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

Final Decision Attachment E - Deliverability expenditure

Date of publication: 29 August 2024

Contents

Chapter 1 Introduction

Purpose

1.1 This document is part of the package of final decision documents on Transpower's individual price path (**IPP**) for the fourth regulatory period starting on 1 April 2025 (**RCP4**).[1]

1.2 This is one of five attachments to our main decision paper. The main 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 decisions relating to deliverability of the IPP reset, and to explain our reasons for the decisions.

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 Verifier's view on RCP4 deliverability;

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

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

Background to our 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 Input Methodology (**IM**), one of which relates to the overall deliverability of the proposed base capex during the regulatory period.[2]

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[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 – Final Decision (29 August 2024), p 22.

[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).

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 We noted in our EDB Default price-quality path (**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]

1.8 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.

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 key elements of the deliverability issue facing Transpower in RCP4, the Verifier's assessment, stakeholder submissions and our analysis of the delivery risk.
Chapter 3	Our final decision	Details our final decision to mitigate delivery risk and the underlying rationale.

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**).

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 describe the problem and summarise the Verifier's assessment of the risk. We present the key stakeholder feedback to our draft decisions, including Transpower's view of delivery risk and the mitigation measures it has put in place to manage this risk. We then present the analysis of delivery risk we have undertaken, which underpins our final decisions presented in Chapter 3.

Defining the delivery risk

2.2 Transpower's proposed expanded work programme for RCP4 will require a large uplift in staffing. It will be recruiting at a time of strong competition for skilled resources from across the electricity sector and from other infrastructure sectors as they decarbonise, and from overseas jurisdictions that may offer more attractive conditions.

2.3 We are concerned Transpower may not achieve the uplift in full-time equivalent staff (**FTE**) numbers required to deliver the entire work plan over the five-year RCP4 period.

2.4 As we consider the majority of Transpower's expenditure is prudent and efficient, our concern is focussed on Transpower's ability to deliver the work rather than the nature of the expenditure.

2.5 We have distilled the problem of RCP4 programme under-delivery to the following:

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

2.5.2 customers will pay high upfront costs now, at a time when 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

2.5.3 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.

The Verifier's view of RCP4 deliverability risk

2.6 The Verifier carried out a comprehensive review of Transpower's ability to deliver the RCP4 work programme,[6] and considered criteria in its review that included:

2.6.1 historical delivery performance and internal workforce capability;

2.6.2 ability to contract the necessary services;

2.6.3 procurement of necessary materials and equipment; and

2.6.4 programme delivery capability.

Historical delivery performance and internal workforce capability

2.7 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.

2.8 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 High Voltage Direct Current (HVDC) Pole 3 upgrade, as well as its ongoing asset renewals programme.

2.9 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.[7]

2.10 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 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.

2.11 The Verifier also assessed Transpower's historical staff turnover.[8] 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 12.4% in 2020/2021 and 15.5% in 2021/2022.

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[6] GHD Advisory and Castalia, Independent verification report – RCP4 base expenditure and service measures 2025-2030 proposal, Transpower New Zealand Limited (21 September 2024) (**IV Report**).

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

[8] GHD Advisory and Castalia, IV Report, p 86.

2.12 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.

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

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

2.15 The Verifier described the review processes Transpower undertook in developing the frameworks underpinning its draft proposal.[9] 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."

2.16 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 (**RFI**).

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9 GHD Advisory and Castalia, IV Report, p 11.

Ability to contract the necessary services

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

2.18 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 volumes are more consistent and coordinated.

2.19 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.

2.20 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

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

> 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.[10]

2.22 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".[11]

2.23 The Verifier concluded 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.

[10] GHD Advisory and Castalia, IV Report, p 90 para 3.
[11] GHD Advisory and Castalia, IV Report, p 94 section 7.6.4.

Programme delivery capability

2.24 The Verifier reviewed Transpower's RCP4 programme delivery capability, and the planning and management of transmission asset outages, to manage that delivery.[12]

2.25 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.

2.26 The Verifier concluded 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."[13]

2.27 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, level out the work programme, and consider customer issues and constraints.[14]

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

Transpower's view of RCP4 delivery risk

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

> 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.[15]

2.30 In addition to the 200 additional 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.

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[12] GHD Advisory and Castalia, IV Report, p 80 section 7.2.

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

[14] GHD Advisory and Castalia, IV Report, p 95 section 7.8.1.

