

ISBN no. 978-1-869455-85-9 Project no. 14.09/16274

Public version

Attachment D: Capex IM incentive framework

Transpower capex input methodology review - Proposed focus areas for the capex IM review

Date of publication: 15 May 2017

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PURPOSE

1. The purpose of this attachment is to describe the Transpower capital expenditure input methodology (capex IM) incentive framework.

CAPEX IM INCENTIVE FRAMEWORK

- 2. The suite of incentives is intended to incentivise Transpower to improve efficiency, deliver outputs within approved expenditure, and improve the outputs themselves. It is designed to work hand-in-hand with the Transpower Individual Price-Quality Path Determination (IPP Determination) and the other input methodologies (IMs) that apply to Transpower.¹
- 3. Figure D1 shows how the incentive mechanisms in the capex IM and the Transpower IMs fit together for the current 2015-2020 regulatory period (**RCP2**).²

See: Commerce Commission, "Transpower Individual Price-Quality Path Determination 2015 [2014] NZCC 35 (consolidated as of 4 November 2016)"; Commerce Commission, "Transpower Input Methodologies Determination 2010 [2012] NZCC 17 (consolidated as of 28 February 2017)".

Refer to: Commerce Commission "Transpower Capital Expenditure Input Methodology – Reasons Paper" (31 January 2012), section 2.2.

Expenditure Adjustment Grid Base Capex Incentive A symmetric incentive that applies to underspend Rate applies and overspend across the base capex allowance Base Capex and Outputs Actual output against Grid Output Adjustment Target, Cap, Collar Revenue Adjustment and incentive rate for A symmetric incentive for performance over/under Calculated annually each revenue-linked output targets for each agreed output measure measure **Policies and Processes** Base Capex Incentive Adjustment Rate applies An asymmetric incentive (penalty only) that applies where commissioned projects were not fully subject to Transpower's internal policies and processes Revenue Adjustment **Efficiency Adjustment** Assessed at end of RCP only if Transpower applies for this adjustment An asymmetric (reward only) incentive, applied at the end of each RCP, to the portfolio of Major capex. Major Capex Incentive Rate applies Project Output Adjustment Major Capex A project-specific asymmetric (penalty only) incentive where agreed output targets are not met Revenue Adjustment Calculated when project is Overspend Adjustment completed Transpower bears 100% of An asymmetric (penalty only) incentive. Transpower unapproved capex costs bears the cost of any unapproved capex Sunk Costs Adjustment Revenue Adjustment Transpower will recover Calculated when, and if, Transpower applies for adjustment costs approved by the A project-specific asymmetric adjustment that allows Commission Transpower to recover justifiable costs Incremental rolling incentive OPEX Revenue Adjustment scheme Annual adjustment made as a recoverable cost IRIS becomes symmetrical in RCP2

Figure D1: Overview of Transpower capex and opex incentive mechanisms in RCP2

BASE CAPEX INCENTIVE AND OUTPUT FRAMEWORK

- 4. Under a price/revenue cap regime, capex incentives exist regardless of whether a more specific incentive regime is implemented. We considered it appropriate to amend the 'natural' incentive properties so that each incentive is explicit and targeted at promoting specific behaviours and outcomes.
- 5. Three annual incentive mechanisms apply to base capex:
 - 5.1 annual base capex expenditure adjustment;
 - 5.2 base capex annual policies and processes adjustment; and
 - 5.3 annual grid output adjustment.

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Annual base capex expenditure adjustment

- 6. The base capex expenditure adjustment provides a symmetric incentive (ie, it applies to both overspend and underspend of approved capex) across the base capex allowance within each disclosure year. The purpose of the incentive is to encourage Transpower to pursue project efficiency savings (ie, more economically deliver planned project outputs).
- 7. This revenue adjustment provides an incentive that recalibrates the strength of the 'natural incentive' by allowing Transpower to retain part of any savings or require it to bear part of any cost increases relative to the base capex allowance.
- 8. The base capex incentive rate that applies to this adjustment is the same for underspends and overspends. This is because we considered it desirable for the incremental incentive strength to be consistent regardless of whether Transpower over-spends or under-spends the base capex allowance. This avoids creating an incentive for Transpower to over- or under-capitalise.
- 9. The base capex incentive rate for RCP2 is currently 33% (ie, Transpower retains 33% of any underspend or bears 33% of any overspend). We will consult on this rate prior to making any IPP determination for the 2020-2025 regulatory period (**RCP3**).
- 10. The base capex incentive rate is also approximately the same as for the incremental rolling incentive scheme (IRIS) incentive rate for opex. This ensures that Transpower would be indifferent to whether it spent operating expenditure or capital expenditure on a project. Transpower should select the lowest lifetime cost, rather than making opex versus capex trade-off decisions based on the nature of regulatory mechanisms.

