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Transpower Individual Price-Quality Path 2025 (RCP4): Issues Paper

Transpower welcomes the opportunity to respond to the Commerce Commission's (the Commission's) Issues Paper on Transpower Individual Price-Quality Path from 2025. We refer to this as Regulatory Control Period 4 (RCP4). We appreciate the Commission publishing the Issues Paper, as it helps Transpower understand the sources of future request for information and stakeholders' views.

We have identified several inaccuracies in the Commission's Issues Paper, and we are concerned that these inaccuracies may lead to stakeholders' responses being based on false premises. We were surprised and concerned to read that the Commission considered that there was no evidence in our RCP4 proposal that we had carried out a deliverability review.

As outlined in our proposal, deliverability is a key consideration for us during RCP4 and beyond. We need to build our internal workforce and support our service providers not only during RCP3 but also into RCP4.

We conducted an extensive deliverability review and developed a workforce plan to identify the type and number of workers required. Our plan outlines how we would recruit, train, and retain both new employees and our existing workforce. The deliverability review and workforce plan were submitted to the Commission on 21 November 2023. Accurately forecasting workforce requirements would not have been possible without conducting the deliverability review. We are progressing well against our hiring targets and are already executing our plan to secure the resources needed to deliver our work plan.

Regarding our service measures, we note that the Commission inadvertently referred to some of our proposals as 'changes' from the RCP3 service measures. However, several of these changes are a continuation of the method set by the Commission for RCP3. Additionally, the Commission incorrectly stated that the Independent Verifier did not support pooling of the Asset Performance 2 (AP2) measure. The Independent Verifier did support pooling.

We have provided further details of these errors and responses to the Commission's key issues in the attachment to this letter.

Please contact me if you have any questions on our submission.

Kind regards,

Joel Cook
Head of Regulation

Attachment – Response to the Commission’s RCP4 Issues Paper

Asset management

The link between expenditure and service performance

1. In paragraph 4.31, the Commission rightly notes that our proposed RCP4 expenditure is targeted to maintain the service levels our customers expect. Throughout our engagement on our RCP4 plan, customers and consumers were clear that they did not want services to deteriorate from current levels.
2. As both we and the Commission have acknowledged, there exists a lag between intervention (whether capex or opex) and changes in observed service levels. Consequently, drawing a direct analytical link between expenditure within a period and service levels within the same period is extremely challenging and likely to lead to spurious results.
3. Rather than attempting to establish this analytical link, as outlined in our proposal, for determining RCP4 expenditure we focused on maintaining the overall network risk profile which we adopt through our strategies and asset management. We considered that this is the best approach to continue to deliver similar levels as we have provided historically. Note, there is not a specific network risk metric we target, rather it is setting our strategies and policies to deliver our risk profile.

Efficiencies from a risk-based approach

4. Our risk-based approach involves assessing the health of our assets and intervening at the optimal time, rather than merely replacing assets deterministically. This approach allows us to consider the system as a whole (i.e. how enhancement and development, and customer work feed in) to identify opportunities to consolidate work and realise efficiencies.
5. The Commission considers that our use of risk-based approach and our increased RCP4 capex should lead to lower RCP4 maintenance expenditure.
6. Even with the increase in capex for RCP4, we are still renewing a relatively small proportion of assets.¹ This approach means that the average age profile of our asset is increasing over RCP4 compared to RCP3. We consider that this is acceptable for maintaining our risk profile, and we do not expect a deterioration in our service levels. This is a key reason why our maintenance expenditure is not decreasing; we have a greater number of assets that need more regular inspections and repairs as they age and continue to degrade. As we noted in our proposal, maintenance costs are increasing (in part) due to *“a material increase in grid works requiring an increase in inspection work, event investigations, defect management, and training”*.²
7. In addition, in Section 8.4 of our RCP4 Proposal, we outlined several step changes for new activities or increased volume of work including for improved SF6 management,

¹ Our asset management plan shows the impact on asset health with and without intervention.

² Transpower, RCP4 Proposal, page 139.

meeting regulatory requirements, and managing towers to the end of life using a new tower modelling programme.

Base capital expenditure forecast

8. We do not have substantive comments on this section but point out that the way base capex is described could be confusing for some submitters. Paragraph 5.9 states that base capex means expenditure only on 'asset replacement and refurbishment', 'business support' and 'information systems and technology assets'. However, as the Commission subsequently points out, base capex includes enhancement and development capex below \$30m for RCP4.³
9. We proposed a definition change as part of the 2023 Input Methodologies to explicitly include enhancement and development base capex under the 'base capex' definition.

