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**Public version** 

# Attachment C: How capital expenditure is proposed and approved under the capex IM

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

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# Attachment C: How capital expenditure is proposed and approved under the capex IM

#### **PURPOSE**

- 1. The purpose of this attachment is to briefly describe how the Transpower capital expenditure input methodology (capex IM) works and what it was designed to achieve.<sup>1</sup>
- 2. This attachment also notes how the capex IM interacts with external processes that Transpower must comply with as the system operator.
- 3. The capex IM incentive framework that offers incentives to Transpower to deliver the outcomes of capital expenditure that are valued by consumers is described in Attachment D.

#### **CAPEX IM FRAMEWORK**

#### Core framework

- 4. The capex IM applies to all capex that is intended to enter Transpower's Regulatory Asset Base (**RAB**).
- 5. The capex IM describes the process for capital expenditure to be submitted by Transpower for our approval, the processes that we and Transpower must follow, the information that must be provided to us by Transpower, and the evaluation criteria and approach that we use in considering capex proposals.

# System operator service provider agreement

- 6. Where there is a System Operator Service Provider Agreement (**SOSPA**) between the Electricity Authority (the **Authority**) and Transpower, any SOSPA capital expenditure is not assessed under the capex IM.
- 7. As the system operator of the national grid, Transpower provides the system operator services under the SOSPA between Transpower and the Authority. System operator services are defined under Part 4 as electricity line services.
- 8. Operating costs or asset values allocated to activities undertaken by Transpower to supply electricity transmission services other than system operator services must be net of costs or asset values implicitly or explicitly recoverable by Transpower. Any costs recovered through such an agreement are to be excluded from any opex or capex forecasts used to determine the Transpower individual price-quality path (IPP).

For a full explanation of how the capex IM works and our reasons for our previous decisions, see:
Commerce Commission "Transpower Capital Expenditure Input Methodology – Reasons Paper"
(31 January 2012). For the consolidated capex IM, see: Commerce Commission "Transpower Capital Expenditure Input Methodology Determination" (5 February 2015). For the listed projects reasons paper, see: Commerce Commission "Amendments to input methodologies for Transpower to provide a listed project mechanism – Reasons paper" (27 November 2014).

#### NICs

- 9. NICs are agreements between Transpower and users of transmission services who are connected directly to the grid in respect of non-core assets or non-core grid assets. The capex IM does not apply to capex relating to new investment contracts (**NICs**).
- 10. All contracting parties have input on the output of the contract. In order to be a new investment contract, a contract needs to be for the provision of new electricity transmission services between Transpower and another party, and must meet the requirements set out in the NIC definition in the capex IM.<sup>2</sup>

### Capex IM decisions

- 11. Our core decisions on the categories of capex in *setting* the capex IM are:
  - 11.1 capital expenditure must be classified as either base capex or major capex;
  - 11.2 Transpower cannot substitute expenditure between individual major capex projects or between major capex projects and base capex allowance; and
  - 11.3 full substitution of expenditure between years and across categories within base capex is allowed.
- 12. Figure C1 sets out an overview of expenditure categories under the capex IM.

Commerce Commission "Transpower Capital Expenditure Input Methodology Determination – Consolidating all amendments as of 5 February 2015", clause 1.1.5(2), definition of 'new investment contract'. Commerce Commission "Transpower Capital Expenditure Input Methodology Determination" (5 February 2015).

The capex IM does not apply to **System Operator Service** capital expenditure relating to **Provider Agreement** New Investment Contract in (SOSPA) between the SOSPA **Expenditure by Transpower** NIC respect of connection assets if Electricity Authority and as determined under the the party that is contracting Transpower; any SOSPA with Transpower agrees that Capex IM capital expenditure will not the terms and conditions are be assessed under the reasonable or reflect workable capex IM or effective competition YES Is the expenditure on a See Figure C2 Transmission Alternative? NO Is the capex for one of the following: Asset replacement Asset refurbishment **Business support** Information system and technology assets YES NO Base capex (See Capex IM, definition of base capex) Major capex Does the capex form part of a listed (See Capex IM, definition of base capex project as identified in the IPP project threshold) Determination? Is the value of enhancement project or (Over \$20 million, asset replacement or programme ≥ \$20 million? asset refurbishment, no specific project commencement date, not to be included in base capex allowance) YES NO YES NO Capex may be treated as Capex may be Capex may form part of base capex under listed Capex may form part of determined as major the base capex projects framework the base capex allowance allowance capex (See Capex IM, Part 2, (See Capex IM, Part 2, (See Capex IM, Part 2, Subpart 2; Transpower (See Capex IM, Part 7, Subpart 4) Subpart 2) IPP, Schedule I; Capex IM, Subpart 2)

