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Transpower's individual price-quality path for the regulatory control period commencing 1 April 2025

Draft Decision Attachment A – Revenue path design

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Chapter 1 Introduction

Purpose

- 1.1 This document is part of the package of draft decision documents on Transpower's individual price-quality path (IPP) for the fourth regulatory period starting on 1 April 2025 (RCP4).¹ The draft decision package was published on 29 May 2024. We seek submissions on our draft decisions, which will inform our final decisions for Transpower's RCP4 individual price-quality path (IPP) reset.
- 1.2 This is one of five attachments to our main draft decision paper, the main draft decisions paper sets out all the decisions as well as the context within which we are setting revenues.
- 1.3 The purpose of this attachment is to set out our review of Transpower's proposal and draft decisions relating to the revenue path for Transpower's IPP reset, and to explain our reasons for those draft decisions.²

Summary of our revenue path decisions

- 1.4 Our key draft decisions relating to Transpower's revenue path are to:
 - 1.4.1 smooth Transpower's annual revenue, consistent with the Transpower Input Methodologies 2012 (**Transpower IM**), by:
 - 1.4.1.1 forecasting costs, including pass-through costs, recoverable costs, and the economic value account (**EV account**) balance as at June 2024, and building these into the forecast maximum allowable revenue (**MAR**);
 - 1.4.1.2 smoothing the resulting forecast MAR over RCP4 using growth rates of equal amounts in years one and two of RCP4 (resulting in an estimated 15.43% for each of those years for the purposes of the draft decision), and 5% for each of years three to five to produce an annual forecast smoothed maximum allowable revenue (**forecast SMAR**); and

¹ Details on consultation dates and formats for submission can be found in Commerce Commission, "Transpower's individual price-quality path for the regulatory control period commencing 1 April 2025 – Draft Decision" (29 May 2024), para 1.7.

² The price path we set for Transpower under the IPP is set according to a revenue cap. We do not determine Transpower's pricing, which is instead set under the Transmission Pricing Methodology (TPM). For clarity we refer in this paper to the RCP4 price path as being a 'revenue path'.

- 1.4.1.3 washing up any variation between the forecast SMAR and the actual revenue, plus any incentive amounts, into the EV account and accumulating the balance of the EV account over RCP4, with the balance to be recovered in RCP5;³
- 1.4.2 maintain the EV account entry definitions from RCP3 with an additional entry for an ex-post economic gain or loss resulting from a revenue wash-up for inflation;
- 1.4.3 maintain the building blocks and inputs to the model set out in RCP3 with the exception of a revaluation building block for the purposes of calculating revenue and wash-ups in the EV account entry; and
- 1.4.4 include an additional transitional adjustment mechanism for an EV account entry arising from a deposit payment on the high-voltage direct current (HVDC) Cook Strait cable replacement project.
- 1.5 We have made a draft IM amendment decision to allow Transpower to use a different revaluation implementation approach than was specified in the IM Review 2023. We discuss this in our IM Amendment draft decision paper.
- 1.6 We are also implementing an annual reopener mechanism to address expenditure deliverability issues. We discuss this in the RCP4 Draft Decision Attachment E Deliverability expenditure.

Why the revenue path design is important

- 1.7 The design of Transpower's revenue path determines the timing of how it will recover its allowable transmission revenue over RCP4, which will in turn affect prices paid by Transpower's customers and end users of electricity.
- 1.8 The shape and design of the revenue path will determine the level of any year-toyear variability of Transpower's transmission revenues.
- 1.9 In RCP3, we decided to amend the IMs to smooth Transpower's revenue path for each year of the regulatory period, in order to minimise the volatility in revenue between regulatory periods and across the regulatory period. Transpower has proposed a smoothed revenue path for RCP4 which is similar to RCP3.
- 1.10 Revenue smoothing is not intended to change the economic value to Transpower of the total revenue it may recover, only the timing of that revenue recovery.

³ Amounts would be carried forward at the WACC rate, to compensate for timing differences.

Process to date in designing the RCP4 revenue path

- 1.11 In preparation for Transpower's RCP4 proposal, we issued a Section 53ZD information-gathering notice under the Commerce Act 1986, requesting Transpower to provide information and forecasts of different revenue smoothing scenarios.⁴
- 1.12 In its proposal,⁵ Transpower forecast nominal revenue of \$6,474 million over RCP4, which would be an increase of 59% in RCP4 when compared with RCP3 revenue. This forecast revenue was based on the applicable IMs at the time of Transpower's submission of its proposal. Accordingly, it did not include the effect of our recent IM Review 2023 decision on indexation of the regulatory asset base (RAB) and decision to apply the 65th percentile estimate of the weighted average cost of capital (WACC) when setting the IPP.⁶
- 1.13 Transpower also provided a revenue forecast that included the effect of RAB indexation and a 65th percentile estimate of WACC. The impact of these changes reduced Transpower's estimate of the forecast RCP4 revenue to \$5,798 million.
- 1.14 One of the revenue path scenarios provided by Transpower was its proposed and preferred revenue smoothing profile, which included a single step change of 24.9% at the start of RCP4, with a 5.0% per annum revenue increase thereafter.

The Transpower IPP financial model and how it has changed since RCP3

- 1.15 Transpower develops and maintains the IPP financial model which we rely on. The model outputs and underlying calculations that will be provided to us for our final IPP decision in November 2024 will be independently audited.
- 1.16 To help inform our draft decisions we have used a simplified version of Transpower's financial model, which we have reviewed. We consider this approach provides a sufficiently accurate set of revenue outcomes to inform stakeholders of our draft decisions. We will use an updated version of this simplified model for our final decisions on inputs to the revenue path in August 2024 and this will enable our publication of an updated draft IPP determination. We will then require Transpower to provide us with revenue outcomes using the full financial model in October 2024.

⁴ Commerce Commission, "<u>Notice to supply information to the Commerce Commission under section 53ZD</u> of the Commerce Act 1986 – RCP4 revenue model and forecast revenue calculations" (s53ZD Revenue model and forecast calculation) (04 September 2023).

⁵ Transpower New Zealand Limited, "<u>Regulatory control period 4 proposal April 2025 – March 2030</u>" (21 November 2023) (**Transpower RCP4 proposal**).

⁶ Transpower, <u>Transpower RCP4 proposal</u>, p 208.

- 1.17 One of the key changes from RCP3 to the financial model for the purpose of informing our draft decisions is the inclusion of RAB indexation. The RAB indexation approach Transpower provided in its financial model is based on the IM Review 2023 revaluation approach rather than its proposed revaluation approach in its cross-submission. We discuss in the IM Amendment draft decision paper published alongside this paper how we expect Transpower's proposed revaluation approach will increase its revenue by \$6.1 million on average per year in RCP4 based on its submission.⁷
- 1.18 Other changes from RCP3 for the purpose of informing our draft decisions include using a simplifying assumption in respect of the timing of capex commissioning. Transpower has assumed that capex will be commissioned on a half-yearly basis, whereas our final IPP decision will be based on assumptions of monthly commissioning of new commissioned assets.
- 1.19 Other changes that Transpower has made to its financial model include:
 - 1.19.1 removing the HVAC/HVDC revenue split, which is no longer required given the implementation of the TPM;
 - 1.19.2 removing the tax goal-seek macro to allow for a more dynamic model;
 - 1.19.3 enabling the modelling of our IM Review 2023 decisions, particularly indexation of Transpower's RAB;
 - 1.19.4 enabling depreciation modelling of new assets within the model to assist with sensitivity analysis and the revenue impact of uncertain capex; and
 - 1.19.5 allowing for capacity to run multiple scenarios at once using Excel's data table function.

⁷ Based on our initial analysis, this is a temporary effect over the life of the assets and there will be an offsetting revenue decrease towards the end of the asset lives, resulting in an NPV neutral revenue outcome over the lifetime of the asset. An approach that is NPV neutral is more likely to reflect the financial capital maintenance principle and as such, is likely to better promote incentives for Transpower to invest. We discuss this analysis in our "Proposed amendments to input methodologies for Transpower's individual price-quality path for the regulatory control period commencing 1 April 2025 – Draft decision paper"; published in this package.

We will require Transpower to finalise the financial model for RCP4 by October 2024

1.20 Transpower will finalise its financial model to take account of our final decisions to be released in August 2024. Transpower will incorporate our expenditure decisions and apply the regulatory WACC, which will be determined in October 2024. Transpower will then receive independent assurance of the model and submit it to us for our final review.