Operating expenditure forecast

Opex efficiency

10. We note the Commission is asking stakeholders several questions around our efficiency.
11. Regarding **base-year efficiency**, it's important to highlight to stakeholders that under the Incremental Rolling Incentive Scheme (IRIS), we have a financial incentive to achieve efficiencies. Any overspending against what is efficient reduces the returns to our shareholder.
12. For our RCP4 **ongoing efficiency** challenge, we've sought independent advice from NZIER, relying on StatsNZ data on various industries' measured efficiencies over recent years. This provides quantitative evidence to set an ongoing productivity target.
13. The Commission seeks input from stakeholders on their experience with switching to a **risk-based maintenance approach** and whether it led to efficiencies or cost reductions. As mentioned in our response to 'Asset Management,' one of the reasons our grid maintenance workload is not decreasing is due to managing a larger proportion of aging assets, notwithstanding our increased renewals spend in RCP4. This aligns with our risk-based asset management approach. We also note that there are additional activities we will be undertaking during RCP4 compared to RCP3. These are outlined in Section 8.4 of our proposal.

Insurance – Impact of lowering the catastrophic event reopener to \$5m

14. Transpower approaches insurance for catastrophic risk prudently, similar to non-regulated corporates. Our insurance cover is determined through careful assessment of attritional risks (such as breaks, mechanical failures, and transformer fires) and catastrophic risks (such as significant earthquakes or extreme weather events).
15. Insurance protects Transpower and consumers from large losses following significant events. Clarity over the trigger and lower threshold for the catastrophic reopener is important when considering the aggregate value of insurance cover. The \$5 million reopener allows Transpower certainty in considering cover for long-tail/unexpected events and reduces the potential of over-insuring, which removes additional premiums.

³ Capitalised leases are also covered under base capex despite also being considered opex.

16. Transpower's insurance strategy continues to prioritise prudent asset resilience design, operation, and management. We maintain insurance cover for credible risks without relying solely on the \$5 million reopener to mitigate financial risk. Relying solely on the \$5 million threshold without prudent insurance cover has the potential to cause a material price shock for consumers in the event of a catastrophic event. Prudent insurance cover, along with the \$5 million reopener threshold, mitigates the need for excessive insurance and prevents incurring premiums beyond appropriate and efficient costs.
17. Our proposed RCP4-specific resilience workstreams are expected to have only a marginal impact on our insurance during RCP4. Our insurers already anticipate that Transpower will actively manage our exposure to risk given the critical nature of our assets. While our resilience investments may prevent insurance premiums from rising significantly, they are unlikely to reduce premiums below their current levels.

Instantaneous reserve event charges – recovering event charges from consumers.

18. The Commission is considering whether it should change its policy of allowing Transpower to recover an efficient and prudent forecast amount instantaneous reserve event charges from consumers.
19. We maintain that the current treatment of instantaneous reserve event charges is fair for both Transpower and our customers. Extensive discussions and consultations occurred before RCP1, with decisions documented in the input methodologies reasons paper.⁴ We stand by our position that certain uncontrollable risks faced by Transpower, as the HVDC owner, cannot be predicted in advance. Agreeing with the Commission, including event charges in the capped opex allowance ensures appropriate incentives to minimize the occurrence of such events.

Grid output measures

Interruptions service measures (GP1 and GP2)

20. The Commission, in paragraph 7.43, states that Transpower has proposed changes including: 'using historic averages to forecast unplanned interruptions' and 'excluding the effect of any automatic underfrequency load shedding'. These are not changes. These are part of the current RCP3 methodology for the GP1 and GP2 service measures.
21. The Commission has proposed that 'normalisation' applications could be used to deal with outages associated with automatic underfrequency load shedding (AUFLS) event or reasons originating outside our network. This approach does not align with delivering long-term benefits to consumers. Requiring Transpower to apply for normalisation events whenever an outage of these types occur would impose significant administrative burden on both Transpower and the Commission. AUFLS is a defined event under the Electricity Industry Participation Code and lies clearly outside Transpower's role as the grid owner. We consider that the Commission's current approach should be continued into RCP4.

⁴ See for example, Commerce Commission, Input Methodologies (Transpower) – Reasons Paper, December 2010, paragraphs 7.3.58 to 7.3.64.

