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

Draft Decision Attachment E - Deliverability expenditure

Date of publication: 29 May 2024

Contents

Chapter 1	**Introduction**	**3**
Chapter 2	**Evaluating RCP4 delivery risk**	**6**
Chapter 3	**Our assessment of RCP4 delivery risk**	**15**
Chapter 4	**Our draft decision**	**20**

Chapter 1 Introduction

Purpose

1.1 This document is part of the package of draft decision documents on Transpower's individual price 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 decision, which will inform our final decision for the IPP reset.

1.2 This is one of five attachments to our main draft decision paper. The main draft decision paper sets out our decision as well as the context within which we are setting revenues.

1.3 The purpose of this attachment is to explain the delivery risk in Transpower's RCP4 proposal, to set out our draft decision relating to deliverability for the IPP reset, and to explain our reasons for the draft decision.

1.4 In this paper we discuss:

1.4.1 the deliverability risk faced by the New Zealand electricity sector in the medium term;

1.4.2 the deliverability constraints Transpower has identified in its RCP4 proposal;

1.4.3 the Verifier's view on RCP4 deliverability;

1.4.4 stakeholders' views on RCP4 deliverability;

1.4.5 our analysis of Transpower's proposed actions to resolve potential deliverability issues; and

1.4.6 our draft decision on options to address deliverability risk as it applies to the RCP4 proposal and the underlying rationale.

[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), p 22.

Background to our draft decision on deliverability

1.5 In setting expenditure allowances for RCP4, we are required to apply the base capex evaluation criteria specified in the Capex IM, one of which relates to the overall deliverability of the proposed base capex during the regulatory period.[2]

1.6 Deliverability risk is likely to be an electricity sector-wide issue given the increasing importance of decarbonisation and demand electrification, and this will affect both Transpower and electricity distribution businesses (**EDBs**).[3]

1.7 In our recently published EDB DPP4 reset issues paper, we expressed concern about the scale of EDB work programmes, given the "labour market conditions and wider supply chain challenges, which is expected to continue in the medium term." These issues will also affect Transpower.

1.8 We noted in our EDB DPP4 and RCP4 issues papers that, from a regulatory perspective, deliverability concerns represent a risk that projects are planned but are not delivered, resulting in elevated profits for regulated parties, not through improved efficiency, but through non-delivery.[4, 5]

1.9 Under-delivery may also result in elevated levels of asset and network risk. Assets that are not refurbished or renewed in a timely manner can result in a defect backlog, which over time will increase asset outage risk.

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2 Transpower Capital Expenditure Input Methodology (IM Review 2023) Amendment Determination 2023 [2023] NZCC 39, (13 December 2023) (**IM review Amendment Determination 2023**), Schedule A1(h).

3 Commerce Commission, Default price-quality paths for electricity distribution businesses from 1 April 2025 – Issues paper (2 November 20243) (**EDB Issues paper**), Attachment E.

4 Commerce Commission, EDB Issues paper.

5 Commerce Commission Transpower's individual price-quality path for the next regulatory control period – Issues paper (25 January 2024) **(RCP4 Issues paper**).

Table 1.1 Structure of this paper

Section	Title	Description
Chapter 1	Introduction	Sets out the purpose of this paper and the background to our decision.
Chapter 2	Evaluating RCP4 delivery risk	Discusses the key elements of the deliverability issue facing Transpower in RCP4, the Verifier's assessment and stakeholder submissions.
Chapter 3	Our assessment of delivery risk	Describes our assessment of the delivery risk, Transpower's historical delivery performance and the materiality of the risk in this period.
Chapter 4	Our draft decision	Details our draft decision concerning our preferred option to mitigate delivery risk and the underlying rationale.

Chapter 2 Evaluating RCP4 delivery risk

Introduction

2.1 In this chapter we discuss how we have evaluated the RCP4 work programme delivery risk. We summarise Transpower's view of delivery risk and the mitigation measures it has put in place to manage this risk.

2.2 The Verifier identified that programme delivery was a key area for us to investigate in our review of the proposal. We have summarised here the Verifier's views and present our analysis of delivery risk that has informed our draft decision presented in Chapter 3.

Summary of our assessment

2.3 Following our review of the Verifier report and Transpower's proposal we concluded that we should focus on Transpower's workforce related delivery risk. We are satisfied that Transpower had processes and plans in place to address supply chain and procurement risk, and that its new service provider arrangements would ensure work programme consistency and skilled external staff retention.

2.4 In line with the Verifier recommendations, we focussed on Transpower's internal recruitment as a key driver of RCP4 programme delivery. Without key internal staff Transpower will be unable to plan, design and implement the work programme.

2.5 To support our delivery risk analysis, we requested further information from Transpower to understand the extent of the workforce related delivery. The information we requested broadly covered:

2.5.1 a progress update on internal workforce uplift targets to deliver the remainder of RCP3 and the RCP4 proposal (as recommended by the Verifier);

2.5.2 evidence that Transpower has carried out FTE uplift scenario analysis to test the extent of work programme delivery, and the impact this has on its RCP4 expenditure forecasts; and

2.5.3 evidence Transpower estimated the impact of under-recruitment and developed strategies to mitigate this risk.

2.6 We drew on the information we received from Transpower to develop options to mitigate the delivery risk. This analysis is presented in chapter 3.