Part 3, Subpart 2)

Figure C1: Overview of expenditure categories

- 13. Our core decisions in *applying* the capex IM are:
  - capital expenditure requiring approval by the Commission is approved as either base capex or major capex;
  - major capex is required to be consulted on, assessed and approved on a project-by-project basis using the requirements set out in the capex IM;
  - 13.3 a major capex project must be the preferred investment option with regard to the major capex investment test;
  - base capex is subject to *ex-ante* approval prior to each regulatory control period (**RCP**) of a base capex allowance for each year of the RCP;
  - 13.5 base capex projects that are not sufficiently certain (in terms of costs and/or completion date) may be classified as listed projects;
  - 13.6 an incentive regime applies to both base capex and major capex (see Attachment D); and
  - 13.7 Transpower is required to consider transmission alternatives in its development of all major capex proposals.

# Integrated transmission plan

- 14. The integrated transmission plan is designed to sit at a level above the base capex and major capex information requirements, providing context for stakeholders within which the base capex and major capex proposals can be assessed.
- 15. Transpower must publish an integrated transmission plan that explains Transpower's view about the long-term development of the grid.
- 16. The purpose of the integrated transmission plan is to provide an integrated overview of the long-term development of, and activities on, the grid. It provides detail on Transpower's stated long-term quality and performance objectives, and summarises the future expenditure requirements of the grid and the outputs or benefits this expenditure will deliver.
- 17. The integrated transmission plan must be submitted to us before the start of each IPP regulatory period. The plan must forecast at least ten years ahead. Transpower must also submit to us annual updates that explain any material changes to matters covered in the integrated transmission plan.<sup>3</sup>

Commerce Commission "Transpower Capital Expenditure Input Methodology – Reasons Paper" (31 January 2012), Section 2.7. Commerce Commission "Transpower Capital Expenditure Input Methodology Determination" (5 February 2015), Schedule E.

#### **Transmission alternatives**

- 18. Transmission alternatives are alternatives to investment in the grid, and play an important role in delivering efficient investment outcomes for the electricity market. Making use of transmission alternatives may be an economically efficient decision where it avoids or defers expenditure on transmission investment. Transpower is required to consider transmission alternatives in its development of all major capex proposals.
- 19. Where expenditure on transmission alternatives is not major capex (ie, the expenditure is classified as operating expenditure or base capex and would not otherwise be major capex), no project-specific approval is required from the Commission.<sup>4, 5</sup> Figure C2 sets out how the identification and recovery of non-transmission solutions works under the capex IM.

Commerce Commission "Transpower Capital Expenditure Input Methodology – Reasons Paper"
(31 January 2012), Section 2.8. For additional information on non-transmission solutions, see: Commerce Commission "Transpower Capital Expenditure Input Methodology Determination" (5 February 2015), Schedule I, Division 2.

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For these types of expenditure, the respective approval process and incentive framework apply.

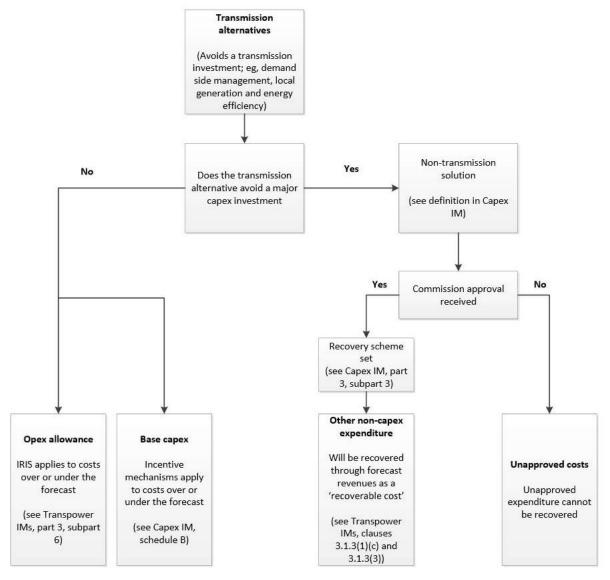


Figure C2: Identification and recovery of non-transmission solutions

# How the IPP applies the capex IM decisions

- 20. The IPP sets out how forecast and actual capital expenditure impacts the actual revenues that Transpower may recover. <sup>6</sup> All of the incentive mechanisms and adjustments in the capex IM also flow through to the IPP revenue calculation mechanism.
- 21. Prior to the start of a five-year regulatory period, we set Transpower's maximum allowable revenue (MAR) on a forecast basis (ie, the 'forecast MAR') for each of the five years on an *ex-ante* basis. This provides certainty regarding the baseline revenue that Transpower will be able to recover.