22. We also want to clarify that we split GP1 and GP2 into six categories, not five, as the Commission states in paragraph 7.39. The proposed categories for RCP4 are the same as those currently in place for RCP3.

HVDC availability (AP1) and HVAC availability (AP2) – MCPs, Listed Projects and Resilience workstream outages

23. In paragraph 7.69, the Commission suggests that excluding the impact of planned HVDC outages resulting from MCPs, listed projects, and new resilience workstreams could reduce the incentive for Transpower to manage these events. Our proposal aims to remove these events to prevent unintended consequences, such as Transpower delaying work to avoid breaching quality standards.

24. For MCPs and listed projects, the Commission could set targets based on forecast planned outages provided by us and adjust the target, collar, cap, and quality standard accordingly. This approach could apply to both AP1 and AP2 (as mentioned in paragraph 7.77 of the Issues Paper).

HVAC availability (AP2) – quality standard and pooling

25. In paragraph 7.78, the Commission asserts that keeping the **quality standard** for AP2 implies a requirement for Transpower to actively work on improving or maintaining performance and asset availability. We disagree that a quality standard is required to incentivise Transpower to maintain or improve availability performance. While we agree that a quality standard provides a clear threshold for the Commission to initiate an investigation, there is nothing preventing the Commission from investigating if it believes we systematically fail to meet good electricity industry practice. Additionally, we emphasise that we still have financial incentives and information disclosure requirements to encourage effective and efficient outages management with regard to asset unavailability.

26. In paragraph 7.99, the Commission expresses an early view that the number of asset classes with asset health quality standards should increase. We disagree with this view. While asset health metrics serve as leading indicators, setting quality standards reduces our flexibility to reprioritise work and may hinder the development of asset health models. Given that it is a leading measure, having a quality standard against it does not seem beneficial. Monitoring asset health metrics alone provides the Commission with sufficient information on our investments during an RCP to inform its assessment for the next RCP.

27. We also note that Table 7.1 incorrectly refers to our proposal to “or using forecast model to set targets using forecast expenditure”. If the Commission rejects our proposal to remove quality standards, our proposal is to use the forecast model to set quality limits.

28. In paragraph 7.73, the Commission states that the Independent Verifier “did not agree that **pooling** across disclosure years was supported.” However, this is incorrect – the Independent Verifier supported “maintaining the quality standard with the introduction of pooling across disclosure years, assessed against annual quality limits.” Refer to Independent Verification report, Table 20-13 – Evaluation summary of the proposed AP2 measure, conclusions cell.

29. The Commission appears to indicate that a reason the Independent Verifier supported pooling was to help smooth out variances in our delivery plan if we are unable to recruit

staff. Variances to our delivery plan will still occur if we recruit the staff required to deliver our RCP4 investment plan.⁵

New HVDC and HVAC reporting only measures

30. The Commission sets out, at a high level, two alternative reporting only measures that could be considered:
 - 30.1.AP1.2 – which would measure the HVDC availability of the link⁶ and related assets to measure the actual HVDC operational capability.
 - 30.2.AP2.2 – a measure of the price impact of the unavailability of the transmission assets on electricity prices.
31. Regarding **AP1.2**, calculating HVDC availability using operational transfer capacity presents challenges. At a high level, this is because transfer capacity fluctuates significantly based on real-time measurements of Wellington load—a factor beyond Transpower’s control or influence. However, we welcome further discussion with the Commission on this topic.
32. Regarding **AP2.2**, the primary value of a market impact measure lies in incentivising service providers to minimise overall market impact rather than solely maximising availability. While this approach may appear appealing, we believe there is limited additional value in reporting market impacts. Our existing outage notification requirements under the Electricity Industry Participation Code already provide forward signals of planned outages to the market. Our yearly outage plan, developed in consultation with market participants, prioritises minimising market impact wherever possible. We also note that a market impact measure is difficult to calculate and interpret given the complexity of New Zealand nodal pricing and how generators respond to signalled constraints.