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

2.31 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. Transpower will be competing with distribution and generation businesses and overseas providers for skilled workers, as different sectors and jurisdictions accelerate their decarbonisation plans.

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

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

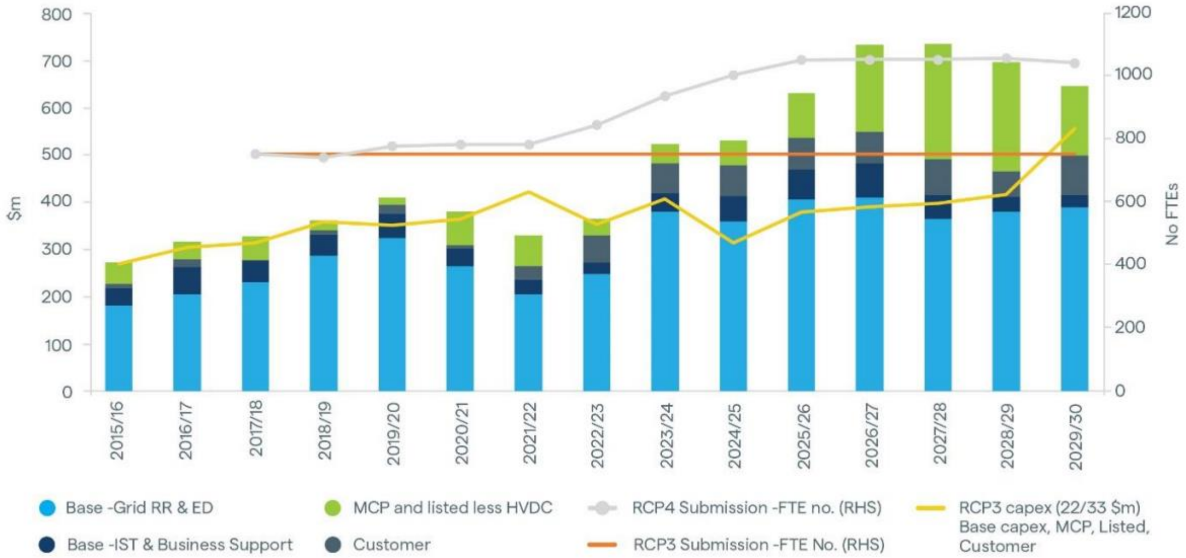
2.32.2 improve supply chain management to minimise asset delivery risk.

How Transpower intends to address FTE uplift need

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

2.34 As demonstrated in figure 2.1 below, Transpower has been increasing its FTE numbers since 2021/2022 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.

Figure 2.1 Transpower's projected workforce growth.[16]



16 Transpower RCP4 proposal, p 63 figure 18.

2.35 In its RCP4 proposal, Transpower discussed the workforce planning initiatives it has implemented, and plans to implement, to support the remaining RCP3 and forecast RCP4 programme delivery.[17]

2.36 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

2.37 In its proposal, Transpower anticipated deliverability issues related to asset procurement lead times and supply chain delays.[18]

2.38 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.

2.39 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.

2.40 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.

Summary of our assessment

2.41 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.

2.42 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.

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[17] Transpower RCP4 proposal, p 63.

[18] Transpower RCP4 proposal, p 13 para 2.1.2.

2.43 Following our review of the Verifier report and Transpower's proposal, and taking into account views raised in submissions to our issues paper, we concluded we should focus on Transpower's workforce related delivery risk. We are satisfied 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.

2.44 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.

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

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

2.45.2 evidence 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

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

2.46 We drew on this information, and feedback from stakeholders in reaching our final decisions regarding deliverability.

Materiality of delivery risk

2.47 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).

2.48 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 Transpower is forecasting will be spent and what it forecasts will be used to provide electricity transmission services.

2.49 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 Transpower will recover from its customers and ultimately consumers. Over time, consumers will end up only paying for assets used by Transpower to provide services.

2.50 However, the incentive mechanism, that 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.

2.51 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.

2.52 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 staff who play an important role in the early stages of the delivered work programme, for example in business support, programme planning and design.

2.53 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 2.1 below.

2.54 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.