Transpower's view of RCP4 delivery risk

2.7 In its RCP4 proposal Transpower is forecasting a significant increase in its work programme over RCP4, noting that:

> To complete the RCP4 work programme, we will require significant growth of our own workforce as well as active support to encourage the growth of engineering consultants, service providers, and specialist contractors from offshore. We also need resilient supply chains and inventory to ensure we have the required material and equipment as we need them.[6]

2.8 In addition to the 200 internal FTEs Transpower is forecasting, it is also anticipating increases in external service provider FTEs in a number of different skilled categories in order to meet its work programme.

2.9 This reset is unlike previous resets in that Transpower's uplift in its work programme will coincide with similar uplifts for other infrastructure providers in New Zealand such as distribution and generation businesses and overseas providers, all competing for skilled workers, as different sectors and jurisdictions accelerate their decarbonisation plans.

2.10 To address delivery risk Transpower has set up a number of initiatives and processes to:

2.10.1 meet the number of full-time equivalents that both Transpower and its service providers would need to recruit; and

2.10.2 improve supply chain management to minimise asset delivery risk.

How Transpower intends to address FTE uplift need

2.11 In its RCP4 proposal, Transpower has projected the FTE workforce growth, both internal and external, required to meet its current work programme under RCP3, and what is proposed in RCP4.

2.12 As demonstrated in figure 2.1 below, Transpower has been increasing its FTE numbers since 2021/22 in RCP3 (grey line) above those that it predicted it needed in its RCP3 proposal (orange line). This is mainly because it has been spending (and intends to spend) above its RCP3 allowance in order to continue to deliver its forecast work programme and build capability for RCP4 and beyond.

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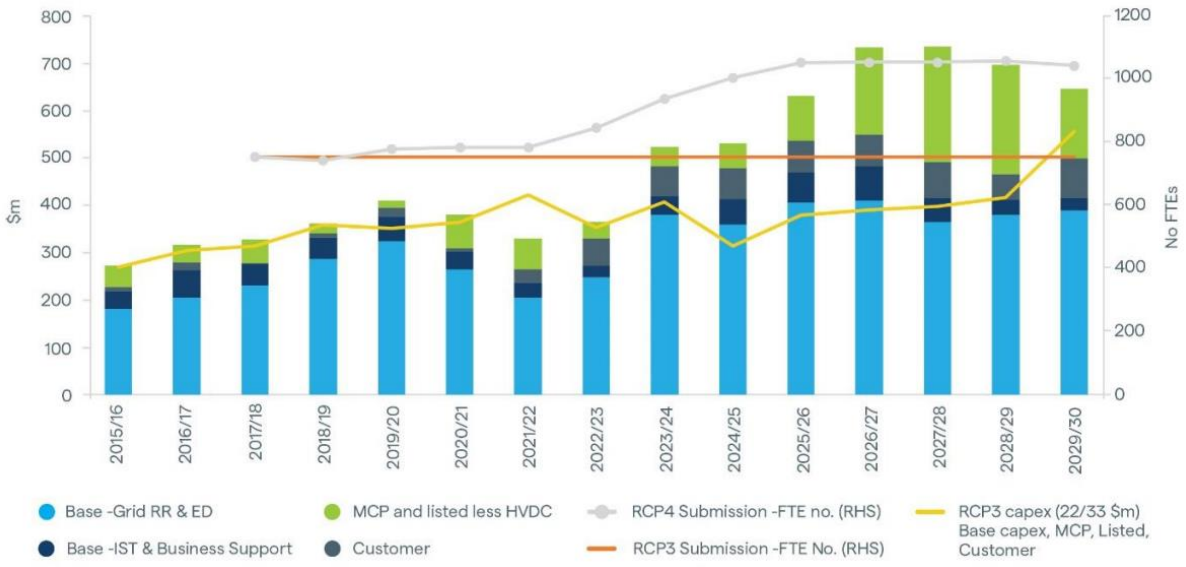
[6] Transpower "Regulatory control period 4 proposal April 2025 – March 2030" (November 2023) (**Transpower RCP4 proposal**), p 61.

Figure 2.1 Transpower's projected workforce growth.[7]



2.13 Transpower discussed the workforce planning initiatives it has implemented, and plans to implement, to support the remaining RCP3 and forecast RCP4 programme delivery in its RCP4 proposal.[8]

2.14 These initiatives include both internal and external initiatives such as increasing promotional activity, international recruitment, closer engagement with service providers and consultants, and investing in a grid skills training centre to train a larger volume of service provider workers.

How Transpower intends to address potential asset procurement issues

2.15 In its proposal, Transpower anticipated deliverability issues related to asset procurement lead times and supply chain delays.[9]

2.16 Transpower is mitigating this aspect of deliverability risk in a number of ways. Primarily, it is increasing pre-purchase of equipment, warehousing capacity, and inventory holdings to buffer the supply chain timing and volume uncertainties.

2.17 Transpower has focussed on its supply chain management processes, and identified areas where it will improve this aspect of RCP4 programme delivery, such as developing specialist procurement expertise, inventory management, and warehousing logistics.

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7 Transpower RCP4 proposal, p 63 figure 18.
8 Transpower RCP4 proposal, p 63.
9 Transpower RCP4 proposal, p 13 para 2.1.2.

2.18 We consider Transpower has adequate processes in place to address global supply chain issues. It is planning to order assets earlier than in previous years and store more assets with increased warehousing.