Chapter 2 Our draft decision on smoothing Transpower's revenue over a 5-year period

Purpose of this chapter

- 2.1 This chapter discusses our draft decision on how we will smooth Transpower's revenue over RCP4.
- 2.2 The building blocks approach to setting Transpower's forecast MAR can produce step changes and volatility in the revenue we allow Transpower to recover from customers from year to year, and when transitioning between RCPs, particularly when we calculate the annual revenue wash-ups. These are reflected in the prices Transpower charges its customers unless we smooth the forecast MAR.
- 2.3 We set out our draft decision and the indicative growth rates and forecast MAR and forecast SMAR. We set out our reasons for our selected revenue smoothing profile and discuss the methodology and inputs for the revenue path including WACC. We then discuss how we will treat pass-through and recoverable costs.

Draft decisions

- 2.4 Our draft decision is to set Transpower's annual RCP4 revenue using building blocks forecast MAR values, and then apply smoothing using our determination of annual revenue growth rates over the five-year period.
- 2.5 We have allocated the resulting annual revenue between Transpower's pricing years (ie, the resulting annual revenue will be smoothed to give forecast SMAR amounts), with the aim of reducing some of the initial price shock from the step change from RCP3. To this effect, our draft decision is to set Transpower's annual RCP4 revenue path with an initial two-year step change of equal growth rates followed by a constant growth rate of 5.0% for years three to five of RCP4. We would expect this to result in the following approximate rates of increase:⁸
 - 2.5.1 15.43% per annum in each of years one and two of RCP4; and
 - 2.5.2 5.0% per annum in each of years three to five of RCP4.

⁸ Note that the rates of increase for the step change (15.43%) is indicative and based on our internal interpretation of Transpower's model. This may change for the final decision based on final decisions on expenditure allowances and Transpower's final modelling.

- 2.6 These rates of annual increase (**IPP revenue growth rate**) are set out in the draft IPP determination.⁹
- 2.7 Differences between the forecast SMAR which we set in the IPP determination and the revenue Transpower earns will be washed up annually and any difference will be included as an entry in the EV account. The closing balance of the EV account for RCP4 will then be recovered or repaid by Transpower over the RCP5 regulatory period.

The length of the regulatory control period

- 2.8 In our RCP4 Issues paper (**Issues paper**), we noted that we are required to decide the length of regulatory period and did not consider there were reasons causing us to consider a shorter regulatory period than the default five-year period.¹⁰
- 2.9 The Act requires us to set a five-year RCP, unless a shorter period would better meet the purpose of Part 4 of the Act (however, a period may not be shorter than four years).¹¹
- 2.10 We received submissions on the length of the regulatory control period from Transpower. In its submission on the Issues paper, Transpower noted: ¹²

In our view any decision to reduce the regulatory period should be made prior to the start of the Transpower's submission proposal process, as the length of the regulatory period dictates investment and operational decisions (including accounting for the expenditure incentives). Our proposal is focused on a five-year period, and our expenditure plans and proposed initiatives reflect this.

A shorter control period would also create consequential effects on both Transpower and Commission processes and their timing, such as the E&D reopener, listed project application, and ability to respond to any specific investigation query under a s53ZD notice. In addition, the decision would mean the control period ended March 2029 and leave an overhang period under the order-in-council (which expires September 2030) 3 that provides for Transpower's IPP.

2.11 We have considered whether a shorter period would be appropriate and conclude that, taken as a package, the features of a shorter period would not better meet the purpose of Part 4 than those of a five-year period. Therefore our draft decision is to set the Transpower RCP4 IPP at the default five-year period prescribed under Section 53M(4) of the Act.

⁹ The draft IPP determination includes the IPP revenue growth rates of 15.43% for years one and two and 5% for years three to five based on smoothing of the draft revenue path. These rates will be finalised in our final IPP determination in November 2024.

¹⁰ Commerce Commission, "<u>Transpower's individual price-quality path for the next regulatory control</u> <u>period – Issues paper</u>" (25 January 2023) (**RCP4 Issues paper**), para 10.57-10.59.

¹¹ *Commerce Act 1986,* s 53M.

¹² Transpower, "<u>Submission on RCP4 Issues paper</u>" (21 February 2024) (**Transpower's submission on Issues paper**) p 1-2.

Our approach to determining Transpower's allowable revenue

- 2.12 Clause 3.1.1 of the Transpower IM states the revenue cap for Transpower must not exceed the forecast SMAR, for each pricing year of the RCP.
- 2.13 Clause 3.1.1(3) states the forecast SMAR must equal the net present value (**NPV**) of aggregated forecast MAR. It also states that the IPP revenue growth rate must be applied when calculating the forecast SMAR.¹³
- 2.14 The first practical step in deriving the smoothed forecast revenue is to set a forecast MAR.

Setting Transpower's forecast MAR

- 2.15 Our draft decision is to set the forecast MAR using an unsmoothed building block approach. The building blocks will consist of:
 - 2.15.1 Capital charge building block (inclusive of the prior years' revaluation balance for calculating the opening RAB value);
 - 2.15.2 Depreciation building block (inclusive of depreciation on the opening RAB balance, inclusive of prior year's revaluation);
 - 2.15.3 Revaluation building block;
 - 2.15.4 Operating expenditure building block;
 - 2.15.5 Tax building block;
 - 2.15.6 Term credit spread differential (**TCSD**) allowance building block;
 - 2.15.7 Forecast EV adjustment building block (which is specified in the Transpower IM);
 - 2.15.8 Pass-through costs building block (which is specified in the Transpower IM); and
 - 2.15.9 Recoverable costs building block (which is specified in the Transpower IM).

¹³ Given that the forecast MAR and forecast SMAR must have the same net present value (based on the WACC), and the revenue growth rate is constant over the IPP, describing the rate of growth will be sufficient to determine the resulting forecast SMAR series.

- 2.16 This is consistent with the building blocks approach used in RCP3, plus the inclusion of RAB indexation. The revaluation of the RAB under RAB indexation will be a separate building block for setting the forecast MAR and forecast SMAR, and also a separate building block for the purposes of the annual revenue path wash-ups. The amount of each year's total revaluation will be treated as revenue received by Transpower consistent with the requirements of the Transpower IM.
- 2.17 The forecast MAR is combined with forecast pass-through costs and forecast recoverable costs to set the annual revenue Transpower can charge. In RCP3, we decided to smooth the forecast MAR across the period.
- 2.18 Based on this approach, we have calculated the following forecast MAR values in Table 2.1 below:

	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Forecast MAR (\$ m nominal)	969.8	1,119.4	1,175.4	1,234.2	1,295.9

Table 2.1 RCP4 Forecast MAR

Setting Transpower's forecast SMAR

- 2.19 Clause 3.1.1(3) of the Transpower IM states we must determine the IPP revenue growth rate for each pricing year for the purposes of setting a forecast SMAR. However, it does not specify a methodology for how we must set the IPP revenue growth rate.
- 2.20 In 2023 we issued a s 53ZD information notice to Transpower requesting that it model and provide us with specified smoothing scenarios.¹⁴ Transpower modelled 16 different revenue paths in response to our notice. In our Issues paper, we identified that a number of these revenue paths were no longer applicable due to the IM Review 2023 final decisions.¹⁵
- 2.21 We initially narrowed down the smoothing profiles to the following most practical options:¹⁶
 - 2.21.1 Option 1 Transpower's proposed smoothing profile with a 24.9% step change between the last year of RCP3 and the first year of RCP4, plus a 5.0% p.a. growth rate after the first year of RCP4; and

¹⁴ Commerce Commission, <u>s53ZD Revenue model and forecast calculation</u>.

¹⁵ Commerce Commission, "<u>RCP4 Issues paper</u>", Attachment A.

¹⁶ Note that our options analysis growth rates are based on the proposed expenditure profile and vary from our draft decision as a result of the impacts of our draft decision on base capex and opex.

- 2.21.2 **Option 2** two-year step change approach, with equal step changes (of 16.62%) in years one and two of RCP4, and a 5.0% p.a. growth rate from year three onwards.¹⁷
- 2.22 We provide an illustration in Figure 2.1 of our preferred smoothing profile ('Option 2') compared to Transpower's proposal, and a fully smoothed variation (labelled as 'For reference SMAR, CPI x approach'), which demonstrates the scope within which we can smooth the revenue path profile.
- 2.23 The fully smoothed variation illustrates an approach that entirely favours customers initially and potentially disadvantages Transpower, with large increases at the end of RCP4 when additional expenditure will need to be incurred by Transpower on the further approvals of major capex projects (**MCPs**) and listed projects that would translate to further revenue increases above what is shown.
- 2.24 We also illustrate in Figure 2.2 how our preferred option looks compared to the building block totals for each pricing year.