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

Table 2.1 Estimated base capex efficiency payments for different levels of under-delivery ($ million nominal)

Scenario	Average annual (2026-30)	Total[19]
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

Historical evidence of Transpower's under-delivery

2.56 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.[20]

2.57 In its 2018 Grid Outputs Report, which preceded the RCP3 submission, Transpower reported 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.[21]

2.58 In its RCP3 proposal, Transpower identified a number of deliverability risks associated with its forecast uplift in expenditure (ie, 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".[22]

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

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

[21] Transpower New Zealand Limited, "Grid Outputs Report 2018", p 32.

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

2.59 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.[23]

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

2.60.1 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.[24]

2.60.2 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 regulatory 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.[25]

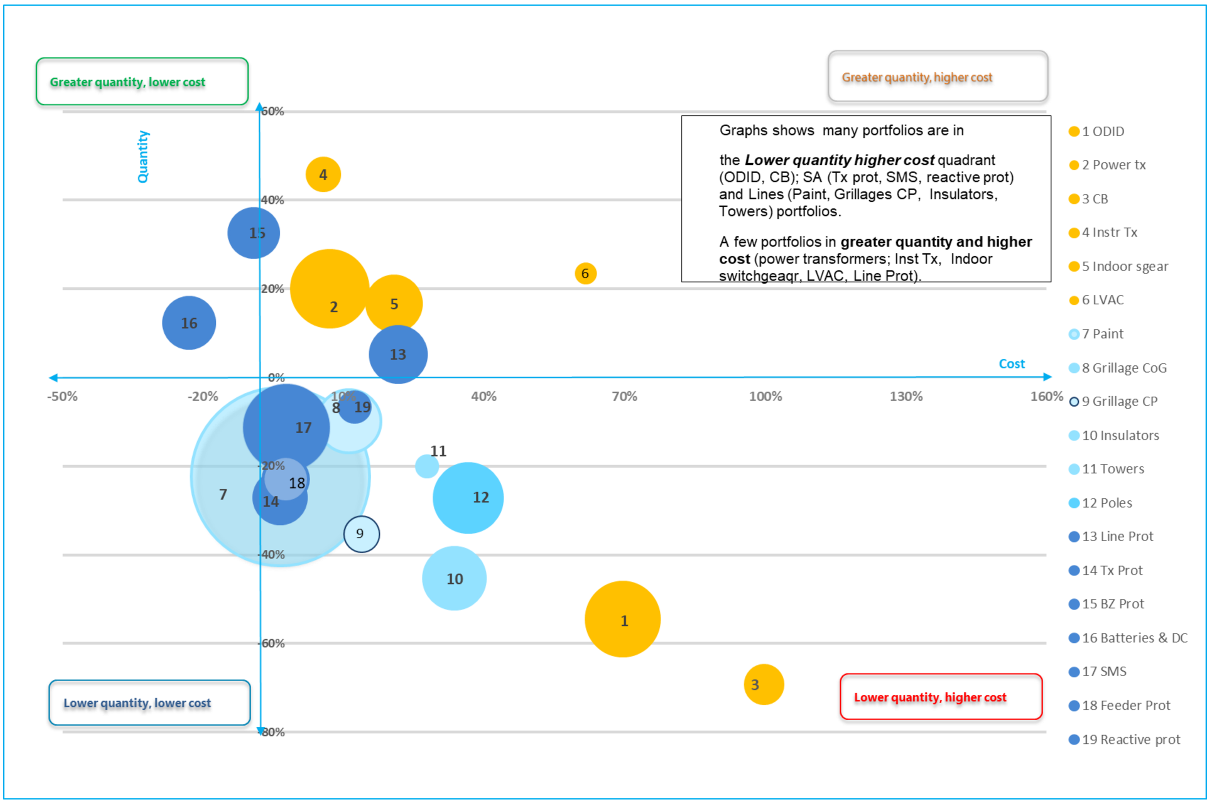
2.61 Figure 2.2 illustrates the variance in both cost and volume of the main standard asset deliverables against the RCP3 allowance. This includes both deliverables already delivered to that date, and those projected to be delivered by the end of RCP3.

2.62 Figure 2.2 shows that most deliverables are in the lower right quadrant, lower quantity and higher cost. The current work rate indicates a significant volume of the proposed RCP3 work programme will be deferred into RCP4.

2.63 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.

[23] 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.
[24] GHD Advisory and Castalia, IV Report, p 198.
[25] GHD Advisory and Castalia, IV Report, p 252.

Figure 2.2 Cost and volume variance of main standard deliverables vs RCP3[26]



2.64 Transpower explains the slower delivery is due to impacts from COVID-19 lockdown restrictions, 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.