The key building blocks of the revenue calculation that are impacted by capital expenditure are the WACC return on the RAB, the depreciation charge on the RAB, and the tax charge on the resulting additional net revenue.

- 22. Transpower maintains a revenue and incentive wash-up account (economic value (EV) account) that records the post-tax effect of revenue adjustments that at any time have not been passed back to or recovered from customers.<sup>7</sup>
- 23. Updates to the forecast MAR are then made annually, which includes the zeroing of the EV account balance. This is done by offsetting the balance of the EV account with an equivalent pre-tax adjustment to the revenues.
- 24. From the 2015-2020 regulatory period (**RCP2**), the Commission has had the discretion to spread an EV adjustment over more than one year of forecast MAR, in order to avoid an unacceptable price shock to consumers.

# CATEGORIES AND DEFINITIONS FOR CAPITAL EXPENDITURE UNDER THE CAPEX IM Overview

- 25. As set out in figure C1, the capex IM categorises capital expenditure as either base capex or major capex. Capex is categorised into different types based on the purpose of the expenditure; base capex includes asset replacement and asset refurbishment and asset enhancements, while major capex is limited to asset enhancement. The current threshold for capex being classified as major capex is enhancement capex projects over \$20 million.
- 26. Base capex (including listed projects) is intended to cover all capital expenditure, except those individual, large enhancement projects that, given their nature and magnitude (over the threshold), warrant individual scrutiny and public consultation. This was originally explained in more detail prior to the capex IM in Section 5.2 of the 2010 IPP Reasons Paper.<sup>8</sup>
- 27. The base capex threshold has been progressively increased since it was first implemented for the 2011-2015 regulatory period (RCP1), increasing from \$1.5 million for each project in disclosure year 2012 up to \$20 million from disclosure year 2016.
- 28. At the time the capex IM was determined, the current \$20 million base capex threshold applying from RCP2 was considered to be the level that best balances the interest of certain stakeholders in wanting larger capex projects to be subject to individual scrutiny, and conversely the benefits of the *ex-ante* pooled capex allowance approach for projects below the threshold.<sup>9</sup>

The revenue part of the wash-up essentially compares the forecasts used when setting the forecast MAR with the actual values for revenue and costs that actually applied in the disclosure year. This has the effect over time of basing Transpower's recovered revenues on actual values of costs rather than estimates.

The threshold was originally set at \$1.5 million per individual project for the first year of RCP1 as a transitional level and this was further increased to \$5 million for projects and programmes for the last three years of RCP1. The level was reset to \$20 million for projects and programmes with effect from RCP2.

Commerce Commission "Individual Price-Quality Path (Transpower) – Reasons Paper" (22 December 2010).

# Situations in which capital expenditure may be recategorised

29. Transpower may submit to the Commission for approval a project that was originally accounted for in the base capex allowance for that RCP. It may do this where the project has become a major capex project due to forecast scope. <sup>10</sup> In such instances, the project is subject to review under the major capex approval process (with the amount of the base capex allowance being reduced accordingly). A planned major capex project can be recategorised as a base capex project if its estimated cost reduces to below the threshold for major capex.

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#### **MAJOR CAPEX – APPROVAL PROCESS**

### Major capex pre-proposal process requirements

- 30. Transpower must notify us of its intention to plan a major capex project once Transpower considers it may become a proposed investment. In the two-month period following such notification, the Commission and Transpower must use reasonable endeavours to agree, for that major capex project:<sup>11</sup>
  - 30.1 an approach to ensure appropriate consideration of non-transmission solutions; and
  - 30.2 a consultation programme for the transmission or non-transmission solution.

#### **Non-transmission solutions**

31. Where use of a transmission alternative avoids or defers a transmission investment that would otherwise be major capex, the transmission alternative is called a 'non-transmission solution'. This is to distinguish non-transmission solutions from other transmission alternatives and ensure non-transmission solutions are given equal consideration alongside transmission investment options, including through the application of the investment test.<sup>12</sup>

# **Consultation program for Transpower and the Commission**

Transpower's consultation requirements

32. In accordance with the consultation programme agreed with the Commission, and prior to submitting a major capex proposal for approval, Transpower must consult with interested parties. The requirement to consult applies to transmission and non-transmission solutions.

The base capex pool can be interchanged between major capex projects and the base capex allowance.

Refer to: Commerce Commission "Transpower Capital Expenditure Input Methodology – Reasons Paper" (31 January 2012), Section 6.2 for more detail.