Figure 2.1 Forecast SMAR (\$ million nominal)

¹⁷ The two steps of 16.62% in our options analysis vary from our draft decision where we estimated two steps at 15.43% as a result of the impacts of our draft decisions on base capex and opex.



Figure 2.2 Forecast SMAR vs Forecast MAR (\$ million nominal)

Factors guiding our assessment of the revenue path profile options

- 2.25 In guiding our assessment of which forecast SMAR to determine, we must consider a revenue path profile that is consistent with promoting the Part 4 purpose.
- 2.26 We noted in our issues paper that in implementing revenue smoothing, we consider a number of factors, including:¹⁸
 - 2.26.1 minimising price shock risks to Transpower's customers and ultimate consumers; and
 - 2.26.2 not imposing undue financial hardship on Transpower in deferring its recovery of revenue.

Assessment of smoothed revenue path profiles

2.27 Transpower's preferred approach is to have a single step change with a flatter year on year growth rate for the remaining years. This results in a significant increase of 24.9% for year one.

¹⁸ Commerce Commission, "<u>RCP4 Issues paper</u>", para 10.7.

- 2.29 We therefore favour an approach that mitigates this price impact by spreading out the increase. There are two factors in considering how much we defer recovery of revenue:
 - 2.29.1 maintaining Transpower's incentives to invest in a safe and reliable network; and
 - 2.29.2 the likelihood of Transpower seeking approvals for listed projects and MCPs during RCP4 and the associated possible price impacts.
- 2.30 In assessing these two factors, we have considered:
 - 2.30.1 whether the "decoupling" of the profile of the forecast SMAR from the profile of the forecast MAR may affect incentives to invest; and
 - 2.30.2 whether the quantum of listed projects and MCPs during RCP4 would cause a price impact and whether as a result a flatter growth rate later in the period would be beneficial. It would help cushion some of the impact of price increases in the later years of RCP4, from commissioning of any MCPs or listed projects we later approve during RCP4.
- 2.31 From the options set out, Option 1 achieves a forecast SMAR profile that is closest to the profile of the forecast MAR.
- 2.32 While Option 2 has some degree of 'decoupling', Option 2 has a lower difference between forecast MAR and forecast SMAR compared to an alternative approach where we spread the initial step change over two years with a higher growth rate for year one and a lower growth rate for year two or a fully smoothed approach. Under Option 2, Transpower will recover revenue greater than its forecast MAR from years 3 of RCP4 onwards.
- 2.33 Based on the regulatory templates provided to us by Transpower, it is forecasting that a large portion of additional capex on MCPs and listed projects will be incurred and commissioned in mid to late RCP4, if the expenditure/projects are approved.¹⁹

¹⁹ Based on the preliminary figures, Transpower expects that it will commission \$246.8 million in year three and \$256.9 million in year four, compared to \$94.8 million in year one and \$183.5 million in year two.

- 2.34 We consider a lower growth rate in the later years of RCP4 is likely to better promote the Part 4 purpose, as it takes into account possible price increases resulting from approved additional commissioned capex during RCP4.
- 2.35 Based on our assessment in balancing the consumer impacts and providing incentives to invest in safe and reliable networks, our draft decisions is to adopt Option 2. In our view it best provides a balance between providing a degree of smoothing of large price rises, and maintaining Transpower's incentives to invest.

Alternatives considered

- 2.36 We received submissions from stakeholders on deferring the recovery of revenue from RCP4 into the next RCP (RCP5).
- 2.37 Contact Energy submitted:²⁰

[...] There should also be scenarios that spread the significant increase in costs over more than one regulatory period [...]

Smoothing revenue increases over more than one regulatory period remains consistent with preserving NPV, and there is regulatory precedent for doing so:

• In the first reset under the Part 4 regime in 2012 the Commission smoothed revenue increases for Alpine Energy, Centralines, The Lines Company, and Top Energy over two regulatory periods. Due to the shortened nature of the first regulatory period this meant costs were recovered over a 7-year period.

• The regulation of fibre services under Part 6 of the Telecommunications Act 2001 established a 'financial losses asset'. This was to account for losses incurred during the construction of the UFB network. It therefore functions in a similar way to multiperiod smoothing as there was a period of underrecovery followed by a period where revenues are allowed to increase to maintain long term NPV. [...]

We are sensitive to the financeability concerns of spreading costs over multiple periods. It is in consumers long-term interests that Transpower has sufficient cashflows to undertake necessary investment.

[submission footnotes omitted]

2.38 Transpower submitted:²¹

Our view is that, to the extent possible, today's consumers should pay for today's costs. Any long-term deferral of revenue is unlikely to be consistent with a workably competitive market. Customers are charged our regulated rate of return on deferred revenue recovery.

²⁰ Commerce Commission, "<u>Contact's submission on RCP4 Issues paper</u>", (21 February 2024), pg 2.

²¹ Commerce Commission, "<u>Transpower's submission on RCP4 Issues paper</u>", (21 February 2024).

We consider the price-path most appropriate is that which allows a supplier to recover its costs as closely as possible to when they have been incurred.

...

In addition, the Commission's decision to index our RAB has deferred a significant proportion of our RCP4 revenue into the future. Further deferrals for smoothing purposes, not in line with the purpose of Part 4, may impact our financing needs.

2.39 In the cross-submission stage, Vector submitted:²²

We note Contact's submission suggested the Commission also consider price smoothing scenarios that spread cost increases across regulatory periods.

We do not consider a revenue path that deferred cost recovery across regulatory periods would support the long-term benefit of consumers. Transpower's submission explains: "Our view is that, to the extent possible, today's consumers should pay for today's costs. Any long-term deferral of revenue is unlikely to be consistent with a workably competitive market. Customers are charged our regulated rate of return on deferred revenue recovery... the Commission's decision to index our RAB has deferred a significant proportion of our RCP4 revenue into the future. Further deferrals for smoothing purposes, not in line with the purpose of Part 4, may impact our financing needs."

- 2.40 We have considered whether there is merit to further deferring some of Transpower's revenue recovery into the next RCP.
- 2.41 While this may mitigate some of the price effects of the forecast expenditure, we consider this approach undesirable as it may have a negative impact on consumers in the future and on Transpower's incentives to invest.
- 2.42 We note that in Transpower's proposal, its RCP5 expenditure is forecast to be further increasing from RCP4 levels (shown in figure 2.3).²³ We have not assessed those expenditure forecasts, as this is outside of our RCP4 revenue path setting. However, taking into account this information from Transpower under a deferred revenue forecast profile for RCP4, it is possible that minimisation of RCP4 price effects, by deferring Transpower's revenue recovery from the current period into the next, may actually exacerbate future price increases for Transpower's customers and its ultimate consumers.

²² Commerce Commission, "<u>Vector's cross-submission on RCP4 Issues paper</u>", (13 March 2024).

²³ Transpower, <u>Transpower RCP4 proposal</u>, figure 15.



Figure 2.3 Transpower long-term expenditure forecast

- 2.43 Significant deferral of cashflows may undermine Transpower's incentives to invest, which could end up being contrary to consumers' long-term interests.²⁴ For these reasons, our draft decision is not to defer any RCP4 revenue recovery by Transpower into RCP5.
- 2.44 We consider that not deferring allowed revenue to a later period is appropriate in this case, as on balance this is likely to better promote the Part 4 purpose by allowing Transpower the opportunity to recover its expenditure in a manner that reflects the expectation of a normal return. It will possibly also provide a degree of protection against future price impacts.

WACC

- 2.45 The WACC has a significant impact on the revenue Transpower can earn over an RCP, as it determines the return Transpower earns on its RAB (this appears in the Return on Capital forecast MAR building block).
- 2.46 We do not set the WACC as part of our IPP decisions. The final WACC that will apply for RCP4 will be published in a separate determination in October 2024.

As mentioned by submitters, a significant deferral of revenue recovery may not support the long-term interest of consumers. We noted in the <u>DPP4 reset Financeability issues paper</u> that our decisions under Part 4 of the Act are intended to provide the expectation of a normal return for investors. Deferral of revenue recovery may not reflect the expectation of a normal return and, as such, may not be reflective of the ex-ante financial capital maintenance principle (which is that regulated supplies should have the expectation of earning their risk adjusted cost of capital, and of maintaining their financial capital in real terms over timeframes longer than a single regulatory period). See Chapter 4 of Commerce Commission, <u>Part 4 IM Review 2023 Framework paper</u>, (13 October 2022).