Deliverability

Deliverability review

33. As mentioned at the beginning of this letter, we conducted an extensive deliverability review during the development of our RCP4 proposal. Our deliverability review and workforce plan were reviewed by the Independent Verifier. The Independent Verifier specifically notes that we conducted “a high-level deliverability review and analysis”.⁷
34. In November 2023, we submitted a report to the Commission detailing the review outcomes and a document outlining our workforce plan. While we have acknowledged the challenges of ramping up our workforce to deliver on our and our customers’ investment plans, we are confident that we have the plan in place to do this. The Independent Verifier noted:

⁵ See Issues Paper paragraph 7.100

⁶ The HVDC link includes the HVDC system circuit between Benmore and Haywards comprising the converter stations at Benmore and Haywards and the HVDC transmission circuit between them, carried on HVDC overhead line and undersea cable, connecting the converter stations. This is because the link availability measures exclude other HVDC components and HVAC grid assets.

⁷ RCP4 Independent Verification report, page 11.

“Skills shortages are a risk to deliverability and require a coordinated response— Transpower acknowledged these risks in its deliverability review and is carrying out workforce planning and development initiatives”⁸

35. The Commission refers to the deliverability adjustment we made for RCP3 on relatively small increases in capex. As we set out in our proposal, we do not consider that making a deliverability adjustment for RCP4 is appropriate. Delaying this work would not align with the long-term interests of consumers.
36. Despite facing a financial penalty, under the IRIS and capex incentive mechanism, we are increasing our workforce capacity in RCP3 to deliver our RCP4, and beyond, work programme. We are hiring in line with our targets for FY23/24 and we continue to have confidence that we can recruit the resources required to deliver our work plan.
37. As we noted in our RCP4 Proposal, while confident in our plan, we are open to using uncertainty mechanisms in this area if the Commission is not confident in our ability to hire sufficient resource.⁹ This would provide us with access to funds with protecting our customers from paying for under-delivery. We agree that, alternatively, additional reporting requirements can provide stakeholders with enhanced confidence in our delivery during RCP4.

Workforce planning model

38. The Commission states it will investigate whether our workforce planning model still over-estimates FTEs. As set out in the information we have provided to the Commission, while the workforce planning model provided a starting point, as we considered that it over-forecast the FTEs required, we relied on a bottom-up approach to determine the required FTEs. This was noted by the Independent Verifier:

“the model overestimated resource requirements in several areas so a bottom-up review of the future resourcing requirements was undertaken by each division. In most instances the bottom-up need has been used as the resource forecast”¹⁰

39. We intend to review and recalibrate the model over the next two years so we can integrate this into our workforce planning to support our bottom-up assessments.

Revenue path

Step-change in revenue requirements from RCP to RCP

40. As set out in our RCP4 Proposal, the majority of the revenue increase from RCP3 to RCP4 is driven by higher input prices and interest rates.¹¹ Our customers are benefiting during RCP3 from the very low interest rates in 2019 that were used to set our allowed rate of return. The Commission’s regulatory arrangements mean that these costs are not passed through when they increase. This has delayed the recovery of these cost increases from existing customers and consumers during RCP3.
41. We do not support smoothing of revenue between and across RCPs. Our view is that, to the extent possible, today’s consumers should pay for today’s costs. Any long-term

⁸ RCP4 Independent Verification report, page 74.

⁹ Transpower RCP4 Proposal, page 62.

¹⁰ RCP4 Independent Verification report, page 83.

¹¹ See Transpower RCP4 Proposal Figure 68.

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.

42. 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. We note that for RCP3 the Commission set an immediate revenue reduction of over 15% reflecting the lower interest rates, compared to RCP2. The Commission would be inconsistent if it did not pass through the increase in revenue requirements between RCP3 and RCP4 in the first year.
43. 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.

Revenue changes from RCP4 to RCP5

44. We do not consider it appropriate to focus on the step between the final year of RCP4 and the first year of RCP5. While Transpower has provided a revenue forecast through RCP5, we note that it relies on 12 years of forecast information¹² and assumes the prevailing market conditions. The outturn RCP5 revenue profile is very far from certain and so should not be used to influence the setting of revenue in RCP4.
45. Notwithstanding the above, we support the Commission's view that a steeper curve in RCP4 might produce a significant step down in revenues between the first year of RCP4 and RCP5. This would not be driven by the revenue profile of RCP5, but rather significant deferral of cost recovery across RCP3 and RCP4, and an untethering of the Smoothed Maximum Allowable Revenue from the Maximum Allowable Revenue that was used to derive it.¹³
46. The Commission notes that "a steeper curve and step into RCP5 could exacerbate price shocks if the expected MCPs and listed projects do end up being approved and commissioned. In comparison Scenario TP2A could leave room to accommodate future capex approvals". We agree, noting that the suite of reopeners available to Transpower is more likely to lead to step changes in the latter years of the RCP.

