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Cross Submission: Transpower Individual Price-Quality Path for the regulatory period commencing 1 April 2025 (RCP4) Draft decision

1 Transpower welcomes the opportunity to respond to some of the issues raised through submissions made to the Commerce Commission's (the Commission) draft decisions on Transpower's Individual Price-Quality Path (IPP). We appreciate stakeholder interest and views on the Commission's draft decisions for our capital and operating expenditure proposals for the fourth regulatory control period 2025 – 2030 (RCP4).

2 In the appendix to this cross-submission we also identify some Input Methodology amendments made during the 2023 review that do not appear consistent with final decisions or contain errors.

3 We are drawing attention to these now as the IM determination to apply for RCP4[1] has not yet been finalised by adopting all the insertions and deletions in the published determination.

Transpower's profitability

4 The Consumer Advocacy Council has raised concerns that its estimate of our return is arguably too high for a monopoly provider. The Consumer Advocacy Council's estimate is based on a calculation of historical earnings before tax divided by our forecast RCP4 operating and capital expenditure. This is not a recognised accounting or regulatory approach to calculating a return on investment.

5 The Commission requires us to report our return on investment as part of its Information Disclosure regime. Our percentage (vanilla) return on investment for RCP3 has been 5.00%, 5.31%, and 4.35% for June end 2021, 2022 and 2023 respectively.[2] These returns compare to the Commerce Commission's WACC setting of 4.57%. The return should be assessed against the whole RCP period as the return is affected by the timing of capex and opex.

[1] Transpower-Input-Methodologies-IM-Review-2023-Amendment-Determination-2023.pdf
[2] RCP3 updates and disclosures | Transpower Refer to the excel spreadsheets, Tab T1, under the Information Disclosures.