- 2.47 In its RCP4 proposal, Transpower calculated an estimate of the WACC based on the risk-free rate and average debt premium from our August 2023 ID WACC determination, amended to incorporate the draft IM Review 2023 decisions (though Transpower did not update the standard error of the WACC).
- 2.48 This estimated WACC rate does not include recent movements in the risk-free rate and average debt premium, and changes to the fixed WACC parameters from the draft to final decision of the IM Review 2023.
- 2.49 To estimate revenues for the purpose of our draft decisions, we have applied our most recent estimates of WACC of 7.37% (65th percentile vanilla WACC) and 6.67% (65th percentile post-tax WACC), based on the risk-free rate and average debt premium set out in our April 2024 EDB ID WACC determination, and the updated fixed WACC parameters following the final decision on the IM Review 2023, including the updated standard error. These vanilla and post-tax estimates of the WACC should be seen as illustrative only and should not be relied upon as an indication of the WACC rate we will determine for RCP4 in October.

Draft decision

- 2.50 For the draft decision, we have used the following WACC rates to model our draft revenue path:
 - 2.50.1 65th percentile vanilla WACC 7.37%; and
 - 2.50.2 65th percentile post-tax WACC 6.67%.

Our reasons

2.51 The Transpower IMs are silent on the WACC to be applied for the purposes of a draft revenue path decision. However, we have used the above estimated values in order to provide a draft revenue path and will use the October 2024 WACC estimate in our final decision, in accordance with clause 3.5.1 of the Transpower IM.

2.53 We set out in Table 2.2 the parameters we used to calculate the estimate of the WACC for the purposes of our draft decisions.

Parameter	Updated estimate of WACC
Nominal risk-free rate	4.53%
Average debt premium	1.39%
Debt issuance costs	0.20%
Asset beta	0.360
Tax adjusted market risk premium	7.00%
Average corporate tax rate	28.00%
Average investor tax rate	28.00%
Leverage	41.00%
Equity beta	0.61
Cost of equity	7.53%
Cost of debt	6.12%
Standard error of mid-point WACC	0.0108
z-Score	0.385

Table 2.2 Parameters for estimate of WACC

2.54 This approach is consistent with the recent Transpower IM amendments. This is likely to produce a WACC that is most representative of an up-to-date WACC we might determine in October 2024. This option uses parameters derived from the electricity distribution business (**EDB**) ID WACC determination,²⁵ and then adjusted using the latest fixed parameters as set out in the Transpower IM that will come into effect for RCP4.

²⁵ Commerce Commission, <u>Cost of capital determination for disclosure year 2025 for information disclosure regulation – For electricity distribution businesses and Wellington International Airport [2024] NZCC 7</u>

Smoothing recovery of pass-through costs and recoverable costs

2.55 In RCP3, as part of our wider decision to smooth Transpower's forecast MAR, we decided to smooth the recovery of pass-through costs and recoverable costs. As a part of the reset process, we made an amendment to the Transpower IM applying to RCP3 by codifying the requirement to smooth the forecast MAR. By virtue of the drafting in the IMs, the forecast pass-through costs and recoverable costs are also smoothed.

Draft decision

- 2.56 Consistent with the approach taken in RCP3, we have smoothed Transpower's recovery of forecast pass-through costs and forecast recoverable costs in our draft decision.
- 2.57 A forecast of these amounts for RCP4 has been included within the revenue path and included in the forecast SMAR. The difference between the forecast SMAR and the actual costs will be washed up annually, with the variances being included in the EV account. This means any forecasting variance on these expenditures will be dealt with in the setting of the forecast SMAR for RCP5.

Analysis

- 2.58 Consistent with cl 3.1.1(4) of the Transpower IM, we will include forecast pass-through costs and forecast recoverable amounts in the forecast MAR. The forecast MAR will then be smoothed consistent with cl 3.1.1(4) of the Transpower IM.
- 2.59 A forecast of these amounts for RCP4 has been included within the revenue path and included in the forecast SMAR. The Transpower IM do not specify the inputs for the EV account or annual wash-up process – these are specified in the IPP.
- 2.60 As these amounts are not set, and can only be forecast, any forecasting inaccuracy needs to be washed up.
- 2.61 Our draft decision is to implement the same approach taken in RCP3, which is to wash-up the difference between the building block values in the forecast MAR and actual costs annually, with the variances being included in the EV account.
- 2.62 Transpower already performs an annual wash-up calculation on its forecast MAR and its cost building blocks, and the difference between forecast and actual passthrough costs and recoverable amounts can be included in this wash-up calculation. These would be disclosed when Transpower provides us with its other wash-up calculations.

Chapter 3 Accumulation of revenue path wash-up and incentive amounts

Purpose of this chapter

- 3.1 The recovery of EV account amounts is currently specified in the IMs and allows Transpower to recover the EV account balance (as at the end of the period) in the proceeding RCP, or where there is a large accumulation of EV account balance during the RCP, rather than recover on an annual basis during the period.²⁶
- 3.2 This chapter sets out our views on the accumulation of revenue path wash-up and incentive amounts for RCP4 and our draft decision on how we deal with the disparity between forecast closing EV account balance for RCP3 and the actual balance.
- 3.3 This chapter also describes the additional transitional adjustment mechanism for any EV account entry arising in RCP3 from deposit payments on the HVDC Cook Strait cable replacement project.

Draft decision

- 3.4 In setting our forecast SMAR values, the Transpower IM requires us to set a forecasted closing EV account balance for the disclosure year ending on 30 June 2025.²⁷ We are proposing to make the wash-up calculation for the difference between forecast and actual EV account balances, subject to the RCP4 HVDC transitional EV account adjustment mechanism described below.
- 3.5 Our draft decision is then to maintain the wash-up approach used in RCP3 to washup for the difference between the forecast closing EV account balance for RCP3 and the actual balance subject to adjustments for the RCP4 HVDC transitional EV account adjustment mechanism. This EV account wash- up amount will be rolled forward with the EV account in RCP4

²⁶ Commerce Commission, <u>Transpower Input Methodologies Determination 2012</u> [2012] NZCC 17 (as amended) (Transpower IM), Clause 3.1.1(5).

²⁷ *Transpower IM*, Clauses 3.1.1(4) and (5).

- 3.6 Our draft decision to introduce the RCP4 HVDC transitional EV account adjustment mechanism is to address a one-off specific issue. Transpower expects to pay a large deposit in RCP3 to secure the manufacturing of new and replacement Cook Strait cables. This is before the expected time of our assessment of the capex project in early to mid RCP4. As a result, a permanent negative base capex incentive penalty will arise, creating a disincentive on Transpower to secure the manufacturing capacity. Our draft decision is to introduce a mechanism to address this issue by:
 - 3.6.1 amending the Transpower IM;²⁸ and
 - 3.6.2 introducing the 'RCP4 HVDC transitional EV account adjustment' into the RCP4 IPP to:
 - 3.6.2.1 separately identify in the closing RCP3 EV account balance any EV account entry relating to the cable deposit, so it is not recovered from Transpower (as a negative revenue amount) in the forecast SMAR across RCP4; and
 - 3.6.2.2 create an offsetting entry in the EV account in the first disclosure year of RCP4, determined by us, which will have the effect of eliminating any base capex incentive penalty relating specifically to the HVDC cable deposit.

Background on the EV account

- 3.7 Transpower's EV account is used to accumulate EV account entries that arise from time to time with respect to various revenue wash-ups and incentive calculations. For example, we expect some variation between the revenue Transpower forecasts and the revenue it actually earns over time. 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 in the EV account.
- 3.8 In RCP1 and RCP2, the balance in the EV account was recovered from, or returned to, Transpower's customers annually when Transpower set its prices. In RCP3 we implemented an EV account recovery approach, where the EV account entries are calculated annually and accumulated in Transpower's EV account, with recovery (or repayment) of wash-up and incentive amounts being deferred until the next regulatory period (in that case, RCP4), when the net balance would be recovered in the smoothed revenue path for that period.

²⁸ Commerce Commission, "Proposed amendments to input methodologies for Transpower's individual price-quality path for the regulatory control period commencing 1 April 2025 – Draft decision paper", (29 May 2024).

- 3.9 The EV account recovery mechanism is accompanied by a price path reopener mechanism in clause 3.7.3A of the Transpower IM. This allows some of the EV account balance to be spread over the remaining years of the current RCP when the forecasted accumulated balance becomes sufficiently material that it could cause a price shock to Transpower's customers if it was carried forward and spread over the subsequent RCP.
- 3.10 These EV account features were implemented in clause 3.1.1(4) and (5) of the Transpower IM for RCP3, and will also be applied in RCP4 and later regulatory periods.

