

Transpower Individual Price-Quality Path from 1 April 2020

Companion paper to final RCP3 IPP determination and information gathering notices

Date of publication: 14 November 2019



Associated documents

Publication date	Reference	Title
29 June 2017	978-1-869455-90-3	<u>Input methodologies review final decision: Transpower Incremental Rolling Incentive Scheme</u>
1 June 2018	978-1-869456-39-9	<u>Transpower Capital Expenditure Input Methodologies Determination 2012 [2012] NZCC 2, as amended and consolidated as at 1 June 2018</u>
25 October 2018	978-1-869456-63-4	<u>Our process, framework and approach for setting Transpower's expenditure allowances, quality standards and individual price-quality path for 2020 to 2025</u>
28 November 2018	978-1-869456-27-6	<u>Transpower Individual Price-Quality Path Determination 2015 [2014] NZCC 35, as amended and consolidated as at 26 November 2018</u>
7 February 2019	978-1-869456-82-5	<u>Transpower's individual price-quality path for the next regulatory period – Issues paper</u>
29 May 2019	978-1-869456-04-4	<u>Transpower's individual price-quality path from 1 April 2020 – Draft decisions and reasons paper</u>
10 June 2019	978-1-869457-09-9	<u>Transpower Input Methodologies Determination 2010 [2012] NZCC 17, as amended and consolidated as at 10 June 2019</u>
14 June 2019	978-1-869457-12-9	<u>[DRAFT] Transpower Individual Price-Quality Path Determination 2020 [2019] NZCC [XX]</u>
12 July 2019	978-1-869457-16-7	<u>Transpower's individual price-quality path from 1 April 2020 – IRIS baseline adjustment term – Draft decisions and reasons paper</u>
28 August 2019	ISSN 1178-2560	<u>Transpower Input Methodologies Amendments Determination 2019 [2019] NZCC 10</u>
28 August 2019	ISSN 1178-2560	<u>Transpower Capital Expenditure Input Methodology Amendments Determination 2019 [2019] NZCC 11</u>
29 August 2019	978-1-869456-54-9	<u>Transpower's individual price-quality path from 1 April 2020 – Decisions and reasons paper</u>
29 August 2019	978-1-869457-12-9	<u>[REVISED DRAFT] Transpower Individual Price-Quality Path Determination 2020 [2019] NZCC [XX]</u>
13 November 2019	978-1-869456-69-3	Treatment of operating leases – Final decisions paper
13 November 2019		Publication of non-material amendment to Transpower Input Methodologies Determination 2010
13 November 2019	ISSN 1178-2560	<u>Transpower Input Methodologies Amendments Determination (No. 2) 2019 [2019] NZCC 16</u>
13 November 2019	ISSN 1178-2560	<u>Transpower Capital Expenditure Input Methodology Amendments Determination (No. 2) 2019 [2019] NZCC 17</u>
14 November 2019	ISSN 1178-2560	<u>Transpower Individual Price-Quality Path Determination 2020 [2019] NZCC 19</u>

Commerce Commission
Wellington, NEW ZEALAND

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Executive Summary

- X1 We have today published alongside this companion paper:¹
- X1.1 Our Transpower individual price-quality path determination (Transpower IPP determination) determined under section 52P of the Commerce Act 1986 (the Act) for the regulatory period commencing 1 April 2020 (RCP3);²
 - X1.2 Our information gathering notice issued under section 53ZD of the Act, which sets out requirements for Transpower to provide asset health and risk modelling information;³
 - X1.3 Our information gathering notice issued under section 53ZD of the Act, which sets out requirements for Transpower to provide customer consultation information;⁴
 - X1.4 Our information gathering notice issued under section 53ZD of the Act, which sets out requirements for Transpower to provide cost estimation information;⁵ and
 - X1.5 Our calculation model for the forecast *differences in penultimate year* amount for RCP3 under Transpower's operating expenditure incremental rolling incentive scheme (IRIS), calculated using the methodology we have described in Chapter 4 of this paper.

¹ These documents and model are available on our website at: <https://comcom.govt.nz/regulated-industries/electricity-lines/electricity-transmission/transpowers-price-quality-path/setting-transpowers-price-quality-path-from-2020#projecttab>.

² *Transpower Individual Price-quality Path Determination 2020* [2019] NZCC 19.

³ *Notice to supply information to the Commerce Commission under section 53ZD(1)(d)(i), (e)(i), and (f) of the Commerce Act 1986 – Requirements for asset health and risk modelling information*, 14 November 2019.

⁴ *Notice to supply information to the Commerce Commission under section 53ZD(1)(d), (e), and (f) of the Commerce Act 1986 – Customer consultation information*, 14 November 2019.

⁵ *Notice to supply information to the Commerce Commission under section 53ZD(1)(d)(i), and (e) of the Commerce Act 1986 – Cost estimation information*, 14 November 2019.

- X2 This companion paper sets out how the Transpower IPP determination for RCP3 and the three information gathering notices have incorporated and built on our expenditure and quality standards decisions of 29 August 2019.⁶ It also explains how we have taken into account Transpower’s technical submission on our revised draft IPP determination.⁷
- X3 Table X1 is a summary of Transpower’s forecast smoothed maximum allowable revenue (forecast SMAR) values for each pricing year of RCP3 as published in the Transpower IPP determination. Under clause 8.1 of the Transpower IPP determination, the forecast SMAR is the maximum revenue that Transpower may recover from its customers for electricity transmission services for each pricing year.

Table X1 Maximum allowable revenues determined for pricing years (nominal)

	2019/20 (\$m)	2020/21 (\$m)	2021/22 (\$m)	2022/23 (\$m)	2023/24 (\$m)	2024/25 (\$m)	Total RCP3 forecast SMAR (\$m)
Forecast MAR (RCP2)/ Forecast SMAR (RCP3)	929.8	788.7	798.8	809.0	819.0	829.3	4,044.8

- X4 Transpower’s price path (ie, the forecast SMAR) for any pricing year may only be reopened during RCP3 in limited circumstances, including the occurrence of a catastrophic event, which are set out in our Transpower input methodology determination (Transpower IM determination) and Transpower capital expenditure input methodology determination (Transpower Capex IM determination).^{8,9} Transpower can also apply (and we expect it likely will apply) to reopen the price path during RCP3 to take account of the revenue impact of:
- X4.1 our approval or variation of any ‘major capex project’;¹⁰
- X4.2 our approval of base capex for any ‘listed project’;¹¹ and

⁶ [Commerce Commission “Transpower’s individual price-quality path from 1 April 2020: Decisions and reasons paper” \(29 August 2019\).](#)

⁷ [Transpower “Revised draft IPP and three section 53ZD notices” \(12 September 2019\).](#)

⁸ *Transpower Input Methodologies Determination 2010* [2012] NZCC 17, as amended as at 13 November 2019.

⁹ *Transpower Capital Expenditure Input Methodology Determination 2012* [2012] NZCC 2, as amended as at 13 November 2019.

¹⁰ Clause 3.7.4(4)(a) of the Transpower IM determination; and Part 3, subpart 3 of the Transpower Capex IM determination.

- X4.3 enhancement and development projects that are currently unforeseeable, but which later become reasonably likely to commence in RCP3 due to factors such as a step change in demand or a commissioning or decommissioning of generation connected to the grid, or other developments by a party outside of Transpower's control that require a transmission network enhancement or development.¹²
- X5 The Commission may later consider it reasonably necessary to reopen the price path, or Transpower may apply later in RCP3 for a reopening of the price path, if there is a large build-up in the 'EV account' balance that needs to be either recovered from or returned to customers. This 'release mechanism' in the Transpower IM determination would be used where the accumulated balance of the EV account became sufficiently material that it could cause a price shock to Transpower's customers if it was carried forward and spread over RCP4.
- X6 In accordance with our earlier amendment of the 'Specification of price' input methodology in the Transpower IM determination, we are deferring recovery (or repayment) of wash-up amounts in respect of actual versus forecast building block values in the forecast MAR (including wash-up amounts for forecast pass-through costs and forecast recoverable costs) and of incentive amounts in RCP3 until the following regulatory period (RCP4), when the net balance will be recovered.
- X7 Wash-up and incentive amounts will be calculated annually during RCP3 and will accumulate within Transpower's EV account. The annual value of the EV account will be disclosed so that interested persons can form a view on the likely impact on RCP4 revenues.¹³
- X8 The estimated values used in calculating the IRIS opex incentive amount in the RCP3 recoverable costs will be washed up by applying actual values. Any difference will accumulate in the EV account for recovery (or repayment) in RCP4.
- X9 The recovery (or repayment) of capital expenditure incentive amounts calculated in RCP3 and recorded in the EV account in accordance with the Transpower Capex IM determination will be deferred until RCP4.

¹¹ Clause 3.7.4(4)(b) of the Transpower IM determination; clause 3.2.3 of the Transpower Capex IM determination; and Schedule I of the Transpower IPP determination.

¹² Clause 3.7.4(1)(vi) of the Transpower IM determination.

¹³ Clauses J50 to J53 of the Transpower IPP determination.

X10 Consistent with the approach of carrying EV account balances to the next regulatory period, we are including the balance in Transpower's EV account at the end of the second regulatory period (RCP2) in the RCP3 forecast SMAR calculations and spreading it over RCP3, via an estimate of the 30 June 2020 amount. The difference will be washed up and rolled forward within the EV account until RCP4.

Our decision on the three information gathering notices

X11 For the primary purpose of carrying out our functions under section 53ZC of the Act to set Transpower's price-quality path for RCP4, we have decided to issue three information gathering notices to improve our understanding of Transpower's cost estimation, customer consultation, and asset health and risk modelling in RCP3. Assessing the information we are requesting before we carry out our evaluation of Transpower's proposal for RCP4 will assist us to determine how effectively and efficiently Transpower is operating and give us advance confidence in the effectiveness of the evaluation process for RCP4.

Our decision on the IRIS baseline adjustment term

X12 The purpose of Part 4 of the Commerce Act 1986 is to promote the long-term benefit of consumers by producing outcomes that are consistent with those produced in competitive markets. It does this partly through placing incentives on regulated suppliers, including to improve efficiency. Regulated suppliers such as Transpower get the benefit of improved efficiency during a regulatory control period (RCP), because they are permitted to earn the same revenue and keep the difference as profit.

X13 Part 4 is also designed to promote the sharing of efficiency gains with consumers.¹⁴ This is achieved in part by resetting the price path at the beginning of each RCP, which may involve lowering the price so that consumers receive the benefit of the efficiency savings.

X14 In the absence of a mechanism such as the IRIS, the strength of the incentive on Transpower to reduce costs declines across a regulatory period, as Transpower can only retain the benefit until the price-quality path is next reset. This is called the natural incentive.¹⁵

¹⁴ Section 52A(1)(b) and (c) of the Act.

¹⁵ For further background on how incentives to make efficiency savings are affected by the inclusion or not of an IRIS mechanism see: [Commerce Commission "Input methodologies \(Transpower\) reasons paper" \(December 2010\)](#), at Section 7.5; and [Commerce Commission "Incentives for Suppliers to Control Expenditure During a Regulatory Period: Process and Issues Paper" \(20 September 2013\)](#).

- X15 The IRIS mechanism is designed to provide a consistent operating expenditure (opex) incentive rate for Transpower to achieve efficiency savings, by allowing it to continue recovering a proportion of its efficiency gains after the end of the RCP.
- X16 The mechanism for calculating the IRIS incentive amount for inclusion in the recoverable costs for each disclosure year in RCP3 is specified in the Transpower input methodologies (IMs), and was most recently¹⁶ amended in 2017 (2017 IM Amendment).¹⁷ Chapter 4 of this paper explains how we have implemented the IRIS mechanism for RCP3.
- X17 While the IRIS calculation is largely a mechanical process, one input to the calculation must be determined by the Commission. In simple terms, and as we explain in more detail below, we must estimate the efficiency savings that Transpower made in the penultimate year of the current RCP (ie, Year 4 of RCP2) This is known as the *differences in penultimate year* amount.
- X18 The mechanism uses this figure as an input to a formula to calculate the amount of the IRIS baseline adjustment term to be applied in the second disclosure year of the subsequent RCP (ie, Year 2 of RCP3), which is in turn used to calculate the IRIS opex incentive amount to be recovered or returned in that disclosure year.
- X19 In particular, the baseline adjustment term is designed to ensure that incentives are correctly applied between RCPs so that Transpower is not over- or under-compensated for efficiencies achieved in Year 4 of RCP2. This is necessary because of the way that Transpower’s opex allowance is calculated. We explain this further in Chapter 4 of this paper.
- X20 In our 2017 IM Amendment, we canvassed two approaches that may be used in determining the *differences in penultimate year*: the *step-and-trend back-cast method* and the *Year 1 back-cast method*.¹⁸ These back-cast methods involve using data from the opex forecast in RCP3 (as well as relevant historical information where appropriate) and projecting back a trend to estimate changes in opex efficiency over time. This enables us to estimate opex efficiency gains in Year 4 of RCP2. Transpower has expressed support for these approaches.¹⁹

¹⁶ Apart from some error corrections made on 28 August 2019 and 13 November 2019.

¹⁷ [Commerce Commission “Input methodologies review final decision: Transpower Incremental Rolling Incentive Scheme” \(29 June 2017\)](#).

¹⁸ Above n 17, at [74]-[94].

¹⁹ [Transpower “Transpower Incremental Rolling Incentive Scheme” \(20 April 2017\)](#).

- X21 On 12 July 2019 we published our draft IRIS decisions and reasons paper.²⁰ Our draft decision identified one of the two previously suggested approaches (the step-and-trend back-cast method) as our preferred option to determine the *differences in penultimate year* amount.
- X22 We received a submission on our draft IRIS decision from Transpower.²¹ We did not receive any cross-submissions.
- X23 Our final decision on the methodology to calculate the *differences in penultimate year* amount is set out in Chapter 4 of this companion paper using the step-and-trend back-cast method.
- X24 Although the actual amount of the *differences in penultimate year* will not be determined until the first year of RCP3 once all information on the RCP2 actual opex is available,²² we consider it important to decide on the *approach* for calculating this amount now. This ensures that the estimate of the baseline adjustment term, and hence the IRIS opex incentive amount, that we include in Transpower’s smoothed RCP3 revenue path is as accurate as possible. The final amount will be determined and any necessary adjustments (ie, ‘washups’) will be made after the end of RCP2.
- X25 Using the methodology we have determined, we have calculated an estimate of the *differences in penultimate year* amount of \$1.3 million (ie, an overall efficiency saving in Year 4 of \$1.3 million), resulting in a baseline adjustment term estimate of -\$7.5 million. When combined with the other input values of the IRIS calculation, the result is an estimate of \$24.1 million for the IRIS opex incentive amount for inclusion in the smoothed RCP3 price path.²³
- X26 To calculate the estimate of the *differences in penultimate year* amount of \$1.3 million, we have made decisions on:
- X26.1 the long run growth rate of Transpower’s opex spend as calculated using data for the relevant period (ie, the opex growth trend for the trend period); and

²⁰ [Commerce Commission “Transpower’s individual price-quality path from 1 April 2020 – IRIS baseline adjustment term – Draft decisions and reasons paper” \(12 July 2019\).](#)

²¹ [Transpower “Submission on IRIS baseline adjustment term” \(21 August 2019\).](#)

²² That is because RCP2 does not end until 31 March 2020.

²³ The baseline adjustment term is an estimate of the RCP2 Year 4 total savings, calculated using the *differences in penultimate year* and the WACC rate, as set out in the formula in clause 3.6.4(3) of the Transpower IM determination.

- X26.2 whether to include any step changes in our assessment of Transpower's opex efficiency gains.
- X27 The growth trend enables us to estimate efficiency savings in a previous year. In simple terms, step changes reflect changes in underlying costs, where there has been a change in the environment that affects Transpower's costs in a way that it cannot control.
- X28 The purpose of the IRIS mechanism is to spread efficiency gains between RCPs and so give Transpower the incentive to improve efficiency. Adjustments may be made for step changes in costs outside of Transpower's control to ensure that Transpower is not inappropriately punished or rewarded for changes in costs over which it had no control. Transpower's submission addressed both of these issues, and we have taken Transpower's submission into account in making our final decision.
- X29 In respect of the opex growth trend:
- X29.1 our estimate uses an opex growth trend of 2.57% based on an opex trend period from 2015/16 to 2024/25 (ie, this covers all of RCP2 and RCP3) compared to Transpower's proposal of 2.71%;²⁴
- X29.2 we have excluded the first regulatory period (RCP1) opex from our trend period, as we consider that the number of large capex projects in that period relative to the opex for the period is not reflective of Transpower's expenditure strategy during RCP2 and RCP3 (when the baseline adjustment term is being estimated and applied). The trend period used in our final IRIS decision is shorter than we used in our draft decision, which used 2010/11 to 2024/25 (ie, RCP1 to RCP3). Shortening the trend period provides a more relevant set of observations for assessing growth in opex. In that respect we agree with Transpower; and
- X29.3 we do not agree with Transpower's suggested approach of confining our dataset to the RCP3 forecast opex. We consider that using a combination of relevant historical information from RCP2 and forecast information from RCP3 provides the best estimate of the growth trend.
- X30 The result is that the only difference between Transpower's proposed approach and our final decision is the inclusion of two years of historical data, which produces a 0.14% difference in the opex trend.

²⁴ This includes a mix of actual opex values (2015/16 to 2017/18), Transpower's forecast of actual opex for the remainder of RCP2 (2018/19 and 2019/20) and our opex allowance for RCP3.

- X31 In respect of step changes:
- X31.1 we have decided not to include any of the step changes proposed by Transpower in our assessment of opex efficiency;
 - X31.2 the IRIS model works at an aggregate opex level and assesses the type of savings achieved by analysing the incremental change in total opex from year to year. This is designed to reveal long-term efficiencies (through the assessment of costs savings and overspends) over time. The model does not work on a bottom-up basis by analysing specific savings in each category;
 - X31.3 we therefore consider that the IRIS should evaluate efficiency on an aggregate basis, and only make step adjustments where there are changes in costs outside of the supplier's control; excluding certain costs that are not outside of Transpower's control from the assessment of efficiency in the IRIS model could distort the assessment of the level and type of savings achieved;
 - X31.4 we assessed whether Transpower's proposed step changes are appropriate to be taken into account in light of these considerations, but are satisfied that excluding these step changes is consistent with the purpose of Part 4.
- X32 Our final estimate is calculated using our final RCP3 opex allowance values and the weighted average cost of capital (WACC) applying to RCP3 from our September 2019 decision of Transpower's WACC rates.
- X33 These decisions result in a final estimate of the *differences in penultimate year* amount of \$1.3 million, to which we apply timing adjustments to give the baseline adjustment term of -\$7.5 million. When combined with IRIS incentive amounts carried forward into RCP3, this gives a resulting IRIS opex incentive amount of \$24.1 million that Transpower may recover as a recoverable cost in its RCP3 revenues. This estimated incentive amount is approximately \$34 million lower than the amount calculated by Transpower in its submission on our draft decision.

Chapter 1 Introduction

Purpose of this paper

- 1.1 This paper supports our determination of the Transpower individual price-quality path determination (Transpower IPP determination)²⁵ for the regulatory period commencing 1 April 2020 (RCP3) and our three information gathering notices issued under section 53ZD of the Act that will apply to Transpower.^{26, 27, 28, 29}
- 1.2 It includes our reasons for our decision on the setting of:
 - 1.2.1 the methodology for the *differences in penultimate year* amount under the Transpower opex incremental rolling incentive scheme (IRIS); and
 - 1.2.2 the forecast *differences in penultimate year* amount for RCP3.

Structure of this paper

- 1.3 This paper sets out:
 - 1.3.1 how we have dealt with outstanding matters identified for the setting of the price-quality path in our decision of 29 August 2019 (Chapter 2);
 - 1.3.2 our determination of the forecast maximum allowable revenue (forecast MAR) and forecast smoothed maximum allowable revenue (forecast SMAR) for each pricing year of RCP3 (Chapter 3);
 - 1.3.3 our decision on the methodology for calculating the *differences in penultimate year* amount and applying this methodology to determine the forecast *differences in penultimate year* amount for RCP3 (Chapter 4);
 - 1.3.4 the calculation of the forecast SMAR values for each pricing year in RCP3, which are the maximum revenues that Transpower may use each year in calculating its pricing to customers (Attachment A);

²⁵ *Transpower Individual Price-quality Path Determination 2020* [2019] NZCC 19.

²⁶ *Notice to supply information to the Commerce Commission under section 53ZD(1)(d)(i), (e)(i), and (f) of the Commerce Act 1986 – Requirements for asset health and risk modelling information*, 14 November 2019.

²⁷ *Notice to supply information to the Commerce Commission under section 53ZD(1)(d), (e), and (f) of the Commerce Act 1986 – Customer consultation information*, 14 November 2019.

²⁸ *Notice to supply information to the Commerce Commission under section 53ZD(1)(d)(i), and (e) of the Commerce Act 1986 – Cost estimation information*, 14 November 2019.

²⁹ These documents are available on our website at: <https://comcom.govt.nz/regulated-industries/electricity-lines/electricity-transmission/transpowers-price-quality-path/setting-transpowers-price-quality-path-from-2020#projecttab>.

- 1.3.5 the calculation of the forecast MAR building block values for each pricing year in RCP3, which are then used to calculate the forecast SMAR values in Attachment A of the Transpower IPP determination (Attachment B);
- 1.3.6 the impact of price-path smoothing on the IRIS (Attachment C);
- 1.3.7 details of Transpower's submission on our draft decision on the IRIS baseline adjustment term (Attachment D);
- 1.3.8 a description of our non-material amendment to the Transpower input methodology determination (Transpower IM determination)³⁰ relating to the calculation of the IRIS opex incentive amount (Attachment E); and
- 1.3.9 our response to the main points of Transpower's technical submission on our revised draft IPP determination and draft information gathering notices published on 29 August 2019 (Attachment F).

³⁰ *Transpower Input Methodologies Determination 2010* [2012] NZCC 17, as amended as at 13 November 2019.

Chapter 2 How we have dealt with outstanding matters from our decisions of 29 August 2019

Purpose of this chapter

- 2.1 Our 29 August 2019 Decisions and reasons paper set out a number of matters that we needed to carry out before we could finalise the Transpower IPP determination for RCP3 and the information gathering notices:³¹
- 2.1.1 Our 25 September 2019 determination of the weighted average cost of capital (WACC) rates that will apply to the Transpower IPP determination in RCP3;
 - 2.1.2 Our 13 November 2019 decision on IM amendments relating to the treatment of operating lease payments, following consideration of submissions and cross-submissions on our draft operating leases decision published on 28 August 2019;
 - 2.1.3 Our issuing of an information gathering notice on 3 October 2019 to Transpower to apply our decisions to calculate its forecast MAR and forecast SMAR for RCP3;
 - 2.1.4 Our decisions of 14 November 2019 in respect of the mechanics and drafting of the IPP determination and information gathering notices, following consideration of Transpower's technical submission on the revised draft IPP determination and draft information gathering notices published on 29 August 2019; and
 - 2.1.5 Our 14 November 2019 decision on the methodology to calculate the *differences in penultimate year* amount and the forecast amount for RCP3, following consideration of Transpower's submission on our draft IRIS decision published on 12 July 2019.
- 2.2 In this chapter we briefly describe how each of those matters has been resolved and has been applied for RCP3.

Our WACC determination

- 2.3 On 25 September 2019, we published on our website our determination of the WACC that will apply to the RCP3 IPP determination (WACC determination).³²

³¹ [Commerce Commission "Transpower's individual price-quality path from 1 April 2020: Decisions and reasons paper" \(29 August 2019\)](#), at [1.19].

- 2.4 The WACC is a fundamental building block input to the calculation of the forecast MAR and to the smoothed price-path forecast SMAR for each pricing year of RCP3.
- 2.5 The WACC rates that apply to Transpower's price-quality path for RCP3 are:
- 2.5.1 4.57%, the 67th percentile vanilla WACC (Table 1, page 4 of the WACC determination), which is mainly used in setting the forecast MAR building blocks values; and
 - 2.5.2 4.23%, the 67th percentile post-tax WACC (Table 1, page 4 of the WACC determination), which is mainly used in setting the forecast SMAR values.
- 2.6 We have taken those WACC rates into account in setting the forecast MAR and forecast SMAR for each pricing year of RCP3.

Calculation of RCP3 base capex standard incentive rate

- 2.7 We amended the Transpower capital expenditure input methodology determination (Transpower Capex IM determination)³³ on 28 August 2019 to replace the fixed incentive rate of 33% which applied for the second regulatory period (RCP2) with a formula based on the 67th percentile estimate of vanilla WACC.³⁴
- 2.8 We indicated in our IM amendment reasons paper that once the WACC rate had been determined, we would calculate the rate for RCP3 using the new formula and would publish the result of our calculation.^{35, 36} Under the formula in the Transpower Capex IM determination, the incentive rate for RCP3 works out to be 24%.

