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Proposed further amendments to input methodologies for Transpower

This letter responds to the Commission's consultation on *Proposed amendments to input methodologies for Transpower New Zealand limited*, published 18 July 2019.

Our submission addresses the two proposals by the Commission to amend Transpower's input methodologies. In summary:

- We support the proposal for the EV account balance.¹ However, we provide drafting to ensure the EV account balance from one regulatory control period (RCP) can be smoothed across the following RCP.
- We do not support the re-opener for enhancement and development (E&D) base capex in its current form.² We reiterate our preference for a draft decision that acknowledges our RCP3 proposal amount of \$76.4m for E&D base capex, which was seen as prudent, efficient and consistent with Good Electricity Industry Practice by the Independent Verifier.

EV account balance smoothing over the next regulatory period

We support the proposed amendments to allow the EV account balance at the end of the RCP to be smoothed across the following RCP subject to revised drafting for the new definition of "forecast EV adjustment" at paragraph 2.21. This will ensure the closing post-tax EV account balance is cleared over the following control period. In paragraph 2.21, the calculation of the

¹ The EV account balance is maintained by Transpower, on an after-tax basis, to record each EV account entry not yet returned to or recovered from Transpower's customers through Transpower's allowable revenue. EV account entries include gains and losses from wash-up calculations, incentive calculations, major capex sunk cost adjustments, capital expenditure commitments, instruments that cease to be an effective hedge. The EV account for RCP2 also records interest calculated on the rolling balance of the account for each disclosure year.

² E&D base capex is capital expenditure for enhancement and development of the grid.

forecast EV adjustment omits to account for interest (at WACC) on the EV account balance as it rolls forward through the RCP.

The drafting for the term should be:

$$\text{forecast EV adjustment} = -x \cdot \frac{WACC}{\left[1 - \frac{1}{(1 + WACC)^y}\right]}$$

The formula calculates the 'y' year annuity that has a present value equal to the forecast closing post-tax value on the EV account, grossed up for tax (x).

We have no concerns with the annual value of the EV account being disclosed and being subject to independent audit assurance.

E&D base capex reopener

Our analysis of the proposed policy

We have carefully considered the proposed provisions for the E&D re-opener mechanism. It is essential that Transpower can respond to imminent grid needs, including those arising from the low emissions pathway New Zealand is currently on. In its report released in July, the Interim Climate Change Commission observed that a "*future of accelerated electrification for New Zealand will require building considerably more wind farms, more geothermal and solar generation, more transmission lines, and possibly more hydro storage.*"³ To ensure these grid connections can occur in a timely and cost efficient manner, we need an effective E&D mechanism that can be applied with certainty of funding and with proportionately appropriate scrutiny.

For the RCP3 proposal, Transpower developed an approach to forecasting E&D base capex and proposed an expenditure amount (\$76.4m) that the Independent Verifier recommended be accepted.⁴

Forecast considered consistent with expenditure outcome with regard GEIP because:

- Forecast based on revised methodology using high and low expenditure scenarios for potential projects categorised by their likelihood demonstrating prudence.
- Transpower developed business rules around allowances included in high and low scenarios based on historic expenditure.
- Forecast methodology considered good basis for estimate with consideration of inherent uncertainties without exaggeration.

However, the Commission's [draft decision](#) is to approve the low-expenditure scenario amount (\$59m)⁵ and then allow Transpower to apply for additional expenditure via a 're-opener' mechanism. This fundamentally changes the way in which an effective E&D mechanism would

³ Interim Climate Change Committee (2019) [Accelerated Electrification](#), p5 www.iccc.mfe.govt.nz.

⁴ [Synergies economic consulting](#) Table 71, page 259.

⁵ Transpower's individual price-quality path from 1 April 2020 Draft decisions and reasons paper, page 67

operate and, in our view, undermines the dynamic efficiency that is the purpose of the E&D regime.

Our support for the draft expenditure decision for E&D was contingent on a workable mechanism for accessing additional funds, as we have set out in detail in our [submission](#) to the draft decision.⁶

We support the Commission's view that the Base Capex Adjustment Mechanism (BCAM) should be amended with the aim of achieving a workable mechanism (including that it should function with low administrative process and compliance costs).

We support the development of a workable process to ensure dynamically efficient investment during the RCP3 period.