Analysis

- 3.11 As the revenue path must be set before the closing balance will be available, we will use the EV account balance as forecasted by Transpower in its proposal (which is forecasted to be \$146.7 million at the end of RCP3). Some fluctuation in annual EV account balance amounts is expected. Any difference between this forecast and the actual balance will be washed up and rolled forward with the EV account.
- 3.12 We received a submission from Transpower advocating for a return to the annual EV account balance drawdown and resetting revenue annually. ²⁹
- 3.13 We considered the EV account balance drawdown and resetting of revenue paths in the IM Review 2023 and maintained our approach to EV account balance drawdowns and revenue path resets and do not consider this better meets the Part 4 purpose as it would reintroduce volatility into the revenue path, and is not in the long-term benefit of consumers.

RCP4 transitional EV account adjustment for HVDC Cook Strait cable replacement project

3.14 The problem is created by the required timing of a contract deposit payment to an overseas cable manufacturer by Transpower in RCP3, which is before the expected timing of our consideration of the capex project in early to mid RCP4. Transpower has stated that the need for and size of a deposit will be subject to negotiations, but it has indicated that it could be as much as \$60 million (and possibly higher). The timing of the payment means our IMs could result in a base capex incentive penalty, which would be approximately \$14 million on a \$60 million deposit paid in RCP3.

²⁹ Transpower New Zealand Limited, "<u>Transpower's submission on Issues paper</u>", (21 February 2024), paras 47-50.

- 3.15 This could result in Transpower bearing a reduction in its RCP4 allowable revenue as a result of incurring capex (ie, the cable replacement deposit) when it does not yet have approval of its project capex. The problem is created by the nature of regulatory periods - Transpower would bear a significant efficiency penalty for something that is purely a timing issue. The lead time for securing manufacture of HVDC cables is unexpectedly long and is not within Transpower's control. If the deposit fell within RCP4 after we approve the cable replacement listed project, the issue would not arise.
- 3.16 We consider this to be a one-off specific situation and have considered possible solutions in this context. We do not intend to repeat this adjustment.
- 3.17 We have considered three options for dealing with the contract deposit:
 - 3.17.1 Do nothing, which means Transpower would permanently bear the financial cost of the negative base capex incentive amount from RCP3;
 - 3.17.2 Amend the RCP4 IPP only, which is workable, but we consider would require a strained interpretation of the EV account spreading rule in the Transpower IM; or
 - 3.17.3 Amend the RCP4 IPP and the IMs.
- 3.18 We consider the first option would be contrary to the Part 4 purpose in s 52A.
- 3.19 Although it meets the Part 4 purpose in s 52A of the Act better than the first option, our draft decision is not to implement the second option because it potentially relies upon a strained interpretation of the IMs and therefore is inconsistent with our obligation under s 52S.
- 3.20 Our preferred option is therefore the third option, which we consider properly complies with our legal obligation under s 52S to apply the IMs as determined, as well as being consistent with the Part 4 purpose in s 52A.
- 3.21 Our draft decision is to separately identify any EV account entry relating to the payment of the HVDC cable deposit at the end of RCP3, so it is not recovered from Transpower (as a negative revenue amount) in the forecast SMAR across RCP4.
- 3.22 We would also create an offsetting entry in the EV account in the first disclosure year of RCP4, determined by the Commission, which would have the effect of eliminating the value of any base capex incentive penalty relating specifically to the HVDC cable deposit from the EV account. This entry would have no revenue effect for Transpower. This means there would be no net revenue effect from any IRIS penalty that would otherwise arise from the payment of the HVDC cable deposit.

- 3.23 The purpose of the transitional EV account adjustment for the HVDC Cook Strait cable is for there to be no net revenue impact on Transpower arising from the timing of the payment of the deposit for the HVDC cable manufacture.
- 3.24 The deposit itself is part of the capex cost of the cable assets and that element of expenditure will enter the RAB when the relevant assets that it relates to are commissioned.
- 3.25 An IM amendment and related RCP4 IPP determination drafting are required to separate the EV account entry from the RCP3 closing EV account balance in this way.³⁰
- 3.26 Another relevant part of our draft decision is to show the project in the RCP4 IPP Schedule I as a listed project (see Table 4 in Chapter 7 below).
- 3.27 During RCP4 we expect to receive from Transpower a listed project application for the three replacement cables and we will likely receive an MCP proposal for an additional fourth HVDC cable. We will assess them under the listed project and MCP requirements respectively in the Capex IM determination.

³⁰ We discuss the IM amendment further in our "Proposed amendments to input methodologies for Transpower New Zealand Limited related to the 2025 Transpower individual price-quality path – Draft decision paper". We set out our drafting in the [DRAFT] Transpower Individual Price-Quality Path Determination 2025. These documents are released as part of this draft decision package.

Chapter 4 EV account entries

Purpose of this chapter

4.1 This chapter discusses our draft decision and reasons on amounts that may enter the EV account for the purposes of the wash-up mechanism.

Background

- 4.2 While we have specified how the EV account will operate in chapter 3, we must make decisions on what amounts may be classified as an EV account entry for the purposes of wash-ups.
- 4.3 Clause 1.1.4 of the Transpower IM states that the definition of EV account entry has the meaning as defined in an IPP determination. We must specify the entries that may enter the EV account, and the mechanisms used to calculate those entries for the purposes of the wash-up mechanism.
- 4.4 In our Issues paper, we also noted that we would be considering the implementation of RAB indexation, in particular, whether Transpower's revenue should be fully adjusted for actual inflation, and how we can best implement this.³¹ This falls within the EV account mechanism and we will discuss this within the context of this chapter.
- 4.5 While we have discussed EV account entries in this section, we note that the definitions as to what may be an EV account entry remain largely unchanged, except where we have explicitly noted.

Our draft decision on additional revenue path mechanisms

- 4.6 Our draft decision is the definitions used to specify the entries that may enter the EV account for RCP3 should be retained. As such, our definition of EV account entries will be:
 - 4.6.1 an RCP4 ex-post economic gain or loss comprising the after-tax difference between the capital charge and the net operating profit or loss after tax for that disclosure year;
 - 4.6.2 an after-tax gain or loss on capital expenditure commitments;
 - 4.6.3 an after-tax economic gain or loss calculated for a base capex expenditure adjustment, grid output adjustment, or major capex expenditure and output adjustment;

³¹ Commerce Commission, "<u>RCP4 Issues paper</u>", para 10.49.

- 4.6.4 an after-tax economic gain or loss calculated for a major capex sunk costs adjustment;
- 4.6.5 an ex-post economic gain or loss calculated for the final disclosure year of RCP3 comprising the after-tax difference between the capital charge and the net operating profit or loss after tax for that disclosure year;
- 4.6.6 an after-tax gain or loss in respect of an instrument that ceases to be an effective hedge for the final disclosure year of RCP3;
- 4.6.7 an after-tax gain or loss in respect of a commodity instrument that is not an effective hedge for the final disclosure year of RCP3; and
- 4.6.8 an ex-post economic gain or loss resulting from revenue wash-up for inflation.
- 4.7 Our draft decision is to also maintain the building blocks approach to calculating the ex-post economic gain or loss, with the addition of a revaluation building block, as well as an inflation wash-up for revenue building blocks.
- 4.8 We consider the mechanism used in RCP3 promotes the Part 4 purpose by maintaining the incentives to invest for Transpower by accounting for the differences between capital charges and net operating profit or loss. This allows Transpower to recover its actual expenditure while promoting long-term benefit of consumers by applying incentives for Transpower to seek efficiencies in expenditure.
- 4.9 We consider the definitions used in RCP3 remain fit for purpose for RCP4, and as such, our draft decision is to maintain these.
- 4.10 The recovery of ex-post economic gains or losses for the final disclosure year of RCP3 adjustment reflects the timing of when the wash-up for the final year of a regulatory period is calculated (ie, in the first year of the next regulatory period). Our draft decision is to retain this feature for RCP4 so that gains or losses for the final year of RCP3 would enter the EV account in RCP4.

Building blocks for revenue path wash-up mechanism

- 4.11 We have considered additional building blocks (such as the RAB revaluation washup). We consider the additional building blocks fall within the calculation of the annual ex-post economic gain or loss.
- 4.12 In terms of how the revenue path wash-up adjustments will be calculated, we have considered that we will use the building blocks approach as used in RCP3.

- 4.13 Our primary focus for this section is our draft decision on additional building blocks to be added for the purposes of:
 - 4.13.1 RAB revaluation; and
 - 4.13.2 CPI revenue wash-up.