2.65 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.

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

Chapter 3 Our final decision

3.1 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.

3.2 We consider 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.

3.3 In this attachment we describe our final decision and the underlying rationale we applied. We also discuss how we have modified our deliverability adjustment for year one of RCP4 (2025/2026) since our draft decision, and our plans for a technical consultation on the deliverability reopener in the IPP determination to address an identified full-time equivalent (**FTE**) employee update timing issue.

Final decision for addressing delivery risk

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

3.4.1 apply an upfront reduction to Transpower's capex and opex of $110.1 million and $61.7 million respectively (expenditure adjustment);

3.4.2 introduce a new reopener for Transpower to apply for additional expenditure if it can show it has reached certain staffing milestones (a deliverability reopener)[27]; and

3.4.3 introduce an annual delivery report (**ADR**).

3.5 We discuss each of these interventions in more detail in the following sections.

Expenditure adjustment with deliverability reopener

3.6 Our final decision is to apply an expenditure adjustment to Transpower's allowance for RCP4 to account for deliverability. The adjustment amounts are given in Table 3.1.

3.7 This is coupled with our second decision to introduce a new deliverability reopener called a "delivery risk adjustment" through which Transpower may apply for the contingent expenditure if it can show it has achieved higher levels of workforce uplift (FTEs). The contingent amounts are given in Table 3.2.

[27] The maximum additional expenditure Transpower can apply for is capped. Further detail on the amounts can be found in Transpower's IPP.

3.8 The deliverability expenditure adjustment has been 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.[28]

3.9 As part of our review of the RCP4 proposal 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 used Transpower's FTE scenario information as the basis for the deliverability reopener in our modelling.[29]

Transpower 16 August 2024 additional information

3.10 In our draft decision we based our proposed deliverability expenditure adjustment on Transpower's most up to date FTE attainment levels (as of January 2024).

3.11 On 16 August 2024, Transpower provided us with an update on its most recent FTE attainment levels on 30 June 2024 (the end of the 2023/2024 Transpower disclosure year).

3.12 This updated information indicates that Transpower was close to a 90% FTE attainment level (931 FTEs) against the year-on-year target of 936 FTEs. This is compared with our draft decision, which modelled Transpower on a trajectory to attain 50% of its target year-on-year FTEs.

3.13 In our final decision we have incorporated Transpower's FTE update into our deliverability reopener modelling and as a result, have amended the RCP4 year one deliverability expenditure adjustment. Table 3.1 sets out the expenditure adjustments we have made for our final decision.

Table 3.1 Adjustments (reductions) to Transpower's expenditure allowances to mitigate delivery risk ($ million constant 2022/2023)[30]

Expenditure category	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030	RCP4 total
Capex	-1.4	-26.4	-28.3	-28.0	-26.0	-110.1
Opex	-2.3	-13.8	-14.7	-16.4	-14.6	-61.7
Total	**-3.7**	**-40.1**	**-42.9**	**-44.4**	**-40.6**	**-171.8**

[28] Commerce Commission "RCP4 Deliverability model" (29 August 2024).

[29] Transpower provided us with capex and opex information for 50%, 75%, 90% and 100% FTE uplift scenarios against year-on-year targets.

[30] Note that the deliverability expenditure adjustment amounts Transpower can apply for are slightly higher than in our draft decision between 2026/2027 and 2029/2030. This is because we have concluded more expenditure is prudent and efficient, which expands the deliverability reopener range.

3.14 In our draft decision we set the 2025/2026 capex deliverability expenditure adjustment to $6.5 million and the opex deliverability expenditure adjustment to $13.0 million. Following the Transpower FTE update information these adjustments are now $1.4 million and $2.3 million for capex and opex respectively.

The deliverability reopener

3.15 Table 3.2 sets out the contingent expenditure amounts that we set in the draft decision and have retained for this final decision (deliverability reopener). These contingent amounts apply from years 2-5 of RCP4 and the first opportunity for Transpower to apply for additional expenditure will be 31 August 2025 for a revenue adjustment in the 2026/2027 year of RCP4.