The BCAM is intended to balance risks to both consumers and Transpower arising from uncertainty within the E&D base capex programme. That uncertainty is not within Transpower's ability to control, which means the 'right' allowance for E&D base capex is difficult to determine.

In principle, if the BCAM can be amended in a way that is simple to implement without undue administrative burden then the Commission's draft decision to approve our low-expenditure scenario amount is appropriate.

But if the BCAM is not simple to implement, we will be required to prioritise E&D base capex for anything other than the 'Extremely Likely' category of projects against other spend across the wider fungible funding pool. Alternatively, we could choose to push investment into RCP4 or not make the investment at all. We do not think this results in the best outcome for consumers.

Accordingly, we outline our views on the policy points below and, in the appendix, propose alternative drafting that will enable a workable mechanism with low administrative process and compliance costs.

Making the re-opener approach workable

Reduce or remove the threshold

The \$20m threshold is a significant barrier to application. The threshold represents a large proportion of the draft decision E&D allowance at more than a third and is too high. We also do not support the requirement for at least two projects for an application because, by definition, a project of E&D base capex is less than \$20m.⁷ The threshold barrier creates an incentive to push investment into RCP4, or not make the investment at all. Neither of these outcomes is acceptable to customers or in the long-term interests of consumers.

We propose a threshold that could enable a significant, single project, for example with a value of \$5m. Preferably, the threshold should be removed entirely, to allow us to assess whether the need is material enough to justify the cost and effort to re-open the price-path, which, in our experience, is costly and lengthy.

⁶ [Submission](#) on Transpower's individual price-quality path from 1 April 2020: draft decisions and reasons paper page 21

⁷ Proposed amendment to IMs clause 3.7.4 When price-quality paths may be reconsidered (1) Transpower's IPP may be reconsidered by the Commission if- (a) the Commission considers, or Transpower applies to the Commission and satisfies the Commission, that- (vi) subject to sub-clauses (7) and (8), two or more Enhancement and Development Projects are required.

Use similar application rationales as for existing regulatory applications

The Commission has proposed specific application – and solution – criteria for the E&D base capex re-opener.⁸ We consider the criteria are a barrier to application and are also inconsistent with the existing definition for E&D base capex under the Capex IM.⁹ The drafting, as proposed, will fundamentally constrain our ability to seek additional funding for circumstances consistent with long-term benefits to consumers.

As we outlined in our [Transmission Planning Report 2018](#), system needs arise from “a myriad of intersecting issues”:

4.3.1 Drivers of E&D System Needs

Drivers of E&D System Needs are varied and often complex, with a myriad of intersecting issues requiring consideration and resolution. As our external environmental changes, so too does demand and generation. This gives rise to E&D System Needs as the transmission grid must change to meet agreed or mandated service, security or reliability standards. A change may increase or decrease grid capability, depending on the driver, and may be used to elicit a range of system outcomes including:

- providing more capacity to generators or connected loads,
- matching reliability or security of supply to the required standard or agreed service level,
- maintaining or improving power quality measures, and
- managing the dynamic response of the power system to disturbances.

Asset health and criticality may also drive E&D System Needs where, when making replacement and refurbishment decisions, our considerations identify the need for future grid capability change.

We consider a re-opener application process for access to E&D funds should mirror the approach of existing regulatory instruments (e.g. major capex, listed projects) and describe the needs or reasons for the investment funding sought. This is an accepted and tested process that both Transpower and the Commission know works.

Explain what the approval process will be, including expectations for our cost estimation

We agree with an application window once within an RCP, by the end of the disclosure year of the second year of the RCP (i.e. for RCP3, by the end of June 2022). To reflect the revenue uplift in our announcement of prices in November 2022 (for prices from April 2023), the Commission would need to approve the application by around September 2022.

⁸ “a Transpower project that requires a transmission network enhancement or development in the present or future interconnected grid as defined by the code, and has a primary driver of either: (a) a step change in demand; or (b) a generation connection or generation decommissioning; or (c) any other existing or potential connected party development that requires a transmission network enhancement or development

⁹ E & D base capex means base capex- (a) that is not in relation to: (i) **asset replacement**; (ii) **asset refurbishment**; (iii) **business support**; or (iv) **information system and technology assets**; and (b) is not funded under a **new investment contract**; **E & D base capex project** means a project of E & D base capex; **E & D base capex programme** means a programme of E & D base capex;”

However, the consultation paper is silent on the Commission's process and approval criteria to allow the expenditure as an uplift to our price path. We need certainty ahead of time on the process, information requirements and decision-making criteria the Commission will apply.