³² [Cost of capital determination for electricity distribution businesses' 2020-2025 default price-quality paths and Transpower New Zealand Limited's 2020-2025 individual price-quality path \[2019\] NZCC 12.](#)

³³ *Transpower Capital Expenditure Input Methodology Determination 2012* [2012] NZCC 2, as amended as at 13 November 2019.

³⁴ *Transpower Capital Expenditure Input Methodology Amendments Determination 2019* [2019] NZCC 11.

³⁵ [Commerce Commission "Amendments to input methodologies for Transpower New Zealand Limited: Reasons paper" \(28 August 2019\)](#), at [3.18].

³⁶ Clause 2 of the WACC determination.

Applying the IM amendments on operating lease payments

- 2.9 On 13 November 2019 we published our final decision on IM amendments relating to the treatment of operating lease payments, following consideration of submissions and cross-submissions on our draft decision published on 28 August 2019.³⁷
- 2.10 The main features of that final decision, which are largely the same as our draft decision, are the following:
- 2.10.1 Subject to some specific exceptions, we generally accept alignment with the NZ IFRS 16 accounting standard for price-quality and information disclosure (ID) regulation purposes. This means that the forecast SMAR in the Transpower IPP determination and returns on investment in the Transpower information disclosure determination (Transpower ID determination)³⁸ are to be calculated using capitalised 'right of use' asset values. However, this will not apply for right of use assets capitalised under NZ IFRS 16 for costs specified as pass-through costs or recoverable costs, for example, transmission alternative operating costs.³⁹ Those costs will continue to be treated as pass-through costs or recoverable costs, as applicable.
- 2.10.2 We have amended the input methodologies in the Transpower IM determination to ensure the calculation of the base capex expenditure adjustment in the Transpower Capex IM determination excludes the impact from 'right of use assets' (ie, operating lease payments will be excluded from the capex incentive calculations and will continue to be treated as opex for IRIS opex incentive purposes).
- 2.10.3 We have amended the input methodologies in the Transpower IM determination to ensure the Transpower IM determination allows for a GAAP-based life to be assigned to 'right of use' assets under ID.

³⁷ Commerce Commission "Treatment of operating leases – Final decisions paper" (13 November 2019), available on our website at: <https://comcom.govt.nz/regulated-industries/input-methodologies/projects/operating-leases#projecttab>.

³⁸ [Transpower Information Disclosure Determination \[2014\] NZCC 5, as amended and consolidated as at 3 April 2018.](#)

³⁹ See clause 3.1.1(1)(c) of the Transpower IM determination. Under NZ IFRS 16 any payment is captured that might be consideration for a lease, which is widely defined in NZ IFRS 16 as *A contract, or part of a contract, that conveys the right to use an asset (the underlying asset) for a period of time in exchange for consideration.*

- 2.10.4 Although NZ IFRS 16 came into effect in RCP2, our IM amendments will not affect Transpower's price path in RCP2. Rather, it requires 'carry-forward' amounts already calculated under IRIS in the current path to be restated before they affect the path in RCP3. For opex this has the effect of converting what would otherwise be treated as a permanent saving into a temporary saving, lasting only for the duration of the remainder of RCP2. The capex effects of applying the existing IRIS rules for the remainder of RCP2 remain as they stand.
- 2.10.5 We have amended the input methodologies in the Transpower Capex IM determination so that the capitalised amount of operating leases is excluded from base capex when calculating the base capex expenditure adjustment for base capex incentive purposes. Although NZ IFRS 16 came into effect in RCP2, this amendment will not affect the price path in RCP2. The effects of applying the existing base capex incentive rules for the remainder of RCP2 remain as they stand.⁴⁰
- 2.11 We have taken this final decision into account in setting the forecast MAR and forecast SMAR for each pricing year of RCP3. The process of calculating the RCP3 forecast MAR and forecast SMAR values is set out in Chapter 3.
- 2.12 We have also taken the decision into account in setting the Transpower IPP determination for the following:
- 2.12.1 the RCP3 base capex allowances that are subject to the standard incentive rate (approximately 24%, as noted in paragraph 2.8 above) for base capex incentive purposes;
- 2.12.2 the RCP3 base capex allowances that are subject to the low incentive rate (15%) for base capex incentive purposes;⁴¹ and
- 2.12.3 the RCP3 opex allowances for IRIS opex incentive purposes.

Calculating the RCP3 forecast MAR and forecast SMAR

- 2.13 On 3 October 2019 we issued an information gathering notice to Transpower under section 53ZD of the Act, requiring it to apply our decisions of 29 August 2019 to calculate its forecast MAR and forecast SMAR for RCP3.⁴²

⁴⁰ Schedules C3 and C4 of the Transpower IPP determination.

⁴¹ The RCP3 low incentive rate base capex allowances for base capex incentive purposes have initially been set at nil (see Schedule C3 of the Transpower IPP determination). However, the low incentive rate base capex allowance amounts may result from listed project applications during RCP3, which may require further application of the final operating lease payments decision.

- 2.14 Transpower was required to provide us with specified information to enable those calculations, including an updated copy of its revenue model and an assurance opinion from an assurance auditor.
- 2.15 We specifically required Transpower to provide us with:
- 2.15.1 its forecast of the EV account balance at the end of RCP2;
 - 2.15.2 its calculation of the forecast EV adjustment for RCP3; and
 - 2.15.3 its calculation of the forecast MAR and forecast SMAR values for each pricing year in RCP3 in accordance with the Transpower IM determination.
- 2.16 Transpower provided us with its updated revenue model in accordance with our information gathering notice on 25 October 2019.
- 2.17 The process of calculating the forecast MAR and the forecast SMAR is set out in more detail in Chapter 3.

Technical consultation on the revised draft Transpower IPP determination and draft information gathering notices

- 2.18 We received a detailed and constructive technical submission from Transpower on the revised draft IPP determination and draft information gathering notices published on 29 August 2019.⁴³ We appreciate the high quality of Transpower’s input.
- 2.19 In its technical submission Transpower identified a number of workability drafting matters that correct for ambiguity and errors in drafting. We have considered and adopted those recommendations from Transpower and do not consider it necessary to comment on each of them in this paper. However, there were some substantive comments from Transpower, which we respond to in Attachment F of this paper.
- 2.20 A copy of our final drafting decisions which compare our final IPP determination and information gathering notices with the revised draft IPP determination and draft information gathering notices is available from the Commission on request.

⁴² *Notice to supply forecast MAR and forecast SMAR calculations to the Commerce Commission under section 53ZD(1)(d), (e), and (f) of the Commerce Act 1986*, 3 October 2019, available on our website at: <https://comcom.govt.nz/regulated-industries/electricity-lines/electricity-transmission/transpowers-price-quality-path/setting-transpowers-price-quality-path-from-2020#projecttab>.

⁴³ [Transpower “Revised draft IPP and three section 53ZD notices” \(12 September 2019\)](#).

The resulting form of our Transpower regulatory regime

2.21 In its technical submission of 12 September 2019 on our revised draft IPP determination and draft information gathering notices, Transpower said:

...we consider the omission of the three areas of costs estimation, customer consultation and asset health initiatives from the two regulatory instruments (Individual Price-Quality Path and Information Disclosure regulation) may make it difficult for interested parties to understand our regulation and information provision. We suggest the Commission will need to ensure that an interested party is readily able to get the complete picture.

2.22 To provide stakeholders with that overview, we summarise in Table 2.1 the form of the Transpower regulatory regime and the high-level purpose of each of the regulatory instruments that will apply in RCP3.

Table 2.1 Our Transpower regulatory instruments⁴⁴

	Instrument	Purpose	Contains
Input methodologies	Transpower IM determination	<p>Input methodologies are the upfront rules, processes and requirements of Part 4 regulation. IMs are used in setting information disclosure and price-quality regulatory determinations.</p> <p>The purpose of IMs, set out in s 52R of the Act, is to promote certainty for suppliers and consumers in relation to the rules, requirements and processes applying to regulation.</p> <p>The purpose of Part 4, in s 52A of the Act, is to promote the long-term benefit of consumers in markets where there is little or no competition and little or no likelihood of a substantial increase in competition.</p>	<p>Contains rules on:</p> <ul style="list-style-type: none"> • Specification of price; • Reconsideration of the IPP; • Cost allocation; • Asset valuation; • Treatment of taxation; • Cost of capital; and • IRIS opex incentive scheme.
	Transpower Capex IM determination		<p>Contains rules on:</p> <ul style="list-style-type: none"> • Information requirements for the approval of capital expenditure; • Consultation requirements for capital expenditure proposals; • Commission evaluation of capital expenditure proposals; • Setting of base capex allowances; • Evaluation and approval of listed project applications; • Evaluation, approval and amendment of major capex projects; • Information requirements for sunk costs applications; and • Calculation of capital expenditure incentive amounts.

⁴⁴ Our 29 August 2019 Decisions and reasons paper sets out the statutory requirements relating to Transpower (above n 31, at Attachment B).

	Instrument	Purpose	Contains
Price-quality path	Transpower IPP determination	<p>The purpose of Part 4, in s 52A of the Act, is to promote the long-term benefit of consumers in markets where there is little or no competition and little or no likelihood of a substantial increase in competition.</p> <p>This is to be done by promoting outcomes that are consistent with outcomes produced in competitive markets, such that suppliers of regulated goods or services:</p> <ul style="list-style-type: none"> • have incentives to innovate and to invest, including in replacement, upgraded, and new assets; • have incentives to improve efficiency and provide services at a quality that reflects consumer demands; • share with consumers the benefits of efficiency gains in the supply of the regulated goods or services, including through lower prices; and • are limited in their ability to extract excessive profits. 	<p>Contains, for the IPP, rules on:</p> <ul style="list-style-type: none"> • the price path and updates to the price path; • quality standards; • revenue-linked and non-revenue-linked performance measures; • compliance requirements; and • information reporting requirements.

	Instrument	Purpose	Contains
Information disclosure		The purpose of information disclosure, under s 53A of the Act, is to ensure that sufficient information is readily available to interested persons to assess whether the Part 4 purpose is being met.	Contains information reporting requirements for: <ul style="list-style-type: none"> • Financial performance; • Regulated revenues; • Investment contracts; • Grid management; • Expenditure; • Quality performance; • Asset management; and • System operator services.

	Instrument	Purpose	Contains
Future IPP planning	Asset health and risk modelling information gathering notice	<p>The Commission may issue information gathering notices under section 53ZD of the Act for the purposes of carrying out its functions and exercising its powers under Part 4 of the Act, including to:</p> <ul style="list-style-type: none"> • permit the Commission to investigate how effectively and efficiently a supplier is supplying the goods or services; 	<p>Contains information requirements to enable us to investigate the development path of Transpower’s asset health modelling and risk understanding over RCP3 in preparation for our function of setting of Transpower’s individual price-quality path for RCP4 and RCP5 (see paragraphs 2.33 to 2.35 below for further details).</p>
	Customer consultation information gathering notice	<ul style="list-style-type: none"> • require the supplier to prepare and produce forecasts, forward plans or other information and apply any methodology specified by the Commission in the preparation of forecasts, forward plans, or other information; • require the supplier to produce or supply to the Commission documents and information in relation to the goods or services, or the prices or operations of the supplier, relevant to the Commission’s investigation or inquiry; 	<p>Contains information requirements to enable us to investigate Transpower’s development of its process of customer consultation to assist our function of setting of Transpower’s individual price-quality path for RCP4. Specifically, information on the effectiveness of Transpower’s customer engagement, its consultation, and the information Transpower provides to customers following an unplanned interruption (see paragraphs 2.36 to 2.38 below for further details).</p>
	Cost estimation information gathering notice	<ul style="list-style-type: none"> • require the supplier to answer any questions about any matter that the Commission has reason to believe may be relevant to the investigation or inquiry; and • require the supplier to produce or supply to the Commission an expert opinion from an appropriately qualified person in relation, amongst other things, to the above matters. 	<p>Contains information requirements to:</p> <ul style="list-style-type: none"> • enable us to investigate the extent to which Transpower is improving the efficiency of its cost estimation; • assist our setting of expenditure allowances for major capex projects and listed projects in RCP3; and <p>investigate Transpower’s development of its process of cost estimation to assist our function of setting of Transpower’s individual price-quality path for RCP4 (see paragraphs 2.39 to 2.41 below).</p>

The detailed purpose and features of the section 53ZD information gathering notices

- 2.23 For the primary purpose of carrying out our functions under section 53ZC of the Act of setting Transpower's individual price-quality path for RCP4, we have decided to issue three information gathering notices to require Transpower to provide us with information that will allow us to investigate and improve our understanding of Transpower's asset health and risk modelling, customer consultation process, and cost estimation processes in RCP3.
- 2.24 Assessing the information we are requesting before we carry out our evaluation of Transpower's expenditure proposal for RCP4 will help us determine how effectively and efficiently Transpower is operating and should give us advance confidence in the effectiveness of our evaluation processes for RCP4.
- 2.25 The information gathering notice on asset health modelling will provide us with information following disclosure year 2022 that will enable us to carry out a preliminary scoping evaluation in respect of the RCP4 proposal that we expect to receive from Transpower in late 2023. This will be backed up by an independent expert opinion. We expect to publish the results of that investigation in 2023 or early 2024 when we publish our process and issues papers in respect of the RCP4 proposal.
- 2.26 The information gathering notice on customer consultation will provide us with information following disclosure year 2022, and further information following disclosure year 2023, which will enable us to investigate the effectiveness of Transpower's engagement with its customers. In particular, that information will cover the effectiveness of Transpower's consultation with customers in relation to how it intends to spend its base capex in RCP3, Transpower's consultation on its post-project reviews for significant projects, and Transpower's consultation on unplanned interruptions. The information will again be backed up by an independent expert opinion and we expect to publish the results of that investigation in 2023 or early 2024 when we publish our process and issues papers in respect of the RCP4 proposal.
- 2.27 The information gathering notice on cost estimation will elicit the following information relevant to our investigation:
- 2.27.1 information following disclosure year 2020 on completed base capex programmes in RCP2 to enable us to form costing conclusions for RCP2;
 - 2.27.2 information following disclosure year 2022 on completed capex projects in RCP3 to enable us to form preliminary costing conclusions for RCP3, which will be further tested against information following disclosure year 2023; and

- 2.27.3 information following disclosure year 2025 on completed capex projects and completed capex programmes in RCP3 to form final costing conclusions for RCP3.
- 2.28 We expect to publish the results of our preliminary RCP3 investigation on cost estimation in 2023 or early 2024 when we publish our process and issues papers in respect of the RCP4 proposal. The results of our final evaluation of Transpower's cost estimation in RCP3 will inform our future discussions with Transpower on its RCP5 expenditure proposal which will ultimately be due in late 2028.
- 2.29 In its technical submission on the revised draft IPP determination and the draft information gathering notices, Transpower noted its broad agreement with the use of a monitoring and investigation regime to provide information to build the Commission's confidence towards RCP4, and support the Commission's focus on cost estimation, asset health modelling development and effective customer consultation. However, Transpower considers that more flexibility in the requirements would better achieve the objectives of Part 4. Transpower is concerned by:⁴⁵
- 2.29.1 the heavy administrative burden and regulatory impost from the section 53ZD notices;
- 2.29.2 the level of prescription of the information to be supplied; and
- 2.29.3 the material risk of non-compliance.
- 2.30 We do not consider that the information gathering notices impose an undue burden on Transpower. We consider the requirements are proportionate to our need for information that will enable us to be efficient and most effective in our scrutiny and evaluation of capex proposals in RCP3 and with respect to Transpower's proposal for the price-quality path for RCP4.
- 2.31 As set out in Attachment F, we have addressed Transpower's concerns about the level of prescription and risk of non-compliance by providing in each information gathering notice an opportunity for Transpower to apply to us to vary the notice to account for any practical limitations on Transpower's ability to provide the specified information at the specified time.
- 2.32 To allow stakeholders to better understand what we are requiring of Transpower, we set out below the purpose and main features of each notice.

⁴⁵ Above n 43, at 3.

Asset health and risk modelling information gathering notice

- 2.33 We require the information in this notice because we seek to understand the development path of Transpower’s asset health modelling and risk understanding over RCP3 in preparation for setting Transpower’s price-quality path for RCP4 and RCP5. This understanding will inform and assist us to carry out our function under section 53ZC of the Act of assessing and setting Transpower’s base capex, operating expenditure, and quality standards for RCP4.
- 2.34 The notice requires an initial ‘progress update’ from Transpower which will assist in our ongoing investigation under section 53ZD(1)(b)(i) into Transpower’s progress in developing its asset health and risk models, asset life-extension models, and risk-based decision-making frameworks. Improving our understanding of these matters will better enable us to consider and assess, for example, the relationship between grid output measures proposed for RCP4 and Transpower capex and operating expenditure.
- 2.35 The main features of this notice are:
- 2.35.1 under section 53ZD(1)(d)(i) of the Act, Transpower must produce a ‘development roadmap’ at the start of RCP3 setting out Transpower’s plans for developing its asset health and risk models, asset life-extension models, and risk-based decision-making frameworks in preparation for its RCP4 proposal;
 - 2.35.2 under section 53ZD(1)(e)(i) of the Act, Transpower must provide midway through RCP3 an update on its progress in developing asset health and risk models, asset life-extension models, and risk-based decision-making frameworks; and
 - 2.35.3 under section 53ZD(1)(f) of the Act, Transpower must obtain an opinion midway through RCP3 from an independent expert on Transpower’s progress in developing its asset health and risk models, asset life-extension models, and risk-based decision-making frameworks.

Customer consultation information gathering notice

- 2.36 We require the information set out in the customer consultation notice to assist:
- 2.36.1 our investigation under section 53ZD(1)(b)(i) into the effectiveness of Transpower’s customer engagement in RCP3; and

- 2.36.2 us in carrying out our function under section 53ZC of setting Transpower’s individual price-quality path for RCP4.⁴⁶
- 2.37 Specifically, the information on the effectiveness of Transpower’s customer engagement, its consultation, and the information Transpower provides to customers following an unplanned interruption will:
- 2.37.1 improve our understanding of Transpower’s customer engagement during RCP3; and
- 2.37.2 help us to set an individual price-quality path for RCP4 that better incentivises Transpower to provide services at a quality that reflects consumer demands.
- 2.38 The main information features of this notice are:
- 2.38.1 under section 53ZD(1)(d)(i) of the Act, Transpower must provide its proposed high-level scope for preparing its customer engagement plan for RCP3. Transpower must then prepare and provide its customer engagement plan, explaining any material departures from the high-level scope;
- 2.38.2 under section 53ZD(1)(e)(i) of the Act, Transpower must supply consultation information on the extent and effectiveness of its consultation in relation to how it intends to spend its base capex in each disclosure year of RCP3;
- 2.38.3 under section 53ZD(1)(e)(i) of the Act, Transpower must produce a review report on post-project reviews for significant capex projects during RCP3;⁴⁷
- 2.38.4 under section 53ZD(1)(f) of the Act, midway through RCP3, Transpower must obtain and provide an opinion from an independent expert on its proposed customer engagement process leading up to its RCP4 proposal; and
- 2.38.5 under section 53ZD(1)(e)(i) of the Act, Transpower must produce a post-interruption survey report summarising the post-interruption survey results of affected customers to assist our investigation into the timeliness of Transpower’s information provision following an unplanned interruption.

⁴⁶ Our function under section 53ZC of the Act.

⁴⁷ See the customer consultation information gathering notice for the definition of ‘significant capex project’ (above n 27).

Cost estimation information gathering notice

- 2.39 The information required by the cost estimation notice will provide us with a clearer picture of Transpower’s forecast costs and actual costs of its capex.
- 2.40 We require the information in the cost estimation notice to:
- 2.40.1 enable us to investigate under section 53ZD(1)(b)(i) the extent to which Transpower is improving the efficiency of its cost estimation process for capex;
 - 2.40.2 assist our function under the Transpower Capex IM determination of setting allowances for major capex projects and listed projects in RCP3; and
 - 2.40.3 assist our function under section 53ZC of setting Transpower’s individual price-quality path for RCP4.⁴⁸
- 2.41 The main information features of this notice are:
- 2.41.1 under section 53ZD(1)(d)(i) of the Act, Transpower must prepare and produce a methodology for tracing of specific project or programme costs between proposal cost estimates, delivery business case cost estimates, and the actual costs of commissioned projects;
 - 2.41.2 under section 53ZD(1)(e)(i) of the Act, Transpower must produce information in relation to each completed capex project for which assets are commissioned in RCP3 on variances between the cost estimate in the proposal document, the delivery business case cost estimate, and the actual costs, for each completed capex project.
 - 2.41.3 under section 53ZD(1)(e)(ii) of the Act, if the variance for a completed capex project, between the proposal cost estimate and the delivery business case cost estimate, exceeds 30%, Transpower must provide an explanation of the reasons for the cost variance;

⁴⁸ Carrying out our function under section 53ZC of the Act.

- 2.41.4 under section 53ZD(1)(e)(i) of the Act, Transpower must produce information in relation to completed capex programmes for which assets are commissioned in RCP2 or RCP3, on variances between the cost estimate of each completed capex programme in the applicable individual price-quality path proposal and the actual cost of the completed capex programme at the end of RCP2 or at the end of RCP3; and
- 2.41.5 under section 53ZD(1)(e)(ii) of the Act, if the variance for a completed capex programme between the completed capex programme's cost estimate and the actual cost of the completed capex programme at the end of RCP2 or at the end of RCP3 is greater than 20%, Transpower must provide an explanation of the reasons for the cost variance.

Our decision on the baseline adjustment term

- 2.42 Our final decision on the methodology to calculate the *differences in penultimate year* amount, following consideration of Transpower's submission on our draft IRIS decision published on 12 July 2019, is set out in Chapter 4.
- 2.43 The *differences in penultimate year* amount is an input to calculating the IRIS baseline adjustment term, which in turn is an input in the setting of the IRIS opex incentive amount which is a recoverable cost used in the setting of the forecast MAR and forecast SMAR.
- 2.44 Although the actual amount of the *differences in penultimate year* (which is a component of the baseline adjustment term formula) will not be determined until the first year of RCP3 once all information on the RCP2 actual opex is available,⁴⁹ we consider it important to decide on the *approach* for calculating this amount now. This ensures that the estimate of the baseline adjustment term, and hence the IRIS opex incentive amount, that we include in Transpower's smoothed RCP3 revenue path is as accurate as possible. The final amount will be determined and any necessary adjustments (ie, 'washups') will be made after the end of RCP2.
- 2.45 Under the smoothed price path, if we had decided not to build in estimates of recoverable costs (including recovery of IRIS amounts from RCP2) into the price path, the full amount of the RCP3 recoverable cost would not be recovered until RCP4 (subject to any reopening of the RCP3 price path to avoid a price shock).⁵⁰

⁴⁹ That is because RCP2 does not end until 31 March 2020.

⁵⁰ The RCP3 IPP includes a 'Large build-up in EV account' reopener to account for potential price shocks from a build-up in the EV account.

- 2.46 Our setting of a smoothed price path for RCP3 builds in estimates of recoverable costs, including recovery of IRIS amounts from RCP2. We have determined an estimate of *differences in penultimate year* amount of \$1.3 million, resulting in a baseline adjustment term estimate of -\$7.5 million for the smoothed RCP3 price path. This estimate uses an opex growth trend of 2.57% based on an opex trend period from 2015/16 to 2024/25 (ie, this covers RCP2 and RCP3).⁵¹
- 2.47 We have taken that decision into account in setting the forecast MAR and forecast SMAR for each pricing year of RCP3.

⁵¹ This includes a mix of actual opex values (2015/16 to 2017/18), Transpower's forecast of actual opex for the remainder of RCP2 (2018/19 and 2019/20) and our opex allowance for RCP3.

Chapter 3 Determination of the RCP3 forecast MAR and forecast SMAR

Purpose of this chapter

- 3.1 This chapter sets out a high-level summary of how we determined the RCP3 price path in the Transpower IPP determination.

Key price-path decisions from 29 August 2019

- 3.2 Our key decisions relating to Transpower's RCP3 price path are to:⁵²
- 3.2.1 set Transpower's annual maximum allowable revenue that it can use for its transmission pricing over RCP3 for a five-year period using a smoothed building blocks approach; and
 - 3.2.2 do this by smoothing Transpower's annual revenue through a sequence of:
 - 3.2.2.1 forecasting costs, including pass-through costs, recoverable costs, and the EV account balance as at 30 June 2020, and building these into the forecast MAR building blocks;
 - 3.2.2.2 smoothing the resulting forecast MAR over RCP3 to produce annual forecast smoothed maximum allowable revenue (forecast SMAR) which is the maximum revenue that Transpower may use in setting its transmission pricing; and
 - 3.2.2.3 washing up any variation, between the forecast MAR (including forecast pass-through costs and forecast recoverable costs) and the actual revenue received, and any capex incentive amounts, into the EV account and, in normal circumstances, accumulating this for spreading over RCP4.⁵³

⁵² Above n 31, at Table 3.1.