Table 3.2 Expenditure contingent on Transpower's workforce recruitment ($ million constant 2022/2023)

Expenditure category	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030	RCP4 total[31]
Capex	-	26.4	28.3	28.0	26.0	108.7
Opex	-	13.8	14.7	16.4	14.6	59.4
Total	**-**	**40.1**	**42.9**	**44.4**	**40.6**	**168.0**

3.16 In our draft decision, we proposed that Transpower could apply from year one (before 31 August 2025) to year four (before 31 August 2028) of RCP4,[32] for a reopener that will increase expenditure and the revenue it can recover for the remainder of the period. We set out the deliverability reopener mechanism in our RCP4 IPP draft determination.[33]

3.17 Following Transpower's 16 August 2024 updated information we identified that the deliverability reopener we published in the draft decision will need to be modified. This is because the FTE attainment levels for a disclosure year ending 30 June will be more than a year behind the revenue need.

3.18 As a consequence, and following this final decision, we will be carrying out a short technical consultation on a revised deliverability reopener modelling mechanism in the IPP Determination.

[31] Note that some numbers in this table may not sum to the totals displayed due to rounding.
[32] Transpower can apply in years 1 to 4 to unlock the expenditure in years 2 to 5.
[33] Commerce Commission, Transpower Individual Price-Quality Path Determination 2025, Schedule EA.

3.19 The deliverability expenditure adjustments set out in Table 3.1 will be retained for the final decision and are not subject to the technical consultation. The base capex and opex allowances will only be amended for the purposes of delivery risk if the Commission approves a deliverability reopener during RCP4.

Other deliverability reopener model features

3.20 In our draft decision we recognised that restricting Transpower's expenditure on the basis of 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.

3.21 For this reason, the deliverability reopener model will allow for a higher level of FTE related opex a year ahead of the delivered capex.

3.22 Transpower will 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.

3.23 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.

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

3.25 The option also maintains incentives for Transpower to find efficiencies. The normal capex and opex incentives will apply to the expenditure unlocked. The maximum expenditure available using the reopener is capped at the amount set out in Table 3.2.

3.26 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

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

3.28 We consider it is appropriate to include the ADR in the IPP rather than the ID determination as it may only be necessary for this regulatory period. This is consistent with other ID matters that have effect over a single regulatory period.

3.29 The ADR will have a limited scope - detailing 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.[34]

3.30 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.

3.31 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 stakeholders can access to understand whether Transpower is delivering on its planned work programme.

3.32 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.

3.33 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 and draft decisions.[35, 36, 37, 38]

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34 Commerce Commission, Transpower Individual Price-quality Path Determination 2025, s 30.

35 Major Electricity Users' Group (MEUG) "Submission on RCP4 issues paper" (21 February 2024) (**MEUG's submission on issues paper**), para 15.

36 Transpower "Submission on RCP4 Issues paper" (21 February 2024) (**Transpower's submission on issues paper**), para 37.

37 Major Electricity Users' Group (MEUG) "Submission on RCP4 draft decision" (26 June 2024) (**MEUG's submission on draft decision**), para 12.

38 Consumer Advisory Council (CAC) "Submission on RCP4 draft decision" (26 June 2024) (**CAC's submission on Draft Decision**), para 23.

Stakeholder views

3.34 In submissions to our issues paper, some stakeholders shared our concerns about delivery risk and the impact on electricity consumers (MEUG, CAC, NZAS). [39, 40, 41] MEUG supported our draft decision to introduce delivery reporting requirements.[42] Others considered that Transpower had demonstrated its ability to meet workforce demands in the past and did not support the Commission's draft decision to adjust Transpower's expenditure allowances (ENA, Vector, Transpower).[43, 44, 45, 46]

3.35 Vector and Transpower proposed in their issues paper submissions that we make use of uncertainty mechanisms such as use-it-or-lose-it (**UIOLI**) allowances to address under-delivery concerns as any unspent allowances would not be cost recovered from consumers.

3.36 Transpower also supported additional reporting requirements as an alternative. [47]

3.37 In its submission to our draft decision Vector reiterated its support for UIOLI allowances to address delivery risk.[48]

3.38 In other responses to our draft decision, MEUG was supportive of the deliverability reopener at a high level but questioned the level of public consultation we would implement, arguing that transparency of the process was important for stakeholders.[49]

3.39 The Consumer Advocacy Council (**CAC**) proposed we consider consequences for non-delivery:

> We recommend the commission considers how information provided by Transpower in annual reports will be reviewed and explain what measures will be taken if planned work is significantly delayed or not able to be progressed. These measures should include reducing the revenue that can be recovered from consumers.[50]

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39 MEUG's submission on Issues paper, para 14.