Building blocks

- 4.14 Consistent with the approach undertaken in RCP3, the ex-post economic gain or loss will be calculated on a building blocks approach.
- 4.15 We consider this approach to remain fit for purpose and should be maintained for RCP4 with an additional building block for revaluation to implement RAB indexation.
- 4.16 The building blocks for the purposes of calculating the ex-post economic gain and loss will comprise (at a high level):
 - 4.16.1 Capital charge building block (inclusive of revaluation balance for calculating the opening RAB);
 - 4.16.2 Depreciation building block (inclusive of depreciation on the revaluation balance);
 - 4.16.3 Revaluation building block;
 - 4.16.4 Operating expenditure building block;
 - 4.16.5 Tax building block;
 - 4.16.6 TCSD allowance building block;
 - 4.16.7 EV adjustment building block;
 - 4.16.8 Pass-through costs building block; and
 - 4.16.9 Recoverable costs building block.
- 4.17 By contrast to the building blocks for the forecast MAR, none of these building blocks are mandated in the Transpower IM.

RAB revaluation building block

4.18 Under clause 2.2.8(4) of the Transpower IM, we are required to undertake a revaluation of the RAB each year to take account of the differences between forecast CPI and outturn CPI. The revaluation amount is to be treated as income, as specified in clause 2.2.9 of the Transpower IM.

4.19 Given that any differences are treated as income, we consider this amount would enter the EV account as part of the ex-post economic gain or loss, which is calculated in Schedule E of the IPP determination. Draft changes have been made to Schedule E in the draft IPP determination to reflect the inclusion of the revaluation building block.

CPI wash-up for revenue

- 4.20 In its cross-submission on our RCP4 Issues paper, Transpower submitted that the building blocks CPI wash-up approach in the RCP3 IPP, which washes up Transpower's expenditure profile for inflation in conjunction with the RAB indexation, would only partially protect Transpower against inflation.³² Transpower considers the capital charge portion would be excluded from the wash-up process.
- 4.21 Transpower suggested the following approach, which is a variation from how the EDB CPI revenue wash-up works in the EDB IM:³³
 - B14. Our proposed wash-up approach would wash up for the differences between:

B14.1. The return on Transpower's forecast RAB using the determined nominal WACC and Transpower's actual RAB using the derived 'restated' nominal WACC.

B14.2. The revaluation amount on Transpower's forecast RAB using forecast CPI and the revaluation amount on Transpower's actual RAB using actual CPI.

B14.3. Forecast depreciation and actual depreciation.

- B14.4. Forecast and actual inflation in the operating expenditure allowance.
- B14.5. Forecast and actual pass-through and recoverable costs.

B14.6. The difference between the allowed tax building block and a recalculated tax allowance, based on the effect of the above.

4.22 Another option we considered is applying the approach taken for EDBs, which is to apply an inflation wash-up for Transpower's revenue for each year.

³² Transpower New Zealand Limited, "<u>Cross-submission on Transpower Individual Price-Quality Path 2025</u> (RCP4): Issues Paper" (**Transpower's cross-submission on Issues paper**) (13 March 2024), para B5.

³³ Commerce Commission, <u>Transpower's cross-submission on Issues paper</u>, para B14.

Analysis

- 4.23 We consider that Transpower's proposal to apply some form of inflation wash-up for revenue has merit, as it promotes incentives to invest. As noted in the IM Review 2023 and in Transpower's cross-submission, the current mechanisms do not have full CPI protection. As Transpower has identified, the capital charge element does not have an adjustment mechanism for any changes to outturn capital charge for inflation.
- 4.24 We consider that some form of inflation wash-up will achieve the intent of the IM change for RAB indexation, to adequately protect Transpower against inflation risk by ensuring that all components of the building blocks have sufficient adjustment mechanisms to account for the difference between forecast and actual inflation.
- 4.25 However, Transpower has suggested a wash-up approach which differs from the EDB CPI wash-up approach, by including use of a derived restated nominal WACC being applied to the actual RAB, as well as existing forms of wash-up adjustments. The general concept of the wash-up is similar between the EDB form of revenue CPI wash-up and the proposed Transpower wash-up, but we note that the Transpower annual revenue wash-up has been carried out in RCP1 to RCP3 at a more granular MAR building blocks level, whereas the EDB wash-up is done at an aggregate forecast net allowable revenue level. As a result, our draft decision is to make the inflation wash-up within each MAR building blocks.

CPI wash-up approach in the EDB IM – aggregate revenue approach

4.26 The relevant clauses of the EDB IM for the CPI revenue wash-up are:

4.26.1 clause 3.1.4(3):

(3) For the purposes of subclause (1), the 'wash-up accrual amount' for a **disclosure year** is an amount equal to:

- (a) actual allowable revenue for the disclosure year; minus
- (b) actual revenue for the disclosure year.

4.26.2 clauses 3.1.4(4)(a), (b) and (d):

(4) For the purposes of subclause (3), and subject to subclause (10), 'actual allowable revenue' for a **disclosure year** means an amount calculated on the same basis as the **forecast allowable revenue** for the **disclosure year**, adjusted (as specified by the **Commission** in a **DPP determination** or **CPP determination**) by substituting:

(a) actual **pass-through costs** for forecast **pass-through costs**;

(b) actual recoverable costs for forecast recoverable costs;...

(d) in respect of each **disclosure year** of the **regulatory period** after the first **disclosure year**, actual **CPI** for **forecast CPI** used for the purposes of determining **forecast net allowable revenue** for that **disclosure year**.

4.27 We note that wash-up adjustments in EDB IM clauses 3.1.4(4)(c) and (e) to (i) are not relevant to Transpower's annual wash-up, primarily because the Transpower RAB is rolled forward on an annual basis for the purposes of its wash-up, and it therefore does not require these adjustments.

Practical application of the approach in the EDB IM to the Transpower IPP

- 4.28 The RCP3 IPP already applies the high-level wash-up approach set out in EDB IM clauses 3.1.4(3) and (4):
 - 4.28.1 Transpower is able to recover up to its forecast SMAR each pricing year, which is the ex-ante smoothed revenue path based on the series of forecast MAR building blocks (Schedule D of the RCP3 IPP);
 - 4.28.2 The forecast MAR building blocks are calculated (where relevant) using the forecast CPI;
 - 4.28.3 Transpower is then required to wash-up the difference between its total regulated income and the sum of the recalculated MAR building blocks on an ex-post basis by using actual values (where relevant) to calculate the building blocks; and
 - 4.28.4 the difference (referred to as the "after-tax ex-post economic gain or loss") is an entry into Transpower's EV account.

Applying the EDB IM approach and our current RCP3 IPP wash-up approach to Transpower's submission

- 4.29 The RCP3 IPP already includes the following wash-up steps suggested by Transpower:
 - 4.29.1 **Depreciation**: forecast depreciation (Schedule D, formula E) versus actual depreciation (Schedule E, formula O);
 - 4.29.2 **Opex**: forecast opex allowance applying forecast CPI (Schedule D, formula F) versus an opex allowance adjusted for the disparity between the forecast CPI and the actual CPI (Schedule E, formula N);
 - 4.29.3 **Pass-through costs and recoverable costs**: forecast pass-through costs (Schedule D, formula J) and forecast recoverable costs (Schedule D, formula K) versus actual pass-through costs and actual recoverable costs (Schedule E, formula Q); and

- 4.29.4 **Tax**: forecast tax (Schedule D, formula G) versus actual tax (Schedule E, formula S).
- 4.30 **RAB indexation**: The RCP3 IPP does not currently include a wash-up of the RAB indexation calculation. However, our draft decision is to allow for differences between the total forecast revaluation amount (to be drafted in Schedule D) with the total actual revaluation amount (to be drafted in Schedule E), to be washed up. This would take into account the difference between the forecast and actual revaluation rates (ie, adjusting between the forecast CPI and the actual CPI).
- 4.31 WACC rate each year for outturn CPI: We do not propose to apply Transpower's cross-submission to effectively wash-up the WACC rate each year for outturn CPI. Our reason for deciding not to implement a WACC wash-up for inflation is that it is inconsistent with our IM Review 2023 decisions, particularly:
 - 4.31.1 on the risk-free rate, where we maintained our 2010 decision to "set a nominal risk-free rate (as part of the overall nominal WACC) at the beginning of a regulatory period, and then we update the price path for actual inflation.";³⁴ and
 - 4.31.2 on inflation risk and compensation, where we made the following final decisions to:³⁵
 - 4.31.2.1 make no change to the EDB and Gas Transmission Businesses(GTB) IMs to introduce a cost of debt washup (CODW) and instead maintain the status quo under the current IMs;
 - 4.31.2.2 confirm our draft decision to amend the EDB and GTB IMs to wash-up allowable revenue for the first year of a regulatory period when inflation differs from expected inflation; and
 - 4.31.2.3 confirm the change we proposed to our draft decision (in our further consultation) to the EDB and GTB IMs to ensure that the most up-to-date CPI inflation (actual and forecast) is used when determining forecast net allowable revenue at the start of each regulatory year.