<sup>&</sup>lt;sup>12</sup> Information on the investment test can be found in Schedule D of the capex IM. See: Commerce Commission "Transpower Capital Expenditure Input Methodology Determination" (5 February 2015).

- 33. Transpower's consultation obligations are set out in Schedule I of the capex IM. Each consultation programme must have regard to:
  - 33.1 the complexity, nature and amount of the project;
  - 33.2 the likely costs and benefits arising from consultation;
  - 33.3 the urgency of investment need;
  - 33.4 consideration of non-transmission solutions; and
  - 33.5 the extent of any relevant prior consultations.
- 34. The consultation process is a critical aspect of the capex IM for major capex proposals. Effective consultation is likely to result in a more comprehensive and robust investment proposal and better-informed stakeholders. Requiring Transpower to publish the agreed consultation programme early in the major capex investment proposal process ensures transparency and allows appropriate consideration of investment options.

# Commission's consultation obligations

35. The Commission must, after receiving a major capex proposal, and in accordance with the timeframes and processes it considers appropriate, publish the proposal, publish a draft decision (or decisions), and consult on the information published. Stakeholders, including Transpower, have a strong interest in the Commission's evaluation of major capex proposals. Enabling stakeholder input will likely lead to more informed and robust evaluation outcomes and, for this reason, we have set an obligation to publish and consult.

# Rules for submitting a major capex proposal

- 36. Transpower may submit a major capex proposal at any time during a regulatory period. The proposal must:
  - 36.1 comply with the information requirements set out in Schedule G of the capex IM; and
  - 36.2 contain the certificate specified in clause 9.2.1 of the capex IM.
- 37. We developed the major capex proposal information requirements taking account of the information requirements of the Commission, and the following roles and responsibilities:
  - 37.1 Transpower's role is to identify potential investment needs and propose solutions; and
  - 37.2 the Commission's role is to consider investment proposals submitted by Transpower.

38. The content requirements are strongly dependent on other key aspects of the capex IM including, in particular, the investment test methodology, the consultation process and the approach for considering non-transmission solutions.

# Rules for approving or rejecting a major capex proposal

- 39. The Commission may either approve or reject a major capex proposal. The Commission cannot change any of the components of the proposal. The Commission must publish its decision as soon as reasonably practicable.
- 40. The Commission may approve a proposed investment after consulting on, and evaluating the proposal in accordance with the requirements set out in the capex IM.
- 41. The Commission may reject a major capex proposal we are not satisfied with a proposed investment having regard to the evaluation criteria in Schedule C of the capex IM, for example, if we are not satisfied:
  - 41.1 with the proposed investment in part or whole;
  - 41.2 with one (or more) components of the proposed investment;<sup>13</sup> or
  - 41.3 that the investment test is not satisfied.
- 42. In setting the capex IM, we considered it appropriate that the responsibility to determine the needs, deliverables and grid outputs remains with Transpower. For this reason, we limited the process to either approving the proposed investment or rejecting the major capex proposal as a whole.

#### Project approval expiry date

43. Transpower must include in each major capex proposal, an approval expiry date assumption. Where an investment is approved by the Commission, the approval expiry date is that specified in the proposal. A project approval expiry date is necessary to recognise that significant delays in undertaking a project may affect the benefits delivered by or the need for the project.

In practice we discuss this with Transpower and allow Transpower to amend the proposal rather than reject the proposal.

### Criteria for evaluating major capex proposals

- 44. The Commission evaluates each major capex proposal in accordance with Schedules C and D of the capex IM. When evaluating a major capex proposal, the Commission may take into account the views of any person or any information we consider relevant, and engage any appropriately qualified person to assist with our evaluation. The evaluation criteria in Schedule C of a major capex proposal include:<sup>14</sup>
  - 44.1 general evaluation of major capex proposal;
  - 44.2 evaluation of major capex allowance and maximum recoverable costs;
  - 44.3 evaluation of approval expiry date; and
  - 44.4 evaluation of major capex project outputs.
- 45. The Commission must not only be concerned with the process used to develop, analyse and present the proposal, but with the outcome itself. We must be satisfied that the proposed investment satisfies the investment test and promotes the long-term benefit of consumers.

#### **MAJOR CAPEX – INVESTMENT TEST**

46. The investment test uses a cost-benefit analysis using discounting of relevant costs and benefits in the electricity market over a defined calculation period to identify a preferred investment option (set out in Schedule D of the capex IM).