We are also unsure of the level of investigation we would need to undertake to submit the forecast project costs. The expectations for cost accuracy for the re-opener projects will affect how we prioritise our investigations. Re-prioritising will create opportunity costs, with some investigations underway for delivery being displaced and creating potential commissioning risk with flow-on implications for connecting customers. We consider the level of investigation should be commensurate with understanding likely forecast costs.

Ex-ante certainty for E&D funding

We understand the Commission's concerns on behalf of consumers that the nature of expenditure for grid E&D (projects under \$20m, driven by exogenous factors) creates uncertainty on need, timing and cost. For RCP3, we evolved our approach from the one we used in RCP2 to estimate E&D expenditure. As noted above, the Independent Verifier agreed with our revised approach.

The Commission has itself expressed caution by noting at 3.20.3 that *"because base capex is essentially a fungible pool of allowable expenditure, this may lead to base capex from other projects and programmes being used instead to fund E&D. This will impact on other project and programme deliverability and may increase asset failure risk overall"*. As the Independent Verifier has already identified that the amount approved for the remaining base capex needs is based on efficient costs of a prudent supplier,¹⁰ all capex funds have already been allocated to other works and there is no other "fungible pool" from which to draw E&D expenditure.

The purpose of the IM is to promote certainty for suppliers.¹¹ Any uncertainty over whether the mechanism will work results in uncertainty as to whether or how to progress investigations towards meeting grid needs. As noted above, the consequence for unfunded investigations and projects is to either defer until the subsequent RCP or to not progress the project at all. Neither outcome presents a sustainable proposition for customers or consumers

Specifically, it is the potential incremental upgrades that are economic in deferring larger works that are most at risk. For example, a generator's public commitment may be just 12-24 months before generation commissioning. With sufficient ex-ante E&D funding, we could respond with investigating whether to increase utilisation of existing circuits to efficient use of generation resources. Under a re-opener approach, the commitment notification risks being misaligned with the application and approval window. If the re-opener approach cannot be applied, we may (instead of deferring) use the Major Capex Project (MCP) process to include the works that could have been completed under base capex, as a staging project.¹² The additional step would

¹⁰ [Synergies economic consulting](#) page 3. The guiding principle in our verification review and in forming our verification opinions have been whether Transpower's RCP3 expenditure forecasts and associated grid output measures are consistent with an expenditure outcome that represents the efficient costs of a prudent supplier having regard to Good Electricity Industry Practice (GEIP).

¹¹ Commerce Act 1986 s52R. The purpose of input methodologies is to promote certainty for suppliers and consumers in relation to the rules, requirements, and processes applying to the regulation, or proposed regulation, of goods or services under this Part.

¹² Capex IM: **Staging project** means a project within a **major capex project (staged)**.

increase the investigation overhead and the lead time for the incremental works and risks the new generation being constrained due to insufficient transmission capacity. The important and additional grid connections identified by the ICCC,¹³ among others, to achieve New Zealand's climate change ambitions would be at risk.

We have outlined our policy and drafting suggestions to ensure the new re-opener mechanism can be applied with certainty. However, as we note above, our preference is for a Commission decision that is consistent with the Independent Verifier's recommendation to accept our [E&D base capex proposal](#) of \$76.4m.

Please contact us if you have any questions about this submission,

Yours sincerely

A handwritten signature in black ink, appearing to read 'Alison Andrew', written in a cursive style.

Alison Andrew
Chief Executive

¹³ See above footnote 3.