⁵³ As we expect some variation between the revenue Transpower forecasts and the revenue it actually earns, the difference is calculated annually and included in the EV account. Other amounts, such as incentive amounts that have not yet been recovered from, or returned to, Transpower's customers are also included within the EV account.

- 3.3 Consistent with the approach of setting an ex-ante expectation of earning WACC and providing incentives for meeting quality measures (and negative revenue adjustments for failure to do so) Transpower should be able to recover wash-up and incentive amounts (or be required to repay, where it has over-recovered or faced negative revenue adjustments).
- 3.4 In RCP2 the forecast MAR was updated annually, and the EV account balance was carried forward (being adjusted at the WACC rate) until the price path could be updated in the next available pricing year. However, under a smoothed price path, annual recovery of these amounts would reintroduce volatility. Recovery (or repayment) of wash-up and incentive amounts in RCP3 will instead be deferred until RCP4, when the net balance will be recovered. These amounts will be calculated annually during RCP3 and will accumulate within Transpower's EV account. The annual value of the EV account will be disclosed so that interested persons can form a view on the likely impact on RCP4 revenues.⁵⁴
- 3.5 A 'release mechanism' in the Transpower IM determination will enable Transpower's price path to be reopened, and allow some of the balance of the EV account to be spread over the remaining years of RCP3. This would be used where the accumulated balance became sufficiently material that it could cause a price shock to Transpower's customers if it was carried forward and spread over RCP4.⁵⁵
- 3.6 Consistent with this approach of carrying EV account balances to RCP4, we have included an estimate of the closing RCP2 balance in Transpower's EV account in the RCP3 forecast SMAR calculations and have spread it over RCP3, via an estimate of the 30 June 2020 amount. Any difference between that forecast and the actual RCP2 closing EV account balance will be washed up and rolled forward within the EV account for later recovery or return in RCP4.

Calculating the forecast MAR and forecast SMAR

- 3.7 We have summarised in Attachment A the calculation method and the results of the calculation of the forecast SMAR values for RCP3. The forecast SMAR acts as the cap on total revenues that Transpower may input into the transmission pricing methodology to calculate the customer transmission pricing for each pricing year.
- 3.8 Attachment B sets out a calculation of the building blocks forecast MAR value for each pricing year, which is used in the calculation of the forecast SMAR in Attachment A. This calculation is based on the calculation model set out in Schedule D of the Transpower IPP determination.

⁵⁴ Clauses 24.1.6 and 31.1 of the Transpower IPP determination.

⁵⁵ [Transpower Input Methodologies Amendments Determination 2019 \[2019\] NZCC 10](#), at [3.7.3A].

Treatment of RCP2 MAR wash-up calculations in RCP3

3.9 As noted above, we applied the amended Transpower IM determination to include an estimate of the EV account balance at 30 June 2020 (end of the final disclosure year of RCP2) in the calculation of the RCP3 price path.^{56, 57}

Estimated total annual revenues for RCP3

3.10 The revenue results of the calculations in Attachment A and Attachment B are set out in Table 3.1 below. This revenue sequence is the price path for RCP3.

Table 3.1 Maximum allowable revenues determined for pricing years (nominal)

	2019/20 (\$m)	2020/21 (\$m)	2021/22 (\$m)	2022/23 (\$m)	2023/24 (\$m)	2024/25 (\$m)	Total RCP3 forecast SMAR (\$m)
Forecast MAR (RCP2)/ Forecast SMAR (RCP3)	929.8	788.7	798.8	809.0	819.0	829.3	4,044.8

Impact of reopeners during RCP3

3.11 On 28 August 2019 we amended the Transpower IM determination to introduce a new provision to allow an EV account balance to be carried forward from one regulatory period to the next, and for that carried forward balance to be applied in the setting of Transpower's maximum allowable revenue for that next regulatory period.⁵⁸ In limited circumstances where there is a large build-up in the EV account balance, the Transpower IPP determination may be reconsidered within a regulatory period to recover/return incentive and wash-up amounts through 'forecast EV adjustments'.

3.12 We also amended the circumstances when the Transpower IPP determination may be reconsidered when projects arise in the Enhancement & Development (E&D) base capex portfolio that were either not reasonably foreseeable at the time of setting Transpower's IPP or were foreseeable, but the costs and/or timing were uncertain at the time of setting Transpower's IPP.

⁵⁶ Above n 55, at [3.1.1(5)], item x in the calculation formula.

⁵⁷ Above n 31, at Table 3.1.

⁵⁸ Above n 35, at [2.3].

EV account balance carry forward

- 3.13 Under the Transpower IPP determination for the regulatory period from 1 April 2015 to 31 March 2020 (RCP2), the Transpower EV account is a memorandum account maintained by Transpower on an after-tax basis to record each EV account entry not yet returned to or recovered from Transpower's customers through Transpower's allowable revenue.
- 3.14 Because EV account entries are recorded in the EV account on an ex-post after-tax basis, there is a delay in Transpower being able to recover or return the amount to customers through its price-setting under the transmission pricing methodology (TPM).
- 3.15 We amended the IMs to explicitly allow an EV account balance to be carried forward from one regulatory period to the next. In RCP3 and future regulatory periods we will set Transpower's building blocks-based forecast MAR values and smooth those values into forecast SMAR maximum allowable revenue values. We will allocate the resulting annual revenue between pricing years to achieve a constant rate of change over the next regulatory period (ie, the resulting annual revenue will be smoothed to give 'forecast SMAR' amounts). Differences between the forecast MAR and the revenue Transpower actually earns for a disclosure year will then be washed up annually and included in the EV account.
- 3.16 For RCP3 we have set Transpower's annual revenue cap over the next regulatory period (ie, RCP3) using a smoothed building blocks approach. We have forecast costs, including pass-through costs, and recoverable costs for RCP3. These costs plus the closing EV account balance for the preceding regulatory period (ie, RCP2) have been used to calculate the 'forecast MAR'. We have smoothed those resulting forecast MAR numbers over RCP3 to produce annual forecast smoothed maximum allowable revenue amounts (ie, the 'forecast SMAR').
- 3.17 Transpower will be required to wash up any variation between the forecast MAR and the actual revenue, and any incentive amounts, into the EV account and accumulate this over RCP3. The balance in the EV account will be spread in the forecast revenues (inclusive of a tax gross up amount) over the subsequent regulatory period (ie, RCP4).
- 3.18 Consistent with our proposed approach of carrying EV account balances to a later regulatory period, the balance in Transpower's closing EV account at the end of RCP2 has been included in the forecast SMAR calculations for RCP3, which will spread it over that period.

Price-path reopener provisions – unexpected material build-up in the EV account

- 3.19 The new price-path reopener provision in the Transpower IM determination enables Transpower’s IPP to be reopened in the event of any unexpected material build-up in the balance of the EV account during RCP3.
- 3.20 Previously, we would reconsider an IPP in each disclosure year of a regulatory period (other than the last disclosure year) to take account of the effect of the following on the forecast maximum allowable revenue (forecast MAR):
- 3.20.1 the revenue impact of ‘major capex’ approved by us;
 - 3.20.2 the revenue impact of ‘base capex’ approved by us for a ‘listed project’; and
 - 3.20.3 an ‘EV adjustment’.
- 3.21 However, the building blocks approach we used to update Transpower’s forecast MAR could produce revenue volatility for Transpower from year to year, and when transitioning between regulatory periods. This volatility was generally reflected in the prices Transpower charged its customers. The volatility was potentially amplified by the reopening of the price path during the regulatory period for these three reconsideration factors.
- 3.22 Volatility in revenues (and therefore prices to customers and end-use consumers) can potentially lead to increased problems for customers in budgeting for transmission lines charges.
- 3.23 We have therefore amended the Transpower IM determination to provide that Transpower’s IPP may be reconsidered to take account of a large build-up in the EV account balance only in circumstances where:
- 3.23.1 a ‘large build-up in the EV account’ is likely to occur, which means a situation where the EV account balance as of the last day of a regulatory period would be, when divided by the number of years in that regulatory period, greater than 10% of the forecast smoothed maximum allowable revenue (ie ‘forecast SMAR’) for the final pricing year in that regulatory period;
 - 3.23.2 we consider (or Transpower applies and we are satisfied) that it is necessary for the price path to be reopened in order to take account of this likely large build-up in EV account balance;

- 3.23.3 the forecast that a large build-up in the EV account balance is likely to occur is made prior to the commencement of a pricing year in a regulatory period and the proposed amendment to the forecast SMAR is to be made in respect of the remaining complete pricing years of that regulatory period; and
- 3.23.4 if it is Transpower who applies for reconsideration of the IPP for this reason, that application:
- 3.23.4.1 relates to the remaining complete pricing years in the regulatory period; and
 - 3.23.4.2 is made within 80 working days after 30 June following the first or second disclosure year in the regulatory period, or within 80 working days after 30 June of the third disclosure year of the regulatory period where the regulatory period is more than 4 years.
- 3.24 In these circumstances, the IPP may be reopened to spread some of the EV account balance over the remaining years of RCP3 and the forecast number of years in the next regulatory period (ie, RCP4). This spreading of the EV account balance over a greater number of years will result in revenue smoothing for Transpower and reduce the degree of price shock for consumers.

Price-path reopener provisions – E&D base capex

- 3.25 We have amended the Transpower IM determination to introduce a new reopener for Transpower to use to seek additional funding when projects arise in the E&D base capex portfolio that were either:⁵⁹
- 3.25.1 not reasonably foreseeable at the time of setting the price-quality path; or
 - 3.25.2 foreseeable but the costs and/or timing were uncertain at the time of setting the price-quality path.
- 3.26 In RCP3 Transpower can seek this additional funding in the E&D capex portfolio in circumstances where:
- 3.26.1 an allowance for that E&D project was not included in the base capex allowances for the current regulatory period because that E&D project was not forecast to commence in that regulatory period when the Transpower IPP determination was made;

⁵⁹ Above n 55, at [3.7.3B].

- 3.26.2 it was either unforeseeable, or was foreseeable but was unknown in its cost and/or timing, that the E&D project was likely to commence during the current regulatory period when the Transpower IPP determination was made;
 - 3.26.3 the project has one or more specific E&D drivers eg, demand step changes, generation developments or decommissioning;
 - 3.26.4 the application must relate to a minimum of two E&D projects that must in aggregate cost at least \$20 million; and
 - 3.26.5 Transpower can demonstrate that the E&D projects are reasonably likely to commence in the regulatory period.
- 3.27 Consistent with our other reopener provisions, we did not specify an approvals process. The application timing gives us sufficient time to assess an E&D reopener application and notify Transpower of a decision in time for Transpower to announce price changes to its customers.

Chapter 4 **Determining the IRIS *differences in penultimate year* amount and baseline adjustment term for RCP3**

Purpose and structure of this chapter

- 4.1 This chapter outlines the methodology we will apply to determine the IRIS *differences in penultimate year* amount as required under the Transpower IM determination.⁶⁰
- 4.2 The mechanism for calculating the IRIS incentive amount (for inclusion in the recoverable costs for each disclosure year in RCP3) is specified in the Transpower IM determination and, apart from some error corrections on 28 August 2019 and 13 November 2019, was most recently substantively amended in 2017 (2017 IM Amendment).⁶¹ This chapter explains how we have implemented the IRIS mechanism for RCP3.
- 4.3 While the IRIS calculation is largely a mechanical process, one input to the calculation must be determined by the Commission. In simple terms, and as we explain in more detail below, we must estimate the efficiency savings that Transpower made in the penultimate year of the current RCP (ie, Year 4 of RCP2): this is known as the *differences in penultimate year* amount.
- 4.4 We have prepared an estimate of the *differences in penultimate year* amount for RCP3 based on our methodology. We have used this estimate to formulaically calculate the forecast baseline adjustment term, which (along with other inputs) is used to calculate the forecast ‘opex incentive amount’ that Transpower is expected to receive in its revenues during RCP3.⁶²

⁶⁰ Above n 30, at [3.6.4(4)].

⁶¹ [Commerce Commission “Input methodologies review final decision: Transpower Incremental Rolling Incentive Scheme” \(29 June 2017\)](#).

⁶² We have used this estimate of the IRIS opex incentive amount to determine Transpower’s smoothed price path for RCP3.

- 4.5 The final determination of the *differences in penultimate year* amount (and hence the final opex incentive amount) for RCP3 will take place in the first year of RCP3 to wash up for any variance between the forecast values used in this decision and the outturn actual opex values (which will only be observable after RCP2 has concluded).⁶³ In washing up the determination for actual values in RCP3, we will apply the methodology outlined in this chapter.
- 4.6 This Chapter contains:
- 4.6.1 the background to our final determination of the *differences in penultimate year* amount;
 - 4.6.2 an overview of our decision for the determination;
 - 4.6.3 the next steps that will follow this decision;
 - 4.6.4 an introduction to how the IRIS mechanism applies as an economic framework, including why an estimate of the *differences in penultimate year* is necessary now;
 - 4.6.5 an explanation of the methodology we have determined to calculate the *differences in penultimate year* amount;
 - 4.6.6 an explanation of how our decision has considered and taken into account Transpower's submission on our draft decision; and
 - 4.6.7 our assessment of the resulting incentive amount Transpower would receive in the forecast SMAR over the pricing years of RCP3.

IRIS background

Introduction

- 4.7 The purpose of the Commerce Act 1986 is to promote the long-term benefit of consumers by producing outcomes that are consistent with those produced in competitive markets. It does this partly through placing incentives on regulated suppliers, including to improve efficiency. Regulated suppliers such as Transpower get the benefit of improved efficiency during a regulatory period, because they are permitted to earn the same revenue and keep the difference as profit.

⁶³ The RCP2 opex allowance will also be washed up to take into account outturn CPI. That is, the opex carry forwards amounts will be based on the difference between the CPI-adjusted opex allowance and actual opex in RCP2.

- 4.8 Part 4 is also designed to promote the sharing of efficiency gains with consumers.⁶⁴ This is achieved in part by resetting the price path at the beginning of each RCP, which may involve lowering the price so that consumers receive the benefit of the efficiency savings generated during the previous RCP.
- 4.9 In the absence of an IRIS mechanism, the strength of the incentive on Transpower to reduce costs declines across a regulatory period, as Transpower can only retain the benefit until the price-quality path is next reset (and those efficiency gains are shared with consumers). This is called the natural incentive.⁶⁵
- 4.10 The IRIS mechanism is designed to provide a consistent operating expenditure (opex) incentive rate for Transpower to achieve efficiency savings, by allowing it to continue recovering a proportion of its efficiency gains after the end of the RCP.
- 4.11 Under the Transpower IM determination, an *adjustment to the IRIS opex incentive amount* must be calculated for the second disclosure year of each regulatory period.⁶⁶ The adjustment to the IRIS opex incentive amount is defined as the sum of the *base year adjustment term* and the *baseline adjustment term*.⁶⁷
- 4.12 Thus to calculate the adjustment to the IRIS opex incentive amount, Transpower needs the baseline adjustment term and the base year adjustment term. As we explain further below, the mechanism uses the *differences in penultimate year* amount as an input to a formula to calculate the amount of the IRIS baseline adjustment term to be applied in the second disclosure year of the subsequent RCP (ie, Year 2 of RCP3), which is in turn used to calculate the IRIS opex incentive amount to be recovered or returned in that disclosure year.
- 4.13 In particular, the baseline adjustment term is designed to ensure that incentives are correctly applied between RCPs so that Transpower is not over- or under-compensated for efficiencies achieved in Year 4 of RCP2 (the base year). This is necessary because of the way that Transpower's opex allowance is calculated. We explain this further below.

⁶⁴ Sections 52A(1)(b) and (c) of the Act.

⁶⁵ For further background on how incentives to make efficiency savings are affected by the inclusion or not of an IRIS mechanism see: [Commerce Commission "Input methodologies \(Transpower\) reasons paper" \(December 2010\)](#), at Section 7.5; and [Commerce Commission "Incentives for Suppliers to Control Expenditure During a Regulatory Period: Process and Issues Paper" \(20 September 2013\)](#).

⁶⁶ Clause 3.6.4(1) of the Transpower IM determination.

⁶⁷ Clause 3.6.4(1) of the Transpower IM determination.

Why we are making this IRIS decision now

- 4.14 In June 2017, as part of our input methodologies review (IM review), we reviewed and amended the Transpower IRIS.⁶⁸ We are now required to apply that mechanism as part of the present IPP determination. We describe the IRIS mechanism and the 2017 amendments in more detail below.
- 4.15 The 2017 decision paper described our decision to amend the IRIS provisions in the Transpower IM determination to be more consistent with the timing of Transpower's opex forecasting in its expenditure proposal for the next RCP and also to provide guidance on how we intended to estimate the baseline adjustment term.
- 4.16 In our 2017 decision paper we considered that it may be appropriate to estimate the baseline adjustment term at the same time as setting the price-quality path for RCP3, to allow for combined consultation with stakeholders.⁶⁹
- 4.17 One of the inputs used to calculate the base year adjustment term and the *differences in penultimate year* is the actual opex Transpower spent for the final pricing year of RCP2 (2019/20). This information will not be available until after 30 June 2020, at approximately the same time that Transpower sets its prices for the 2021/22 pricing year (ie, for the second year of RCP3).
- 4.18 The Transpower IM determination does not specify a time for when this determination needs to be made and the amount notified to Transpower. We previously indicated that we considered it appropriate to determine this term at the time we set the IPP. However, we acknowledged that making that determination at a later date would allow a greater quality of historic data to be taken into account, thereby potentially increasing the accuracy of the estimation.⁷⁰

⁶⁸ Above n 61.

⁶⁹ Above n 61, at [96]-[97].

⁷⁰ Above n 61, at [96]-[97].

- 4.19 Although the actual amount of the *differences in penultimate year* will not be determined until the first year of RCP3 once all information on the RCP2 actual opex is available,⁷¹ we consider it important to decide on the *approach* for calculating this amount now. This ensures that the estimate of the baseline adjustment term, and hence the IRIS opex incentive amount, that we include in Transpower's smoothed RCP3 revenue path is as accurate as possible. The final amount will be determined and any necessary adjustments (ie, washups) will be made after the end of RCP2.
- 4.20 We have publicly consulted on the baseline adjustment term during the RCP3 IPP process so that we can build the forecast IRIS recoverable costs (ie, an estimate of the IRIS opex incentive amount) into Transpower's smoothed price path for RCP3.
- 4.21 We are satisfied that determining the methodology and making a preliminary calculation now, and conducting a wash up after the end of RCP2, is the best way of balancing the goal of promoting predictability and the desire to use as accurate information as possible.
- 4.22 As a practical matter, it is also helpful to make a decision on the approach for determining this term now, due to the interaction with smoothing of the price path. We explain this further below.

Framework for making decisions

- 4.23 The regulatory framework and statutory requirements for our IPP decisions are described in our 29 August 2019 Decisions and reasons paper on Transpower's IPP for RCP3.⁷²
- 4.24 In determining an appropriate methodology for calculating the *differences in penultimate year* amount, we have considered whether our decision is consistent with:
- 4.24.1 the Part 4 purpose in section 52A of the Act;⁷³
 - 4.24.2 our IRIS policy objectives, which are to encourage Transpower to make opex efficiency savings and over time share those efficiency gains with its customers;⁷⁴ and

⁷¹ That is because RCP2 does not end until 31 March 2020.

⁷² Above n 31, at Attachment B.

⁷³ Consistent with s52A(1)(b) and (c) of the Act, [Commerce Commission "Input methodologies \(Transpower\) reasons paper" \(December 2010\)](#), at [7.1.7]; and above n 61, at [27]-[28], [44] and [70].

- 4.24.3 our goal of promoting predictability in the application of the regime.
- 4.25 We have taken into account as part of our decision the need to promote the Part 4 purpose in s 52A of the Act. We have also considered as part of our final decision the submission received from Transpower on our draft decision. We have analysed the points in that submission and taken it into account in forming our final decision.
- 4.26 In Table 4.1, we have outlined the objectives referred to in s 52A that we seek to promote in making our decisions.

⁷⁴ The effectiveness of sharing these benefits with end-consumers is the extent to which the savings are passed on through electricity retailers and distributors. Passing on of these savings will result in lower prices for electricity consumers.

Table 4.1 High-level summary of how our decision is consistent with the purpose of Part 4 of the Commerce Act

Purpose of Part 4 of the Act	Example
<p>Transpower will have a further incentive to innovate and invest, including in replacing assets. (s52A(1)(a))</p>	<p>Our decision should provide improved predictability and confidence in the opex incentive regime and better ensure that when Transpower undertakes investments and achieves efficiency gains, these will be appropriately shared between Transpower and its customers.</p>
<p>Transpower will have further incentives to improve efficiency and provide service at a quality that reflects consumer demands. (s52A(1)(b))</p>	<p>Our decision should promote the intended sharing of efficiencies between Transpower and its customers. This is consistent with our revenue path decision for quality of service which sets the reliability incentive rate with regard to the IRIS mechanism.⁷⁵</p>
<p>Transpower will share with consumers the benefits of efficiency gains, including through lower prices. (s52A(1)(c))</p>	<p>Our decision should allow for appropriate assessment and treatment of temporary and permanent savings, resulting in the intended sharing between Transpower and its customers.</p>
<p>Transpower will be limited in its ability to extract excessive profits. (s52A(1)(d))</p>	<p>Our decision should limit the ability to ‘double dip’ by retaining savings that have been made in previous regulatory periods, and not allow for the asymmetric treatment of controllable costs in the evaluation of efficiency. This should limit Transpower’s ability to extract excessive profits.</p>

Overview of this IRIS decision

4.27 We have:

- 4.27.1 determined that the appropriate methodology to calculate the *differences in penultimate year* amount is the ‘step-and-trend’ back-cast approach, originally proposed in our 2017 decision paper and in our draft decision and explained further in this Chapter;⁷⁶

⁷⁵ Above n 31, at [F367].

⁷⁶ Clause 3.6.4(4) of the Transpower IM determination provides that the *differences in penultimate year* amount is the difference between **forecast opex** and **actual opex** in the penultimate year of the preceding **regulatory period**, minus any amount resulting from savings that occurred in the preceding years of the regulatory period” (emphasis added).

- 4.27.2 for the purposes of estimating the *differences in penultimate year* amount for RCP3, used a general opex growth trend based on RCP3 and part of RCP2 to apply the step-and-trend back-cast method;⁷⁷
- 4.27.3 decided that it is not appropriate to include Transpower's proposed step changes in our assessment of the *differences in penultimate year* amount and our estimation of the baseline adjustment term for RCP3;⁷⁸ and
- 4.27.4 using the methodology described in this paper, estimated a *differences in penultimate year* amount of \$1.3 million, which results in a baseline adjustment term estimate of -\$7.5 million for the smoothed price path for RCP3, which is incorporated in an opex incentive amount estimate of \$24.1 million for RCP3.⁷⁹
- 4.28 Our determination of the forecast *differences in penultimate year* for the purposes of Transpower's RCP3 forecast SMAR was notified to Transpower on 18 October 2019 to enable it to perform calculations required under our section 53ZD information gathering notice of 3 October 2019.⁸⁰

Next steps

- 4.29 The final *differences in penultimate year* amount will be determined in the first year of RCP3, and will wash up the calculation for actual opex values for all of RCP2. The final *differences in penultimate year* amount will be calculated using the methodology set out in this chapter.
- 4.30 The wash up will adjust for the outturn actual opex as well as adjusting the RCP2 allowance for the outturn Consumer Price Index (CPI), as specified in the Transpower IPP determination.

⁷⁷ This trend period is shorter than the trend period of RCP1 to RCP3 proposed in our draft decision.

⁷⁸ In its RCP3 proposal, and refined in its submission on our draft decision, Transpower proposed to remove a number of steps from the RCP3 opex allowance before back-casting.

⁷⁹ This calculation will be washed up for outturn actual opex in RCP2 and for outturn CPI in the RCP2 opex allowance. The same methodology as outlined in this chapter will be applied in the final calculation in RCP3.

⁸⁰ See paragraphs 2.13 to 2.17, and Chapter 3 above.

- 4.31 The difference between the opex incentive amount calculated in Year 2 of RCP3 and the estimate we have used to forecast recoverable costs for the RCP3 smoothed price path will be recorded in Transpower's EV account,⁸¹ and will be recovered from (or returned to) Transpower's customers over RCP4.⁸²
- 4.32 Attachment C contains an explanation of how smoothing of Transpower's price path affects IRIS.