The Verifier's view of RCP4 deliverability risk

2.19 The Verifier carried out a comprehensive review of Transpower's ability to deliver the RCP4 work programme,[10] and considered criteria in its review that included:

2.19.1 historical delivery performance and internal workforce capability;

2.19.2 ability to contract the necessary services;

2.19.3 procurement of necessary materials and equipment; and

2.19.4 programme delivery capability.

Historical delivery performance and internal workforce capability

2.20 The Verifier commented that historical data indicated Transpower has been able to expand its organisational capability to deliver step changes in total expenditure, equivalent to what it is proposing over RCP4.

2.21 This was demonstrated over the 2010-2013 period when Transpower delivered a number of major projects, such as the 400kV line between Whakamaru and Pakuranga, and the HVDC Pole 3 upgrade, as well as its ongoing asset renewals programme.

2.22 However, the Verifier was concerned about whether Transpower could recruit and sufficiently develop approximately 200 additional FTEs (often in highly specialised areas) to deliver the forecast work programme, especially given there will be significant competition for this resource both domestically, and overseas.[11]

2.23 In our view, this is not a situation Transpower faced over the 2010-2013 period to the extent that it will likely face over RCP4 with major upgrades also being required. New Zealand EDBs are forecasting that they will also need a significant asset investment uplift, and the global trend to decarbonise through electrification will also affect overseas transmission, distribution, and generation asset owner work programmes.

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[10] GHD Advisory and Castalia, Independent verification report – RCP4 base expenditure and service measures 2025-2030 proposal. Transpower New Zealand Limited" (12 September 2023) (**IV Report**).

[11] GHD Advisory and Castalia, IV Report, p 77.

2.24 The Verifier also assessed Transpower's historic staff turnover.[12] While Transpower stated in its proposal that its historical staff attrition rate is about 11%, recent attrition trends since 2019/2020 are much higher than 11%. Total Transpower staff attrition has seen rates increasing from an average of 8.1% between 2017/2018 and 2019/2020, to attrition rates of 12.4% in 2020/2021 and 15.5% in 2021/2022.

2.25 The Verifier also carried out a more focussed staff attrition rate analysis at a division level. While the grid development staff turnover rate has been relatively stable since 2019, at about 9%, works delivery staff turnover rates have increased from 9.3% to 14.4% over the same period.

2.26 While the Verifier noted Transpower's planned initiatives to recruit the additional FTEs it states it needs, it did not identify whether Transpower is investigating the reason for increasing staff attrition rates in key technical areas, and whether these rates can be decreased.

2.27 We note also that the Verifier did not seek scenario analysis from Transpower about the impact of not meeting its FTE targets, and how not meeting targets will affect network investment, and the opex to support this investment.

2.28 The Verifier described the review processes Transpower undertook in developing the frameworks underpinning its draft proposal.[13] Transpower undertook both a bottom-up review and a top-down challenge. The top-down challenge involved oversight by its internal Economic Regulatory Governance Group (with process steps listed in the IV report). After seeing the draft proposal, the Verifier still had residual concerns about Transpower's ability to recruit the internal workforce required. Transpower responded with the following:

> "We agree that it will be a challenge to increase our resourcing levels as proposed; however, we consider that we have the plan in place to do this. We are happy to update the Commission on our recruiting throughout the RCP4 determination process. However, while we have no issue doing it, we see less value in reporting during RCP4."
>
> "In RCP3, we made a top-down adjustment for deliverability reasons. We have not made one for RCP4. With an ageing asset base, increasing customer work, and a need to reinforce the grid for increasing electrification, we consider that it is now time to spend to develop our workforce capabilities rather than defer work to future RCPs."

2.29 The Verifier recommended that we require Transpower to provide regular reporting on the status of its specialist workforce development over RCP4. During our review of Transpower's proposal we requested a progress update on its recruitment through a request for information.

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[12] GHD Advisory and Castalia, IV Report, p 86.
[13] GHD Advisory and Castalia, IV Report, p 11.

Ability to contract the necessary services

2.30 The Verifier reviewed the processes Transpower has implemented to manage its external service provider resource.

2.31 Over RCP3, Transpower has been updating and streamlining its grid services contracts into six regional services areas. This is to provide a greater level of certainty to service providers in terms of expected future work volumes, and to ensure that these are volumes are more consistent and coordinated.

2.32 Previously, Transpower had 22 separate service provider contracts across individual regions, and in some cases, work volumes did not make these contracts commercially viable. By consolidating contracts over larger catchments, Transpower will be better able to guarantee consistent work volumes and allow service providers the ability to develop and retain specialist skilled staff.

2.33 The Verifier concluded that Transpower's updated service provider processes will provide a "greater level of certainty regarding contractor work levels and forward work levels" and enable service providers to "grow their teams in line with the expected future work volumes."

Procurement of necessary materials and equipment

2.34 The Verifier reviewed the range of measures Transpower has introduced to address supply-chain risk, and manage procurement across its business units, noting that:

> Transpower currently spends approximately $500m per annum on the procurement of goods and services across the company. Approximately 85% is involved with grid services, Information and Communications Technology (ICT) services, or materials in support of the grid with the remaining 15% spent on other enabling services.[14]

2.35 Transpower has developed a "detailed procurement method that, while addressing compliance with principles, policies and procedures, is also designed to match the value, risk, criticality, and complexity of the purchase."[15]

2.36 The Verifier concluded that the new procurement and supply chain processes Transpower had implemented, will improve visibility of plans and procurement need. The Verifier was satisfied with Transpower's mitigation strategies to address supply-chain risk.