Appendix – Proposed drafting to improve workability of the re-opener mechanism

Commission's Proposed drafting	Transpower Proposed redrafting	Reasons
<p>B Enhancement and Development Projects (1) 'Enhancement and Development Project' means either an Unforeseeable Enhancement and Development Project as specified in subsection (2) or a Foreseeable Enhancement and Development Project as specified in subsection (3).</p>	<p>Enhancement and Development Project' means <u>an E & D base capex project</u> that is either an Unforeseeable Enhancement and Development Project or a Foreseeable Enhancement and Development Project.</p>	<p>The basis for an E&D project is the existing definition under the Capex IM.</p> <p>E & D base capex means base capex-</p> <p>(a) that is not in relation to:</p> <p>(i) asset replacement;</p> <p>(ii) asset refurbishment;</p> <p>(iii) business support; or</p> <p>(iv) information system and technology assets; and</p> <p>(b) is not funded under a new investment contract;</p> <p>E & D base capex project means a project of E & D base capex;</p> <p>E & D base capex programme means a programme of E & D base capex;</p>
<p>(2) 'Unforeseeable Enhancement and Development Project' means a Transpower project that requires a transmission network enhancement or development in the present or future interconnected grid as defined by the code, and has a primary driver of either:</p> <p>(a) a step change in demand; or</p> <p>(b) a generation connection or generation decommissioning; or</p>	<p>'Unforeseeable Enhancement and Development Project' means an E & D base capex project:</p> <p>(a) an allowance for which was not included in the base capex allowances for the current regulatory period because the E & D base capex project was not forecast to proceed when the IPP was determined;</p> <p>(b) that was not reasonably foreseeable as likely to proceed during the current</p>	<p>Linking the definitions to primary drivers risks creating a similar problem as affects the BCAM i.e. limiting the flexibility of the mechanism making it unnecessarily difficult to use.</p> <p>We have suggested various changes to the list of requirements for clarity, consistency of language and use of defined terms, and to introduce an express requirement that an allowance for the project has not already been provided.</p> <p>We have retained the word "proceed" but consider it is unclear whether this means "commence" or</p>

<p>(c) any other existing or potential connected party development that requires a transmission network enhancement or development where:</p> <p>(d) expenditure on the project had not been reasonably forecast for the current IPP regulatory period;</p> <p>(e) it would have been reasonably unforeseeable for Transpower to forecast expenditures on the project for the current IPP regulatory period; and</p> <p>(f) Transpower can demonstrate that the project is reasonably likely to proceed in the penultimate and final years of the regulatory period.</p>	<p>regulatory period when the IPP was determined; and</p> <p>(c) that Transpower can demonstrate is reasonably likely to proceed in the penultimate or final pricing year of the current regulatory period.</p>	<p>“occur”. For example, is a project that starts during the third pricing year and continues into the fourth intended to be covered?</p> <p>We consider re-openers should not be restricted just to the interconnected grid. We note that “interconnected grid” is not defined in the Code. If “interconnection assets” is used instead then it should be defined by reference to the Part 1 Code definition (not the TPM definition) so that the HVDC link is included.</p> <p>There is no “year” of a regulatory period, just a pricing year or disclosure year. We think this reference is for a pricing year.</p>
<p>(3) ‘Foreseeable Enhancement and Development Project’ means a Transpower project that requires a transmission network enhancement or development in the present or future interconnected grid as defined by the code, and has a primary driver of either:</p> <p>(a) a step change in demand; or</p> <p>(b) a generation connection or generation decommissioning; or</p> <p>(c) any other existing or potential connected party development that requires a transmission network enhancement or development, where:</p> <p>(d) expenditures cost estimates on the project could not have been accurately</p>	<p>Foreseeable Enhancement and Development Project’ means an E & D base capex project:</p> <p>(a) an allowance for which was not included in the base capex allowances for the current regulatory period because the capital expenditures on or timing of the E & D base capex project was not accurately forecast at the time the IPP was determined;</p> <p>(b) the capital expenditure on or timing of which was not reasonably able to be accurately forecast at the time the IPP was determined; and</p> <p>(c) Transpower can demonstrate is reasonably likely to proceed in the penultimate or final</p>	<p>For Transpower to be able to apply, the application should not be tied to specifying a ‘primary driver’.</p>