The purpose of the IRIS mechanism and why we must determine the *differences in penultimate year*

Overview of the IRIS mechanism

- 4.33 Price-quality regulation produces an incentive to achieve efficiency savings by fixing maximum revenues over a regulatory period. Transpower will receive the benefit of any opex efficiencies it achieves, as it will earn the same maximum revenues for the regulatory period, while experiencing lower operating costs.
- 4.34 At the end of each regulatory period, Transpower's opex allowance is reset and a new baseline is established that incorporates the opex savings generated during the regulatory period. This allows consumers to share in those efficiency gains. The extent to which Transpower retains the benefit of efficiency gains (as opposed to them being shared with consumers) is known as the 'retention factor': a higher retention factor indicates that Transpower retains a greater share of the efficiency gains.
- 4.35 Without an IRIS mechanism, Transpower is able to retain the revenue adjustment associated with any efficiency saving made at the start of the regulatory period for a longer time than those savings made at the end of the regulatory period.
- 4.36 This is because in the absence of an IRIS mechanism, Transpower would only retain the benefits/losses from efficiency gains or losses until the price path is next reset, as the new opex allowance would reflect realised efficiencies. The decreasing retention factor reflects declining incentive strength as the regulatory period progresses. The declining incentive that exists under a price-quality path without an IRIS mechanism is known as the 'natural incentive'.

⁸¹ The EV account is used to account for under/over-recovered revenues until the next available pricing year, with balances carried forward being adjusted at the WACC rate. These balances include annual price path wash-up calculations and incentive calculations that have not yet been recovered from or returned to Transpower in revenue calculations.

⁸² Unless there is a 'Large balance in EV account' reopener. For more information see paragraphs 3.19 to 3.24 above.

- 4.37 The IRIS is intended to allow Transpower to retain efficiency savings for a five-year period, regardless of when they occur within the regulatory period. It is designed to achieve this result by implementing a mechanism to carry cost savings across a price-path reset.
- 4.38 Under the IRIS, Transpower calculates (in accordance with a methodology set by the Commission) the incremental efficiency gain or loss for each year, based on the difference between forecast opex and actual opex, and the level of efficiency already realised.⁸³ This calculated amount for each disclosure year is notionally carried forward for the subsequent five years.
- 4.39 This notional carry forward helps ensure that the incentive strength remains constant. Transpower retains the benefit or cost in the year it is realised and for the following five years under this approach.
- 4.40 The overall effect is that Transpower will receive efficiency incentives:
- 4.40.1 through the natural incentive, for efficiencies achieved within the same regulatory period;⁸⁴ and
 - 4.40.2 through the carry-forward mechanism, resulting in incentive amounts arising under IRIS, for efficiencies achieved within the previous regulatory period.

The relationship between the IRIS mechanism and Transpower's IPP: the adjustment to the opex incentive

- 4.41 As we have explained, the IRIS mechanism is designed to create a link between two regulatory periods, by allowing the supplier to retain the benefit of efficiency gains generated in one regulatory period into the next.
- 4.42 An IRIS mechanism ensures that, instead of simply resetting the opex allowance to transfer the entire benefit of efficiency savings to consumers, the supplier is permitted to retain the revenue associated with those savings for a full five years. The benefit of the efficiency savings that Transpower is permitted to recover in the next regulatory period is known as the 'amounts carried forward'. This is the first component of the opex incentive amount.

⁸³ Represented by the difference between forecast opex and actual opex in the previous year.

⁸⁴ Or within the final year of the previous regulatory period. This efficiency gain would be experienced after the price path for the next regulatory period was determined, so would not be reflected in the opex allowance.

- 4.43 The opex incentive mechanism is based on the penultimate year of the preceding regulatory period (year four). This is known as the base year.
- 4.44 Under a relatively low cost default price-quality path (such as those applied to most electricity distribution businesses), opex allowances are rolled over from expenditure in the previous regulatory period.
- 4.45 However, a potential issue occurs for Transpower’s individual price-quality path. Unlike a default price-quality path, opex allowances are not simply rolled over from expenditure in the previous regulatory period. Instead, the opex allowance is calculated for each regulatory period from the ‘bottom up’ (based on Transpower’s proposal, audited estimates of future costs, and so on).
- 4.46 It follows that there is no necessary link between the costs incurred in the past regulatory period and the allowance Transpower receives in the next regulatory period. This means that additional components must be introduced into the calculation to enable the IRIS mechanism to operate correctly.
- 4.47 A further complication arises because expenditure allowances are set based on information provided in the third year of a regulatory period, so any gains or losses from the fourth year are not taken into account in the opex allowance set for the next regulatory period.
- 4.48 Because the data is based on Year 3 data, any subsequent savings in Year 4 will be overcompensated (or cost overspends will be over-penalised).⁸⁵ Permanent savings would be effectively counted twice:
- 4.48.1 first, they will be counted as part of the IRIS amounts carried forward (this is the positive revenue adjustment that Transpower should earn from making permanent savings in Year 4); and
 - 4.48.2 second, as the opex allowance is set “too high” (or “too low” where the saving is negative – ie, an inefficiency), Transpower will retain (bear) this difference from Year 3 (when the forecast is made) to the base year (Year 4). This is a windfall adjustment that Transpower should not be exposed to under our price-quality path.

⁸⁵ Temporary savings are savings which only take place in a given year (and are reversed in the following year), whereas permanent savings are those which are maintained in perpetuity. It is not straightforward to distinguish between temporary and permanent savings by examining actual expenditure and we therefore must estimate the type of savings through the back-casting methodology.

- 4.49 In addition, Transpower will be over-rewarded for temporary underspends (or over-penalised for temporary overspends) in Year 4:
- 4.49.1 the main difference between a default price-quality path (DPP) and an IPP is that, in a DPP, the forecast will include all savings (both temporary and permanent) that were made in Year 4;⁸⁶ and
 - 4.49.2 with an IPP, the assumption is that only permanent savings in the previous period are incorporated in the forecast, because the forecast is determined independently (ie, on a bottom-up basis). As a result there is no offsetting of the inaccurate opex incentive that arises from temporary savings in Year 4 (ie, the penultimate year of the regulatory period).
- 4.50 To address these issues, the IRIS opex incentive mechanism includes an 'adjustment to the opex incentive'. The adjustment to the opex incentive amount comprises two 'terms' (ie, components):
- 4.50.1 the baseline adjustment term, which re-establishes the link between the current regulatory period and the preceding regulatory period. The relevant adjustment amount provided through the baseline adjustment term is equal to the total difference from savings between forecast and actual expenditure in the penultimate year (Year 4) of the preceding regulatory period. This negates the part of the opex incentive that would otherwise be wrongly attributed to savings made in Year 4 (as these savings would not be incorporated in the forecast); and
 - 4.50.2 the base year adjustment term, which ensures that temporary savings in year five of a regulatory period are treated correctly.⁸⁷ This is determined formulaically based on the forecast and actual opex values from Years 4 and 5 of RCP2.⁸⁸

⁸⁶ Including the effect of temporary savings within the DPP forecast has the effect under an IRIS of offsetting the incremental change in Year 4 (due to temporary savings) that would otherwise be wrongly rewarded as part of the IRIS opex incentive (ie, treated as a permanent savings). The reduced allowance due to the temporary savings in the base year would cancel out the positive IRIS adjustments, and effectively 'reveal' the saving as temporary.

⁸⁷ Savings in Year 5 will be retained for that year, and permanent savings will be retained for the entirety of the following regulatory period. The base year adjustment term ensures that the retention factor is maintained for savings (or cost overruns) in Year 5.

⁸⁸ Clause 3.6.4(2) of the Transpower IM determination.

- 4.51 A negative baseline adjustment term reflects cost savings being made in Year 4 of the preceding regulatory period. In this case, Transpower will receive positive amounts under the carry-forward mechanism, and under the natural incentive (ie, Transpower will retain the difference between its allowance and actual spend in RCP3). A negative adjustment term is necessary to offset this (and vice versa for cost overruns).

The IRIS requirements in the 2017 Transpower IM Determination

- 4.52 The original IRIS mechanism in the Transpower IM determination assumed that any permanent savings made up to and including Year 4 were incorporated in Transpower's IPP forecast.
- 4.53 Transpower subsequently informed us that its initial IPP forecasts are developed in Year 3 of the previous regulatory period, and therefore are unlikely to incorporate Year 4 savings in the forecast.
- 4.54 We responded in 2017 by amending the Transpower IM to include total differences in the penultimate year (rather than just temporary savings) in estimating the baseline adjustment term.⁸⁹ We consulted on our proposed approaches to estimating the baseline adjustment term in our decision paper. Transpower supported our proposed approach in its submission.⁹⁰
- 4.55 The calculation of annual IRIS opex incentive amounts is determined under Part 3, Subpart 6 of the Transpower IM determination (clauses 3.6.1 to 3.6.4). It requires Transpower to calculate the IRIS opex incentive amount for each disclosure year of a regulatory period.⁹¹ The IRIS opex incentive amount comprises the sum of two components:
- 4.55.1 amounts carried forward into that disclosure year from a disclosure year in a preceding regulatory period;⁹² and
 - 4.55.2 an adjustment to the IRIS opex incentive amount (if applicable).⁹³

⁸⁹ Above n 61, at Attachment B.

⁹⁰ [Transpower "Transpower Incremental Rolling Incentive Scheme" \(20 April 2017\)](#).

⁹¹ Clause 3.6.1(1) of the Transpower IM determination.

⁹² Clause 3.6.2(1)(a) of the Transpower IM determination.

⁹³ Clause 3.6.2(1)(b) of the Transpower IM determination.

- 4.56 One of the components required to calculate the baseline adjustment term is the *differences in penultimate year*.⁹⁴ To enable Transpower to perform the required calculations, we need to determine this value.⁹⁵ Clause 3.6.4(4) of the Transpower IM determination provides:

‘Differences in penultimate year’ is an amount determined by the **Commission**, having regard to the views of interested persons, that is the difference between **forecast opex** and **actual opex** in the penultimate year of the preceding **regulatory period**, minus any amount resulting from savings that occurred in the preceding years of the **regulatory period**. For the purpose of this definition, savings can be both negative and positive. The amount so determined is to be notified to **Transpower**.

- 4.57 Other terms determined under other processes by the Commission are used by Transpower to calculate the IRIS opex incentive amount. These include:

4.57.1 The WACC rate;

4.57.2 The cost of debt;⁹⁶

4.57.3 The forecast opex (for disclosure years in the preceding RCP, ie, in RCP2);
and

4.57.4 The number of disclosure years in the current regulatory period, ie, the five years of RCP3.

- 4.58 These terms do not require specific decisions – they have been determined, or will be determined, by other processes.

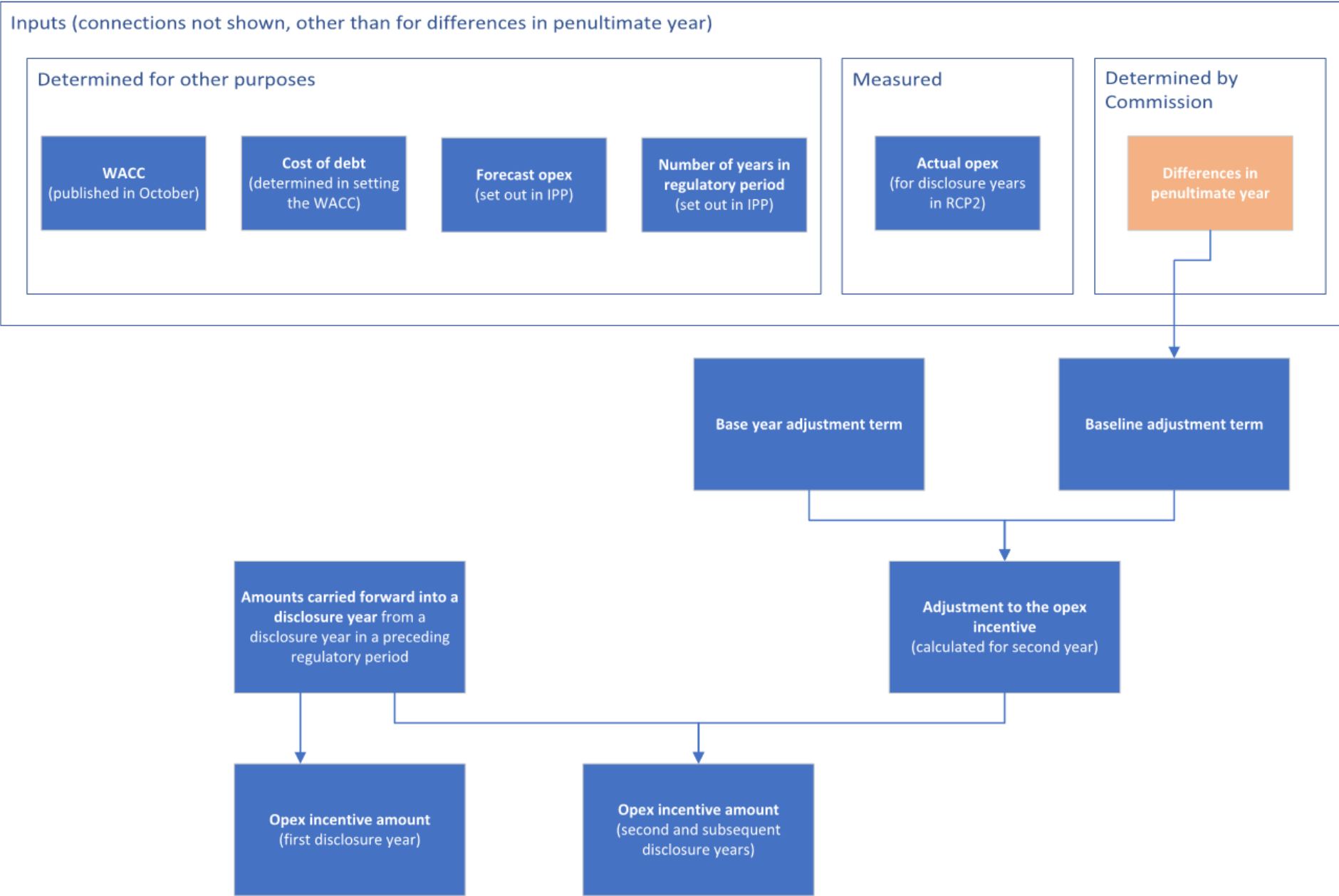
- 4.59 A simplified visual representation of how these amounts are combined to produce the IRIS opex incentive amount is in Figure 4.1.

⁹⁴ Clause 3.6.4(3) of the Transpower IM determination.

⁹⁵ Clause 3.6.4(4) of the Transpower IM determination.

⁹⁶ This is one of the inputs that is calculated and used in the determination of the WACC and is used to roll forward the opex incentive amounts.

Figure 4.1 How IRIS inputs combine to calculate the IRIS opex incentive amount



- 4.60 The *differences in penultimate year* amount is broken down into two elements:
- 4.60.1 The difference between forecast opex and actual opex in the penultimate year of the preceding regulatory period (ie, disclosure year 4 of RCP2); less
 - 4.60.2 Any amount resulting from savings that occurred in the preceding years of the regulatory period (ie, the first three years of RCP2).
- 4.61 The Transpower IM determination requires that the Commission have regard to the views of interested persons in determining this amount.⁹⁷
- 4.62 Forecast opex and actual opex are defined terms in the Transpower IM determination. The forecast opex is specified by the Commission. For the purposes of this calculation, the amount is in the RCP2 IPP determination. Actual opex is the actual amount of Transpower's operating costs, allocated to electricity transmission services for the relevant disclosure year, as calculated under the Transpower IM determination, including an adjustment for differences between forecast CPI and outturn CPI.
- 4.63 However, the Transpower IM determination does not prescribe a method for determining the amount of *savings* that occurred in the preceding years (the second component of the *differences in penultimate year*). In this determination we have set out our chosen methodology and how it should be applied.

Our decision on the methodology to calculate the *differences in penultimate year* amount

- 4.64 We must choose and apply a methodology to estimate the *differences in penultimate year* amount. As we explain below, the methodologies we have considered both use a combination of forecast and/or historical data to construct a trend which we can project back to estimate this amount.
- 4.65 The decisions that we are required to make include:
- 4.65.1 the choice of calculation methodology – in the 2017 paper we outlined two potential methods for estimating the *differences in penultimate year* (and hence the baseline adjustment term);
 - 4.65.2 the opex growth trend estimate – this requires a decision on the trend estimation period and the data used in the estimate to feed into the back-cast estimation (ie, the slope of the trend back from RCP3 into RCP2); and

⁹⁷ Clause 3.6.4(4) of the Transpower IM determination.

4.65.3 the inclusion (or otherwise) of step changes – consideration of any applicable environmental changes in costs that are outside of Transpower’s control.

4.66 In the rest of this chapter, we explain why we have chosen to use the step-and-trend back-cast method, why we have estimated the opex trend using a combination of historical and forward-looking data, and why we do not consider that any of the step changes proposed by Transpower are appropriate.

Draft decision

4.67 For our draft decision, we preferred the step-and-trend method. We regarded this method as preferable as it took into account the total opex allowance, rather than just the allowance in the first year of RCP3.

4.68 Our preferred approach was to use an exponential trend estimate. We used nominal dollars in estimating our trend so considered the exponential trend to be the most appropriate.⁹⁸

4.69 We used the trend period of RCP1 to RCP3 opex (that is, data that included Transpower’s actual operating expenditure since the 2010/11 disclosure year, forecast expenditure for 2018/19 and 2019/20, and the opex allowance for RCP3).⁹⁹ We considered that the general opex trend should be based on the approved RCP3 opex allowance, as well as observed historical opex during RCP1 and RCP2.

4.70 Our draft decision did not remove any step changes from the RCP3 opex allowance as we did not consider there was an environmental shift in costs between RCP2 and RCP3 that were outside of Transpower’s control.

Transpower’s submission on our draft IRIS decision

4.71 We received one submission on our draft decision, from Transpower.¹⁰⁰ We did not receive any cross-submissions.

4.72 Transpower’s submission did not provide any comments on our proposed methods for determining the *differences in penultimate year*, which it had supported in its submission on our 2017 draft decision.¹⁰¹

⁹⁸ Inflation will be included in nominal opex dollars and is an example of exponential growth as it is inherently compounding.

⁹⁹ We considered the results of a number of other approaches to modelling this trend, as a cross check on the exponential regression, including the annual percentage change in opex; compound annual growth; and linear regression.

¹⁰⁰ [Transpower “Submission on IRIS baseline adjustment term” \(21 August 2019\)](#).

4.73 Transpower identified five related key points in its submission:¹⁰²

1. The Commission **should examine steps and trends** to reach an outcome consistent with its core financial capital maintenance (**FCM**) principle. The draft IBAT decision would result in Transpower funding underlying (non-efficiency related) cost changes using proceeds from earlier efficiency gains. This undermines the principle that we should have an ex ante expectation of recovering prudent and efficient costs and undermines confidence in the efficiency mechanisms.
2. The IBAT decision is **very sensitive to the trend estimate** and extending the trend assessment period. The Commission's draft decision not to use the trend factors identified in the RCP3 proposal has led to a material impact. Historic costs have been taken into account through the base-step-trend opex forecast, as we undertook historic trend analysis in assessing the appropriateness of 2017/18 as a base year. Using extended historic data has led to a result that does not reflect inflation and the savings from our business improvement initiatives during RCP2.
3. Our RCP3 **proposal provides relevant information** to make a considered IBAT decision. The draft IBAT decision disregards using an analysis of step opex investments within our RCP3 proposal in favour of high-level examination of opex figures, including historic data that does not provide insight into future trends. The proposal provides clear evidence of new costs and relevant trends that we consider the Commission should examine to ensure the IBAT decision is well founded and consistent with the opex allowance decision.
4. The **outcome can be sense-checked**. The draft IBAT decision is not consistent with the information that has been provided to the Commission about our past efficiency gains and future cost pressures. Our view is that to reach a robust decision the Commission should complete both a detailed step cost assessment and a high-level sense-check of the efficiency and cost story implied by the IBAT decision.
5. The final IBAT **decision should provide clear guidance** on how future IBAT decisions will be made. A well-documented final IBAT decision will help to provide confidence and predictability.

4.74 In particular, Transpower submitted that we should take a different approach to setting the period used to determine the opex growth trend estimate (excluding certain historical data), and make an allowance for 'step changes' in expenditure during 2018/19 to 2024/25 (which would reflect changes in costs unrelated to efficiency, and over which Transpower had no control). We analyse each of these issues below and explain why we have taken a different view to Transpower in relation to them.

¹⁰¹ In calculating its updated baseline adjustment term in its submission on our draft decision, Transpower used the step-and-trend back-cast approach that we preferred in our draft decision.

¹⁰² Above n 100, at 2.

4.75 In particular, Transpower:

4.75.1 used a shorter period for estimating the opex growth trend, spanning from Year 3 of RCP2 to the end of RCP3 (2017/18 to 2024/25). Transpower uses a forward-looking trend assessment period;¹⁰³

4.75.2 included a number of steps over the period (averaging \$19.0 million per annum over RCP3 and averaging \$9.3 million in the final two years of RCP2);¹⁰⁴ and

4.75.3 corrected RCP2 opex figures to ensure they are up to date and treated operating leases consistently.¹⁰⁵

4.76 Further detail on Transpower's submission is described in Attachment D. In the rest of this chapter, we explain why we have followed our draft decision to use the step-and-trend back-cast method, how we have constructed the opex trend and why we do not consider that Transpower's proposed steps should be included.

Our decision is to use the step-and-trend back-cast method

Selection of a method

4.77 In our 2017 IM Amendment, we canvassed two approaches that may be used in determining the *differences in penultimate year*: the *step-and-trend back-cast method* and the *Year 1 back-cast method*.¹⁰⁶ These back-cast methods involve using data from the opex forecast in RCP3 (and relevant historical information) and projecting back a trend to estimate changes in opex efficiency over time. This enables us to estimate opex efficiency gains in Year 4 of RCP2. Transpower has expressed support for these approaches.¹⁰⁷

¹⁰³ Above n 100, at 3.

¹⁰⁴ Above n 100, at 3.

¹⁰⁵ Our draft IRIS decision did not include the value of operating leases in Year 5 (as Transpower's proposal did not include these in the forecast actual opex for Year 5). We have included operating lease payments in our final IRIS decision to keep the treatment of leases consistent.

¹⁰⁶ Above n 61, at [74]-[94].

¹⁰⁷ Above n 90.

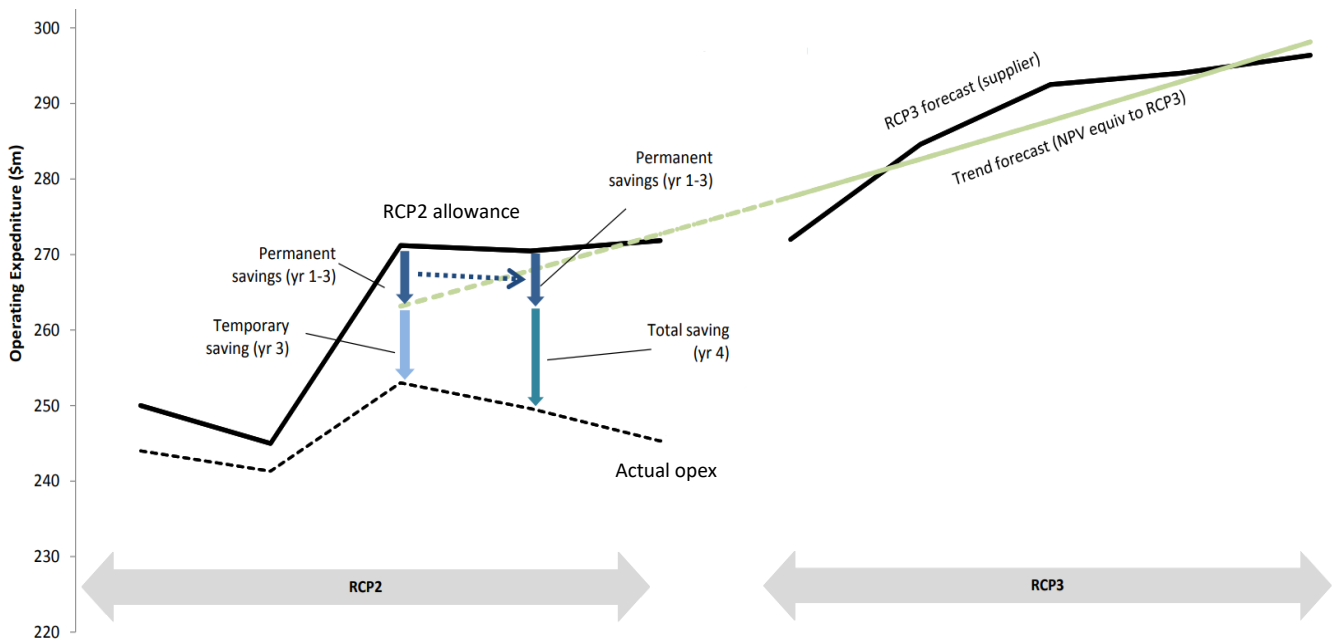
- 4.78 Both methods use a similar process to estimate the *differences in penultimate year* term for Year 4 of RCP2:¹⁰⁸
- 4.78.1 A back-casting approach (ie, trending back from RCP3 into RCP2) is used to estimate the level of temporary savings in Year 3 of RCP2. This is done by trending from the RCP3 opex allowance back to Year 3 of RCP2 using our estimated general trend in opex. The back cast provides us with an estimate of the ‘baseline’ level of opex, and so we can identify temporary savings made in Year 3 by comparing to the actual opex spend in Year 3.¹⁰⁹
- 4.78.2 From this back cast we can also determine the level of permanent savings made from Years 1 to 3 in RCP2. This is done by comparing the ‘baseline’ level of opex (ie, where the back trend reaches in Year 3) with Transpower’s opex allowance for Year 3 in RCP2. This difference represents permanent savings that have been achieved during the first three years of RCP2.
- 4.78.3 The estimate of the permanent savings over Years 1 to 3 can then be used to determine the total opex savings in Year 4 of the period (ie, the *differences in penultimate year* for RCP2). The total savings in Year 4 are the difference between actual opex and the forecast opex for Year 4 taking into account permanent savings made up until Year 4 (ie, the permanent savings from Years 1 to 3).
- 4.79 Figure 4.2 displays how a back-cast methodology could apply to estimate total savings in Year 4 of RCP2 (ie, the *differences in penultimate year*), using the step-and-trend methodology as an example.¹¹⁰

¹⁰⁸ Above n 61, at Attachment C.