Base capex annual policies and process adjustment

- 11. This is an asymmetric penalty that makes Transpower bear a portion of cost overruns (determined by the base capex incentive rate) for base capex assets that were not fully subjected to Transpower's policies and processes, or do not (in all material respects) meet the requirement to undertake a cost-benefit analysis and consultation consistent with major capex. This incentive adjustment is additional to any adjustment made under the base capex expenditure adjustment.
- 12. The reason for this adjustment is to ensure that a thorough and rigorous process is applied by Transpower when testing the economics and engineering solutions of any base capex.

Commerce Commission, "Setting Transpower's individual price-quality path for 2015 – 2020 [2014] NZCC 23" (29 August 2014), Para 3.17.

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Annual grid output adjustment

- 13. This adjustment is designed to provide an incentive to Transpower to deliver the agreed levels of outputs. It was considered necessary to reduce incentives for underinvestment that could result from the other incentive mechanisms used. It is a symmetric incentive that applies penalties for performance that does not achieve the targets set, and rewards performance for outperforming the targets.
- 14. There are four types of grid output adjustments:
 - 14.1 Grid performance;
 - 14.2 Asset performance;
 - 14.3 Asset health; and
 - 14.4 Asset capability.
- 15. Each revenue-linked grid output measure has a target, incentive rate, cap and collar. The mix of grid output measures that Transpower proposed for RCP2 was developed to ensure a balanced overview of performance is provided. This includes the performance of individual components of the grid, as well as of the grid as a whole. The asset health and asset capability outputs are measures of the impact of base capex expenditure on the average condition of grid assets and on grid capacity respectively.

MAJOR CAPEX INCENTIVE AND OUTPUT FRAMEWORK

- 16. Four incentive mechanisms apply to major capex projects:
 - one periodic incentive that applies for each regulatory control period (major capex efficiency adjustment); and
 - three project-specific incentives (major capex project output adjustment, major capex overspend adjustment, and sunk costs adjustment).

Major capex efficiency adjustment

- 17. The major capex efficiency adjustment is an asymmetric incentive mechanism that rewards Transpower for efficiency gains at the conclusion of a regulatory control period. Only net efficiencies are included in the calculation of the incentive amount. If the Commission decides that no net efficiencies were achieved over the portfolio of major capex projects commissioned during the regulatory control period, the incentive amount is zero.
- 18. The intention of the major capex efficiency adjustment is to provide an incentive to maintain downward pressure on costs within the aggregate amount of the portfolio of approved major capex projects, not just on those costs in excess of the approved level.

Major capex project output adjustment

- 19. The major capex project output adjustment is an asymmetric incentive mechanism that applies a penalty if Transpower does not deliver the agreed outputs for a major capex project. An adjustment is made for each individual major capex project whenever the approved outputs are not delivered. Under the major capex overspend adjustment Transpower then bears 100% of the difference between actual cost and the adjusted major capex allowance (if the actual cost is greater than the adjusted allowance).
- 20. The purpose of this output adjustment incentive is to make Transpower accountable to deliver the outputs that are agreed at the time the capex allowance is approved (or when Transpower subsequently seeks an amendment due to changing circumstances).
- 21. The major capex incentive rate for each regulatory period that applies to this adjustment is set by the Commission prior to the start of the period, and applies for the length of the period. The Commission determines and sets the incentive rate at the same time as we review Transpower's base capex proposal and set the base capex incentive rate.
- 22. For RCP2, we decided that 33% is an appropriate balance of risk and reward.⁴ This incentive rate is applied to the major capex efficiency adjustment and the major capex project output adjustment.