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[14] GHD Advisory and Castalia, IV Report, p 90 para 3.

[15] GHD Advisory and Castalia, IV Report, p 94 section 7.6.4.

Programme delivery capability

2.37 The Verifier reviewed Transpower's RCP4 programme delivery capability, and the planning and management of transmission asset outages, to manage that delivery.[16]

2.38 Transpower's outage planning process sets out how it plans outages to deliver works delivery, including maintenance and project works. The process provides a framework for Transpower and service providers to schedule and resource the work plan and minimise asset unavailability.

2.39 The Verifier concluded that Transpower's planning and management of transmission asset outages to manage works delivery, is systematic and "consistent with the outage planning approach of other TNSPs."[17]

2.40 The programme delivery framework was developed to enable Transpower and its service providers to group work at a site where this is appropriate and efficient, ensure procurement principles are considered, maintain workforce capacity and levelise the work programme, and consider customer issues and constraints.[18]

2.41 The Verifier concluded that Transpower's work programme delivery framework has been modified following an external review in 2019, and that recommendations from that review were implemented, such as new management and governance systems, and delivery team restructuring.

Stakeholder submissions on deliverability in RCP4

2.42 We received eight submissions to our RCP4 issues paper and four cross submissions. Below we summarise the relevant points raised by stakeholders regarding deliverability of Transpower's proposed work programme.

2.43 Major Electricity Users Group (**MEUG**), Consumer Advisory Council (**CAC**) and the New Zealand Aluminium Smelters Limited (**NZAS**) shared our concerns about delivery risk – particularly the impact on electricity consumers:

> MEUG has previously noted concerns with Transpower's ability to deliver the extensive programme of work, and we support the Commission undertaking more assessment in this space. Given that this issue is also facing electricity distribution businesses in DPP4, we consider that a sector-wide approach might be more useful.[19] (MEUG)

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16 GHD Advisory and Castalia, IV Report, p 80 section 7.2.

17 GHD Advisory and Castalia, IV Report, p 95 section 7.7.1. Note TNSPs are Australian Transmission Network Service Providers.

18 GHD Advisory and Castalia, IV Report, p 95 section 7.8.1.

19 Major Electricity Users' Group (MEUG) "Submission on RCP4 Issues paper" (21 February 2024) (**MEUG's submission on Issues paper**) p 3 para 14.

> We agree with the commission's comments (para X46) that there are grounds for concern about Transpower's ability to deliver its proposed work programme, in addition to the major projects it has signalled. As the commission notes (para X47), projects planned but not delivered will result in elevated profits for Transpower. Consumers will also pay higher prices. [20] (CAC)

> The market for the skills that Transpower will require, which are similar to skills required across both the electricity and industrial sectors is very constrained and highly competitive, and we would strongly suggest that any forward-looking work programme factor in more fully the reality of current labour market conditions. [21] (NZAS)

2.44 ENA did not share our concerns about delivery risk in Transpower's proposal:

> Transpower — and the electricity lines sector more broadly — have demonstrated their ability to ramp up their resources to deliver large infrastructure projects and work programmes as required.[22] (ENA)

2.45 MEUG supported us introducing reporting requirements on Transpower's progress towards its recruitment targets, as proposed by the Verifier:

> MEUG would support Transpower being subject to reporting requirements around deliverability. It would be helpful to see how Transpower is managing the recruitment of the extra 200 FTEs (or equivalent resource from other sources) as it progresses through RCP4. We believe it would also be useful for Transpower to report on staff retention, given the commentary on current staff attrition rates in key technical areas.[23] (MEUG)

2.46 Vector, Transpower and ENA did not support adjusting allowances as a mechanism to address deliverability concerns:

> We would have significant concerns if the Commission reduced allowances on the basis Transpower could not deliver proposed programmes. Rather than address deliverability risk, this would effectively ensure that Transpower was unable to deliver investment. Accordingly, this approach would undermine the long-term benefit of consumers.[24] (Vector)

> 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.[25] (Transpower)

> The Commission rejecting expenditure on the basis that there may be deliverability challenges, effectively locks in failure and the non-delivery of this investment. Instead, the

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20 Consumer Advocacy Council "Submission on RCP4 Issues paper" (21 February 2024) (**CAC's submission on Issues paper**) p 2 para 12.

21 New Zealand Aluminium Smelters Limited (NZAS) "Submission on RCP4 Issues paper" (21 February 2024) (**NZAS's submission on Issues paper**), p 3 para 5.

22 Electricity Networks Aotearoa "Submission on RCP4 Issues paper" (21 February 2024) (**ENA's submission on Issues paper**), p 1 para 7.

23 MEUG's submission on Issues paper, p 3 para 15.

24 Vector's submission on Issues paper, p 2 para 13.

25 Transpower "Submission on RCP4 Issues paper" (21 February 2024) (**Transpower's submission on Issues paper**), p 2 para 13.