¹⁰⁹ The forecast opex for RCP2 is specified in the RCP2 price-quality path determination, and the actual opex for RCP2 can be observed.

¹¹⁰ The values in the figure are only indicative to provide an overview of how a back-cast methodology could be applied.

Figure 4.2 Overview of step-and-trend back cast



- 4.80 In order to determine the amount resulting from savings from previous disclosure years with RCP2, we can use the approved RCP3 opex allowance, taking into account steps between Year 3 of RCP2 and the end of RCP3, and an estimate of the trend in expenditure. This enables us to determine the level of permanent savings in Year 3 of RCP2.
- 4.81 This approach relies on the assumption that permanent savings attained by Year 3 of RCP2 are included within the forecast opex for RCP3. The RCP3 forecast can therefore be assumed to reflect this amount trended forward, taking account of any trends (eg, increases in input costs) and any steps in expenditure.

Our draft IRIS decision

- 4.82 On 12 July 2019 we published our draft IRIS decisions and reasons paper.¹¹¹ Our draft decision identified one of the two previously suggested approaches (the step-and-trend back-cast method) as our preferred option to determine the *differences in penultimate year* amount. We also indicated that a hybrid approach, that averages the results of the two approaches, may be possible.¹¹² We invited submissions on the suitability of this approach. However, we did not receive submissions from interested persons on this issue.

¹¹¹ [Commerce Commission “Transpower’s individual price-quality path from 1 April 2020 – IRIS baseline adjustment term – Draft decisions and reasons paper” \(12 July 2019\).](#)

¹¹² Above n 111, at [4.16].

- 4.83 The 'Year 1 back cast from RCP3' approach, applies a trend back from Year 1 of RCP3, to Year 3 of RCP2. This produces an estimate of the 'permanent' savings in Year 3 of RCP2.¹¹³
- 4.84 Because this method trends back from a single year, it must take into account any one-off (temporary) factors associated with the year, as well as any step changes in opex, that are outside the trend, between Year 3 of RCP2 and Year 1 of RCP3.
- 4.85 Our preferred approach, the 'step-and-trend back cast from RCP3' approach, differs from this in that it converts the RCP3 opex allowance into a step-and-trend forecast amount that has the same net present value (NPV) as the actual allowance, and follows a trend increase equivalent to the estimated opex trend.
- 4.86 The results of the step-and-trend back-cast method are more sensitive to the trend assumption than the Year 1 back-cast method, but are less affected by an atypical Year 1 of RCP3.
- 4.87 For our draft decision, we preferred the step-and-trend method because it took into account the total opex allowance, rather than just the allowance in the first year of RCP3. This method resulted in a *differences in penultimate year* amount of \$7.7m.¹¹⁴
- 4.88 In comparison, the Year 1 back-cast method produced an estimate of *differences in penultimate year* amount of \$3.9m (less favourable to Transpower).¹¹⁵

Our decision on choice of back-cast methodology

- 4.89 As part of our decision on estimating the baseline adjustment term we considered which estimation methodology was most appropriate and consistent with the Part 4 purpose.
- 4.90 Our final decision is to use the step-and-trend back-cast methodology to calculate the *differences in penultimate year* amount because it:
- 4.90.1 is more representative of the opex allowance over RCP3 rather than relying on the value of one year (Year 1) for the back-casting estimation; and

¹¹³ The difference between the actual expenditure, and the back trended amount for Year 3 of RCP2 can be assumed to only be temporary savings.

¹¹⁴ Above n 111, at Table 4.

¹¹⁵ Above n 111, at Table 4.

4.90.2 provides less of an incentive to forecast or adjust Year 1 in an opex allowance to receive a greater baseline adjustment term (compared with the Year 1 back cast).¹¹⁶

4.91 We consider the step-and-trend back-cast methodology of estimating the *differences in penultimate year* is consistent with the Part 4 purpose. The step-and-trend methodology provides less of an incentive to adjust or time forecast opex in Year 1 of RCP3 to gain a higher baseline adjustment term (compared with the Year 1 back cast), limiting Transpower's ability to extract excessive profits. We consider that the step-and-trend methodology appropriately shares cost savings achieved by Transpower with consumers in comparison to the Year 1 back cast by providing a more representative RCP3 opex allowance to back cast from.

Applying this methodology to calculate the differences in penultimate year amount for RCP3

4.92 To implement our decision, the step-and-trend back cast requires an estimate of the general trend in opex and an assumption of the allowance in RCP3 to back cast from. Using these inputs we back cast from a present value trend of the RCP3 allowance (using the general growth trend in opex) to Year 3 of RCP2, where we estimate 'temporary savings' made in Year 3.¹¹⁷ With this estimate we can formulaically estimate the *differences in penultimate year* and therefore the baseline adjustment term to apply to Transpower during RCP3.¹¹⁸

4.93 We have estimated a general trend in opex (explained below) and used this in our IRIS calculation model to calculate the baseline adjustment term and total IRIS recoverable costs (from savings made in RCP2) based on Transpower's RCP2 allowance and RCP2 actual spend, and Transpower's RCP3 IPP opex allowance.¹¹⁹ We have published our IRIS model alongside this paper which demonstrates how we have estimated the baseline adjustment term for RCP3.

¹¹⁶ Under the Year 1 back cast Transpower would be incentivised to forecast a low amount of required opex in Year 1 of the coming period. This would result in a lower starting point for the back cast to take place and therefore a lower estimate of *differences in penultimate year* and greater baseline adjustment term estimate.

¹¹⁷ Paragraphs 4.153 to 4.156 demonstrate how our estimation takes place using the different inputs available.

¹¹⁸ To see how we can calculate the *differences in penultimate year* for the level of temporary savings in Year 3 of RCP2, see above n 61, at Attachment C.

¹¹⁹ Years 4 and 5 actual opex are Transpower's estimate of actual opex for the remainder of RCP2. At the time of the final baseline adjustment term determination in RCP3 we will have the disclosed actual opex values for Years 4 and 5 of RCP2.

- 4.94 As a cross check on the result of the calculation, we have also estimated the differences using the Year 1 back cast approach, and explain the result of this cross check below.

Our decision on the approach for estimating the opex growth trend

Our draft decision on the opex growth trend

- 4.95 To estimate this trend for our draft decision we considered a selection of trending techniques and different time periods that could be used for the trend period estimation.
- 4.96 In our draft decision, our preferred approach was to use an exponential trend estimate, measured over historical and forecast opex (that is, data that included Transpower's actual operating expenditure since the 2010/11 disclosure year, forecast expenditure for 2018/19 and 2019/20,¹²⁰ and the opex allowance for RCP3).
- 4.97 We also considered applying the same exponential trend estimate, measured over actual operating expenditure (from RCP1) and forecast expenditure for the remainder of RCP2 (ie, 2018/19 and 2019/20). This produced a smaller trend estimate value.
- 4.98 We considered the results of other approaches to modelling this growth trend as a cross check on the exponential regression, including:
- 4.98.1 The annual percentage change in opex;
 - 4.98.2 The compound annual growth; and
 - 4.98.3 Linear regression.
- 4.99 The trend estimates produced by these methods were reasonably consistent using the trend periods analysed in the draft decision, providing us with confidence in our preferred estimation using an exponential trend.¹²¹

Transpower's submission on the growth trend

- 4.100 Transpower's submission proposed a forward-looking exponential trend estimation approach with a trend period of 2017/18 to 2024/25, excluding historical data prior to 2017.

¹²⁰ Actual operating expenditure amounts for 2018/19 are now available. Transpower has provided us with this information, as well as a revised forecast for 2019/20, and an explanation of changes between the original and the revised forecast.

¹²¹ Above n 111, at Table 3.

- 4.101 As Transpower notes in its submission, the IRIS baseline adjustment term decision is very sensitive to the opex trend estimate. Transpower argued that by using extended historic data, our draft decision did not reflect inflation and savings made during RCP2 (2015-2020). As we explain below, however, we consider that the general trend in opex should reflect both forward-looking costs and observed opex during RCP2. Using actual opex in the trend estimate reflects outturn costs that have occurred during RCP2, rather than relying solely on forecasts that could be under- or overspent. This is the best estimate of the observed trend in opex.

How we have estimated the opex growth trend

- 4.102 The general trend in opex used in estimating temporary savings in RCP2 Year 3 is a significant factor in determining the baseline adjustment term. In the estimation of *differences in penultimate year* we have considered the relevant trend period at the time of the determination. Our general opex growth trend estimate is 2.57%.¹²²
- 4.103 We have used nominal dollars in estimating our trend and in the application of the step-and-trend back cast.¹²³ On that basis, we consider that the exponential trend approach is the most appropriate. Transpower also used an exponential trend approach in its submission on our draft decision. We have used this in DPP approaches in the past.
- 4.104 We have estimated a general trend in opex based on the time period comprising part of RCP2, and RCP3 (ie, 2015/16 to 2024/25). We consider that the general opex trend should be based on the approved RCP3 opex allowance, while also taking into account observed historical opex during RCP2. We consider that this time period strikes an appropriate balance between the RCP3 allowance and relevant historical data to inform the general trend.

¹²² We have tested our general opex trend against the DPP draft decision econometric approach used for setting opex allowances. The approach uses elasticities for determining total opex using the opex drivers of circuit length and the number of connections. We have used the elasticities from the DPP (circuit length growth and GXP growth as well as population growth as a proxy for connection growth to be consistent with the DPP) using Transpower's data and forecast CPI from the IPP to estimate a growth trend. We have assumed that circuit length growth is zero as Transpower has been selling off (or decommissioning) lines and there have been no significant projects increasing circuit length. The growth rate based on a period of 2015/16 to 2024/25 using the approach used for the DPP results in a growth rate of approximately 2.5%. For information on the elasticities see: [Commerce Commission "Default price-quality paths for electricity distribution businesses from 1 April 2020 – Draft decision" \(29 May 2019\)](#), at Table A5.

¹²³ We have used nominal dollars in our trend estimate calculations because we do not need to then take into account inflation and real price effects that are not directly observable or relatable to categories of opex. Inflation will be included in nominal opex dollars and is an example of exponential growth, as it is inherently compounding.

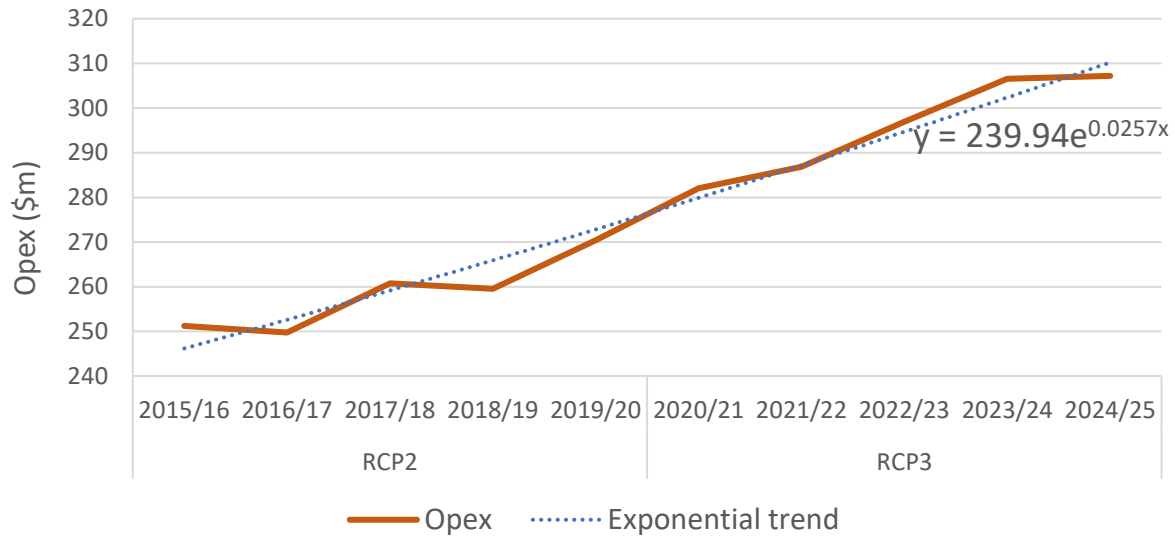
- 4.105 In its submission on our draft decision, Transpower used a forward-looking trend assessment period (2017/18 to 2024/25) which it suggested would ensure the assessment is based on the best available information about valid trends in costs.¹²⁴
- 4.106 Historical opex spend is important in our trend estimation as it is the only available information that we have on how Transpower has observably spent opex. At the same time, we agree that the RCP3 opex allowance is our best estimate of future opex costs, and therefore we have included this in our trend estimation.
- 4.107 Thus we agree that forward-looking costs are valuable and should be included in the assessment, but the opex trend should also include observed historical data. Estimating a trend based solely on forward-looking costs relies on forecasts of costs (that may or may not eventuate) rather than observed trends in opex. This smaller set of observations from Transpower's submission also limits the amount of relevant data included in the estimation.
- 4.108 Although we are satisfied that it is appropriate to include some historical data, we have adopted a shorter time period compared with our draft decision which used a trend period of RCP1 to RCP3 (2010/11 to 2024/25). We consider that our updated time period weighs more relevant historical data with the allowed RCP3 opex allowance. The consequence is that the only difference between our approach and the approach suggested by Transpower is the inclusion of historical data for two years (2015/16 and 2016/17).
- 4.109 We estimate that using Transpower's proposed trend period, and assuming no step changes are taken into account in the trend estimation, would result in an opex trend of 2.71%. This compares with our trend estimate of 2.57%.
- 4.110 Our final decision excludes RCP1 from our trend period as we consider that it is not reflective of Transpower's expenditure strategy during RCP2 and RCP3 (when the baseline adjustment term is being estimated and applied). Transpower undertook a number of large capex projects during RCP1, making it an atypical period.¹²⁵ We consider RCP2 and RCP3 to be more business as usual periods, with a steady increase in opex.

¹²⁴ Above n 100, at 3.

¹²⁵ [Commerce Commission "Setting Transpower's price-quality path for 2015–2020 \[2014\] NZCC 23" \(29 August 2014\)](#), at [2.17].

- 4.111 Our general opex trend estimate of 2.57% is displayed in Figure 4.3 below.¹²⁶ The general trend in opex is above the forecast level of cost price inflation over RCP3, resulting in a positive real trend in opex.¹²⁷

Figure 4.3 Opex trend



Note: All values are in nominal NZ dollars

- 4.112 Overall, we consider that our trend period of RCP2 and RCP3 provides a more appropriate balance between observed historical data and forward-looking values in the trend estimation. We consider that the trend period is consistent with the Part 4 purpose and is in the long term interests of consumers.

Our decision on efficiency step changes for the back-casting estimation

Background of step changes in the IRIS

- 4.113 The second decision we have to make in applying the step-and-trend back-casting methodology is whether to include any 'step changes'.
- 4.114 Step changes are permanent 'environmental changes': significant external changes in the business landscape where costs have changed that are beyond Transpower's control and outside of its ability to respond to the event.¹²⁸

¹²⁶ We also note that the exponential trend period from 2015/16 to 2024/25 has a higher R-squared compared with the 2010/11 to 2024/25 trend period (0.971 compared to 0.899). The R-squared of the trend period from 2015/16 to 2024/25 is also slightly higher than Transpower's proposed trend period of 2017/18 to 2024/25 (0.971 compared to 0.968). A higher R-squared value indicates that the model is a better fit of the data.

¹²⁷ In its submission on our draft IRIS baseline adjustment term decision, Transpower noted that our draft decision opex growth trend of 1.64% was well below CPI.

4.115 We consider that step changes can and should be taken into account in the back-cast estimation where these costs are external to Transpower and are not due to cost changes that are controllable (and therefore not considered for the purposes of efficiency). Incentive regulation is designed to give regulated suppliers an incentive to improve efficiency, not to reward or penalise them for material external changes over which they have no control.

4.116 With the introduction of the IRIS mechanism in 2014 we discussed adjusting the IRIS mechanism for certain extreme events:¹²⁹

We consider that as a general principle the incentives to control expenditure should not be automatically suspended following a catastrophic event. In particular the IRIS should help provide incentives for suppliers to prepare appropriately for such events.

Despite this we believe that there should be some discretion for the Commission to modify the impact of the IRIS under certain circumstances which result in a material impact on the gains and losses to suppliers under IRIS.

4.117 The Transpower IM does not specify how we treat step changes in our back cast estimation. The Transpower IM does specify that we must estimate the *differences in penultimate year* using forecast and actual opex. These are defined terms and therefore cannot be adjusted for in RCP2.

4.118 In our 2017 decision paper we stated that permanent step changes could include a change in legislative or regulatory requirements as we considered that these were good examples of an environmental change that could impact costs and should be considered for the assessment of efficiency.¹³⁰

4.119 Our draft decision did not remove any step changes from the RCP3 opex allowance as we did not consider there were any environmental changes in costs between RCP2 and RCP3 that are beyond Transpower's control for which an adjustment was appropriate.

¹²⁸ An example of a step adjustment we have previously made was an adjustment for increased insurance costs resulting from the Canterbury earthquakes and other natural disasters. See: [Commerce Commission "Resetting the 2010-15 Default Price-Quality Paths for 16 Electricity Distributors" \(30 November 2012\)](#), at [C40].

¹²⁹ [Commerce Commission "Amendments to input methodologies for electricity distribution services and Transpower New Zealand: Incremental Rolling Incentive Scheme" \(27 November 2014\)](#), at [B20]-[B21].

¹³⁰ Above n 61, at [82.2].

Transpower's submission

- 4.120 In its submission on our 12 July 2019 draft decision on the IRIS baseline adjustment term, Transpower suggested that our draft decision was inconsistent with the opex allowance decision (in our 29 May 2019 draft decisions), which accepted opex step changes. We note that our 29 August decision implicitly included the allowed step changes in our estimate of the general trend in opex.
- 4.121 Transpower has already made significant savings through RCP2 so far from underspending its opex allowance.¹³¹ It has also received a greater allowance for certain opex categories in its allowance for RCP3. As we explain below, we do not consider that it necessarily follows that these reflect step changes in costs outside Transpower's control during RCP2 for which an adjustment to the IRIS is necessary.
- 4.122 Transpower proposed a number of step changes in its submission on our draft decision.¹³² Transpower proposed to make cost adjustments for:¹³³
- 4.122.1 service provider cost base;
 - 4.122.2 maintenance cycle;
 - 4.122.3 renewal optimisation;
 - 4.122.4 digitisation;
 - 4.122.5 insurance cover;
 - 4.122.6 business support costs associated with debt raising and portfolio management; and
 - 4.122.7 deliverability overlay.

¹³¹ Transpower retains the difference between the opex allowance that we set and its actual spend. The only wash-up during the period is adjusting the allowance for outturn CPI (ie, for forecast CPI error).

¹³² Above n 100.

¹³³ These are the steps that Transpower has used in its estimation of the *differences in penultimate year*. We have not excluded these costs from the assessment of *differences in penultimate year* in our final decision.

- 4.123 We have examined Transpower's proposed step changes and have considered whether it is appropriate to remove these costs for the purposes of assessing efficiency, taking into account the overall statutory purpose and the nature of the incentive regime of which the IRIS mechanism forms a part. We do not agree with Transpower's submission that these steps are 'non-efficiency related' and we do not consider that it is appropriate to remove these costs.

Whether to include step changes in our assessment of the baseline adjustment term for RCP3

- 4.124 As previously discussed in paragraph 4.113, we use the term 'environmental changes' to refer to external changes in the business landscape where costs have changed that are beyond Transpower's control and outside of its ability to respond to the event. We previously stated that regulatory or legislative changes could be examples of a change in costs that we would consider for the purposes of assessing efficiency.¹³⁴
- 4.125 Efficiency cost changes that we may take into account are not limited to regulatory and legislative cost changes, but these are good examples of external events outside of Transpower's control. Other examples could include (but are not limited to):
- 4.125.1 Insurance premiums increasing based on some extreme natural disaster (that is outside of the design standards of Transpower's grid); or
 - 4.125.2 A catastrophic natural event that is outside of the design standards of Transpower's grid and that causes Transpower to incur significant additional costs.
- 4.126 In our assessment of proposed efficiency step changes that should be taken into account for RCP3, we have taken into account whether the proposed changes are:
- 4.126.1 significant;
 - 4.126.2 robustly verifiable;
 - 4.126.3 not captured in the other components of our projection (base year, trend factors, capex, or recoverable costs); and
 - 4.126.4 largely outside the control of the supplier.

¹³⁴ Above n 100, at [82].

- 4.127 These factors have been drawn from the step-change criteria we apply in the context of default price-quality path regulation.¹³⁵ We are mindful, as Transpower notes, of the different context in which we are required to assess step changes for the purpose of an IPP. However, we consider that these factors help us to exercise our judgement in identifying changes for which a discrete efficiency adjustment is appropriate, and help us to ensure that the objectives of the IRIS mechanism are met and that our decision is consistent with the purpose of Part 4.

Our final decision on efficiency step changes for back-casting

- 4.128 As we outline below, we have evaluated Transpower's proposal to take into account step changes and do not consider that its proposed steps are appropriate to be excluded from the back-casting for the assessment of efficiency.
- 4.129 The proposed steps are costs which we consider are within management control and are costs that we would expect a prudent transmission operator to be able to effectively manage.¹³⁶ Transpower can plan and minimise the impact of external events that are within its reasonable control, and we do not consider these risks should be passed on to consumers.
- 4.130 Due to the cyclical nature of many of the proposed steps, we consider that while costs may be increasing now for certain items (there are also likely to be a number of costs not proposed as steps where costs are decreasing), there will be periods where the costs are also falling. As explained further below, we expect there to be, on average, a symmetric impact on Transpower.

¹³⁵ The DPP step change criteria also includes that steps should apply in principle to all distributors. We have interpreted this for the purposes of the IRIS baseline adjustment term decision as applying to the wider electricity industry, and consider this to be a relevant consideration to take into account in assessing step changes.

¹³⁶ Insurance costs are one such expense that we have considered for step changes in the past. In this case, for Transpower in RCP3, we consider that insurance cover does not meet our criteria because Transpower has made a management decision to increase the scope of insurance coverage of the grid. Transpower should generally be able to manage expected changes in insurance costs.

- 4.131 We have approved opex cost increases in Transpower's RCP3 opex allowance, but do not consider that these cost changes should be excluded for the assessment of efficiency as part of the IRIS mechanism. The setting of allowances in the opex forecast is done on a bottom-up basis by looking at different opex categories and what costs are expected to be required over RCP3. The purpose of the IRIS back cast is to estimate the level of savings in RCP2 to effectively bridge the RCP2 and RCP3 regulatory periods. We consider that our back cast methodology is consistent with our approach to setting the RCP3 opex allowance, and it does not follow that additional allowances that have been made for RCP3 necessarily reflect step changes in costs during RCP2.
- 4.132 Transpower's analysis in its submission suggests that increases in costs that are not in the base year (which we consider to be within Transpower's control) should be excluded from the RCP3 opex allowance for the back-cast estimation (and this should be considered underlying opex). However, just because opex costs are expected to increase, and we consider the costs to be prudent, does not necessarily mean that a change in environment has occurred that should be reflected in efficiency steps being excluded.
- 4.133 We note that the step changes that Transpower has proposed to be removed for the back cast do not directly match the opex increases that we allowed as part of the IPP, although there is some crossover.¹³⁷ This is consistent with our view that there is no direct connection between previous costs in RCP2 and steps that should be accounted for in the back cast.
- 4.134 The IRIS mechanism is intended to reveal long-term efficiencies (through the assessment of cost savings or overspends) over time. We consider that the IRIS should evaluate efficiency on an aggregate basis, and only make step adjustments where there are costs outside of the supplier's control due to external changes in costs that can be identified and verified and are sufficiently significant to justify a separate adjustment.

