

WAIKATO AND UPPER NORTH ISLAND VOLTAGE MANAGEMENT

ATTACHMENT A: COMPLIANCE REQUIREMENTS

Transpower New Zealand Limited

December 2019

Keeping the energy flowing

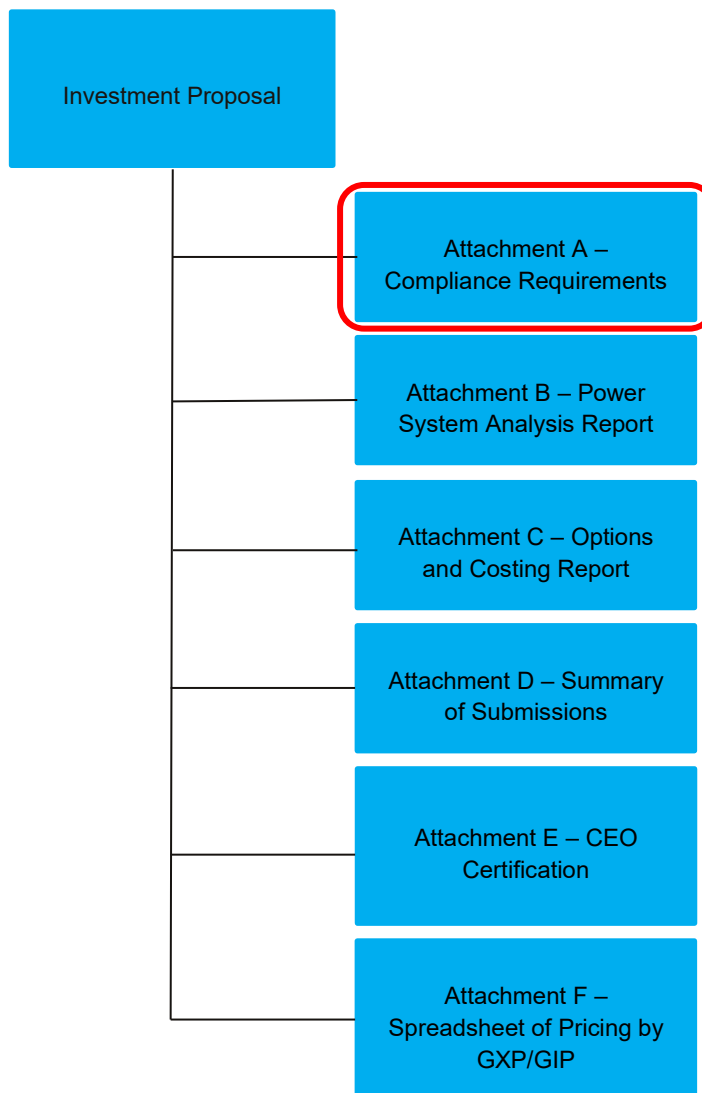


1 Introduction

The Commerce Commission's *Transpower Capital Expenditure Input Methodology Determination 2012* (Capex IM) contains a number of requirements for Transpower to comply with in preparing a major capex proposal, and requirements the Commerce Commission must follow in determining whether to approve the major capex proposal.

The purpose of this document is to satisfy the Commerce Commission that Transpower has met the compliance requirements as set out in the Capex IM.

It is one of the supporting attachments for our main report ('Waikato and Upper North Island Voltage Management Major Capex Proposal') and should be read in conjunction with the rest of the major capex proposal.



The Capex IM was issued by the Commerce Commission in 2012 and has had a number of subsequent amendments. The most recent amendment was on 1 June 2018 which means that the Capex IM has changed since Transpower initially commenced this investigation and undertook its Long-list consultation in 2016.

Current Capex IM (2018):

https://comcom.govt.nz/data/assets/pdf_file/0026/88280/Consolidated-Transpower-capital-expenditure-input-methodology-determination-as-at-1-June-2018.PDF

The Capex IM (as it applied in 2016):

https://comcom.govt.nz/data/assets/pdf_file/0026/63881/Consolidated-Transpower-Capital-Expenditure-Input-Methodology-Determination-as-at-5-February-2015.pdf

2 Information requirements for Major Capex Proposal

The Capex IM includes some specific requirements for major capex proposals. The tables below describe how this proposal meets these requirements.

Clause	Requirement	Compliance
1.1.5(2), definition of “major capex project (staged)”	major capex project (staged) means a major capex project consisting of two or more projects and includes any major capex project that is a continuation of an existing major capex project (staged) ;	<p>Compliant.</p> <p>The proposed investment is a major capex project because the expenditure:</p> <ul style="list-style-type: none"> • will be incurred to meet grid reliability standards; • is forecast to be a mixture of capital expenditure in excess of the base capex threshold (\$20m) and potential expenditure on non-transmission solutions; and • will not be incurred in relation to the base capex categories of expenditure. <p>The proposed investment consists of two staging projects.</p>
3.3.3(1)	<p>Transpower must submit a major capex proposal to the Commission when it seeks approval for-</p> <p>(a) a major capex project that is not major capex projects (staged); or</p> <p>(b) one or more staging projects of a major capex projects (staged).</p> <p>For the avoidance of doubt, any application by Transpower to the Commission for approval of subsequent stages of a major capex project (staged) must be made in a new major capex proposal.</p>	<p>Compliant.</p> <p>This major capex proposal relates to the first stage of the proposed investment (stage 1).</p>