EV account balances

47. We continue to advocate for an annual wash-up for the EV account. The Commission assessed this as part of its IM review, however this assessment appeared to be done without considering the impact of the revaluation building block. The revaluation building block is significantly more volatile to changes in CPI than the other revenue building blocks and could contribute to significantly larger EV account balances and revenue over-recovery/ deferrals during sustained periods of higher/ lower than forecast CPI.
48. The Commission updated the definition of a large buildup in EV account balance to be triggered "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".¹⁴ The

¹² As the price-path is assumed to be smoothed, the forecast includes up to the 2035 year.

¹³ For example, in scenario 3c, MAR is \$1,273m, against SMAR of \$1,383m.

¹⁴ [Transpower-Input-Methodologies-IM-Review-2023-Amendment-Determination-2023.pdf \(comcom.govt.nz\)](#) clause 3.7.8 (1)

Commission executed this on the basis that a “>5% reopener threshold be more effective at mitigating inter-period price shocks from large EV account build-ups”.¹⁵

49. However, this mechanism is only ever likely to be triggered in the most extreme circumstances. For example, where SMAR for the final pricing year in the regulatory period is ~\$1.3b:
- The closing EV account would need to be at least \$325m.
 - This amount would be determined ex-ante.
 - The application would need to be made in the period of 80 working days that commences after the end of the third disclosure year. At this point in time, we would be at least four months into the fourth pricing year, and so this adjustment would only apply for the final pricing year of the RCP.
50. The mechanism’s trigger point is extremely high, it only allows for an adjustment to the final year of the regulatory period, relies on forecast information, and will be determined ahead of the setting of revenues for the succeeding RCP.¹⁶ We cannot foresee likely circumstances where this reopener would be triggered, that would not otherwise be covered by other reopener provisions.

Possible new information disclosure requirements

Additional reporting requirements

51. The Commission is considering several additional information disclosure requirements for Transpower for RCP4. While we support information disclosure that assists the Commission in assessing whether we are following good electricity industry practice for a prudent and efficient electricity transmission operator, we are concerned that continuing to add information requirements on top of existing ones increases the costs we pass on to consumers with no discernible benefit. We would appreciate the Commission reviewing its existing information disclosure requirements (including the Information Disclosures requirements that were set in 2014)¹⁷ alongside any new ones for RCP4.

Expenditure forecasts supported by analytical modelling

52. We are concerned by the Commission view that it needs additional information disclosure requirements to “ensure that expenditure forecast in future resets will be more reliable underpinned by analytical modelling.”¹⁸ We agree that analytical models can, and should, be improved however our RCP4 proposal is underpinned by detailed analytical modelling.¹⁹ The Independent Verifier has reviewed our analytical models and concluded that almost all our forecast expenditure is prudent and efficient.

¹⁵ [Part-4-IM-Review-2023-Final-decision-Report-on-the-Input-methodologies-review-2023-paper-13-December-2023.pdf \(comcom.govt.nz\)](#) para 8.56.

¹⁶ Meaning the step between periods will not be known.

¹⁷ [Transpower-information-disclosure-determination-2014-consolidated-3-April-2018.pdf \(comcom.govt.nz\)](#). these have not been substantively reviewed since their introduction in 2014.

¹⁸ Issues Paper, paragraph 9.24.

¹⁹ Our asset health and network risk development roadmap attests to this.

Asset health and network risk development – maturity levels

53. In paragraph 9.25.1, the Commission states that it is considering setting requirements on Transpower to disclose how it is progressing models that the Expert Opinion found were below a maturity level of 3.
54. Our asset health and network risk development roadmap does not target maturity level 3 or above for all our asset classes; there are asset classes where we do not consider there is value in progressing up to a maturity level of 3.

Indexation

55. In para 10.43, the Commission states that “Transpower also noted it would be forecasting RAB depreciation at an individual asset level for our final price path decisions”. We did not indicate this; in fact we indicated that we considered it “not realistic” in our letter to the Commission accompanying our S53zd response.
56. We intend to engage the Commission shortly on an alternative approach to input methodologies RAB indexation. We have an alternative approach that is more practical to implement and better links the profile of the revaluation to the underlying asset itself. The alternative is NPV equivalent, with a similar revenue path, to the input methodology approach.