³⁴ Commerce Commission, "<u>Cost of capital topic paper, Part 4 Input Methodologies Review 2023 – Final</u> <u>decision"</u> (13 December 2023), paras 3.20 to 3.23.

³⁵ Commerce Commission, "<u>Financing and incentivising efficient expenditure during the energy transition</u> topic paper, Part 4 Input Methodologies Review 2023 – Final decision" (13 December 2023) para 4.79.

4.32 In the IM Review 2023 we reviewed the annual wash-up process and made four main findings, which the above inflation risk and compensation decisions were based on. The first finding states:³⁶

4.83.1 The first finding was that the effect of our revenue wash-ups on suppliers' financing costs depends on their financing choices - which we refer to as 'debt management choices'. To explain, our approach to indexing the RAB together with setting a nominal WACC effectively sets a real WACC at the beginning of the regulatory period. Using the building blocks model, this produces an ex-ante revenue allowance for the period that targets a real return (ie, equal to the real WACC). Subsequently, we annually wash up allowed revenue for actual inflation. This maintains the real value of allowed revenues to suppliers (and prices to consumers) and delivers a real return during the regulatory period. While the wash-up adjusts the revenue side, we do not recalculate the building blocks costs side – the WACC and its underlying risk-free rate. The effect on suppliers' financing costs depends on their debt management choices. Given inflation outturns, the returns that equity holders receive will be driven by these debt management choices (we referred to the effects on suppliers as 'windfall gains and losses' in earlier consultations in this IM Review process).

4.83.1.1 For example, if a supplier fully fixes the nominal risk-free rate component of the cost of debt for the length of the regulatory period, and actual inflation is higher than forecast, then its equity holders will receive higher real returns. This is because the revenues it receives are fully adjusted for higher actual inflation, while the debt costs it faces remain the same (at the lower level at which it hedged, consistent with the lower expected inflation at that time). Conversely, if a supplier issues inflation-indexed bonds or uses floating debt, then its equity holders' real returns will be broadly unchanged when actual inflation is higher than expected. This is because the debt costs it faces will more closely track inflation, as will the revenues.

4.33 Our draft decision is not to include a WACC rate wash-up for inflation as proposed by Transpower, and to instead make an equivalent adjustment in the IPP by way of a CPI disparity adjustment between the forecast CPI and the actual CPI to the IPP total capital charge building block consistently with the revenue CPI adjustment formula in the EDB IM.

³⁶ Commerce Commission, "<u>Financing and incentivising efficient expenditure during the energy transition</u> <u>topic paper, Part 4 Input Methodologies Review 2023 – Final decision"</u> (13 December 2023), para 4.83.

Chapter 5 Revenue path reporting features

Purpose of this chapter

5.1 To help us ensure compliance with the IPP, and to enable scrutiny from interested persons, there should be access to accurate information about Transpower's price path performance and EV account (and other) calculations.

Draft decision

5.2 The draft decisions in Table 5.1 are to support our substantive draft decision made in relation to the price path, and are intended to help ensure compliance (and visibility of compliance) with the price path, while not being onerous or expensive to comply with.

ltem	Description		
Pricing compliance statement (ex-ante)	Statement of compliance with the price path when setting annual pricing. Certified by Directors. Provided each November, within 5 working days after Transpower announces its forecast revenue for the purpose of setting charges under the TPM for a pricing year		
Compliance with price path (ex-post)	Report on compliance with price path and wash-up calculations. Certified by at least two Transpower Directors and is accompanied by an independent assurance report. Provided within 105 working days of the end of the disclosure year.		
Wash-up calculation, incentive calculations, and EV account disclosure	Disclosure and publication of the wash-up calculation, incentive calculations, ³⁷ and the EV account, including an updated forecast EV account balance at end of RCP4. Enables interested persons to form view on likely impact in RCP5.		
Other summaries	Disclosure of the forecast MAR. Summary of actual pass-through costs and recoverable costs for a pricing year. Explanations for voluntary revenue reductions (if any). ³⁸		

Table 5.1 Price path reporting features

³⁷ This includes amounts of incentives from IRIS, incentives arising under the Capex IM, and incentives relating to Grid Output Measures and Quality Standards.

³⁸ Transpower can voluntarily price below the revenue cap, subject to reporting on the reasons why. Transpower has no incentive to under-recover (for reasons other than price smoothing).

Chapter 6 Other policy features

Purpose of this chapter

- 6.1 This chapter sets out our draft decisions and reasons for policy features that we have changed in the RCP4 revenue path. These changes are:
 - 6.1.1 removal of independent assurance requirements from forecast MAR and forecast SMAR reconsiderations;
 - 6.1.2 change of certification requirements for updates to the forecast MAR and forecast SMAR from the current director certification standard to CEO certification; and
 - 6.1.3 additional EV account adjustment mechanism to accommodate a deposit made by Transpower to secure a manufacturing contract.

Removal of independent assurance requirements from forecast MAR and forecast SMAR reconsiderations

- 6.2 The RCP3 IPP specifies that an independent assurance report must be provided for any updates during the regulatory period to the forecast MAR and forecast SMAR. For example, price path reopener applications.
- 6.3 This approach provided assurance that Transpower had calculated updates to the forecast MAR and SMAR correctly, in line with its financial model and our decision allowing an update to the forecast MAR and SMAR.
- 6.4 In its draft IM Review 2023 submission, Transpower submitted that it should be able to update its revenue to reflect allowed expenditure from a reopener without a separate audit engagement.³⁹ Transpower considers the requirement is largely redundant and an unnecessary cost, given Transpower's improved modelling of the price-quality path and our resulting improved capability to scrutinise that modelling. We agree with Transpower and our draft decision is to remove the requirement for Transpower to procure an independent assurance report for updates to the forecast MAR and forecast SMAR.

³⁹ Transpower New Zealand Limited, "<u>Submission on IM Review 2023 draft decision</u>" (19 July 2023), p 25.

Analysis

- 6.5 While this requirement provides additional assurance as to the accuracy of Transpower's proposal, we are able to scrutinise Transpower's proposed update and the accompanying modelling. Given the number of adjustments that are now being made across each regulatory period as a result of decisions on listed projects and major capex proposals, having an assurance requirement for each adjustment is repetitive and does not add value to our decision-making. Removing the requirement will result in reduced compliance costs for Transpower in engaging an independent assurance provider every time it applies for an update to the forecast MAR and SMAR.
- 6.6 While this may slightly increase the risk that Transpower's updates to the forecast MAR and forecast SMAR may not accurately reflect our decision to amend the forecast MAR and forecast SMAR, we consider this risk is slight, as we can internally scrutinise the modelling informing the proposed updates on a risk-assessed basis. We also consider the risk to consumers is also somewhat minimised as there is an independent assurance process each year on the wash-ups for ex-post economic gain or loss associated with the updated forecast MAR and SMAR.
- 6.7 The reduced compliance costs justify this change as we consider it is likely to reduce long-term costs for consumers, consistent with the Part 4 purpose.

CEO certification for updates to forecast SMAR

- 6.8 Clause 30.1.4 of the RCP3 IPP requires at least two directors of Transpower to certify a proposal to update forecast SMAR updates, for the purposes of a price-path reopener.
- 6.9 Our draft decision is to change the certification requirements for updates to the forecast MAR and forecast SMAR from the current director certification standard to CEO certification.
- 6.10 We have considered whether CEO certification is sufficient for forecast SMAR updates proposed by Transpower. Under the current RCP3 IPP, Transpower may apply for amendments to the forecast SMAR to take account of the revenue impacts arising from:
 - 6.10.1 catastrophic event;
 - 6.10.2 regulatory change event;
 - 6.10.3 error event;
 - 6.10.4 provision of false or misleading information by Transpower;
 - 6.10.5 our approval of major capex;

- 6.10.6 our approval of additional base capex for listed projects; and
- 6.10.7 our approval of Enhancement and Development (**E&D**) projects.
- 6.11 We consider there is merit in changing the requirement for forecast SMAR updates from director certification to CEO certification on the basis of consistency with the above list of other revenue adjustments.
- 6.12 Director certification will continue to be used to certify Transpower-produced information that is not subject to our regular scrutiny or verification. Examples include annual disclosure reports, and annual compliance statements. We rely on these but do not scrutinise the validity of them.
- 6.13 Applications from Transpower on matters like MCPs and listed projects only require CEO certification. The key feature of these applications is that we are not solely relying on Transpower's information, but rather we routinely scrutinise material and information provided by Transpower for the purposes of our decision-making.
- 6.14 Similarly, proposals to amend the revenue path are also scrutinised by the Commission independently of what Transpower is proposing, including the quantum, and modelling of the revenue path updates and amendments. We internally scrutinise the modelling.
- 6.15 As we have the ability to scrutinise revenue path update proposals, we consider the level of CEO certification by Transpower is appropriate in these circumstances.
- 6.16 This change will help to reduce some of the regulatory burden for Transpower by reducing some of the certification steps required in a revenue path update application, while also being consistent with the Part 4 purpose. This approach ensures there is adequate scrutiny of the revenue path updates to limit the ability for Transpower to extract excessive profits, while balancing a consideration to ease some of the regulatory burden and resulting cost for Transpower.
- 6.17 The risk of making this change is that we do not benefit from director oversight in the forecast SMAR values we rely upon to make our price-path reconsideration decisions, and we cannot have recourse to that director's certification. However, we consider the risk of any practical negative outcomes for the Commission is slight. Further, for the reasons explained above, we consider it is outweighed by our ability to scrutinise this information.