40 Consumer Advocacy Council "Submission on RCP4 Issues paper" (21 February 2024) (**CAC's submission** on **issues paper**), para 12.

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

42 MEUG's submission on issues paper, para 15.

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

44 ENA's submission on issues paper, para 2.

45 Vector "submission on RCP4 draft decision" (26 June 2024) **Vector's submission on draft decision**, para 13.

46 Transpower's submission on issues paper, para 13.

47 Transpower's submission on Issues paper, para 37.

48 Vector's submission on draft decision,paras 12-13.

49 MEUG's submission on draft decision, para 11.

50 CAC's submission on draft decision, para 25.

3.40 MEUG and CAC supported the introduction of an ADR, asking that the report be aimed at stakeholders and subject to independent scrutiny.

> It is important that this report is designed with the reader in mind – it needs to provide a concise and digestible summary for interested stakeholders, while still providing the Commission with the necessary information to monitor Transpower's performance.[51] (MEUG)

> We support the proposed introduction of an annual delivery reporting requirement for Transpower and agree this would help improve the transparency of information about its work programme. However, this information must be subject to independent scrutiny to ensure reporting is robust.[52] (CAC)

3.41 Transpower supported our deliverability expenditure adjustment plus reopener decision, stating that:[53]

> The proposed mechanism will work in combination with additional reporting requirements and the service measures (particularly the asset health measures) to ensure that the Commission can monitor our performance against our proposed deliverables

3.42 Transpower also considered that the mechanism would:

> give stakeholders greater visibility and focus on our delivery achievement.

Our analysis of stakeholder submissions

3.43 In response to MEUG's comments on consultation, we consider that further public consultation is not required when Transpower applies for the deliverability reopener. The additional expenditure has already been scrutinised and found to be prudent and efficient. The public have been consulted on Transpower's proposed revenue requirements through Transpower's and our own consultation processes. The remaining risk being targeted by the mechanism is the recruitment of the necessary staff and we will scrutinise the evidence of staffing uplift Transpower provides to support its application before approval. Given the remaining risk is low, we have designed the deliverability reopener as a proportionately low implementation cost mechanism.

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[51] MEUG's submission on draft decision, para 12.

[52] CAC's submission on draft decisions, para 24.

[53] Transpower "Submission on RCP4 draft decision" (26 June 2024) (**Transpower's submission on draft decision**), para 75-76.

3.44 In response to the CAC's comments that there should be consequences for non-delivery, we consider that the risk of non-delivery is reduced by the deliverability expenditure adjustment as it is an upfront protection for consumers. The expenditure is not unlocked unless Transpower gives evidence it has the workforce required to deliver the work. Beyond this adjustment, other measures already exist within our regime to address an underspend – namely the washup at the end of the period and quality standards.

3.45 The ADR introduced this regulatory period will give us important information on the accuracy of Transpower's forecasting versus actual delivery. Should there be examples of significant under-delivery this period, this report will help form the evidential basis for any measures we develop to address the risk of non-delivery in RCP5.

3.46 To the CAC's point regarding independent scrutiny for the ADR, we agree that the numbers Transpower report should be robust. The content of the ADR is fairly straightforward including:

3.46.1 assets planned for the disclosure year (**DY**) (cost and volume);

3.46.2 assets delivered for the DY (cost and volume); and

3.46.3 explanation for any discrepancies between the two.

3.47 If we consider the ADR provided by Transpower is not fit for purpose, we can engage an independent expert at our discretion. For this reason, we do not propose to require an independent assessment of the annual report in the IPP.

3.48 The focus of some submissions suggested that the policy intent of introducing the deliverability expenditure adjustment, reopener and ADR was not clear. For example, MEUG's suggestion the ADR be a concise and digestible summary for all stakeholders suggested they envisioned a report of a similar style to that produced by Aurora and Powerco as part of their customised price-path, aimed at general stakeholders. The CAC's submission that non-delivery be subject to independent scrutiny with consequences for delayed or deferred work is at odds with the up-front nature of the expenditure adjustment.

3.49 To better explain our intent, we include a description of the objective below to clarify the deliverability measures and how they address different aspects of delivery risk.

Objective of the deliverability expenditure adjustment and reopener

3.50 This measure involves an upfront decrease in Transpower's expenditure allowance, which is related to the level of staffing uplift Transpower had achieved in its latest workforce update.