¹³⁷ For our approach to scrutiny of step changes in Transpower's expenditure proposal, see: [Commerce Commission "Our process, framework and approach for setting Transpower's expenditure allowances, quality standards and individual price-quality path for 2020 to 2025" \(25 October 2018\)](#), at [5.17]. For the results of our analysis, see above n 31, at Attachment I.

- 4.135 The IRIS model works at an aggregate opex level and assesses the type of savings achieved by analysing the incremental change in total opex from year to year. The model does not work on a bottom-up basis by analysing specific savings in each category over time. Therefore, excluding certain costs that are not environmental changes outside of Transpower's control from the assessment of efficiency in the IRIS model could distort the estimate of the level and type of savings achieved during RCP2.
- 4.136 We note that our philosophy to setting revenues for Transpower is to set an overall 'bucket' of expenditure for both opex and base capex, and allow Transpower to spend the allowance in a way that is in line with it being a prudent grid operator.¹³⁸ We do not direct Transpower on where to spend its allowances, and provide Transpower with flexibility to substitute expenditure between opex and capex. We provide Transpower with incentives to operate prudently and achieve efficiency savings in the long term interest of consumers.

Asymmetric treatment of step changes

- 4.137 As we noted in 2014 with the introduction of the IRIS mechanism, we consider that costs over which Transpower lacks control are likely to have a symmetric effect in that these could have a positive or negative impact (and are unlikely to be biased in either direction).¹³⁹ We considered that it was consistent with the objective of the IRIS to create a consistent marginal incentive to reduce costs.
- 4.138 Allowing selected cost increases to be removed from the assessment of efficiency provides incentives for Transpower to 'cherry pick' changes in costs that are beneficial to the assessment of efficiencies that have been created during RCP2. This creates a risk that increases in costs are characterised as 'step changes' while costs that have reduced (whether due to controlled expenditure or external factors) would be treated as 'efficiencies'.¹⁴⁰

¹³⁸ The opex and base capex amounts which we approve under our decisions for RCP3 represent a pool of fungible expenditure within which Transpower has the freedom to make its spend decisions during RCP3. This means that any decision by us to reduce a specific category of expenditure, compared to what Transpower proposed, does not mean that Transpower cannot reprioritise and spend its proposed amount during RCP3 if it considers that this is the priority use of funds. See: above n 31, at [X43].

¹³⁹ Above n 129, at [B13]-[B18].

¹⁴⁰ This would result in a lower back casting starting point in RCP3 and lower level of *differences in penultimate year* estimated in RCP2, resulting in a higher baseline adjustment term that Transpower would receive in RCP3.

- 4.139 Therefore, allowing such costs in the assessment can lead to an asymmetry in the assessment of whether cost savings or overspends have occurred (which will be biased towards Transpower as they will be incentivised to propose only steps which will benefit them). We do not consider that this is in line with the purpose of our regulatory incentives which are to promote genuine cost savings (rather than rewarding Transpower for categorising different costs as being 'steps').
- 4.140 Using Transpower's proposed 'steps' could lead to a 'double dipping' issue. We do not have perfect information on where different cost efficiencies have been achieved during RCP2. Transpower could make savings in RCP2 and achieve a positive revenue benefit through the IRIS, but then propose the same costs as a 'step increase' in costs (which would be excluded for assessing efficiency).
- 4.141 This would represent a reversal in cost savings made in RCP2 but would allow Transpower to make the same savings again in RCP3 (which would be the incorrect treatment of savings and how these are shared with consumers).
- 4.142 Therefore, netting out costs that are not consistent with our evaluations factors can distort the assessment of whether temporary and permanent savings have been achieved during RCP2. We do not consider that this outcome is consistent with the Part 4 purpose as it may over-reward Transpower and not appropriately share cost savings with consumers.
- 4.143 We have not identified any step changes to be excluded for the assessment of efficiency for RCP3, but have adjusted the RCP3 allowance for Fire and Emergency New Zealand (FENZ) and Utilities Disputes levies to be consistent with RCP2.
- 4.144 FENZ levies and levies payable by all members of the Energy Complaints Scheme operated by Utilities Disputes¹⁴¹ have been recategorised from being in the opex allowance in RCP2 to becoming recoverable costs in RCP3.
- 4.145 Therefore, to be consistent with historical actual opex, we have adjusted the RCP3 opex allowance to include the value of FENZ and Utilities Disputes levies for the purposes of estimating the *differences in penultimate year* amount. We have also taken operating leases into account consistently through RCP2 and RCP3.

¹⁴¹ This scheme has been approved under Schedule 4 of the Electricity Industry Act 2010.

Our estimate of *differences in penultimate year* for RCP3

Our estimate of the baseline adjustment term for RCP3

- 4.146 With our trend estimate of 2.57% we can estimate temporary savings in RCP2 Year 3 under the two methods (the RCP3 Year 1 back-cast method and RCP3 step-and-trend back-cast method).
- 4.147 Using the value of temporary savings in RCP2 Year 3 we can estimate the total differences in RCP2 Year 4 and therefore an estimate of the baseline adjustment term that applies in RCP3 (after washing up for outturn RCP2 values).
- 4.148 Table 4.2 presents our range of values for the baseline adjustment term and opex incentive amounts under the different approaches outlined in our 2017 paper.¹⁴²

Table 4.2 Opex incentive outcomes under different calculation approaches

Approach	Opex growth trend	Differences in penultimate year (\$m)	Baseline adjustment term (\$m)	PV opex incentive amount incl. baseline adjustment term (\$m) ¹⁴³
Year 1 back cast	2.57%	2.2	-12.1	19.9
Step-and-trend back cast	2.57%	1.3	-7.5	24.1

- 4.149 Our modelling under both approaches produces a positive calculation of the *differences in penultimate year* (total savings amount in Year 4 of RCP2). By positive we mean that the actual opex spend is lower than the forecast opex allowance for that year, taking into account all permanent savings made in previous years of the RCP.
- 4.150 Under the IRIS, positive opex savings in Year 4 of RCP2 require a negative adjustment via the baseline adjustment term to balance against the positive effects of the IRIS carry-forward mechanism. Positive savings in Year 4 require a negative baseline adjustment term to offset this saving because the IPP works on the assumption that the RCP3 opex allowance is based on Year 4 costs.¹⁴⁴

¹⁴² The calculations for these outcomes are displayed in our associated model.

¹⁴³ This is the present value of the IRIS opex incentive amount as at the start of RCP3, ie, 1 April 2020.

¹⁴⁴ On 13 November 2019, we made a non-material amendment to the Transpower IM determination relating to the calculation of the IRIS opex incentive amount. This is explained further in Attachment E.

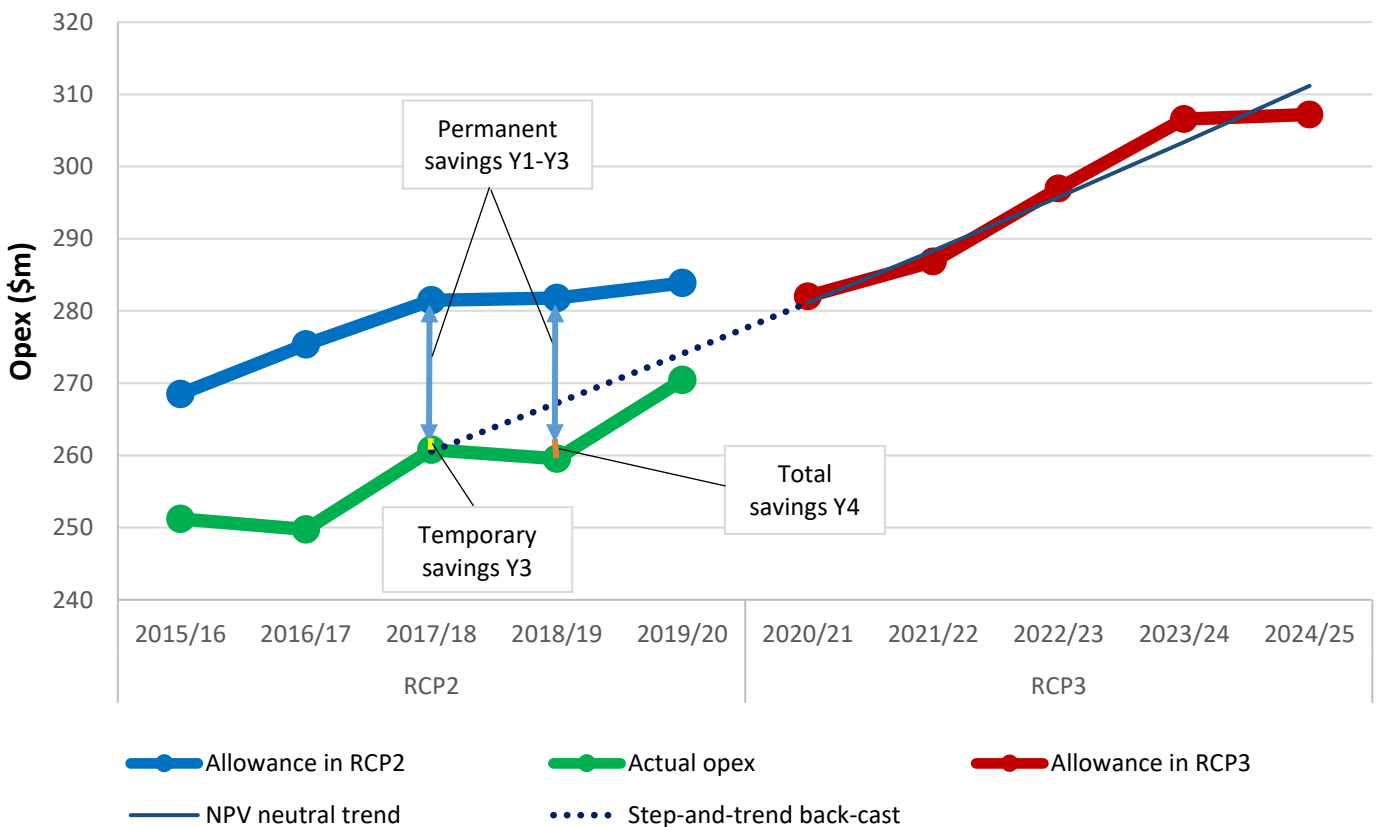
4.151 However, because Transpower’s RCP3 proposal is developed and proposed in Year 3 of RCP2, any savings in Year 4 need to be taken into account otherwise Transpower could benefit or be penalised more than is necessary (ie, if there is a positive saving in Year 4, this should have been reflected in the proposed opex allowance, otherwise it could appear as an efficiency saving under the IRIS mechanism).

4.152 We consider the Year 1 back cast approach to be a useful cross-check against our estimate of *differences in penultimate year*. This approach results in a slightly greater total saving in Year 4, and hence a more negative baseline adjustment term (which would result in Transpower receiving a lower total opex incentive amount). This estimate provides confidence in our final estimate using the step-and-trend approach.

Applying the step-and-trend back-cast method for RCP3

4.153 Figure 4.4 demonstrates how the step-and-trend back-cast estimates the total savings in Year 4 of RCP2.

Figure 4.4 Calculation of baseline adjustment term



4.154 Applying the step-and-trend back-cast method results in an estimate of the *differences in penultimate year* amount for RCP3 of \$1.3 million, and a baseline adjustment term calculation of -\$7.5 million.

- 4.155 When our estimate of the baseline adjustment term is combined with the IRIS incentive amounts carried forward in RCP3, this gives a resulting net present value of the IRIS opex incentive amount of \$24.1 million that Transpower may recover as a recoverable cost in its revenues in RCP3.¹⁴⁵
- 4.156 Table 4.3 shows a breakdown of how the different estimation amounts feed into the final baseline adjustment term, and how all of the IRIS components then feed into the final NPV of the opex incentive amount used in the RCP3 revenue calculation.

¹⁴⁵ This estimated incentive amount is approximately \$34 million lower than the amount calculated by Transpower in its submission on our draft decision.

Table 4.3 Calculation of estimate of IRIS opex incentive amount

Amount	2020/21 (\$m)	2021/22 (\$m)	2022/23 (\$m)	2023/24 (\$m)	2024/25 (\$m)	Total RCP3 estimate (\$m)
Year 3 total difference		20.7				
Less Year 3 temporary savings¹⁴⁶		-0.2				
Equals permanent savings Years 1-3		20.9				
Year 4 total difference		22.3				
Less permanent savings Years 1-3		20.9				
Equals differences in penultimate year¹⁴⁷		1.3				
Convert to baseline adjustment term¹⁴⁸		-7.5				-7.5
Plus base year adjustment term¹⁴⁹		7.4				7.4
Plus amounts carried forward to opex incentive amount	22.3	5.0	-3.3	1.6	-	25.6
Equals total opex incentive amount	22.3	4.8	-3.3	1.6	-	25.4
NPV opex incentive amount recoverable in revenues¹⁵⁰						24.1

Note: Numbers in the table are rounded

¹⁴⁶ This amount is estimated using our back-cast methodology.

¹⁴⁷ Estimate of the difference between the opex allowance and actual opex in Year 4 of RCP2 less permanent savings in Year 3 of RCP2, as specified in clause 3.6.4(4) of the Transpower IM determination.

¹⁴⁸ Estimate of the RCP2 Year 4 total savings, calculated using the *differences in penultimate year* and the WACC rate, as set out in the formula in clause 3.6.4(3) of the Transpower IM determination.

¹⁴⁹ Estimate calculated using the differences between the forecast opex and actual opex for Years 4 and 5 of RCP2 and the WACC rate, as set out in the formula in clause 3.6.4(2) of the Transpower IM determination.

¹⁵⁰ The NPV of the opex incentive amount is required to enable the spreading in the smoothed RCP3 price path. It is the net present value of the series of annual opex incentive amounts calculated using the WACC rate.

- 4.157 The baseline adjustment term is determined using the *differences in penultimate year* and the WACC that will apply for RCP3 (ie, 4.57%).¹⁵¹ The WACC has been used for discounting purposes to calculate the present value of expenditure and is used in the calculation of the baseline adjustment term.
- 4.158 The Transpower IM determination requires that we use the WACC applying at the time the IRIS recoverable costs are determined. The baseline adjustment term is applied in the second year of RCP3, so we are required to use the WACC applying in RCP3.¹⁵²

Assessment of how our decision promotes the objectives of the IRIS mechanism

- 4.159 In its submission on our draft decision, Transpower suggests:¹⁵³

IRIS is part of an overall regulatory design that aims to achieve two key objectives:

- Transpower has an ex ante expectation of recovering prudent and efficient costs.
- Gains (and losses) associated with improving (or deteriorating) efficiency will be shared.

- 4.160 Our regime incorporates an ex-ante financial capital maintenance (FCM) principle to ensure that Transpower has an expectation that it can recover an efficient and prudent level of costs. This is primarily accomplished through the setting of opex and capex allowances to ensure that Transpower is able to recover enough revenue such that it can undertake prudent and efficient expenditure.
- 4.161 The IRIS provides incentives for Transpower to further improve cost efficiency by reducing its expenditure in relation to allowable opex. This provides Transpower with an opportunity to increase profits through efficiency savings. The baseline adjustment term bridges the disconnect between regulatory periods to ensure that Transpower is appropriately remunerated for cost savings achieved.
- 4.162 As previously discussed, we note that allowing controllable costs to be excluded for IRIS purposes can have an asymmetric impact on incentive outcomes and the sharing of savings with consumers. We consider that applying a symmetric approach to assessing efficiency is consistent with FCM.

¹⁵¹ The WACC used for regulatory purposes is the 67th percentile vanilla WACC (above n 32).

¹⁵² Clause 3.6.4(3) of the Transpower IM determination.

¹⁵³ Above n 100, at 3.

4.163 We consider that our IRIS baseline adjustment term decision (alongside our IPP allowance decisions) is consistent with ex-ante FCM, as Transpower will have an expectation of being able to recover efficient costs and of being appropriately remunerated for cost savings while also sharing these with consumers.

4.164 We also consider that our decision is consistent with the purpose of Part 4 and the outcomes we outlined at Table 4.1 above. In particular, it promotes sharing of efficiency gains in a way that is consistent with the IPP generally, and should also provide improved predictability and confidence in the opex incentive regime.

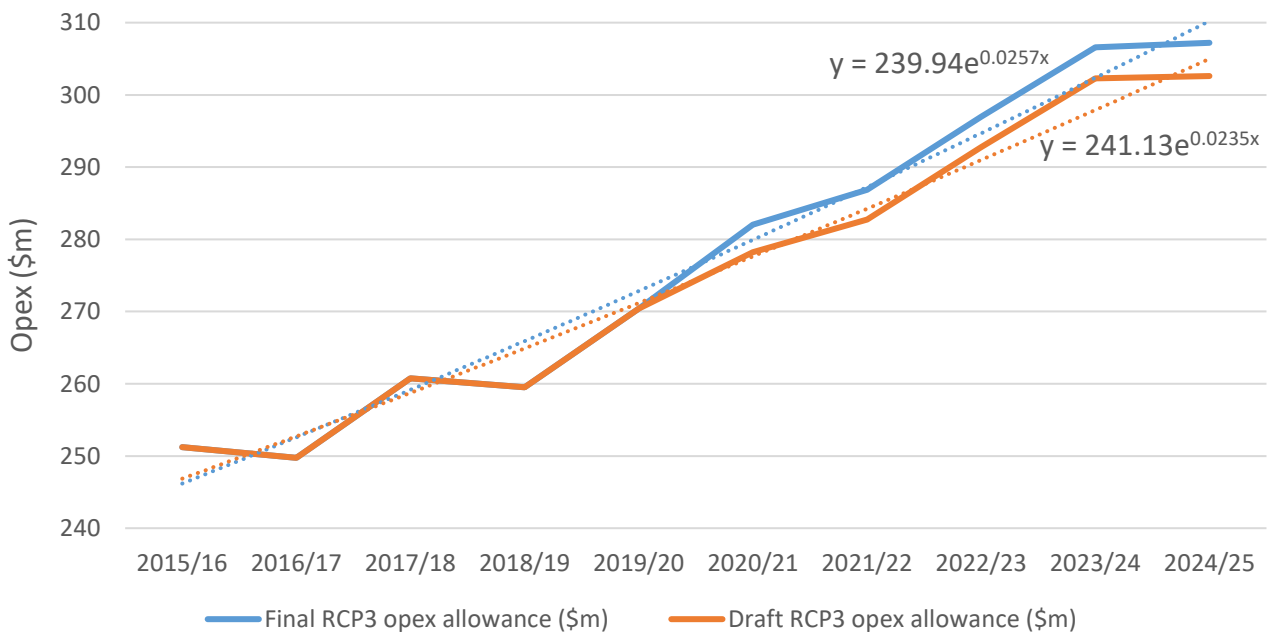
How our final baseline adjustment term decision compares to our draft decision

4.165 Our decision produces an estimated baseline adjustment term of -\$7.5 million (with differences in penultimate year of \$1.3 million) in comparison to our draft decision of -\$42.7 million (with differences in penultimate year of \$7.7 million). This difference was due to updated values in the RCP3 opex allowance, updated forecasts of actual opex for the remainder of RCP2, and the shorter trend period.

4.166 The main change between the draft decision and our final decision is due to the shortened trend period from 2010/11 to 2024/25 in our draft decision to 2015/16 to 2024/25 in our final decision.

4.167 Figure 4.5 displays the difference in the RCP3 opex allowance from our draft decision to our final decision (based on our updated trend period), and the impact on the trend estimate.

Figure 4.5 Draft to final RCP3 allowance



4.168 The IRIS baseline adjustment term changes from our draft decision to our final decision are detailed in Table 4.4 below. Note that we have used the step-and-trend back-cast methodology for all calculations.

Table 4.4 Incremental changes from draft to final

	Growth trend	Differences in penultimate year (\$m)	Baseline adjustment term (\$m)	PV opex incentive amount (\$m)
Commerce Commission draft decision	1.64%	7.7	-42.7	-28.9
Updating for operating leases	1.66%	7.3	-40.9	-20.3
Updated numbers for final RCP3 opex allowance	1.81%	11.1	-62.0	-25.5
Shortened trend period (2015/16 to 2024/25)	2.57%	1.3	-7.5	23.8
Updated WACC (from 5.13% to 4.57%)	2.57%	1.3	-7.5	24.1
Commerce Commission final decision	2.57%	1.3	-7.5	24.1

Attachment A: Calculation of RCP3 forecast SMAR values

Purpose of this attachment

A1 This attachment describes the calculation of the forecast SMAR values for RCP3.

Calculation method

A2 The initial forecast SMAR values for RCP3 have been determined using Transpower's financial model that applies revenue calculation rules that are consistent with the method set out for future updates of the forecast SMAR, as set out in clause 30.3 of the RCP3 IPP determination:¹⁵⁴

30.3 For the purpose of clause 8.1, an update of the 'forecast SMAR' is calculated by –

- 30.3.1 inputting building block values for each **disclosure year** of the **regulatory period** into Schedule D;
- 30.3.2 converting the **forecast MAR** building blocks to **pricing year** values by applying the cash flow timing factors in 'Column 4' of Schedule D; and
- 30.3.3 converting the **forecast MAR** to the **forecast SMAR** for each **pricing year** using the methodology set out in clause 3.1.1(3)(b)-(d) of the **Transpower IM**.

A3 Clause 3.1.1(3)(b)-(d) of the Transpower IM determination states:

- (3) For the purpose of setting the '**forecast SMAR**':
 - (a) ... ;
 - (b) the present value of the aggregated **forecast SMAR** values for the **regulatory period** must equal the present value of the aggregated **forecast MAR** values for the **regulatory period**;
 - (c) the **IPP revenue growth rate** must be applied when calculating the **forecast SMAR** for each **pricing year** of the **regulatory period** after the first **pricing year**; and
 - (d) the respective present values in (b) must be calculated using the **WACC**.

¹⁵⁴ Transpower provided us with an audited updated revenue model on 25 October 2019 in response to our s53ZD information gathering notice of 3 October 2019.

Key inputs

- A4 The IPP revenue growth rate for each pricing year of RCP3 is set out in clause 8.5 of the IPP determination as 1.26%.¹⁵⁵
- A5 The 67th percentile estimate of post-tax WACC applied in setting the forecast SMAR in the smoothed price path for RCP3 is 4.23%.

Results of calculations for RCP3

- A6 Table A1 shows a summary of the RCP3 forecast MAR and forecast SMAR values. The building block calculation of the nominal forecast MAR values is described in more detail in Attachment B.

Table A1: Present value of RCP3 forecast MAR AND FORECAST SMAR values (nominal)

	2020/21 (\$m)	2021/22 (\$m)	2022/23 (\$m)	2023/24 (\$m)	2024/25 (\$m)	Total (\$m)
Forecast MAR value	810.6	795.6	790.9	821.3	824.4	4,042.8
Cashflow timing variance due to smoothing of the price path	-21.9	3.2	18.1	-2.3	4.9	2.0
Forecast SMAR value (applying the IPP revenue growth rate)	788.7	798.8	809.0	819.0	829.3	4,044.8

¹⁵⁵ This is a weighted average of the IPP revenue growth rates for HVAC and HVDC revenues. Because we determine the total revenues (and not the breakdown into HVAC and HVDC revenues for the purposes of the TPM), the breakdown of the single growth rate into the HVAC and HVDC growth rates is Transpower's responsibility.

Attachment B: Calculation of RCP3 forecast MAR building block values

Purpose of this attachment

B1 This attachment shows a summarised view of the building blocks calculation of the forecast MAR for each pricing year of RCP3 commencing 1 April 2020.¹⁵⁶

Key inputs

B2 The 67th percentile estimate of vanilla WACC applied in calculating the forecast capital charge building block in the forecast SMAR is 4.57%.

B3 The opex allowances for each pricing year (before application of the cash flow timing factor) are summarised in Table B1.

Table B1: RCP3 opex allowances

	2020/21 (\$m)	2021/22 (\$m)	2022/23 (\$m)	2023/24 (\$m)	2024/25 (\$m)
Opex allowance	271.5	276.0	286.0	295.5	295.9

B4 The corporate tax rate for the calculation of the tax building block for each pricing year of RCP3 is 28%.