# Form and scope of the investment test

- 47. Schedule D of the capex IM provides details on the investment test for proposed major capex projects. 15
- 48. The costs and benefits to be included in the investment test are those accruing to participants in the electricity market. Accordingly, the investment test is called a 'net electricity market benefit test'. Where investment options have a similar quantified net electricity market benefit, Transpower may identify the investment option with the highest net benefit using both:
  - 48.1 estimates of the expected monetary value of the electricity market costs and benefits; and
  - 48.2 a qualitative assessment of the unquantified electricity market costs and benefits for which Transpower has not provided an expected monetary value.

Commerce Commission "Transpower Capital Expenditure Input Methodology Determination" (5 February 2015), Schedule C.

Commerce Commission "Transpower Capital Expenditure Input Methodology Determination" (5 February 2015), Schedule D.

49. In setting the capex IM we considered that all of the effects that a transmission investment has on either the cost or price of delivered electricity must be taken into account by Transpower in assessing its investment options. Therefore, in proposing major capex under the capex IM, Transpower must assess the likely costs and benefits of different investment options for all participants in the electricity market.

# Application of the investment test

- 50. Application of the investment test includes:
  - 50.1 the calculation of expected net electricity market benefit using scenarios;
  - 50.2 investment options; and
  - 50.3 satisfying the investment test (as per Schedule D1 of the capex IM).
- 51. The expected net electricity market benefit for each investment option is calculated by combining the net electricity market benefit for each investment option for each scenario, consistent with scenario weightings. Scenarios are developed by the Ministry of Business, Innovation and Employment (MBIE) and are known as electricity demand and generation scenarios (EDGES).<sup>16</sup>
- 52. Using scenarios in the quantitative investment test accounts for the uncertainty in the future development of the electricity sector, particularly given the long life of transmission assets. We considered a multi-scenario approach using weightings was the most practical way of taking account of the range of possible, but uncertain, futures.
- 53. Transpower must develop a number of investment options, including both transmission and non-transmission solutions. An investment option means a solution that is:
  - 53.1 designed to meet a particular need;
  - 53.2 technically feasible; and
  - 53.3 materially different to another major capex project designed to meet the same investment need.
- 54. After consultation, Transpower must identify a limited number of investment options to which the investment test is applied (the shortlist). The proposed investment must satisfy the investment test.

Electricity demand and supply generation scenarios can be found on MBIE's website: <a href="http://www.mbie.govt.nz/info-services/sectors-industries/energy/energy-data-modelling/modelling/electricity-demand-and-generation-scenarios">http://www.mbie.govt.nz/info-services/sectors-industries/energy/energy-data-modelling/modelling/electricity-demand-and-generation-scenarios</a>.

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- 55. To satisfy the investment test with respect to Schedule D1 of the capex IM, the proposed investment must:
  - 55.1 have the highest expected net electricity market benefit;
  - 55.2 have a positive expected net electricity market benefit unless it is designed to meet an investment need generated by a deterministic requirement of the grid reliability standards; and
  - 55.3 be sufficiently robust under sensitivity analysis.

### Implementation of the investment test

- 56. Transpower must calculate the expected net electricity market benefit using the expected values of the project costs, and the electricity market costs and benefits. The calculation period is a 20-year period starting from the base year unless varied by Transpower after consultation. The base year is the year in which the last asset to be delivered by the proposed investment is commissioned. All project costs prior to the base year are compounded forward at the discount rate to the base year. All subsequent costs and benefits occurring in the calculation period are discounted back at the discount rate to the base year.
- 57. The capex IM requires Transpower to use, in the investment test analysis, a value of lost load (**VOLL**) for the purpose of quantifying benefits associated with transmission investments.<sup>17</sup>
- 58. The VOLL to be used is that determined by the Authority as recorded in clause 4 of Schedule 12.2 of the Code. <sup>18</sup> The VOLL is used to estimate the economic impact of planned and unplanned outages in the grid, and is therefore a key input to the calculation of cost and benefit to end users.

#### **AMENDMENTS TO MAJOR CAPEX APPROVALS**

# Process requirements for amendment applications

- 59. Transpower may only apply to the Commission for an amendment to one or more of the following components of an approved major capex project:
  - 59.1 major capex allowance; Maximum recoverable costs;
  - 59.2 recovery scheme;
  - 59.3 approved major capex project outputs; and
  - 59.4 approval expiry date.

In the 2012 Reasons Paper, VOLL was called the value of expected unserved energy (**VoEUE**). See: Commerce Commission "Transpower Capital Expenditure Input Methodology – Reasons Paper" (31 January 2012), Para 7.4.52 to 7.4.58.

Electricity Authority, "Electricity Industry Participation Code 2010" (1 April 2017). Information on the Code can be found on the Authority's website: <a href="https://www.ea.govt.nz/code-and-compliance/the-code/">https://www.ea.govt.nz/code-and-compliance/the-code/</a>.