> Commission must give Transpower the opportunity and incentive to rise to the challenge of delivering the infrastructure that will enable decarbonisation. ENA is confident that Transpower, like its own members, can rise to the challenges of delivering the works programmes set out in the asset management plans (or regulatory proposal).[26] (ENA)

2.47 Vector and Transpower instead proposed that we make use of uncertainty mechanisms such as use-it-or-lose-it allowances to address under-delivery concerns as any unspent allowances would not be cost recovered from consumers. Alternatively, Transpower would also support additional reporting requirements.

> 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. 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.[27] (Transpower)

2.48 Transpower felt we misrepresented its workforce efforts.

> We recommend making better use of mechanisms such as use-it-or-lose it allowances for Transpower to ensure under-delivery is not seen as an efficiency. This would address any deliverability risk by returning these allowances to consumers if projects are not actually delivered.[28] (Vector)

> 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. [29] (Transpower)

2.49 We discuss our view further in the following chapter.

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[26] ENA's submission on Issues paper, p 2 para 2.
[27] Transpower's submission on Issues paper, p 8 para 37.
[28] Vector's submission on Issues paper, p 2 para 12.
[29] Transpower's submission on Issues paper, p 1 para 2.

Chapter 3 Our assessment of RCP4 delivery risk

3.1 Transpower's improved asset management processes have enabled it to better prioritise and time its investments, giving us confidence that the forecast uplift in expenditure over RCP4 is prudent in order to maintain the present levels of quality.

3.2 Under-delivery of this work programme may increase defect backlogs. The challenge in this reset is to provide sufficient funding to Transpower to enable it to manage its asset related risk, while balancing the risk that it cannot deliver.

Historical evidence of Transpower's under-delivery

3.3 In our RCP2 draft decision we expressed concern that Transpower would be unable to deliver its proposed programme of works, and Transpower proposed volumetric asset health measures with delivery targets in response to these concerns.[30]

3.4 In its 2018 Grid Outputs Report, which preceded the RCP3 submission, Transpower reported that it was only on track to meet one of the works delivery targets (refurbished transmission towers) and was likely to fail to fully deliver its targets for refurbished foundations and insulator replacements.[31]

3.5 In its RCP3 proposal, Transpower identified a number of deliverability risks associated with its forecast uplift in expenditure (i.e., a 7% increase in base capex and 2.9% increase in opex in $ constant 2017/2018) when compared with RCP2. At that time, Transpower stated the deliverability risk would likely be due to "resourcing, as resource constraints can impact on work volumes and the timing of works."[32]

3.6 After an internal top-down deliverability review, and following consultation feedback, Transpower applied downwards deliverability adjustments of 5% for base capex, and 2% for opex, to its RCP3 expenditure forecasts.[33]

3.7 In its review the Verifier noted a number of cases where Transpower is deferring work from RCP3 including:

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30 Commerce Commission, Setting Transpower's individual price-quality path for 2015—2020 - Reasons for draft decision, (16 May 2014) p 57.

31 Transpower New Zealand Limited, "Grid Outputs Report 2018", p 32.

32 Commerce Commission, "Transpower's individual price-quality path for the next regulatory control period Issues paper", (7 February 2019), p 121 para 9.5.

33 Transpower New Zealand Limited, "Securing our Energy Future 2020-2025 Regulatory Control Period 3 – RCP3 Proposal", (November 2018), p 25-26 section 2.3.4.

3.7.1 In the first two years of RCP3 Transpower has spent $14.0 million on both reactive and HVDC assets. However, $16.4 million worth of planned HVDC work for RCP3 has so far been deferred. Over $15.0 million of this is due to assets being identified in better condition than expected. This is an example of how Transpower has been able to use its asset management systems to defer capex based on updated or more accurate asset condition information.[34]

3.7.2 TransGO assets currently embedded in the network are expected to reach their end of life and technical support from the manufacturers is expected to be withdrawn during the next price control period. The required investment was originally identified in RCP3 and during RCP3 there was a period of 'trade-off' where investment was deferred as the assets were expected to still be fit for purpose.[35]