Building blocks calculation of the forecast MAR

B5 Table B2 sets out the building block values calculated for the setting of the forecast MAR. The calculation is carried out in accordance with the forecast MAR calculation schedule in the RCP3 IPP determination, Schedule D, which will also later be used by Transpower to calculate updates of the forecast MAR.¹⁵⁷ The values described are after the application of cash flow timing factors based on the WACC rate, using the formulae defined in Schedule D of the RCP3 IPP determination.

¹⁵⁶ A copy of the detailed building blocks calculation model on which the Transpower IPP determination is based is available on Transpower's website.

¹⁵⁷ Clauses 8.4, 30 and Schedule D of the Transpower IPP determination.

Table B2: Forecast MAR building block values

Forecast MAR building block (as per Schedule D of the RCP3 IPP determination)	Forecast MAR building block value by pricing year as calculated per Schedule D of the RCP3 IPP determination (\$m)				
	2020/21	2021/22	2022/23	2023/24	2024/25
[Column 1]	[Column 5]	[Column 5]	[Column 5]	[Column 5]	[Column 5]
	(\$m)	(\$m)	(\$m)	(\$m)	(\$m)
WACC (67th percentile vanilla WACC)	4.57%	4.57%	4.57%	4.57%	4.57%
WACC return on forecast opening RAB value	212.5	215.7	216.7	219.1	220.1
WACC return on forecast VCA_{JUL}¹⁵⁸	4.8	-	-	-	-
WACC return on forecast VCA_{AUG}	-	-	-	-	-
WACC return on forecast VCA_{SEP}	-	-	-	-	-
WACC return on forecast VCA_{OCT}	-	-	-	-	-
WACC return on forecast VCA_{NOV}	-	-	-	-	-
WACC return on forecast VCA_{DEC}	2.5	3.3	3.6	3.3	4.1

¹⁵⁸ VCA_{month} in each case from July to June of a disclosure year means the forecast value of commissioned assets for the 'month' calculated in accordance with the Transpower input methodologies and weighted to reflect the time from the month of commissioning to the end of the disclosure year.

Forecast MAR building block (as per Schedule D of the RCP3 IPP determination)	Forecast MAR building block value by pricing year as calculated per Schedule D of the RCP3 IPP determination (\$m)				
	2020/21	2021/22	2022/23	2023/24	2024/25
WACC return on forecast VCA _{JAN}	2.1	2.7	3.0	2.8	3.5
WACC return on forecast VCA _{FEB}	-	-	-	-	-
WACC return on forecast VCA _{MAR}	-	-	-	-	-
WACC return on forecast VCA _{APL}	-	-	-	-	-
WACC return on forecast VCA _{MAY}	-	-	-	-	-
WACC return on forecast VCA _{JUN}	-	-	-	-	-
Total forecast capital charge	222.0	221.7	223.4	225.2	227.8
Forecast depreciation	252.1	252.5	246.8	257.3	256.7
Operating expenditure ¹⁵⁹	272.1	276.7	286.7	296.2	296.6

¹⁵⁹ The operating expenditure building block comprises the opex allowance per Attachment A, Table A1, adjusted for the application of the cash flow timing factor.

Forecast MAR building block (as per Schedule D of the RCP3 IPP determination)	Forecast MAR building block value by pricing year as calculated per Schedule D of the RCP3 IPP determination (\$m)				
	2020/21	2021/22	2022/23	2023/24	2024/25
Forecast tax	38.3	39.9	38.6	41.2	41.9
Forecast TCSD	3.3	3.3	3.3	3.4	3.4
Forecast EV adjustment	-24.5	-24.5	-24.5	-24.5	-24.5
Forecast pass-through costs	18.1	18.5	19.0	19.4	19.8
Forecast recoverable costs	29.2	7.5	-2.4	3.0	2.8
Total Forecast MAR inclusive of forecast pass-through costs and forecast recoverable costs	810.6	795.6	790.9	821.3	824.4

Attachment C: Impact of price-path smoothing on the IRIS

- C1 We have smoothed Transpower’s annual maximum revenues for RCP3. Smoothing is implemented through a number of features of the RCP3 price path:¹⁶⁰
- C1.1 Transpower calculates the building blocks forecast maximum allowable revenue (forecast MAR) for each pricing year of RCP3;
 - C1.2 In calculating the forecast MAR, Transpower includes forecasts of costs which Transpower may recover, including recoverable costs;
 - C1.3 At the end of each disclosure year, Transpower will perform a wash-up calculation that determines the difference between the economic gain allowed under the price path, and the amount it actually received. That wash-up calculation also includes a wash up of recoverable cost estimates against the actual costs of recoverable costs. The differences represent an amount of revenue over or under the amount Transpower should have received, and the differences are entered into Transpower’s EV account;¹⁶¹
 - C1.4 Recovery of the EV account balance will be built into Transpower’s RCP4 smoothed price path, when it is set in 2024 (subject to reopening of the price path in the meantime in RCP3 in the event of a large EV account build-up).¹⁶²
- C2 IRIS opex incentive amounts are a recoverable cost under the Transpower IM determination.¹⁶³ Transpower is able to recover recoverable costs in full – Transpower will use the actual amount when determining the economic value it should have received, through the wash-up calculation.

¹⁶⁰ For a discussion of how we have set a smoothed price path for Transpower, see above n 31, at Attachment J.

¹⁶¹ Transpower’s EV account is used to account for under/over-recovered revenues until the next available pricing year, at which stage the balance is included in the forecast revenue calculation as a ‘forecast EV adjustment’. The EV account balance carried forward is adjusted annually at the WACC rate until recovered or returned in the forecast revenues. The balance includes annual revenue-path wash-up amounts and incentive calculations that have not yet been recovered from or returned to Transpower in revenue calculations.

¹⁶² For RCP2, the price path was reopened annually and the forecast MAR recalculated in order to clear the EV account balance – which could potentially lead to volatility in annual revenues.

¹⁶³ Clause 3.1.3(1)(a)(i) of the Transpower IM determination.

- C3 All else being equal, this would result in any difference between the forecast IRIS opex incentive amount and the actual IRIS opex incentive amount being included in Transpower's EV account when the wash-up calculation is performed. The closer the forecast amount is to the amount finally determined, the smaller the variance that will be washed up into the EV account.¹⁶⁴
- C4 From a policy perspective, it would be preferable to aim to forecast the amount as accurately as possible, in order to keep the balance of the EV account that needs to be recovered in RCP4 relatively small. The purpose of smoothing was to reallocate revenues over RCP3 in order to help reduce the variation in annual pricing for Transpower's customers by reducing variance in Transpower's annual revenues. Shifting income between regulatory periods was not one of the purposes.
- C5 A larger EV account balance may undermine confidence in the price path we set, by reducing the certainty of future prices due to increased likelihood of reopening, and potentially reallocating costs or the benefits of cost savings between different consumer groups.¹⁶⁵
- C6 Determining the approach to estimating this term will help enable us to estimate the forecast amount to be included when calculating the forecast MAR for each disclosure year of RCP3.

¹⁶⁴ In practice, this would be one of a number of sources of potential difference between actual revenue and the price path. The wash-up would be the aggregate of these amounts (taking into account positive and negative amounts offsetting each other).

¹⁶⁵ The possibility of a change in the way in which customer groups are charged for electricity transmission services (for example, if a new Transmission Pricing Model was to be implemented) could also add complications and uncertainty for Transpower's customers, in the event a much higher than usual EV account balance was carried forward.

Attachment D: Further details on Transpower's IRIS calculation in its submission on our draft decision on the IRIS baseline adjustment term

D1 This attachment provides further details on how Transpower calculated the baseline adjustment term.

D2 Transpower's submission on our draft IRIS decision was to produce a trend estimate of 2.08% based on the reduced trend period.¹⁶⁶ Transpower stated that the shorter, forward-looking trend period was a:¹⁶⁷

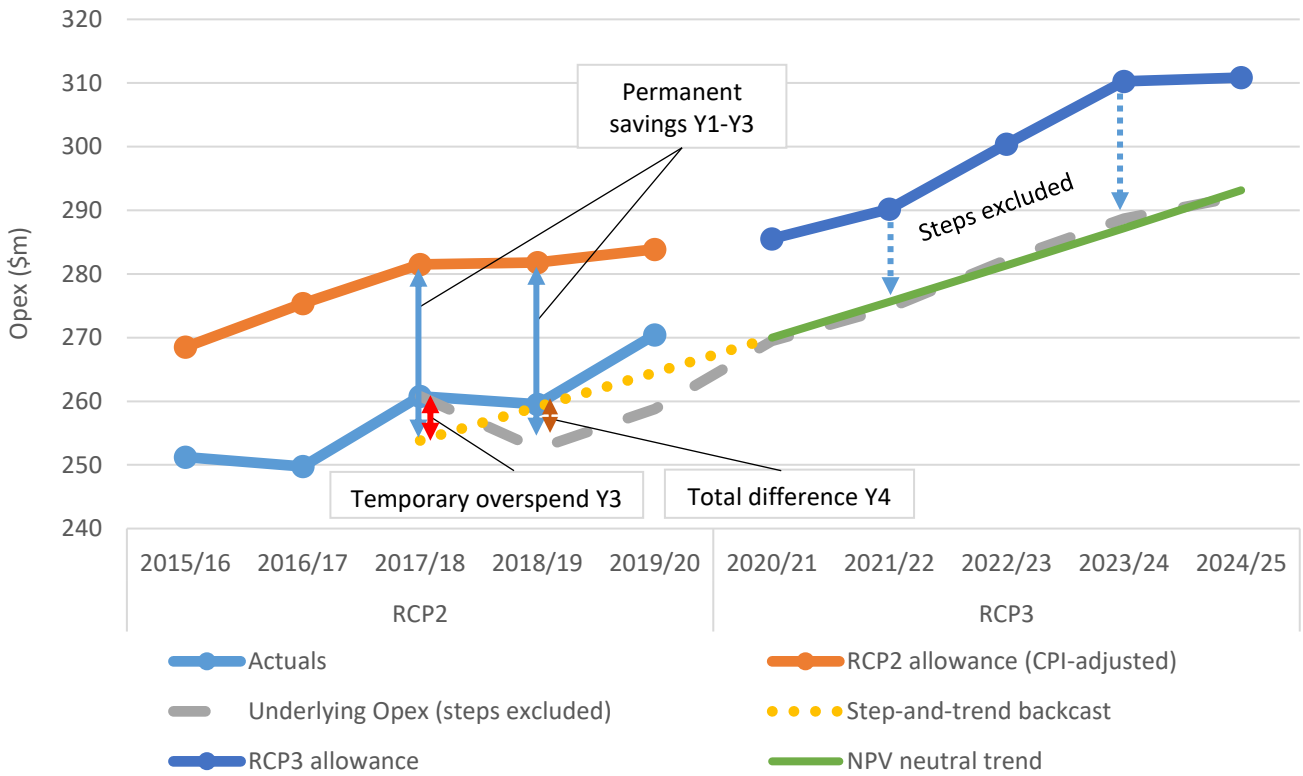
more valid and coherent approach than fitting a trend line to a longer historical sequence back to 2010, which will be influenced by historic phases of productivity change, cost change and growth that are not relevant to RCP3

D3 Based on this opex growth trend and using the appropriate opex values, and after adjusting for 'step changes' in underlying costs, The Transpower calculations result in an estimate of *differences in penultimate year* of -\$5.4 million. Transpower's estimate gives a baseline adjustment term estimate of \$30.1 million, and results in an opex incentive amount of \$57.8 million (as at 1 April 2020), which is approximately \$34 million greater than our calculated opex incentive amount. Transpower's calculation approach is demonstrated in Figure D1.

¹⁶⁶ The trend estimate percentage in Transpower's submission is lower than our trend estimate (2.57%) because Transpower has removed the proposed 'step changes' when estimating its trend estimate.

¹⁶⁷ Above n 100, at 5.

Figure D1: Transpower back-cast estimation



D4 Table D1 provides a summary of Transpower’s estimation of the baseline adjustment term.

Table D1: Summary of Transpower’s IRIS baseline adjustment term in its submission

Method	Growth trend	Differences in penultimate year (\$m)	Baseline adjustment term (\$m)	PV opex incentive amount incl. baseline adjustment term (\$m) ¹⁶⁸
Transpower step-and-trend method	2.08%	-5.4	30.1	57.8

¹⁶⁸ This is the present value of the IRIS opex incentive amount as at the start of RCP3, ie, 1 April 2020.

Attachment E: Non-material amendment to Transpower Input Methodologies Determination 2010

- E1 We published a non-material amendment to the Transpower Input Methodologies Determination 2010 on 13 November 2019.¹⁶⁹ We made this amendment under section 52X of the Commerce Act 1986 in conjunction with our input methodologies amendments relating to the treatment of operating leases.¹⁷⁰
- E2 The amendment makes an error correction to the formula for calculating the IRIS baseline adjustment term, contained in clause 3.6.4(3) of the Transpower IM determination. The amendment inserts a minus sign and brackets into the formula in clause 3.6.4(3) of the Transpower IM determination as follows:
- $$\begin{aligned} &-(\text{differences in penultimate year}) \\ &\times \\ &((1-(1+WACC)^6)/WACC) \\ &\times \\ &(1+WACC)^2 \end{aligned}$$
- E3 This is necessary because a positive total saving in Year 4 of the preceding regulatory period (ie, a positive total “difference in that penultimate year”) should result in a negative baseline adjustment term to offset positive IRIS revenue adjustments from the IRIS carry-forward mechanism (as explained in Chapter 4 of this paper).
- E4 Our IRIS model, Transpower’s RCP3 revenue model and our 29 August 2019 decisions and reasons papers have assumed that the formula was correctly operating (ie, the positive savings result in a negative baseline adjustment term). Transpower has applied the same interpretation. The amendment corrects the formula to correctly align it with this interpretation.

¹⁶⁹ *Transpower Input Methodologies Amendments Determination (No.2) 2019* [2019] NZCC 16; and Commerce Commission “Publication of non-material amendment to Transpower Input Methodologies Determination 2010” (13 November 2019); both available on our website at: <https://comcom.govt.nz/regulated-industries/input-methodologies/projects/amendments-necessary-to-implement-transpowers-2020-individual-price-quality-path-and-future-price-quality-paths>.

¹⁷⁰ Above n 37.

Attachment F: Response to Transpower’s technical submission on drafting of the IPP determination and information gathering notices

Purpose of this attachment

F1 Table F1 of this Attachment F summarises the main submission points made by Transpower on the revised draft IPP determination and draft information gathering notices which we released on our website for public consultation on 29 August 2019.^{171, 172} It shows how we have addressed those points in finalising the IPP determination and the information gathering notices.

Summary of responses to Transpower’s main technical submission points

- F2 The Transpower IPP determination and information gathering notices published with this companion paper on 14 November 2019 take into account:
- F2.1 the technical submission from Transpower on the revised draft IPP determination and draft information gathering notices;
 - F2.2 the updated WACC (which we set at the 67th percentile estimate of vanilla WACC of 4.57%, and published on 25 September 2019);
 - F2.3 updated forecasts of RCP3 price-path inputs (apart from opex and capex) for the 2020-25 period (received from Transpower on 25 October 2019 in response to our section 53ZD information gathering notice issued on 3 October 2019);
 - F2.4 our final decision on the methodology for calculating the *differences in penultimate year* amount, taking into account Transpower’s submission on the IRIS baseline adjustment term – the Commission decision is discussed in Chapter 4 of this companion paper; and
 - F2.5 our final decision on the treatment of operating lease payments published on 13 November 2019.

¹⁷¹ [\[REVISED DRAFT\] Transpower Individual Price-Quality Path Determination 2020 \[2019\] NZCC \[XX\], \[Draft\] Information gathering notice – Cost estimation information, \[Draft\] information gathering notice – Customer consultation, \[Draft\] Information gathering notice – Asset health and risk modelling information](#), all published for consultation on 29 August 2019.

¹⁷² Above n 43.

Table F1: Responses to Transpower submission on the revised draft RCP3 IPP determination and draft information gathering notices

Determination	Submission	Agree/disagree	Commission comment
Revised draft IPP determination and draft section 53ZD information gathering notices (all)	<p>Transpower notes its broad agreement with the use of a monitoring and investigation regime to provide information to build the Commission’s confidence towards RCP4, and support the Commission’s focus on cost estimation, asset health modelling development and effective customer consultation. However, Transpower considers that more flexibility in the requirements will better achieve the objectives of Part 4. Transpower is concerned by:</p> <ul style="list-style-type: none"> • the heavy administrative burden and regulatory impost from the proposed section 53ZD information gathering notices; • the level of prescription of the information to be supplied; • the material risk of non-compliance; and • the importation of a criminal standard for the provision of information. 	We largely agree.	<p>We have accepted most of Transpower’s proposed drafting changes. This includes the ability for Transpower to apply to us for exemptions, variations and time extensions for the information gathering notices (on a similar basis to that contained in the IPP determination).</p> <p>In our decision of 29 August 2019 we set out our reasons for moving the relevant provisions from the draft IPP determination to the section 53ZD information gathering notices – most of the information we are requesting is not strictly for monitoring of compliance with the RCP3 price-quality path (section 53N). Rather, the information is primarily intended to assist us in our investigations and evaluations of various capex approvals during RCP3 and to give us confidence in carrying out our functions under section 53ZC of the Act to set Transpower’s price-quality path for RCP4.</p> <p>Although our powers under the Act to request the information in the notices potentially varies between information disclosure and forward-looking investigations, we concluded that the requests for information should be kept together by topic for ease of understanding by stakeholders (see next submission point).</p> <p>We note that criminal standards are not unique to breaching section 53ZD notices. While s103 sets a lower standard (refusal or failure to comply without reasonable excuse) for breaching a section 53ZD notice than section 86B and section 87B (intentional contravention or failure to comply with a court order) for breaching an IPP determination, they are both criminal offences, and section 86B and section 87B carry a substantially higher penalty for breach.</p>

Determination	Submission	Agree/disagree	Commission comment
<p>Revised draft IPP determination and draft section 53ZD information gathering notices (all)</p>	<p>IPP and information gathering notices</p> <p>Transpower considers the omission of the three areas of costs estimation, customer consultation and asset health initiatives from the two main regulatory instruments (Individual Price-Quality Path and Information Disclosure regulation) may make it difficult for interested parties to understand Transpower’s regulation and information provision. Transpower suggests the Commission will need to ensure that an interested party is readily able to get the complete picture.</p>	<p>We agree with Transpower’s sentiment, but our power to request the three sets of forward-looking information derives from separate powers under the Act and we therefore need to separately set out our information requirements in section 53ZD notices.</p>	<p>In order to better show the integrated package of our regulation that applies to Transpower, in Chapter 2 of this companion paper we set out an explanation of our overall regime and the place of the section 53ZD notices in that regime. We set out the purpose of each instrument in this companion paper for the benefit of stakeholders:</p> <ul style="list-style-type: none"> • IMs (Transpower Capex IM determination and Transpower IM determination); • IPP (price and quality, with compliance requirements); • ID (how well price-quality regulation is working); and • Information gathering notices (forward-looking information, primarily focussed on planning for RCP4 and carrying out our functions under section 53ZC of the Act to set Transpower’s price-quality path for RCP4). <p>For transparency of information, we encourage Transpower to publish relevant information on its website (which was the approach agreed with Transpower when the ID determination was published in 2014) with the aim of increasing the engagement of interested parties in Transpower’s performance.¹⁷³</p>

¹⁷³ [Commerce Commission “Information Disclosure Requirements for Transpower: Reasons Paper” \(28 February 2014\)](#), at Chapter 3.

Determination	Submission	Agree/disagree	Commission comment
Revised draft IPP determination	<p>IPP clause 7 - definition of ‘Customer’</p> <p>“Customer” is not defined in the Transpower IM determination (or Transpower Capex IM determination). Transpower suggests the definition of “customer” in the Transpower Information Disclosure Determination 2014:</p> <p>customer means any generator, distribution business, consumer, or other entity in New Zealand that is connected, or applies to be connected, to the grid;</p>	We do not agree.	This appears to be a minor misunderstanding on Transpower’s part. A definition of ‘customer’ was inserted into the Transpower IM determination by the <i>Transpower Input Methodologies Amendments Determination 2019</i> (28 August 2019). The drafting of the IPP determination has been clarified to make the definition used clearer.
Revised draft IPP determination	<p>IPP clauses 11-19 - Performance measures</p> <p>Transpower notes and supports the changes to the relative weighting of the incentive rates for Transpower’s grid performance measures GP1 and GP2 (refer Table 4.1 in the 29 August 2019 Decisions and reasons paper). Transpower also supports that the non-revenue-linked quality standards have been revised towards asset classes for which the Verifier has concluded Transpower has a good level of asset health modelling maturity.</p>	We welcome Transpower’s support for the changes we made in our final decisions.	No drafting issues to resolve.

Determination	Submission	Agree/disagree	Commission comment
<p>Revised draft IPP determination</p>	<p>IPP clause 20.3 - Normalisation policy</p> <p>Transpower appreciates the development in the IPP of the normalisation policy. Transpower notes that its application to the Commission to determine whether a normalisation event has occurred (refer clause 20.3), currently no later than 105 working days, needs to be earlier to meet the timing for the annual compliance statement.</p> <p>Confirmation of a normalisation event should happen before the annual compliance statement for the disclosure year is submitted, as the statement is required to include normalisation event information under clause 24.1.11 (including the grid output adjustment calculation). Accordingly, this deadline should be sooner than the deadline for the statement (which is also 105 working days). Transpower suggests 60 working days, which Transpower believes will give the Commission enough time to make its determination under clause 20.4.</p>	<p>We understand the issue and have incorporated similar drafting to Transpower's suggestion.</p>	<p>We have reworked the steps in the quality standard normalisation timeline each year so that Transpower will generally have our finalised view on whether normalisation applies before it submits its annual compliance statement.</p> <p>In the event that our decision will not be made in sufficient time for Transpower to meet its deadline date for the annual compliance statement, we will consider a time extension.</p>

Determination	Submission	Agree/disagree	Commission comment
<p>Revised draft IPP determination</p>	<p>IPP clause 20.3.2(c) – Normalisation application</p> <p>Given the nature of events in clause 20.2.4, Transpower does not consider it will always be possible to exercise good electricity industry practice in relation to those causes (eg, terrorism, war, civil commotion). Transpower suggests adding this to the end of this clause:</p> <p>...to the extent good electricity industry practice can be applied to the cause and effects;</p>	<p>We do not agree.</p>	<p>The normalisation application requires Transpower to provide “reasons for why Transpower considers a normalisation event has occurred, including why it considers...it exercised good electricity industry practice in relation to the cause and effects of the interruption or outage...”</p> <p>We do not consider that this requires any limitation or exclusion from the application requirements. In the interests of transparency of information, we expect Transpower’s application would explain why good electricity industry practice does not apply to a normalisation event, if that was the case.</p>
<p>Revised draft IPP determination</p>	<p>IPP clause 24.1.2 – annual compliance statement</p> <p>This information appears to be duplication of the information required under clauses 24.1.3 and 24.1.4.</p>	<p>We do not agree.</p>	<p>Clause 24.1.2 requires the forecast revenue for electricity transmission services, whereas the HVAC and HVDC transmission revenue (ie, actual revenue received) is required under clause 24.1.3.</p>

Determination	Submission	Agree/disagree	Commission comment
Revised draft IPP determination	<p>IPP clause 24.1.7 – annual compliance statement</p> <p>Transpower is unclear why these particular examples [of pass-through and recoverable costs in subclauses (a) and (b)] are called out.</p>	<p>We understand the comment, but no change is required.</p>	<p>These two items (operating costs of major capex projects and prudent net operating costs incurred in responding to a catastrophic event) are highlighted in the IPP disclosures because they are significant recoverable cost items in terms of clauses 3.1.3(1)(d) & (e) of the Transpower IM determination.</p> <p>This reporting requirement is a partial roll-over from RCP2 requirements. For RCP2 we called out more items. However, not all of them required an explanation/description/summary (or were relevant under a smoothed price path) so these have dropped off the reporting requirements.</p> <p>We want the extra information for these two items because the boundary with regular opex is less clear than some other items, so having the ability to scrutinise them in more detail is useful under the Part 4 purpose.</p>
Revised draft IPP determination	<p>IPP clause 25.1.1 – annual compliance statement</p> <p>Transpower is unclear why it has to explain why its performance was better than the cap.</p>	<p>We agree.</p>	<p>We have deleted draft clause 25.1.1. There is now no requirement to explain why the grid output measure is outside of the cap value. The requirement to report the reasons for the value being outside of the collar value (if applicable) is covered in clauses 28.5.1 and 28.6.1.</p>

Determination	Submission	Agree/disagree	Commission comment
<p>Revised draft IPP determination</p>	<p>IPP clause 26.2 – periodic reporting of performance events</p> <p>In contrast to clause 26.1 (which is identical but for the duration of the interruption), this clause captures planned as well as unplanned interruptions. Transpower does not believe that is intended.</p> <p>Planned interruptions will be subject to Transpower’s normal outage planning process, which will include providing upfront information about the timing of and reasons for the interruption.</p> <p>The references to ‘interruption’ in this clause should be changed to ‘unplanned interruption’.</p>	<p>We agree.</p>	<p>The reporting requirements for interruptions over one system minute now refer to ‘unplanned interruptions’.</p>
<p>Revised draft IPP determination</p>	<p>IPP clause 27.1 – time extensions</p> <p>[time extension provisions] should also apply to clause 22.1 (time limit for the pricing compliance statement).</p>	<p>We do not agree.</p>	<p>The requirement to provide a pricing compliance statement is based on the time when Transpower announces or amends its forecast revenue for the purposes of setting or resetting charges under the TPM. There is no necessity to further provide for a time extension to the five working day reporting requirement, given that existing flexibility in timing.</p>

Determination	Submission	Agree/disagree	Commission comment
<p>Revised draft IPP determination</p>	<p>IPP clauses 28.5 and 28.6 – reporting on asset performance measures</p> <p>The subclauses of clause 28.5 require Transpower to focus on individual events when performance is a function of all events. It is not possible for Transpower to select particular events that “caused” performance to go below the collar.</p> <p>[This comment also applies to clause 28.6.]</p>	<p>We agree.</p>	<p>We removed draft clause 28.5.1 to take out reference to “events”.</p> <p>Also, clauses 28.4, 28.5 and 28.6 apply now to “...reasons, including whether the reasons are unknown...”. We consider that the fact that reasons are not known is useful information and this should be explicitly reported.</p> <p>We have similarly updated clause 25.1.1(b) to refer to ‘...known or estimated impact on affected parties...’, and we have deleted reference to the market.</p>
<p>Revised draft IPP determination</p>	<p>IPP clauses 28.5.3 and 28.6.3 – reporting on asset performance measures</p> <p>Transpower request that this should be deleted. Transpower is unlikely to know what the impact on customers was.</p> <p>This comment also applies to clause 28.6.3.</p>	<p>We agree.</p>	<p>We removed the reference to customer effects from clauses 28.5 and 28.6, and in the case of asset performance measure AP1 we have included a requirement to report on the impact of significant events on the market (for example, the effect on market price or grid congestion).</p>

Determination	Submission	Agree/disagree	Commission comment
<p>Revised draft IPP determination</p>	<p>IPP clause 30.3.2 – update of forecast SMAR</p> <p>Given that the IPP revenue growth rate is defined as a maximum, this should be:</p> <p>...follows a trend no greater than the IPP revenue growth rate...</p>	<p>We do not agree.</p>	<p>Our policy position is that the IPP revenue growth rate would not change when the price path is updated during the regulatory period.</p> <p>We discussed various aspects of the smoothing of the RCP3 price path in our issues paper, in particular, the step changes at the commencement and end of the regulatory period.¹⁷⁴ The details of our final price-path decisions are discussed in further detail in our 29 August 2019 Decisions and reasons paper.¹⁷⁵</p> <p>Setting the IPP revenue growth rate such that it applies as a cap when the price path is updated during RCP3 would be inconsistent with our objective of avoiding large step changes in revenues (and prices) between RCP3 and RCP4.</p>
<p>Revised draft IPP determination</p>	<p>IPP Schedules A - E</p> <p>In general, some of the references in the Schedules should be checked for accurate cross-referencing.</p>	<p>We agree.</p>	<p>We have reviewed and updated the cross-referencing in the IPP determination schedules.</p>

¹⁷⁴ [Commerce Commission “Transpower’s individual price-quality path for the next regulatory control period – Issues paper” \(7 February 2019\)](#), at [10.19]-[10.25].