- 60. All major capex amendment applications must comply with the timing and information requirements specified in clause 7.4.2 of the capex IM. An amendment may be made by the Commission to an approval expiry date by no later than the approval expiry date previously approved. The Commission evaluates each application in accordance with Part 6 of the capex IM.
- 61. Transpower may apply, prior to the commissioning date or completion date and within six weeks after the date, on which our approval in respect of the major capex project expires, for a major capex sunk costs adjustment. We have the discretion to decide to calculate that adjustment in accordance with Schedule B6 of the capex IM.
- 62. As the P50 commissioning date and commissioning date assumptions are used in the forecast MAR calculations, these also need to be amended, consistent with any amendments to the components.<sup>19</sup> As these components are washed-up for actual expenditure (under the IPP), actual completion or actual commissioning date, they do not impact on any of the major capex adjustments.<sup>20</sup>

### Information requirements for amendment applications

- 63. All major capex amendment applications must comply with the information requirements specified in clause 7.4.2(3) of the capex IM. The information requirements set out in the capex IM are separately specified for amendments to the:
  - 63.1 major capex allowance;
  - 63.2 maximum recoverable costs or recovery scheme;
  - 63.3 approved major capex project outputs; and
  - 63.4 approval expiry date.
- 64. We considered that information was required in sufficient detail so that the evaluation of an application could be made in the context of the original approval. It must also take into account that the overall net benefit of the project may have changed. For this reason, a similar level of information is required to that of the original approval application.

P50 means estimated cost of a project where the probability of the actual cost being lower than that estimated is 50%

Refer to Attachment A of this paper for an overview of forecast vs actual expenditure wash-ups.

# Criteria for evaluating major capex amendment applications

- 65. When evaluating a major capex amendment proposal, the Commission may take into account the views of any persons or any other information we consider relevant. In summary, the Commission applies the following criteria in evaluating a major capex amendment proposal:<sup>21</sup>
  - 65.1 whether the proposal is consistent with the capex IM;
  - 65.2 the extent to which the proposal promotes the purpose of Part 4;
  - 65.3 whether the data, analysis and assumptions underpinning the proposal are fit for the purpose of the Commission exercising its powers under Part 4;
  - 65.4 the extent to which each key factor relevant to the proposal amendment:
    - 65.4.1 was reasonably foreseeable by Transpower before the major capex project was approved by the Commission; and
    - 65.4.2 was or is within Transpower's control;
  - 65.5 for each key factor outside Transpower's control:
    - 65.5.1 the reasonableness of any applicable mitigation strategy devised by Transpower; and
    - 65.5.2 the reasonableness and extent of mitigation actions taken by Transpower;
  - 65.6 the extent to which the expected net electricity market benefit would be materially lower as a result of the amendment than when it was approved; and
  - 65.7 in respect of a major capex project that has already commenced, the extent to which Transpower has incurred capital expenditure by the date of the application.
- 66. We considered that the evaluation approach and criteria should have been similar to that used when reviewing a major capex proposal for the first time, taking into account changes to the project and evaluating the overall continuing benefit of the project.

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Commerce Commission "Transpower Capital Expenditure Input Methodology – Reasons Paper" (31 January 2012), Section 8.4.

# Consultation requirements for amendment applications

- 67. The Commission may take none, any, or all of the actions listed below:
  - 67.1 publish the relevant proposal or application;
  - 67.2 make and publish a draft decision(s);
  - 67.3 seek the written views of interested persons on anything published;

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- 67.4 seek the written views of interested persons on others' submissions;
- 67.5 seek the views of any person the Commission considers has expertise on a relevant matter; and
- 67.6 hold a conference at which the views of some or all interested persons may be sought.
- 68. As amendment applications are likely to vary significantly, we considered it appropriate to retain flexibility to undertake some, none, or all of the consultation measures.

#### **CERTIFICATION REQUIREMENTS**

### Certification requirements for proposals and amendments applications

- 69. There are no requirements to obtain independent verification or audit. However, there are requirements for self-verification in the form of certification in respect of Transpower's directors and CEO. The directors must each certify in writing their belief, having made all reasonable enquiries, that the information was derived from, and accurately represents, the operations of Transpower, and is provided in accordance with the relevant requirements of the capex IM.
- 70. Major capex proposals, major capex project amendments applications, and sunk costs adjustment applications, as well as supporting information, must be certified by Transpower's CEO. As base capex is set only once every five years, and considering the magnitude of this expenditure, we considered that director-level certification was appropriate at the time of the 2012 Reasons Paper.<sup>22</sup>
- 71. Audits are not required for capex proposals, because they are not as effective for forecasts or non-financial information. The Commission considered that the combination of certification by Transpower's directors and its CEO was relatively low-cost and flexible.