Major capex overspend adjustment

- 23. The overspend adjustment is a penalty calculated at the completion of a project. It applies where costs on a major capex project exceed the level of capex approval for that project.
- 24. The penalty requires Transpower to bear 100% of the costs in excess of the total approved costs for the project. If Transpower underspend the major capex allowance, only the actual capex incurred is entered into the RAB and recovered through future revenues. The difference between the forecast capex in the approval of the major capex allowance and the actual capex is washed-up.⁵
- 25. The major capex overspend adjustment is imposed only if Transpower exceeds the approved major capex allowance for a project and Transpower has not sought and obtained an amendment to the project allowance that reflects the actual costs incurred.

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Commerce Commission, "Setting Transpower's individual price-quality path for 2015 – 2020 [2014] NZCC 23" (29 August 2014), Para 3.17.

See the incentive summary in Attachment A for further details.

26. This approach is intended to encourage Transpower to deliver the outputs at the level of cost that the assessment of Transpower's major capex proposal is based on (or when Transpower subsequently seeks an amendment due to changing circumstances). This is considered to encourage Transpower to discuss alternatives with the Commission at the time Transpower recognises the agreed outputs will not be achieved at the expected cost.

Sunk costs adjustment

- 27. The purpose of the major capex sunk costs adjustment is to provide the correct incentive for Transpower to discontinue a project when it is no longer in customers' interests (ie, is abandoned for good reason), or the project takes longer than expected (ie, passes the approved expiry date). This avoids an incentive to finish a project that is still part way through construction and is identified as no longer needed due to changes in market conditions.
- 28. The incentive to correctly abandon projects is provided by allowing Transpower to recover its costs up to the point that Transpower becomes aware that the project is no longer economical or needed.

INTERACTION OF CAPEX INCENTIVES WITH OPEX INCENTIVE SCHEME

- 29. The Transpower IRIS is an incentive mechanism in the Transpower IMs that applies to opex.⁶
- 30. This incentive mechanism creates a time-constant incentive for Transpower to make opex efficiency savings. The mechanism is symmetric (ie, the proportion retained by Transpower is equal for opex savings and expenditure overruns).
- 31. The retention factor as set in the Transpower IMs is 34%, which means that Transpower retains 34% of any efficiency gains or losses. This means that Transpower has no incentive to reallocate expenditure between capex and opex in order to benefit from a higher retention factor, as both types of expenditure have similar retention factors.
- 32. The IRIS mechanism results in an annual adjustment that is implemented as a recoverable cost (or negative recoverable cost, if applicable), with savings (or cost overruns) being passed on to consumers.
- 33. The Transpower IRIS is currently under review as part of the IM review.⁷

See: Commerce Commission, "Transpower Input Methodologies Determination 2010 [2012] NZCC 17, as amended and consolidated as of 28 February 2017", Part 3, Subpart 6.

⁷ Commerce Commission, "Input methodologies review draft decision – Transpower Incremental Rolling Incentive Scheme" (24 March 2017).

HOW THE CAPEX IM INCENTIVES ARE APPLIED IN THE IPP DETERMINATION

- 34. All of the incentive mechanisms and adjustments in the capex IM flow through to the IPP revenue calculation mechanism.
- 35. The incentive adjustments for major capex and base capex are given effect through accounting entries in the EV account. This maintains the transparency of all adjustments and ensures the impact of those adjustments flow through to the next available forecast maximum allowable revenue (MAR) update. It ensures that the incentive amounts are recovered from or passed back to customers.
- 36. The processes in the IPP determination will be subject to consultation in conjunction with the next full reset of the forecast MAR for RCP3 in 2019 (ie, for the 2020-2025 regulatory period). A matter that we signalled previously when we reset the forecast MAR for the RCP2 regulatory period is whether we should continue to make annual determinations of the forecast MAR and all relevant component inputs, including annual incentive adjustments in the capex IM.⁸

Commerce Commission, "Setting Transpower's individual price-quality path for 2015-2020 [2014] NZCC 23" (29 August 2014), Attachment A: The individual price-quality path evolves over time.

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