3.51 The upfront expenditure adjustment is coupled with a streamlined reopener termed the "delivery risk adjustment", which Transpower can apply for in year one to year four of the period to unlock further expenditure in the following years (year two to year five). Note that in the first year of RCP4 we have made capex and opex deliverability adjustments of $1.4 million and $2.3 million respectively. The first-year deliverability expenditure adjustments are not subject to the deliverability reopener.[54]

3.52 This upfront adjustment addresses the risk that we approve Transpower's full proposed revenue but that it is not able to recruit the staff required to deliver the work programme.

3.53 The expenditure we have reviewed as prudent and efficient in Table 3.2, is the maximum amount Transpower can apply for, if it can demonstrate it has the workforce numbers to deliver the work. This evidence must be accompanied by a CEO certification.

3.54 We have decided not to introduce an additional consultation process into the reopener. This is because we have already reviewed the expenditure during this reset and found it to be prudent and efficient, provided Transpower has sufficient workforce to deliver the programme. Transpower can apply for the deliverability reopener if it can demonstrate it has achieved a given level of staffing uplift. If Transpower provides sufficient evidence, the Commission will give notice the reopener has been approved.

3.55 Further information on the process can be found in the reopener provisions of the IM amendment paper accompanying our draft decisions.[55]

3.56 Information on the deliverability expenditure adjustment figures can be found in Table 3.2 and Schedule EA of Transpower's IPP determination accompanying this document.[56]

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[54] The full table of (downwards) adjustments to expenditure allowances to mitigate delivery risk can be found in the final decision paper Table X3. The deliverability model can be found here.

[55] Attachment C of the IM amendment paper.

[56] Schedule EA of the RCP4 IPP Determination.

Objective of the annual delivery report

3.57 The purpose of the ADR is to improve transparency of Transpower's delivery of its RCP4 work programme.

3.58 At the end of each disclosure year of RCP4, Transpower must report for each asset class specified in the IPP determination, the volume of assets it planned to replace, refurbish or defer that year versus the volume actually replaced, refurbished or deferred by the end of that year and the associated costs. Transpower must also provide an explanation for any variance between the planned versus actual delivered costs and volumes.

3.59 This is a different format to the ADRs that have been required for Powerco and Aurora when they were transitioned from the default price path for electricity distribution businesses to a customised price path. [57]

3.60 Transpower's ADR can be considered as a measure that functions over the longer-term, providing us with a valuable evidence base to better understand the extent of Transpower's works delivery.

3.61 Further information on the ADR, including the asset classes reported can be found in the compliance and information reporting section of the IPP determination accompanying this document.[58]

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

3.63 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.

3.64 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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[57] Examples can be found on our website and on Powerco's website.

[58] IPP Determination information reporting section.

Alternatives considered

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

3.65 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.[59]

3.66 In submissions to our issues paper, Vector and Transpower expressed support for this type of allowance.[60, 61] MEUG was open to further discussions as to how it might work.[62]

3.67 In its submission to our draft decisions, Vector reiterated its support for a UIOLI mechanism as a good way to manage deliverability risk.[63]

3.68 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

3.69 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.

3.70 We consider that an ex-ante deliverability expenditure adjustment, and a reopener tied to recruitment progress, is a better option to address delivery risk than a UIOLI allowance. The deliverability expenditure 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.

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[59] 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.

[60] Vector "submission on RCP4 issues paper" (21 February 2024) **Vector's submission on issues paper**, para 12.

[61] Transpower's submission on issues paper, para 37.

[62] MEUG's cross-submission on issues paper, para 10.

[63] Vector's submission on draft decisions, para 7.

3.71 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. Our final decision maintains appropriate incentives for Transpower to innovate and invest.

3.72 UIOLI allowances are also ex post which does not allow us any scrutiny of what Transpower ultimately spend the allowance on.

3.73 Our decision to introduce an expenditure adjustment in conjunction with a deliverability reopener effectively withholds expenditure until Transpower demonstrates it has the workforce to deliver, promoting the Part 4 purpose in s 52A more effectively.

Changes to the IPP determination after stakeholder consultation

3.74 We have made an amendment to the draft IPP determination after feedback from stakeholders.

3.75 We have clarified the Transpower's reporting requirement to make clear the intention that it report for the same disclosure year:

3.75.1 What assets it proposed to commission; and

3.75.2 The assets actually commissioned by the end of that year.