<p>forecast for the current IPP regulatory period by a prudent transmission operator; (e) it would have been unreasonable for Transpower to forecast project timing for the current IPP regulatory period; and (f) Transpower can demonstrate that the project is reasonably likely to proceed in the penultimate and final years of the regulatory period.</p>	<p>pricing year of the current regulatory period.</p>	
<p>3.7.4 When price-quality paths may be reconsidered (1) Transpower's IPP may be reconsidered by the Commission if- (a) the Commission considers, or Transpower applies to the Commission and satisfies the Commission, that- (vi) subject to sub-clauses (7) and (8), two or more Enhancement and Development Projects are required</p>	<p>3.7.4 When price-quality paths may be reconsidered (1) The IPP may be reconsidered by the Commission if- (a) the Commission considers, or Transpower applies to the Commission and satisfies the Commission, that- (vi) subject to sub-clauses (7) and (8), one or more Enhancement and Development Projects are required. (7) For the purpose of clause 3.7.4(1)(vi), Transpower may only apply once during a regulatory period for reconsideration of the IPP in respect of one or more Enhancement and Development Projects, and that application must be received by the Commission no later than the end of the second disclosure year of that regulatory period.</p>	<p>We note that "IPP" is defined as Transpower's IPP.</p>

<p>3.7.5 Amending price-quality path after reconsideration</p> <p>(2) The Commission must not amend the-</p> <p>(b) grid output targets, caps, collars and grid output incentive rates associated with revenue-linked grid output measures to mitigate the effect of-</p> <p>(vi) the approval of Enhancement and Development Projects by the Commission in clause 3.7.4, as the case may be.</p>	<p>3.7.5 <u>amending price-quality path after reconsideration</u></p> <p>(2) The Commission must not amend the-</p> <p>(b) grid output targets, caps, collars and grid output incentive rates associated with revenue-linked grid output measures to mitigate the effect of-</p> <p>(v) the amendment required to forecast SMAR to account for-</p> <p>(B) the revenue impact of any base capex approved by the Commission for a listed project or Enhancement and Development Project;</p> <p>as the case may be.</p>	<p>We support this provision.</p> <p>The drafting change incorporates the reference to Enhancement and Development Projects into the existing subclause about base capex rather than having it as a stand-alone subclause, for drafting consistency.</p>
<p>3.18.4 The insertion of a new sub-clauses (7) and (8) to clause 3.7.4 of the Transpower IM determination as follows:</p> <p>(7) For the purpose of clause 3.7.4(1)(vi), Transpower may only apply once during a regulatory period for reconsideration of the IPP in respect of Enhancement and Development Projects, and that application must be received by the Commission no later than the E&D of the disclosure year of the second year of that regulatory period.</p> <p>(8) For the purpose of clause 3.7.4(1)(vi), the total of the Enhancement and Development Projects must in aggregate amount to at least \$20 million. For the</p>	<p>(7) For the purpose of clause 3.7.4(1)(vi), Transpower may only apply once during a regulatory period for reconsideration of the IPP in respect of one or more Enhancement and Development Projects, and that application must be received by the Commission no later than the end of the second disclosure year of that regulatory period.</p>	<p>We support the provision for the timing of the application.</p> <p>We do not support the threshold level nor the requirement for at least two projects, as explained in our submission.</p> <p>We suggest combining these subclauses (7) and (8) with the other changes to clause 3.7.4 (two rows above).</p>

<p>avoidance of doubt, the two or more Enhancement and Development Projects may comprise of either or both 'Unforeseeable Enhancement and Development Projects' in accordance with clause 3.7.3B (2) or 'Foreseeable Enhancement and Development Projects' in accordance with clause 3.7.3B (3)</p>		
<p>Connection asset has the same meaning as "connection asset" as set out in the transmission pricing methodology which is set out in subpart 4 of Part 12 of the code Enhancement and Development Projects has the meaning set out in clause 3.7.3B; Primary driver means the primary reason for a decision to incur a cost in the year the cost was incurred or forecast to be incurred</p>	<p>Base capex allowances has the same meaning as defined in the Capex IM;</p> <p>Connection asset has the same meaning as "connection asset" in the TPM;</p> <p>E & D base capex project has the same meaning as defined in the Capex IM;</p> <p>Enhancement and Development Projects has the meaning set out in clause 3.7.3B (1);</p> <p>Foreseeable Enhancement and Development Projects has the meaning set out in clause 3.7.3B (3);</p> <p>Unforeseeable Enhancement and Development Projects has the meaning set out in clause 3.7.3B (2);</p>	<p>We are not clear on why a definition of "connection asset" is required because the term is not used in the proposed new provisions.</p>