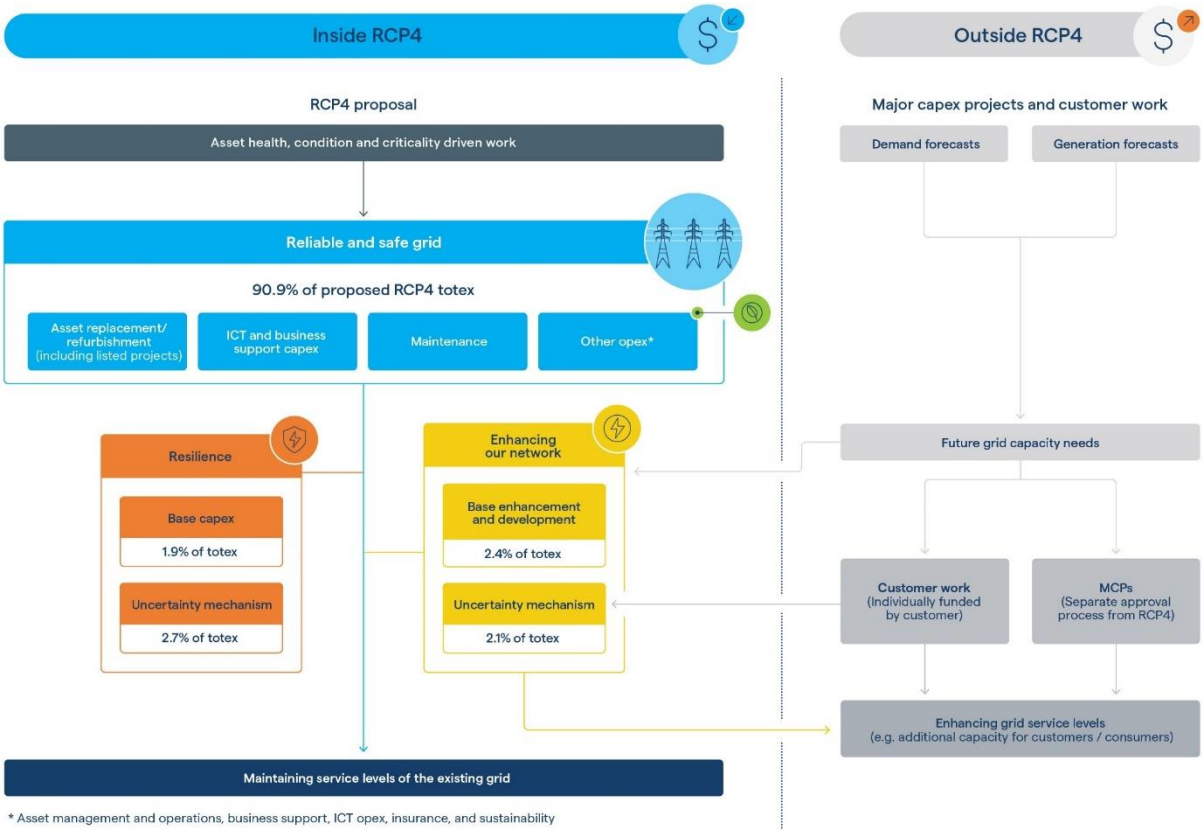
Integrated planning

6 The Consumer Advocacy Council view is that internationally good practice planning required an integrated approach between transmission and distribution. We agree with Consumer Advocacy Council, and we consider that good practice integrated planning should also include taking account of generation.

7 We engage with our connected (and prospective) customers to understand their perspectives and needs and take these into account when deriving expenditure forecasts for enhancement and development works. Our annual Transmission Planning Report details how we forecast demand and generation. Demand forecasting applies a two-stage modelling process:

- stage 1 considers how underlying, business-as-usual growth will evolve with input from distribution companies and major electricity users about their expectations
- stage 2 considers how the uptake of electric vehicles, solar photovoltaic panels, battery storage and industrial electrification will impact demand.[3]

8 It is important to note, our RCP4 forecast expenditure is predominantly made up of expenditure to replace, refurbish, or maintain our existing assets. The majority of expenditure driven by changing demand or generation requirements sit outside RCP4. This was illustrated in Figure 4 of our main proposal,[4] and reproduced below.



When considering replacement or renewals we also consider our customers' views and the drivers for investment such as condition, electrification, and resilience to optimise

[3] Transmission Planning Report 2023 Chapter 3
[4] RCP4 Main Proposal

intervention timing and maximise network availability. This ensures a cost-effective outcome for our consumers over the long-term.

Testing new technologies for conductors

9 One submitter suggests that Transpower should be considering different types of conductors. Transpower has had a keen interest in new and developing conductor technologies for both underground to overhead applications, including High Temperature Low Sag (HTLS) and superconducting types. These are the type referred to in the submission.

10 We have evaluated HTLS options for projects in the past including the 400kV cable line from Whakamaru to Pakuranga via Brownhill (BHL-WKM_A) in 2012 and the 220kV underground cable from Albany to Penrose (ALB-PEN_A) in 2014. In both cases, the cost of the conductor and its increased reactive power consumption (VARs) that required additional equipment to compensate made the option of HTLS conductor lines uneconomic.

11 In addition to the economic considerations, although HTLS conductors have been used overseas, large-scale deployment has been in generally more benign environments than here in NZ. The two largest challenges we face in the use of any overhead conductor are:

- Gusty and buffeting winds that cause vibration which in turn causes conductor damage and early failure. This phenomenon is where the wind tumbles over the line and causes the conductor to vibrate in the clamps and spacers and gradually frets and wears the conductor causing strands to break.
- Corrosive atmosphere from either westerly winds with entrained salts and/or agricultural fertilisers, and hydrogen sulphide atmosphere near geothermal regions in the central North Island.

12 Despite these challenges, Transpower has maintained an active interest in new conductors and cable technology. Manufacturers continue to improve the relative cost and electrical performance of these options. We have a research, testing and trial programme so that we can have confidence in the selection and application of HTLS conductors in the NZ environment. We have been undertaking a pilot test installation that includes:

- Full scale installation of test spans of three types of conductors over a strain section (approximately 3km) by reconductoring traditional conductors in that area
- Installation of environmental test samples
- Design and development of accelerated corrosion test cells with conductor samples.