Chapter 7 Listed projects

Purpose of this chapter

7.1 This chapter discusses our draft decisions on Transpower's proposed listed projects to be included in the revenue path for application and approval in RCP4 and our reasons for these decisions.

Background

- 7.2 Transpower is estimating it will need \$261.5 million for base capex Listed Projects.⁴⁰ Listed projects are asset renewals projects with an estimated project cost that is estimated to exceed the base capex threshold, and which will be considered for approval as base capex outside of this IPP reset decision.⁴¹
- 7.3 In its RCP4 proposal, Transpower proposed five listed projects with the following estimated costs:
 - 7.3.1 Huntly–Ōtāhuhu A (OTA–DRY) reconductoring \$37.2 million (\$2022/23)
 - 7.3.2 Haywards bus rationalisation \$44.1 million (\$2022/23)
 - 7.3.3 Rangipō gas insulated switchgear replacement \$58.7 million (\$2022/23)
 - 7.3.4 HVDC cables replacement \$67.3 million (\$2022/23)
 - 7.3.5 Brownhill–Pakuranga A cable joint replacements \$54.2 million (\$2022/23).
- 7.4 In addition, in response to our request for information (**RFI**), Transpower proposed additional amendments to its listed projects:
 - 7.4.1 recategorisation of the Otahuhu Whakamaru (OTA-WKM) A&B reconductoring from base capex to a listed project;
 - 7.4.2 inclusion of the Redclyffe 220kV Switchyard Re-build; and
 - 7.4.3 removal of Brownhill Pakuranga A (BHL-PAK-A) cable joint replacements project as a listed project.

⁴⁰ Transpower, <u>Transpower RCP4 proposal</u>, p. 118.

⁴¹ Following the IM Review 2023 decision, that will take effect for Transpower from 1 April 2025, the Capex IM base capex threshold will increase from \$20 million to \$30 million.

Analysis

Criteria

- 7.5 Under clause 2.2.2(7) of the Capex IM, a project may be determined to be a listed project if:
 - 7.5.1 we consider the project:
 - 7.5.1.1 will require capex over \$30 million;⁴²
 - 7.5.1.2 is reasonably required by Transpower; and
 - 7.5.1.3 at least one asset is likely to have a commissioning date in the RCP;
 - 7.5.2 forecast capex to be incurred is in relation to asset replacement and/or refurbishment;
 - 7.5.3 the commencement date of the project within the RCP is anticipated but cannot be forecast with specificity; and
 - 7.5.4 the project capex is not already accommodated in the RCP base capex allowance.
- 7.6 In order for Transpower to include a listed project in the calculation of the revenue path in RCP4, it must qualify to be listed in Schedule I of the IPP determination under clause 2.2.2(8) of the Capex IM, Transpower must apply for approval of the listed project to be included in the base capex allowance under clause 3.2.3 of the Capex IM, and we must consider that application and reopen the revenue path in accordance with clause 3.7.4 and 3.7.5 of the Transpower IM.

Verifier's review

7.7 The Verifier reviewed the proposed listed projects. In its review, the Verifier took into account the Terms of Reference evaluation criteria, which was based on the criteria set out in clause 2.2.2(7) of the Capex IM.

⁴² Termed in the *Transpower Capital Expenditure Input Methodology (IM Review 2023) Amendment Determination 2023* [2023] NZCC 39 as "base capex threshold" which will be \$30 million from 1 April 2025.

- 7.8 The Verifier has considered that each of the listed projects to have satisfied that each of the projects:⁴³
 - 7.8.1 require capex greater than \$30 million;
 - 7.8.2 are reasonably required by Transpower determined by factors including asset condition and assets, safety concerns, or assets reaching end of life and no longer being supported by original equipment manufacturers;
 - 7.8.3 are likely to commence in RCP4 for example, assets are likely to be commissioned in RCP4 regardless of solution, long lead times, or work would likely be undertaken alongside base capex; and
 - 7.8.4 are refurbishment or replacement projects based on current plans.

Our view on the Cook Strait HVDC cables replacement

- 7.9 We consider the Cook Strait HVDC cables replacement project is likely to meet the listed project criteria under clause 2.2.2(7) of the Capex IM and should be included as a listed project in Schedule I of the RCP4 IPP. We consider Transpower has demonstrated that:
 - 7.9.1 the project is likely to be over \$30 million, with the estimated cost being \$67.3 million;
 - 7.9.2 the project is reasonably required based on Transpower's assessment that the cables are deteriorating and will need replacement by the early 2030s;⁴⁴
 - 7.9.3 the cable replacement is a replacement project;
 - 7.9.4 it is expected that while the cables themselves will not be commissioned until 2032, Transpower will need to commission related assets in RCP4 including a cable storage facility;⁴⁵ and
 - 7.9.5 the expenditure has not already been accommodated for in the base capex allowance for RCP4.

 ⁴³ GHD Advisory and Castalia "<u>Independent verification report – RCP4 base expenditure and service</u> <u>measures 2025-2030 proposal - Transpower New Zealand Limited</u>" (12 September 2023) (IV Report), s 19.4.

⁴⁴ Transpower New Zealand Limited, "<u>RCP4 proposal</u>", p 120.

⁴⁵ Transpower New Zealand Limited, "<u>RCP4 proposal</u>", p 120.

Response to RFI

- 7.10 Based on its response to our RFI, Transpower has proposed the following amendments to its proposed listed projects:
 - 7.10.1 recategorisation of the Otahuhu Whakamaru (OTA-WKM) A&B reconductoring from base capex to a listed project;
 - 7.10.2 inclusion of the Redclyffe 220kV Switchyard Re-build; and
 - 7.10.3 removal of Brownhill Pakuranga A (BHL-PAK-A) cable joint replacements project as a listed project.
- 7.11 We consider the OTA-WKM A&B reconductoring project is likely to meet the listed project criteria under clause 2.2.2(7) of the Capex IM and should be included as a listed project in Schedule I of the RCP4 IPP. We consider Transpower has demonstrated that:
 - 7.11.1 the project is likely to be over \$30 million (with a midpoint estimate of \$55 million);
 - 7.11.2 the project is reasonably required based on Transpower's assessment that the cables are approaching Transpower's replacement criteria (being condition in this instance) and that the asset condition is expected to require replacement from 2025 onwards;
 - 7.11.3 the cable replacement is a replacement project;
 - 7.11.4 the replacement project is expected to be fully commissioned by the start of 2028; and
 - 7.11.5 we have not approved the proposed base capex for this project as part of our RCP4 expenditure approval, so it will not be accommodated in the base capex allowance for RCP4.
- 7.12 Transpower explained it is removing the BHL-PAK A cables as a listed project, as the cable replacement is no longer required. We accept this reasoning and have not included the BHL-PAK A cables as a listed project.
- 7.13 Our draft decision is to not include the Redclyffe 220kV Switchyard Re-build project as a listed project. This project has not been reviewed by the Verifier and we have not concluded this project would meet the listed project criteria. We have approved resilience expenditure as base capex and have not sighted sufficient evidence that this project has not been accommodated in the base capex allowance.

Draft decision

7.14 Our draft decision on listed projects for inclusion in Schedule I of the draft IPP determination is set out in Table 7.1.

Line name (Section)	Project estimated cost RCP4 (\$ million)
Huntly–Ōtāhuhu A (OTA–DRY) reconductoring	37.2
Haywards bus rationalisation	44.1
Rangipō gas insulated switchgear replacement	58.7
HVDC cables replacement	67.3
Otahuhu-Whakamaru (OTA-WKM) A&B reconductoring	55.0
Total estimated cost	262.3

Table 7.1 Draft decision on listed projects