder from a panel of approved contractors operating on our network. Delta is one of the approved contractors on the panel. We note that in previous years Delta has performed customer connection services under a different contracting model.

### External tender market

In addition to our FSA arrangements, we also operate an external tender market into which works are submitted each year and approved contractors (in addition to our FSA partners) are invited to tender. Delta, plus the other FSA providers and other approved contractors participate in this external tender market.

## SECTION B2 SERVICES PROVIDED BY DELTA

This section is in response to the IM clause D12(5) disclosure requirements.

Table B.2 outlines information about the services provided by Delta. Services provided by other related parties are procured through standard purchasing procedures. Documents used to tender for the provision of services and example methodologies and consultant reports have been provided to the Commission separately to this proposal.

**Table B.2: Example information of services provided by Delta**

EXPENDITURE CATEGORY / SERVICES	REPRESENTATIVE EXAMPLE	TENDER PROCESSES USED OR WHERE TENDERS ARE NOT USED A DESCRIPTION OF THE PROCESS	ARE SERVICES PROCURED PROVIDED UNDER A DISCRETE CONTRACT OR PART OF A BROADER OPERATIONAL CONTRACT	ARE SERVICES PROCURED ON A GENUINELY COMPETITIVE BASIS	METHODOLOGIES, CONSULTANTS REPORTS OR KEY ASSUMPTIONS USED TO DETERMINE COMPONENTS OF COSTS
<b>Service interruptions and emergencies</b>	Response to a fault that was caused by an overhead line coming down.	Services are procured through the negotiated FSA	Services were procured through the negotiated FSA	The terms upon which services are provided, and the rates at which services are charged, were procured under terms negotiated in 2018 during the development of the three FSAs	Comparative market labour and plant rates established under a negotiated process that was based on competitive market rates from the FSA process
<b>Vegetation management</b>	A specified feeder was surveyed and any identified trimming or cut work was carried out.	Services are procured through the negotiated FSA	Services were procured through the negotiated FSA	The terms upon which services are provided, and the rates at which services are charged, were procured under terms negotiated in 2018 during the development of the three FSAs	Comparative market labour and plant rates established under a negotiated process that was based on industry knowledge of market rates
<b>Routine and corrective maintenance and inspection</b>	Underground substation inspection	Services are procured through the negotiated FSA	Services were procured through the negotiated FSA	The terms upon which services are provided, and the rates at which services are charged, were procured under a competitive basis in 2018 during the development of the three FSAs.	Comparative market labour and plant rates established under a competitive process
<b>System operations and network support</b>	Rental of warehouse premises	Services are procured through the negotiated FSA	Services were procured through the negotiated FSA	Services procured based on market rates	Market lease rates were used to determine lease costs

EXPENDITURE CATEGORY / SERVICES	REPRESENTATIVE EXAMPLE	TENDER PROCESSES USED OR WHERE TENDERS ARE NOT USED A DESCRIPTION OF THE PROCESS	ARE SERVICES PROCURED PROVIDED UNDER A DISCRETE CONTRACT OR PART OF A BROADER OPERATIONAL CONTRACT	ARE SERVICES PROCURED ON A GENUINELY COMPETITIVE BASIS	METHODOLOGIES, CONSULTANTS REPORTS OR KEY ASSUMPTIONS USED TO DETERMINE COMPONENTS OF COSTS
<b>Business support</b>	Rental of office premises	Direct procurement	Discrete contract	Services procured based on market rates	Market lease rates were used to determine lease costs
<b>Consumer connection</b>	Subdivision connection	Services procured through the CIW procurement process	Discrete contract	Customer selected service provider from the Aurora Authorised Contractor list	Customer negotiates costs with available suppliers
<b>System growth</b>	Reinforcement of network	Open tender	Discrete contract	The terms upon which services are provided, and the rates at which services are charged, were procured under an open tender process	Competitive tender supported by QS review of tender pricing
<b>Asset replacement and renewal</b>	Upgrade of existing overhead network in a residential area	Closed tender	Discrete contract	The terms upon which services are provided, and the rates at which services are charged, were procured under an open tender process	Competitive tender
<b>Asset relocations</b>	Pillar replacement	Services procured through the CIW procurement process	Discrete contract	Customer selected service provider from the Aurora Authorised Contractor list	Customer negotiates costs with available suppliers
<b>Reliability, safety and environment</b>	Replacement of a voltage regulators	Services are procured through the negotiated FSA	Services are procured through the negotiated FSA	The terms upon which services are provided, and the rates at which services are charged, were procured under a competitive basis in 2018 during the development of the three FSAs.	Comparative market labour and plant rates established under a competitive basis
<b>Non-network assets</b>	Fixed asset purchase.	Direct purchase	No contract	Assets procured based on depreciated historical costs	Book value – being the depreciated asset value

## APPENDIX C: RECOVERABLE COSTS

SUPPLIER	SUPPLIER INVOICE NUMBER	AMOUNT	INVOICE DATE
<b>Verifier fees</b>			
Farrier Swier Consulting Pty Ltd	2019193	34,507.73	31/07/2019
Farrier Swier Consulting Pty Ltd	2019207	4,166.16	31/08/2019
Farrier Swier Consulting Pty Ltd	2019216	5,074.43	30/09/2019
Farrier Swier Consulting Pty Ltd	2019239	6,355.16	31/10/2019
Farrier Swier Consulting Pty Ltd	2019249	4,564.23	30/11/2019
Farrier Swier Consulting Pty Ltd	2020018	90,485.30	29/02/2020
Farrier Swier Consulting Pty Ltd	2020033	373,346.25	09/04/2020
Farrier Swier Consulting Pty Ltd	2020045	42,821.25	30/04/2020
Farrier Swier Consulting Pty Ltd	2020060	88,547.69	10/06/2020
Farrier Swier Consulting Pty Ltd	Accrual	22,370.00	
<b>Total CPP verifier fees</b>		<b>672,238.20</b>	
<b>Audit fees</b>			
Audit NZ	SINV23333	18,977.39	20/12/2020
Audit NZ	SINV24388	34,143.69	30/01/2020
Audit NZ	SINV24485	38,000.00	26/02/2020
Audit NZ	SINV24646	58,700.00	31/03/2020
Audit NZ	SINV24918	49,300.00	09/05/2020
Audit NZ	SINV25133	73,000.00	31/05/2020
Audit NZ	Accrual	79,456.31	
<b>Total CPP audit fees</b>		<b>351,577.39</b>	