Commerce Commission "Transpower Capital Expenditure Input Methodology – Reasons Paper" (31 January 2012), clause 9.2.7.

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#### Certification of annual information

72. The capex IM sets out disclosure requirements. These relate to rules for calculations and information to be provided about capital expenditure as part of its annual information requirements. The annual information requirements for base and major capex are included in an information disclosure determination (ID determination). 

Two Transpower directors are required to certify the annual information requirements for base and major capex. Transpower's CEO is also required to certify each base capex project first commissioned in the disclosure year in question.

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# **Certification for listed projects**

- 73. In relation to all information provided with respect to an application for approval of base capex in respect of a listed project, the CEO of Transpower must certify, in writing, that:
  - 73.1 the information provided in Transpower's application to the Commission was derived from and accurately represents the relevant operations of Transpower; and
  - 73.2 the base capex in respect of the listed project was approved by Transpower in accordance with the applicable requirements of Transpower's capital expenditure approval policies.

#### **BASE CAPEX ALLOWANCE – APPROVAL PROCESS**

74. Unlike major capex, which is subject to individual approval, base capex is approved in aggregate (ie, at the total level) and for the whole RCP (a five-year period). We considered that this approach had a number of economic and process benefits for this type of expenditure.

# Process for agreeing the quantitative information requirements

- 75. Base capex for each RCP is approved and set prior to the start of each RCP. The Commission evaluates the level of base capex proposed by Transpower, and determines and sets the allowance.
- 76. The base capex proposal must also present Transpower's view on the most appropriate grid output measures to apply to that regulatory control period. Some of these measures are linked to revenue, and have targets, caps and collars set to maintain the impact of the incentives provided at an appropriate level.
- 77. The capex IM sets out the process for submitting, assessing and approving Transpower's base capex proposals. Likewise, the capex IM provides detailed information requirements that Transpower must comply with, and assessment criteria that the Commission will apply.

Commerce Commission "Information Disclosure Requirements for Transpower – Reasons Paper" (28 February 2014).

- 78. The key steps in the assessment and approval process include:
  - 78.1 Prior to a regulatory period, the Commission and Transpower will agree the regulatory templates that Transpower will complete and provide as part of its base capex proposal including the criteria for identifying which projects and programmes may be subject to individual review.
  - 78.2 After receiving a base capex proposal, the Commission publishes the proposal, assesses the proposal, publishes its draft decisions and seeks the views of interested persons.
  - 78.3 By the end of August of the year before the April start of a regulatory period, the Commission determines:
    - 78.3.1 the base capex allowances for each year of the RCP;
    - 78.3.2 the opex allowance;<sup>24</sup>
    - 78.3.3 the base capex incentive rate;<sup>25</sup>
    - 78.3.4 the revenue-linked grid output measures (quality standards);
    - 78.3.5 all listed projects approved for the RCP; and
    - 78.3.6 any grid output measures to which will be only subject to disclosure.

#### Timing and content requirements for each base capex proposal

79. Transpower must submit to the Commission a base capex proposal by the first working day of December, 16 months prior to the start of the RCP – for the 2020-2025 regulatory period (**RCP3**) this will be Monday 3 December 2018. This timing provides certainty to Transpower and the Commission on both process and timing regarding the submission of a base capex proposal.

# Base capex – qualitative information requirements

80. Transpower is required to provide qualitative information when submitting a base capex proposal. Schedule F of the capex IM sets out the required information.

Transpower's proposal includes opex, but this is not included in the base capex allowance.

Refer to Attachment D for an explanation of the incentive rate.

### Commission's base capex determination and process requirements

- 81. The Commission determines in respect of that regulatory period:
  - 81.1 base capex allowances for each year of the RCP;
  - 81.2 the quantum of the base capex incentive rate; and
  - 81.3 revenue-linked grid output measures.
- 82. The Commission may require Transpower to provide, in a time that is reasonable, any additional information we consider is necessary for determining an appropriate base capex allowance.

# Commission's consultation obligations

- 83. After receiving a base capex proposal, the Commission must:
  - 83.1 publish the proposal;
  - 83.2 publish its draft decision(s); and
  - 83.3 seek the written views of interested persons on anything published or on others' submissions.
- 84. Enabling stakeholder input as part of the consultation was considered to lead to more informed and robust evaluation outcomes.