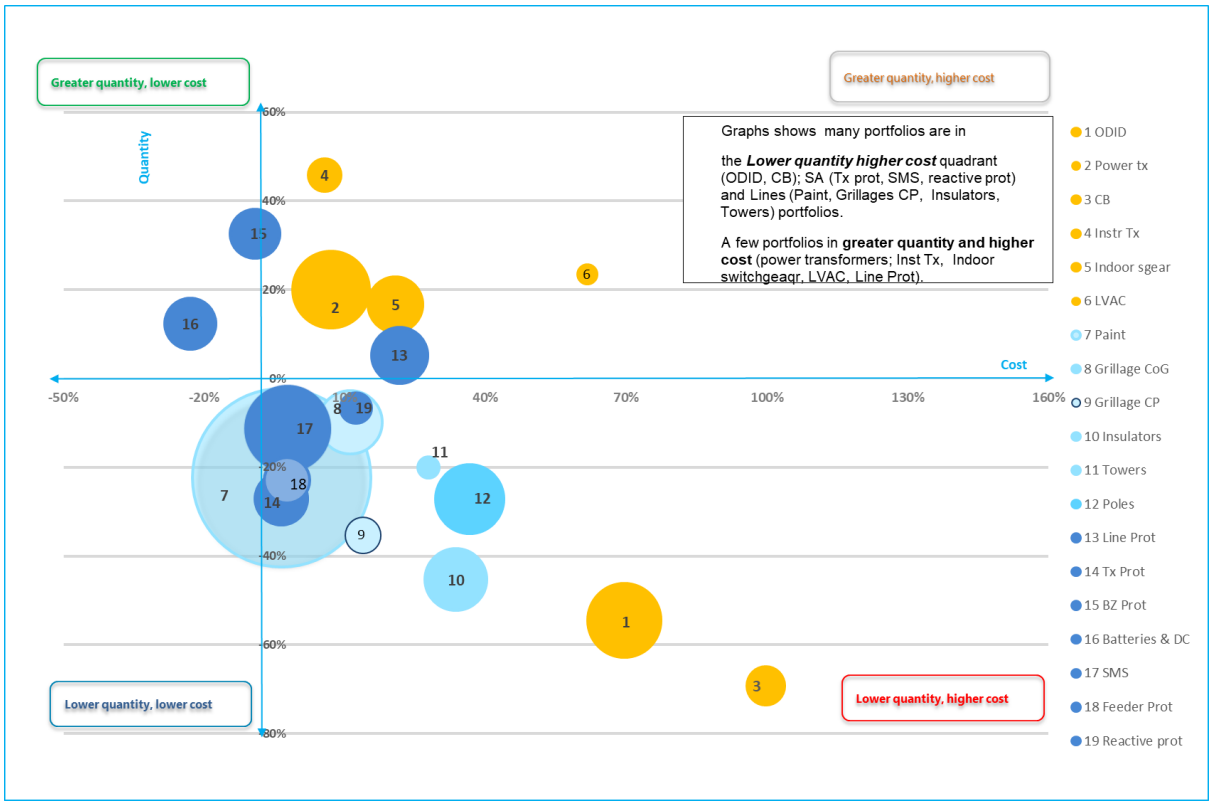
3.8 Figure 3.1 illustrates the variance in both cost and volume of the main standard asset deliverables against the RCP3 allowance. This includes both deliverables already delivered to that date and those projected to be delivered by the end of RCP3.

3.9 Figure 3.1 shows that most deliverables are in the lower right quadrant i.e., lower quantity and higher cost. The current work rate indicates a significant volume of the proposed RCP3 work programme will be deferred into RCP4.

3.10 Transpower appears to be significantly under-delivering in a number of high expenditure value programmes such as tower painting, circuit breakers, 33kV switchyard conversions, insulators, and poles. Additionally, it is also under-delivering in many crucial protection and secondary systems upgrades which has the potential to impact the commissioning of primary transmission assets.

[34] IV Report, p 198.
[35] IV Report, p 252.

Figure 3.1 Cost and volume variance of main standard deliverables vs RCP3[36]



3.11 Transpower explains the slower delivery is due to impacts from Covid 19 lockdown restrictions and severe weather events, supply chain challenges, congestion at some sites leading to delays, and more case-specific issues not forecast by Transpower that have become apparent closer to commencement of the work.

3.12 Transpower also attributes the lower volume of deliverables to factors including updated asset condition data affecting intervention volumes, recalibrated asset health models and changes in strategies for particular assets.

Defining the delivery risk

3.13 We have distilled the implications of RCP4 programme under-delivery to the following:

3.13.1 if projects are planned but not delivered, this will result in elevated returns for Transpower, not through improved efficiency but through non-delivery;

[36] Figure based on Figure 4-1 in the IV report reproduced with permission from Transpower.

3.13.2 customers will pay high upfront costs now, at a time where they are already facing high cost of living pressures, even if they are reimbursed at the end of the period (as forecast revenue is washed up for actual commissioned assets); and

3.13.3 under-delivery may also result in elevated levels of asset and network risk. Assets that are not refurbished or renewed in a timely manner can result in a defect backlog, which over time will increase asset outage risk.

Materiality of delivery risk

3.14 A financial impact of under-delivery could emerge through impacts on the revenue price path, the capex incentive amount or the opex incentive (the incremental rolling incentive scheme or IRIS).

3.15 We are concerned that under-delivery could impact consumers through us initially setting a higher upfront revenue path for Transpower by basing this on the forecast commissioned capex. This is the amount of the capex allowance that Transpower is forecasting will be spent and forecast to be used to provide electricity transmission services.

3.16 Any difference between the forecast and actual commissioned values of the assets will be adjusted annually, with the differences (plus or minus) being factored into the revenue path in the following regulatory period. This means that over time any under-delivery is corrected for in the amount of revenue that Transpower will recover from its customers and ultimate consumers. Consumers will end up over time only paying for assets used by Transpower to provide services.

3.17 However, the incentive mechanism which rewards Transpower for underspending its capex allowance does not distinguish under-delivery from expenditure efficiency gains. This means we cannot identify whether Transpower has found efficient ways of reducing its expenditure or has merely not delivered on a forecast asset installation. Any incentive reward for under-delivery of capex is not corrected when the value of the commissioned capex is adjusted. This is why consumers may end up paying Transpower a reward for under-delivery.

3.18 For example, if Transpower does not achieve the level of forecast staffing underpinning its RCP4 proposal, it may spend less capex, making what looks like an efficiency gain, and collecting an efficiency incentive payment of 33.7% of any apparent savings.

3.19 Limiting the opex to correct for this potential outcome by avoiding an incentive bonus could have the unintended consequence of increasing the delivery risk. Opex will be required in advance of the capex work programme as it includes salaries for the staff who play an important role in the early stages of the delivered work programme, for example in business support, programme planning and design.