13 Over the last few years this programme has been able to monitor, test and compare the laboratory and real-world results of the most promising three types of HTLS conductors. This work will complete in 2026

Non-transmission solutions

14 The Major Electricity Users' Group (MEUG) considers that further work needed to be done to understand how non-transmission solutions (NTS) and non-traditional solutions can be used by Transpower and distributors respectively.

15 We agree with MEUG that we need to better understand what current and future NTS's can offer. In February this year, we published a request for proposal for non-

transmission solutions as an option for the upper South Island.[5] The limited existing NTS capacity and uncertainty around future pricing for when the solution is needed meant that we could not progress with an NTS at this stage, although we will review this closer to the investment need date.

16 We intend to seek expressions of interest or proposals for NTS's later in 2024 to support the grid in the upper North Island.

17 We will use to the learnings for the upper South Island RFPs and the future upper North Island ones to better identify what information the market requires, and whether there are regulatory settings which are creating barriers.

Transpower's RAB indexation implementation

18 Vector raised some questions around the implementation of RAB indexation for Transpower. We believe most of these questions are dealt with in our submission on the Commission's RCP4 issues paper. These submissions, including a model supporting our proposed approach, are publicly available our website under the Regulatory submissions | Transpower, specifically entries dated March 2024.

Yours sincerely

Joel Cook

Head of Regulation

[5] Request for Proposals: Upper South Island Non-Transmission Solutions | Transpower

Appendix: 2023 review, IMs amendments

The table below outlines the IMs amendments as drafted following the 2023 review decisions. We identify where some amendments do not appear consistent with final decisions, or contain error.

IMs as drafted following 2023 review **Transpower-Input-Methodologies-IM-Review-2023-Amendment-Determination-13-December-2023.pdf (comcom.govt.nz)**	**Transpower comment**
3.1.3 Recoverable costs (2) For the purpose of subclause (1)(b), an instantaneous reserves availability charge excludes- (a) any 'event charges' payable by Transpower, as defined under- (i) clause 8.64 of the code, or (ii) any legislation ~~Act or regulations~~ that replaces that clause; (b) 50% of any such charge incurred by Transpower, ~~except one incurred as a direct result of decommissioning of Pole 1 of the HVDC link, in relation to an asset remaining out of service after an initial period of 14 consecutive days out of service, insofar as the cumulative amount so incurred is less than or equal to 1% of Transpower's forecast MAR for the disclosure year in which the event causing the asset to be out of service commences, as specified in the IPP determination;~~ …	The highlighted writing should be struck out but the rest of what is struck out should be reinstated. As per below. *(2) For the purpose of subclause (1)(b), an instantaneous reserves availability charge excludes- (a) any 'event charges' payable by Transpower, as defined under-* *(i) clause 8.64 of the code, or* *(ii) any legislation ~~Act or regulations~~ that replaces that clause;* *(b) 50% of any such charge incurred by Transpower in relation to an asset remaining out of service after an initial period of 14 consecutive days out of service, insofar as the cumulative amount so incurred is less than or equal to 1% of Transpower's forecast MAR for the disclosure year in which the event causing the asset to be out of service commences, as specified in the IPP determination;* We consider the additional strike out is in error.