¹⁷⁵ Above n 31, at Attachment J.

Determination	Submission	Agree/disagree	Commission comment
<p>Revised draft IPP determination</p>	<p>IPP clause 25.1.5 - Customer consultation</p> <p>Customer service measure CS1 should only apply to unplanned interruptions. Planned interruptions will be subject to Transpower’s normal outage planning process, which will include providing upfront information about the timing of and reasons for the interruption. Transpower notes that this information is duplicated in the proposed 53ZD notice for customer consultation information (clause 2.5 of the notice). Transpower also notes that clause A6 of the notice restricts the information to information about unplanned interruptions.</p>	<p>We agree.</p>	<p>Customer service measure CS1 will now apply to unplanned interruptions only. We have corrected for the duplication between the IPP determination and the customer consultation information gathering notice by moving all of the CS1 measure information requirements into the information gathering notice (on the basis for the notices set out above) and we have rationalised the information requirements to remove duplication.</p> <p>(see also section 53ZD notice Customer consultation information (clause 2.5) below).</p>
<p>Draft section 53ZD information gathering notice (customer consultation)</p>	<p>Section 53ZD notice Customer consultation information (clause 2.5)</p> <p>Customer service measure CS1 in the draft IPP already requires the annual disclosure of post-interruption survey information (clause 25.1.5 of the draft IPP). This information should be required under either the IPP or the notice, not both. If this is retained, “interruption” should be “unplanned interruption”, consistent with clause A6.</p> <p>“Post-interruption survey results” used in this clause and clause 13 is not defined.</p>	<p>We agree.</p>	<p>As above for clause 25.1.5 of the IPP determination.</p>

Determination	Submission	Agree/disagree	Commission comment
Revised draft IPP determination	IPP Schedules C2 and C4 The numbers in Schedule C2 should be in Schedule C4 and vice versa.	We agree.	We have corrected our error in the IPP determination.
Draft section 53ZD information gathering notices (all)	Transpower notes that the Verifier didn't recommend specific development steps. Rather it indicated its view of potential scope for improvement. Transpower considers the draft s53ZD notices interpose the Commission's own view of what it thinks Transpower should be developing in a manner the Verifier did not.	We do not agree.	We have developed the s53ZD information gathering notices to inform us and stakeholders of necessary future developments in RCP4. The notices are based on a combination of what Transpower's RCP3 proposal and the verification report told us on those matters. We also applied our own analysis in developing the information requirements. It is not correct to suggest that the information requirements should be solely limited to the Verifier's recommendations. The information being requested is primarily to assist us in carrying out our functions under section 53ZC of the Act to set Transpower's price-quality path for RCP4.
Draft section 53ZD information gathering notices (all)	Transpower considers the section 53ZD regime for information relating to asset health, cost estimation, and stakeholder engagement to be inconsistent with the objectives of delivering long-term benefits to consumers in the electricity market. Transpower considers that two main issues need to be resolved if the proposed section 53ZD notices are to achieve the Commission's goal of providing "confidence" in the evaluation process for RCP4:	See responses below.	See responses below.

Determination	Submission	Agree/disagree	Commission comment
	<p>1) Permitting alternative approaches to ensure Transpower can deliver meaningful information</p> <p>Transpower’s review of the individual notices has considered whether the information gathered from Transpower will be meaningful and meet the Commission’s objective of giving confidence to its evaluation of Transpower’s RCP4 proposal. Transpower’s conclusion is that the policy detail in the notices has not been sufficiently tested for implementation issues, including practicality and cost-effectiveness. The highly prescriptive nature of the notices, particularly the ‘Asset health and risk modelling information’ notice, creates a material risk of non-compliance, which, with the imposition of criminal sanctions, places the burden for the simple provision of information too high and would act contrary to the Part 4 objectives.</p> <p>Transpower has suggested redrafts in each of the notices for the clauses on extension to be expanded to allow Transpower to apply for an exemption as well.</p> <p>As an alternative, Transpower suggests that each notice could provide that compliance is achieved on ‘best or reasonable endeavours’ basis, to account for any practical limitations on its ability to provide the specified information in the specified time frames.</p>	<p>We understand the issue, but do not agree with Transpower being permitted to apply a “best or reasonable endeavours” standard.</p>	<p>Transpower has requested that the Commission considers the use of a “best or reasonable endeavours” standard.</p> <p>We are concerned about how Transpower’s proposed standard can be assessed/enforced and therefore do not consider it to be an appropriate standard.</p> <p>We do not agree with Transpower’s contention that the policy detail in the notices has not been sufficiently tested. The policy intentions of the notices have been developed on the way through from our issues paper of February 2019 to our decisions of August 2019. Moving the information requirements from the IPP determination to the section 53ZD information gathering notices does not alter those policy intentions.</p> <p>We address Transpower’s implementation concerns through substantially adopting Transpower’s proposed drafting and by adding similar provisions in the information gathering notices to those in the IPP determination to allow for variations, exemptions and time extensions upon Transpower’s application and Commission approval during the regulatory period.</p>

Determination	Submission	Agree/disagree	Commission comment
	<p>2) Certification of responses to information gathering notices</p> <p>Transpower supports the ability for the Commission to gather the information it considers necessary and desirable for operating Transpower’s regulatory regime. However, Transpower considers that the section 53ZD notices should not create undue administrative burden or compliance risk for Transpower (and its directors and officers). Transpower considers that director (or CEO) certification requirements are not appropriate for the information gathering notices under section 53ZD.</p> <p>[refer also: section 53ZD notice Asset health and risk modelling information, clause 18; section 53ZD notice Customer consultation information, clause 20; section 53ZD notice Cost estimation information; section 53ZD notice Cost estimation information, clause 13.]</p>	<p>We agree with Transpower’s submission.</p>	<p>We moved these information requirements from the draft IPP determination to section 53ZD notices because the information we are requesting is not strictly for monitoring of compliance with the RCP3 price-quality path (ie, section 53N). Rather, the information is primarily intended to assist us in our evaluations of various capex approvals during RCP3 and to give us confidence in our evaluation process for setting Transpower’s price-quality path for RCP4.</p> <p>Contrary to Transpower’s suggestion in its submission, we do not consider that the application of the same approach to the information to be provided under the information gathering notices would materially change the duty of care to be applied by Transpower or the exposure of directors or management to statutory penalties.</p> <p>We note that criminal standards are not unique to breaching section 53ZD notices. While section 103 sets a lower standard (refusal or failure to comply without reasonable excuse) than sections 86B and 87B (intentional contravention or failure to comply with a court order – for breaching an IPP determination), they are both criminal offences, and sections 86B and 87B carry a substantially higher penalty for breach.</p> <p>Having considered Transpower’s submission, we agree with Transpower that director or CEO certification requirements are not appropriate for the information gathering notices under section 53ZD. We have therefore removed the requirements for director or CEO certification in the final section 53ZD notices.</p>

Determination	Submission	Agree/disagree	Commission comment
			<p>On that basis, we therefore agree with Transpower's submission and we have removed the requirements for director and CEO certification from the information gathering notices.</p> <p>We note that this leaves open the possibility that where we identify information that we consider particularly critical to our investigation and analysis, we might later require Transpower to provide us with additional expert opinions, which are explicit features of section 53ZD(1)(f).</p>

Determination	Submission	Agree/disagree	Commission comment
<p>Draft section 53ZD information gathering notice (asset health and risk modelling)</p>	<p>Section 53ZD notice - Asset health and risk modelling information</p> <p>In Transpower’s view, the draft section 53ZD notice interposes the Commission’s own view of what it thinks Transpower should be developing in a manner the Verifier did not.</p> <p>The resulting prescriptive detail requires Transpower to take a particular, pre-determined approach to developing asset health modelling. This at best limits (and may remove) Transpower’s ability to take ownership for evaluating the possibilities and challenges to determine the approach that best takes account of good electricity industry practice, considers relevant precedent and learning over time and is framed by the underlying objective of long-term benefits to consumers.</p>	<p>We understand the issue, and we have amended our drafting to ensure that the long-term benefits of consumers are not compromised.</p>	<p>We have been signalling our focus on asset health and criticality through our various published papers, commencing with our Process framework and approach paper in October 2018,¹⁷⁶ followed by our issues paper of February 2019,¹⁷⁷ our draft decisions of May 2019,¹⁷⁸ and our decisions of August 2019.¹⁷⁹</p> <p>Through our evaluation of Transpower’s RCP3 proposal, our review of the Verifier’s findings, and our consultation with stakeholders, we have developed focus areas for our further evaluation of Transpower’s development of asset health and risk modelling which are reflected in the information we seek to gather with this notice. We have amended the notice to make it clear that it is not intended as a prescriptive direction to Transpower or a limitation on its taking of ownership of the matters Transpower refers to.</p> <p>The information being requested is primarily to assist us in carrying out our functions under section 53ZC of the Act to set Transpower’s price-quality path for RCP4.</p>

¹⁷⁶ [Commerce Commission “Our process, framework and approach for setting Transpower’s expenditure allowances, quality standards and individual price-quality path for 2020 to 2025” \(25 October 2018\)](#), at [4.18]-[4.24].

¹⁷⁷ Above n 174, at Chapter 6.

¹⁷⁸ [Commerce Commission “Transpower’s individual price-quality path from 1 April 2020: Draft decisions and reasons paper” \(29 May 2019\)](#).

¹⁷⁹ Above n 31, at [X17.1], Attachment G and Attachment L.

Determination	Submission	Agree/disagree	Commission comment
<p>Draft section 53ZD information gathering notice (asset health and risk modelling)</p>	<p>Section 53ZD notice - Asset health and risk modelling information</p> <p>Transpower supports the Commission’s focus on asset health and agree with its expectation that “where asset health models are practical and useful, they should be developed and implemented” (L11 page 303 reasons paper).</p> <p>Transpower notes that the final decision for asset health and risk modelling information introduces material new and very detailed policy, which was not included in the Commission’s draft IPP determination. The short consultation window on the revised draft determination is Transpower’s first and only opportunity to consider the detailed policy contained in the draft notice or provide Transpower’s perspectives on whether the information requested will meet the Commission’s objective in practice. Transpower is concerned by the level of direction conveyed by the draft section 53ZD information gathering notice and has had limited opportunity to review and understand the operational implications.</p>	<p>We understand the issue, and our preference is to adopt Transpower’s alternative drafting in most instances.</p>	<p>We do not agree with Transpower’s suggestion that we are introducing “material new and very detailed policy” through the revised draft IPP determination. We have signalled our focus on asset health and criticality through our various published papers.</p> <p>However, we have agreed to substantially all of Transpower’s requested drafting changes, which should mitigate the risk of Transpower not understanding and failing to comply with the requirements of the notice.</p> <p>We have also included a provision to allow Transpower to be able to apply to us for an exemption, variation or time extension, which should go some way to addressing Transpower’s concerns.</p>

Determination	Submission	Agree/disagree	Commission comment
<p>Draft section 53ZD information gathering notice (asset health and risk modelling)</p>	<p>Section 53ZD notice - Asset health and risk modelling information (Schedule A)</p> <p>If the prescription remains, then Transpower proposes alternative drafting (identified in Table 1 of the submission) to reduce the risk that the development is without precedent, inconsistent with GEIP and contrary to the long-term benefit of consumers.</p>	<p>We agree in part with Transpower's suggested drafting.</p>	<p>We have retained the information requirements at their current level of prescription, as they are largely based on the recommendations of the Verifier, but we have adopted several of Transpower's drafting suggestions. This, coupled with the ability to seek a variation, an extension or an exemption, reduces the risk of Transpower not understanding the requirement or of failing to comply.</p>

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<p>Draft section 53ZD information gathering notice (asset health and risk modelling)</p>	<p>Section 53ZD notice - Asset health and risk modelling information (Schedule A)</p> <p>The expert must implicitly endorse the roadmap but its assessment against GEIP could raise the fact a development approach is not consistent with GEIP. Transpower notes that the terms of reference (under clause 10) for the opinion should allow for a conclusion about departures from the roadmap if doing so better meets GEIP.</p>	<p>We agree.</p>	<p>The information gathering notice sets out a requirement for Transpower to draft the terms of reference for the expert opinion, which must take into account our feedback.</p> <p>We do not expect those terms of reference to require implicit endorsement of the development roadmap by the independent expert where a variation by Transpower from the roadmap during RCP3 might give a better result that can be justified as consistent with GEIP.</p> <p>The expert opinion will be required to set out an assessment against good electricity industry practice of Transpower’s progress towards implementing:</p> <ul style="list-style-type: none"> • the further development of its asset health and asset life-extension modelling, where this has been identified as not yet sufficiently and reasonably developed in line with the roadmap; and • the further development of its asset and network risk-based decision-making frameworks, in line with Transpower’s asset and network risk-based decision-making frameworks to enable network investment decision-making to be informed by risk during RCP3 and in preparation for RCP4. <p>This requirement is not intended to restrict Transpower from deviating from the roadmap where it can justify that the alternative development approach is consistent with GEIP.</p> <p>The notice provides the opportunity in its annual update for Transpower to explain the reasons for the difference in the level of progress set out in the development roadmap, which we expect would include reasons for justified variations to the roadmap during RCP3 in accordance with GEIP.</p>

Determination	Submission	Agree/disagree	Commission comment
<p>Draft section 53ZD information gathering notice (asset health and risk modelling)</p>	<p>Section 53ZD notice - Asset health and risk modelling information (Schedule A)</p> <p>Substation management systems (SMS) operate in a niche area where the realms of Information and Communications Technology (ICT) and power systems engineering converge. These systems are the mission critical interface between Transpower’s primary and secondary assets and the IT control systems that operate the power system as a whole. SMS are subject to the evolving requirements of both realms and therefore controlling mortality rates is typically secondary to managing obsolescence drivers such as cyber security, functionality, compatibility, and supportability. Applying a simple asset health approach to SMS lifecycle management would result in a regime that increases whole of system costs and rapidly escalates risk.</p> <p>If the prescription remains, Transpower proposes re-drafting as follows:</p> <p>A1.1.4 Secondary assets – SA Substation Management systems: Transpower will actively track the failure rates of SMS assets and will replace devices on an age-based approach, balanced against the context of the wider system requirements;</p>	<p>We do not agree.</p>	<p>The wording in our notice gives practical effect to the recommendation of the independent verifier (at page 242 of the Verification Report) that Transpower consider developing further asset health and criticality models for SMS assets.</p>

Determination	Submission	Agree/disagree	Commission comment
<p>Draft section 53ZD information gathering notice (asset health and risk modelling)</p>	<p>Section 53ZD notice - Asset health and risk modelling information (Schedule A)</p> <p>Transpower understands that an annual update on progress could be useful to stakeholders. Transpower proposes that for its ownership of the update information, the form and content of the update should be at Transpower’s discretion. Clause A4 is overly prescriptive.</p> <p>The wording in the decision paper (page 417) would suffice –</p> <p>“Transpower to report annually on its progress towards implementing the development roadmap.”</p> <p>Transpower notes that the form and content of the update should be left to Transpower’s discretion, which could take into account any feedback from stakeholders on prior updates.</p>	<p>We do not agree.</p>	<p>Under this notice, Transpower must produce a progress update that sets out:</p> <ul style="list-style-type: none"> • a statement of whether Transpower achieved the level of development set out in the development roadmap, of asset health and risk models, asset life-extension models and risk-based decision-making frameworks; • whether Transpower has achieved the level of development set out in the development roadmap in respect of one or more of asset health and risk models, asset life-extension models and risk-based decision-making frameworks; • whether Transpower expects to achieve the level of progress set out in the development roadmap; • information about how the proposed RCP3 asset health measures are performing in each asset class; and • where Transpower proposes to do any additional work as a result of the expert opinion, how the additional work takes into account recommendations (if any) from the expert opinion, and a timeline for this additional work. <p>We do not consider these requirements for the annual update to be too prescriptive. However, if based on feedback from stakeholders the prescribed information proves not to be of value to them (and us), we have included a provision in the notice to allow Transpower to be able to apply to us for an exemption, variation or time extension, which should go some way to addressing Transpower’s concerns.</p>

Determination	Submission	Agree/disagree	Commission comment
<p>Draft section 53ZD information gathering notice (customer consultation)</p>	<p>Section 53ZD notice – Customer consultation information</p> <p>While the Commission signalled the information requirement for customer engagement in the 2017/18 Capex IM review, it was initially proposed as an Information Disclosure requirement [in the Capex IM review decisions].</p> <p>Transpower repeats its concerns that the importation of a criminal standard for the provision of information to the Commission that is, in part, dependent on the receipt of accurate and reliable information from the customers themselves is, Transpower considers, inconsistent with the purpose of the Act.</p>	<p>We do not agree, but we have made changes to address Transpower’s concerns.</p>	<p>Contrary to Transpower’s submission, the criminal liability that attaches to a breach of a section 53ZD notice is not a unique consequence of breaching an information provision requirement we set. If we put the information provision requirement in the IPP, it would be a criminal offence to intentionally breach such a requirement. The same is true if we required the information under information disclosure.</p> <p>Transpower’s concern at exposure to criminal liability for failure to provide information that Transpower has not itself received (from customers) is unwarranted. Under section 103(1)(a) of the Act, Transpower would in such circumstances have a reasonable excuse for not providing such information, so would not have committed any offence.</p> <p>Our provision of scope for Transpower to seek a variation, an extension or an exemption, is intended to reduce the risk for Transpower of not understanding the requirement or of failing to comply. We consider that adopting variation and exemption mechanisms will mitigate Transpower’s concerns.</p>

Determination	Submission	Agree/disagree	Commission comment
<p>Draft section 53ZD information gathering notice (customer consultation)</p>	<p>Section 53ZD notice - Customer consultation information (clause 11)</p> <p>The RCP4 IPP will be determined in August 2024 (clause 2.2.2(1) of the Transpower Capex IM determination). If the purpose of the information is to assist with setting the RCP4 IPP, Transpower should not be required to provide the consultation information for the last disclosure year of RCP3 because by that stage the RCP4 IPP will already have been determined. It is likely the consultation information for the second-to-last disclosure year of RCP3 would also be provided too late.</p> <p>[see also: section 53ZD notice Asset health and risk modelling information, clause 12; section 53ZD notice Cost estimation information, clause 9.2.6.]</p>	<p>We agree.</p>	<p>The information gathering notices have been updated to reflect only the information from those disclosure years that will be available in time for our decision-making on the RCP4 IPP determination or where the information is necessary for our capex approval decision-making during RCP3 (major capex and listed project base capex approvals).</p>

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<p>Draft section 53ZD information gathering notice (customer consultation)</p>	<p>Section 53ZD notice - Customer consultation information (clause 15)</p> <p>Transpower suggests this clause be expanded to allow Transpower to apply for an exemption as well as an extension, as is proposed for information to be disclosed under the IPP (clause 35 of the draft IPP). This will allow the notice requirements to be sensibly flexible if it transpires certain information cannot reasonably be provided or there is better information to meet the Commission's purpose than specified in the notice.</p> <p>[see also: section 53ZD notice Asset health and risk modelling information, clause 13; section 53ZD notice Cost estimation information, clause 11.]</p>	<p>We agree.</p>	<p>In the information gathering notices we have included the ability for Transpower to apply to us for exemptions, variations and time extensions on a similar basis to that contained in the IPP determination.</p>

Determination	Submission	Agree/disagree	Commission comment
<p>Draft section 53ZD information gathering notice (cost estimation)</p>	<p>Section 53ZD notice - Cost estimation information</p> <p>Transpower understands the intent of this draft notice is to build the Commission's confidence in Transpower's cost estimation. It seems likely Transpower will need to develop a methodology for establishing the line of sight between proposal costs (where these can be established, noting that a base capex proposal is not simply a collection of specific projects) and delivery business case cost, and actual cost.</p> <p>Agreement on such methodology would be needed if the data collection and collation task is more complex than the drafting in the notice implies.</p> <p>Transpower is keen to avoid a repeat of the recent assessment process for the IRIS baseline adjustment term, where methodological differences created outcomes for Transpower and the Commission that were very different.</p>	<p>We agree.</p>	<p>We have modified the information gathering notice to require Transpower to produce a methodology for establishing the line of sight between proposal costs, delivery business case costs, and actual cost. Transpower will consult with us on a draft methodology and finalise the draft methodology after taking account of any feedback we provide.</p> <p>We can also make any necessary changes to the information gathering notice during RCP3 so that the policy objective of creating transparency of cost estimation variances is achieved.</p>

Determination	Submission	Agree/disagree	Commission comment
<p>Draft section 53ZD information gathering notice (cost estimation)</p>	<p>Section 53ZD notice Cost estimation information (clause 9.2.1)</p> <p>It is unclear what “completed” means versus “commissioned”, and Transpower notes the terms are used interchangeably in this clause, clause 9.27 and clause A1.2.</p> <p>From Transpower’s perspective, Transpower would not consider a project or programme to be “completed” until all costs for the project or programme have been finalised and attributed. Depending on the project or programme, that can be a very considerable period of time after commissioning. The result is that the cost estimation information may not be provided until a disclosure year after the project or programme has been commissioned.</p>	<p>We agree.</p>	<p>We have changed our drafting of the information gathering notice to line up with the concept of “completed”, including defining what that means in a practical sense. This makes the gathering of information more workable and does not impact our policy objective.</p>