# Criteria for evaluating and approving base capex

- 85. The Commission's evaluation criteria for the base capex are set out in Part 6 and Schedule A of the capex IM. In summary, when evaluating a base capex proposal, the Commission must have regard to:
  - 85.1 level of focus towards achieving efficient solutions;
  - 85.2 Transpower's process to determine reasonableness and cost-effectiveness;
  - 85.3 the reasonableness of key assumptions relied upon used to prepare to proposed base capex allowances;
  - 85.4 the overall deliverability of the proposal;
  - 85.5 Transpower's internal processes for assessing the need for an identified programme and the possible alternative solutions;
  - 85.6 dependencies between proposed grid output targets and proposed base capex allowances; and
  - 85.7 how grid outputs, key drivers, assumptions, and cost modelling were used to determine forecast capital expenditure.

86. A process review, together with a more detailed examination of a sample of base capex projects, was considered to provide sufficient understanding and knowledge of Transpower's base capex requirements to set the base capital allowance for a regulatory period.

#### **LISTED PROJECTS**

- 87. The listed projects mechanism may be used by Transpower to apply for, and us to approve, additional base capex for inclusion in the price path to take into account the additional expenditure on certain 'listed projects'. <sup>26</sup> Capex projects can be applied for by Transpower for inclusion in the IPP as 'listed projects' prior to an RCP if the project if specified conditions in the capex IM are met. <sup>27</sup>
- 88. The mechanism allows Transpower more time to do technical studies and refine its forecasts before it submits its proposal for approval at some time in the regulatory period following our evaluation of the base capex proposal for the RCP.

# Whether listed projects should be evaluated on an approve/reject basis

89. Within the base capex allowance, there is the ability for funds to be substituted between any base capex projects. An application for approval of a specified amount of base capex for a listed project should not be considered on an approve/reject basis. It is for us to determine the amount of approved base capex.

# Requirements that must be met by Transpower

90. Before seeking approval of base capex in respect of any listed project, Transpower must undertake consultation with interested persons. Transpower must also undertake a cost-benefit analysis commensurate to the project size and complexity. The cost-benefit analysis must include consideration of alternatives to the project, including non-transmission solutions. In addition to the cost-benefit analysis, Transpower must provide us with all relevant costing, scope, and any other information that we consider necessary.

# Criteria we use to evaluate applications for approval of base capex in respect of listed projects

91. After receiving an application in respect of a project listed in the IPP, we will consider and evaluate it in line with the consultation requirements and evaluation criteria in the capex IM that apply to base capex. We will then decide whether to approve an appropriate amount of base capex for inclusion in the IPP.

Listed projects are defined in the capex IM: Commerce Commission "Transpower Capital Expenditure Input Methodology Determination" (5 February 2015), clause 2.2.3.

These requirements are listed in the amendment paper: Commerce Commission "Amendments to input methodologies for Transpower to provide a listed project mechanism – Reasons paper" (27 November 2014), Para 110.

In line with clause 3.2.1(b) of the capex IM.

# How base capex in respect of listed projects will feed into the base capex incentive framework

92. Approved base capex associated with listed projects is subject to incentive mechanisms that apply to base capex. The key components of the incentive framework for base capex are contained in Schedule B of the capex IM. Revenue adjustments are given effect through the wash-up process in the IPP.

#### ANNUAL REPORTING REQUIREMENTS

### Base capex annual reporting requirements

93. The base capex annual reporting requirements to apply to Transpower are set out by the Commission in an ID determination. The information provided through the base capex annual reporting requirements was intended to enable the Commission to implement and operate the various base capex incentive mechanisms. This allows the Commission to track approved base capex against actual expenditure for each defined category, and track actual performance for all grid outputs listed in the relevant ID determination.

# Major capex annual reporting requirements

- 94. The information specified in the capex IM as to reporting requirements for major capex was considered to be necessary for the Commission to be able to monitor Transpower's progress on major capex projects. It was also required for calculating incentive adjustments. Reporting requirements are set out in the relevant ID determination. Transpower is required to report information to the Commission by the last working day of September each year, including information:
  - 94.1 on uncompleted projects;
  - 94.2 for each commissioned or completed major capex project; and
  - 94.3 for calculating the major capex overspend adjustment and the Major capex project output adjustment.
- 95. We considered that stakeholders are likely to be highly interested in this information. We also considered that providing greater transparency on tracking project costs and deliverables provides an incentive for Transpower to control those costs and influence the delivery of outputs against agreed targets.

#### Formatting for reporting, proposals and applications

96. We considered that requiring data and information to be provided in industry-standard electronic formats, with the capability to reformat that data or information, provides the Commission with greater flexibility to evaluate proposals and applications from Transpower.