2.2.10 Value of commissioned assets 2.2.10 (2) When applying GAAP under subclause (1), ~~the cost of financing~~ (a) the cost of financing is applicable only in respect of the period commencing on the date the asset becomes a works under construction and terminating on its commissioning date; and ~~(i) is applicable only in respect of the period commencing on the date the asset becomes a works under construction and terminating on its commissioning date; and~~ ~~(ii) calculated using a rate not greater than Transpower's weighted average of borrowing costs for each applicable disclosure year.~~ (3) For the purposes of subclause (2)(a)~~(b)~~, the '~~weighted average of borrowing costs~~ cost of financing' is calculated for a disclosure year using principles set out in GAAP, where: (a) the cost of financing rate is the weighted average of the costs applicable to borrowings in respect of capital expenditure that are outstanding during the disclosure year; (b) the total costs applicable to borrowings outstanding, as used in calculating the weighted average, must include costs of borrowings made specifically for the purpose of any particular – (i) capital expenditure projects; or (ii) capital expenditure programmes; and (c) the amount of borrowing costs capitalised during the disclosure year must not exceed the amount of borrowing costs incurred during the disclosure year.	The Commission's policy decision is to "remove the requirement in the Transpower IM that, when applying GAAP for the purposes of valuing commissioned assets, the cost of financing is to be calculated using a rate not greater than Transpower's weighted average of borrowing costs for each applicable disclosure year".[6] This decision is intended to remove an ex-post adjustment process that is "unnecessary and disproportionate".[7] The Commission implemented this decision by the removal of clauses (2)(a)(i) and (2)(a)(ii). We consider there is an issue with policy effectiveness as the IM still includes (3)(a), which states the 'cost of financing' as the '*weighted average of the costs applicable to borrowings in respect of capital expenditure that are outstanding during the disclosure year*.' As this can only be determined at the end of the year, there would still need to be an ex-post adjustment to ensure we are not accumulating interest above what it allowed. In other words, the policy decision from the Commission is not able to be effective because of clause 2.2.10 (3)(a). As noted in our submission, one practical effect of this decision would be to remove the need for schedule F1b in our Information Disclosures[8]; a schedule which is confusing and provides no value to an interested party trying to assess Transpower's performance under Part 4. We note the complexity would only increase following the Commission's decision to index Transpower's RAB. We propose the Commission either: - remove 2.2.10 (3)(a); or - allow for any disclosed RAB as part of an ID determination to allow for any difference between Transpower's forecast cost of financing and

IMs as drafted following 2023 review Transpower-Input-Methodologies-IM-Review-2023-Amendment-Determination-13-December-2023.pdf (comcom.govt.nz)	Transpower comment
	actual cost of financing to be washed through depreciation, consistent with Transpower's IPP determination. Either outcome would significantly enhance the understanding of Transpower's Information Disclosures.
3.7.8 Large buildup in EV account balance (1) A 'large buildup in EV account balance' is a situation where the EV account balance would be, as of the last day of a regulatory period, when divided by the number of years in that regulatory period, greater than 5% of the forecast SMAR for the final pricing year in that regulatory period. 2 (a) Transpower must apply for amendment of the IPP in respect of the large buildup in EV account balance (b) the application must relate to remaining complete pricing years in the regulatory period; (c) the application must be made-	Clarifying policy intent about the price path adjustment made. Given our regulatory period is longer than four years, only be able to apply for this reopener following the end of the third disclosure year. At this point, we would be mid-way through the fourth pricing year, meaning any reopener would only apply for the final year of the regulatory period. As noted in our submission on the RCP4 Issues paper[9] we cannot foresee likely circumstances for which this reopener would be triggered. We are unsure if this is consistent with policy intent. We are also unsure why the reopening window is restricted to the period of 80 working days following the end of the third disclosure year. We think the policy objective would be better met with an application able to be made after the end of the second and third regulatory periods, for an RCP of five

[6] Part-4-IM-Review-2023-Final-decision-Transpower-investment-topic-paper-13-December-2023.pdf (comcom.govt.nz) para 10.73
[7] Ibid para 10.77
[8] Being an attribution and deduction of the disallowed interest during construction to our ID RAB derived from our IPP RAB (which instead manages this constraint via a depreciation adjustment (refer clause 29.1.5 of Transpower's RCP3 IPP)).
[9] Transpower - RCP4 Issues Paper Submission from para 48

IMs as drafted following 2023 review Transpower-Input-Methodologies-IM-Review-2023-Amendment-Determination-13-December-2023.pdf (comcom.govt.nz)	Transpower comment
(i) if the regulatory period is longer than 4 years, in the period of 80 working days that commences after the end of the third disclosure year commencing in the regulatory period; and (ii) in any other case, in the period of 80 working days that commences after the end of,- (A) the first disclosure year commencing in the regulatory period; or (B) the second disclosure year commencing in the regulatory period; and	years, for any price path adjustment to apply to the fourth and fifth years respectively.