3.20 To model the base capex incentive risk, we calculated the incremental base capex based on Transpower's proposal. This is the level of capex above what Transpower predicts it will spend in the final year of RCP3. We then calculated the revenue impact of Transpower under-delivering its incremental base capex by between 10% and 30%, with results given in Table 3.1 below.

3.21 With annual incremental base capex estimated at $23.2 million and an incentive payment taken from Transpower's model of 33.7%, Transpower would be set to gain between $3.9 million, for a 10% under-delivery, to $11.7 million, for a 30% under-delivery, of incremental capex over the five-year RCP4 period.

3.22 We consider that options developed to mitigate this delivery risk should be proportionate to this quantum of incentive payment.

Table 3.1: Estimated base capex efficiency payments for different levels of under-delivery ($ million nominal)

Scenario	Average annual (2026-30)	Total[37]
Proposed base capex allowance	501.2	2506.0
Base capex, no increase in deliverability	478.0	2390.0
Average annual incremental base capex	23.2	116.1
Average annual underspend with a 10% under-delivery of incremental capex	2.3	11.6
Average annual underspend with a 30% under-delivery of incremental capex	7.0	34.8
Average annual capex incentive payments with a 10% under-delivery of incremental capex	0.8	3.9
Average annual capex incentive payments with a 30% under-delivery	2.3	11.7

[37] Note that numbers in tables in this paper do not sum to the totals displayed due to rounding.

Chapter 4 Our draft decision

4.1 We considered a number of options to mitigate the risk to consumers of Transpower failing to meet its workforce targets and receiving an efficiency incentive for under-delivery over the period.

4.2 We consider that the decision we have made is the most appropriate to address the specific delivery uncertainty and incentive bonus risk, reflecting the best compromise between cost, complexity and accuracy of the mechanism.

4.3 In this attachment we describe our draft decision and the underlying rationale we applied.

Draft decision for addressing delivery risk

4.4 We are making three draft decisions to address RCP4 programme delivery risk:

4.4.1 the first is to apply a contingent expenditure adjustment (to incremental capex and opex);

4.4.2 the second is to introduce a new deliverability reopener; and

4.4.3 the third is to introduce an annual delivery report (**ADR**).

4.5 We discuss each of these interventions in more detail in the following section.

Expenditure adjustment with deliverability reopener

4.6 Our first draft decision is to apply a deliverability expenditure adjustment to Transpower's allowance for RCP4. This is coupled with our second decision to introduce a new deliverability reopener through which Transpower may apply for the contingent expenditure if it can show it has achieved higher levels of workforce uplift.

4.7 The deliverability adjustment will be calculated using information provided by Transpower and is based on its estimate of base capex it can deliver and opex it incurs for different FTE attainment levels on a year-on-year basis.[38]

[38] Commerce Commission "RCP4 Deliverability model" (29 May 2024)

Table 4.1 Expenditure contingent on Transpower's workforce recruitment ($ million constant 2022/2023)

Expenditure category	2025/26 ($m)	2026/27 ($m)	2027/28 ($m)	2028/29 ($m)	2029/30 ($m)	RCP4 total ($m)
Capex	-	25.2	27.3	27.1	25.1	104.7
Opex	-	11.7	13.3	15.3	15.8	56.0
Total	**-**	**37.0**	**40.6**	**42.3**	**40.8**	**160.7**

4.8 Transpower can apply from year 1 to year 4 of RCP4, for an adjustment that will increase expenditure and the revenue it can recover, for the remainder of the period. We have set out the deliverability model mechanism in our IPP determination.[39]

4.9 Transpower provided us with scenario information for different levels of base capex it could deliver and opex it would incur for different FTE attainment levels against its FTE targets. We have used Transpower's FTE scenario information in our modelling.

4.10 We have based our initial deliverability adjustment, which will apply in year 1 of RCP4, using Transpower's most up to date FTE attainment levels. Transpower will be able to update its most recent FTE attainment, against the target, as part of its draft decision submission.

4.11 We recognise that restricting Transpower's FTE's ahead of capex delivery may hinder the delivery of that capex, and that capex delivery will lag the FTEs needed to plan, design, and deliver the work. For this reason, the deliverability adjustment model allows for a higher level of FTE related opex a year ahead of the delivered capex. We have detailed this in our deliverability adjustment model which is published as part of this draft decision.

Considerations

4.12 An expenditure adjustment plus reopener would put an upper limit on any efficiency incentive gain Transpower could make from under-delivery.

4.13 Consumers would not be exposed to the delivery risk upfront as the expenditure only becomes available to Transpower once it can show evidence it has the staff to deliver the work.

[39] Commerce Commission, [DRAFT] Transpower Individual Price-Quality Path Determination 2025, Schedule EA.

4.14 We have taken this approach after evaluating Transpower's expenditure which we find to be prudent and efficient. The reopener process would therefore be automatic without further scrutiny of expenditure. Transpower would be required to demonstrate that it has achieved a particular level of FTE attainment that unlocks the proportionate level of expenditure based on its estimates. This presents a low compliance burden.

4.15 By coupling an adjustment with a reopener, this option maintains the incentive for Transpower to deliver the full RCP4 work program if it can achieve higher levels of workforce uplift.

4.16 The option also maintains incentives for Transpower to find efficiencies. The normal capex and opex incentives will apply to the expenditure unlocked.

4.17 The maximum expenditure available using the reopener is capped at amount set out in Table 4.1.

4.18 This option puts the responsibility on Transpower to provide evidence it has the workforce available to deliver the work and unlock the contingent expenditure.

Transparency tool – Annual delivery report

4.19 Our third draft decision is to introduce a new requirement for Transpower to produce a public ADR using our information disclosure (**ID**) framework.

4.20 The ADR will detail the costs and volumes of specific delivered outputs or interventions compared to the RCP4 allowance and explanations for any differences. An outline of the proposed ADR content can be found in our draft Transpower IPP determination.[40]

4.21 We consider the proposed disclosure requirements are set at an appropriate level of aggregation which will not present an onerous compliance burden for Transpower over and above what it appears to be internally reporting on.

4.22 The information on replacement volumes and intervention volumes, both forecast and delivered in each year of RCP4, will allow us to assess what is likely to be an under-delivery and what is a true efficiency gain due to replacement deferral. This will be information that stakeholders can access to understand whether Transpower is delivering on its planned work programme.

4.23 This information could also enable us to better assess the deliverability of future work programmes and encourage Transpower to refine its expenditure forecasting function for better accuracy in RCP5 and beyond.

[40] Commerce Commission, [DRAFT] Transpower Individual Price-quality Path determination 2025, section 30.

4.24 The benefits of this option include the simplicity of implementation of delivery reporting and the transparency over Transpower's delivery of its work programme for stakeholders. Some stakeholders have already indicated support for a reporting requirement, including Transpower, as we heard through stakeholder submissions to our Issues paper.[41,42]

4.25 We seek your views on the scope we have proposed for the ADR.

ADR examples

4.26 Both Powerco and Aurora EDBs applied for customised price-quality paths (**CPPs**) in the past when significant and larger scale increases in their work programmes were required than what they had delivered previously. [43,44]

4.27 The increased expenditure was coupled with an obligation to provide an ADR to communicate progress on delivery to the EDB's customers.

4.28 The ADRs detail progress on delivering the CPP work programme including volumetric measures and give reasons for any areas where the EDBs have not delivered as expected.[45]

Considerations

4.29 The level of reporting we propose is intended to be practical, avoiding an unreasonable compliance burden for Transpower.

4.30 The information will likely be of interest to parties wishing to understand the extent to which Transpower is delivering on its proposal and allow interested persons to determine whether the purpose of Part 4 is being met.

4.31 We consider that further measures are necessary to encourage Transpower to deliver its full work programme and limit the profit that can be obtained from non-delivery which is why we have packaged this decision with the expenditure adjustment and reopener discussed above.

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41 MEUG's submission on Issues paper, p 3 para 15.
42 Transpower's submission on Issues paper, p 8 para 37.
43 Commerce Commission "Powerco's customised price-quality path – final decision" (28 March 2018). An example report can be found here.
44 Commerce Commission "Aurora Energy Limited Additional Information Disclosure Requirements – Final reasons paper" (31 August 2021). An example report can be found here.
45 Commerce Commission "Aurora Energy Limited Additional Information Disclosure Requirements – Final reasons paper" (31 August 2021), table 5.2.

Alternatives considered

Uncertainty Mechanism – "Use-it-or-lose-it" (UIOLI) allowance

4.32 Transpower has proposed we introduce what it terms 'uncertainty mechanisms' for resilience and enabling customer electrification, as capped (ex-ante) UIOLI funds to address project timing, scope, and cost uncertainties.[46]

4.33 In submissions to our Issues paper, Vector and Transpower expressed support for this type of allowance.[47,48] MEUG was open to further discussions as to how it might work.[49]

4.34 Taking a UIOLI approach to address deliverability, a proportion of revenue could be approved upfront and made available so that Transpower would access funding at its discretion.

Considerations

4.35 We consider that an ex-ante delivery risk adjustment, and a reopener tied to recruitment progress, is a better option to address delivery risk than a UIOLI allowance. The delivery risk adjustment approach we have taken is targeted to address the specific workforce issue presented, and will maintain the incentives for Transpower to invest efficiently, provide transparency and encourage Transpower to evolve its workforce planning. We consider this approach better promotes the part 4 purpose.

4.36 A UIOLI allowance would have a similar benefit to our proposed reopener in mitigating consumers' exposure to the upfront costs of under-delivery. However, we consider that a UIOLI allowance is not the appropriate mechanism for addressing this issue as it may dilute Transpower's incentives to improve efficiency given that incentives do not apply to UIOLI allowances.

4.37 A UIOLI allowance may be appropriate where the outputs can be clearly identified and ring-fenced. However, in this instance we are concerned about Transpower's ability to recruit the workforce needed to deliver largely volumetric programmes – which makes ring-fencing specific expenditure difficult. To maintain incentives on Transpower to invest efficiently, we would need to allocate outputs either to the UIOLI allowance or to base capex and to monitor how the fund was ultimately spent. Not doing so would effectively dilute the incentives that Transpower is subject to.

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[46] A use-it-or-lose-it allowance is a targeted allowance that is ring-fenced for a specified type of activity and is not subject to expenditure incentives. If it is not spent, it is not cost-recovered from consumers.

[47] Vector's submission on Issues paper, p 2 para 12.

[48] Transpower's submission on Issues paper, p 8 para 37.

[49] MEUG's cross-submission on Issues paper, p 2 para 10.