3.3.3(2)	<p><i>Where Transpower seeks approval of one or more staging projects-</i></p> <ul style="list-style-type: none"><i>(a) the aggregate forecast capital expenditure and forecast maximum recoverable costs for all staging projects that comprise the major capex project (staged) must exceed the base capex threshold;</i><i>(b) the forecast capital expenditure and forecast maximum recoverable costs for a staging project for which approval is sought need not exceed the base capex threshold.</i>	Compliant. The forecast expenditure for stage 1 is \$144.5m. The forecast expenditure for stage 2 is \$90m. The forecast expenditure for the proposed investment is therefore greater than \$20m.
3.3.3(3)	<p><i>A major capex proposal may be submitted at any time during a regulatory period.</i></p>	Compliant.

Clause ¹	Requirement	Compliance
3.3.4(a)	The Commission may reject a major capex proposal where- (a) Transpower has not complied with the requirements specified in clause 3.3.1;	See below.
3.3.1(1) 3.3.1(1)	<u>Transpower must notify the Commission of its intention to plan a major capex project that Transpower considers may become a proposed investment.</u> Transpower must notify the Commission of its intention to plan a major capex project that may become a proposed investment.	Compliant. We notified the Commission of our intention to plan the proposed investment on 27 May 2016. This was before staged major capex projects were added to the Capex IM, so the notice did not include the matters now specified in clause 3.3.1(2).
3.3.1(2)-(6) 3.3.1(3)-(8)	<u>(2) In the two-month period following such notification, the Commission and Transpower must use reasonable endeavours to agree, in respect of that major capex project-</u> (a) <u>in accordance with clause 8.1.3-</u> i) <u>a consultation programme for a transmission investment or non-transmission solution; and</u> ii) <u>an approach to ensure appropriate consideration of non-transmission solutions to meet the investment need; and</u> (b) <u>approval timeframes.</u> <u>(3) For the purpose of assisting interested persons, the Commission may include in the consultation programme referred to in subclause (2)(a)(i) such consultation processes that</u>	Compliant. Transpower and the Commission agreed the clause 3.3.1(2) matters in July 2016 (Commission letter to Transpower of 1 July 2016). Transpower reviewed and updated the clause 3.3.1(2) matters in letters to the Commission on 15 March 2019 and 30 May 2019. Information about the consultation programme, approach to considering non-transmission solutions, application submission date and approval timeframe is published on Transpower's

¹ The underlined clause references in this part of the table are to clauses in the Capex IM immediately before it was amended by the *Transpower Capital Expenditure Input Methodology Amendments Determination* [2018] NZCC 8 on 25 May 2018. The previous version of the Capex IM applied at the time some process steps were completed.

the **Commission** intends to follow, but **Transpower** is not required to agree such processes.

(4) Where no agreement is made on one or more of the things referred to in subclause (2), the **Commission** will, by one week after the end of the period referred to in subclause (2), having regard to the views expressed by **Transpower** during that period, specify whichever of the following has not been agreed:

- (a) a consultation programme in respect of a **transmission investment or nontransmission solution**, in accordance with clause 8.1.3;
- (b) an approach to ensure appropriate consideration of **non-transmission solutions to meet the investment need**, in accordance with clause 8.1.3; and
- (c) **approval timeframes**.

(5) The **Commission** and **Transpower** must publish the-

- (a) consultation programme;
- (b) approach for consideration of **non-transmission solutions**; and
- (c) **approval timeframes**.

as soon as reasonably practicable.

(6) The **Commission** and **Transpower** must-

- (a) regularly review the published-
 - (i) consultation programme; and
 - (ii) approach for consideration of **non-transmission solutions**; and
 - (iii) **approval timeframes**.

as to whether they remain appropriate and reasonable; and

- (b) the **Commission** may amend one or more of those things to ensure that they remain appropriate and reasonable.

website at <https://www.transpower.co.nz/waikato-and-upper-north-island-voltage-management-investigation>.

(3) The **Commission and Transpower** must, in the two-month period following a notification, under subclause (1) use reasonable endeavours to agree in respect of that **major capex project**-

- (a) a consultation programme for a **transmission investment or non-transmission solution**, in accordance with clause 8.1.3;
- (b) an approach to ensure appropriate consideration of **non-transmission solutions** to meet the **investment need** giving rise to the **major capex project** in accordance with clause 8.1.3;
- (c) an **application submission date**; and
- (d) an **approval timeframe**.

(4) Where the **Commission and Transpower** have not agreed on each of the matters in subclause (3) within the two month period following a notification under subclause (1), the **Commission** must, after considering the views expressed by **Transpower**, specify those matters that have not been agreed within two weeks of the expiry of the two month period.

(5) The consultation programme referred to in subclause (3)(a) may also include any consultation processes that the **Commission** intends to follow.

(6) The **Commission and Transpower** must publish the matters agreed under subclause (3) or specified under subclause (4) as soon as reasonably practicable.

(7) The **Commission and Transpower** must regularly review whether the matters published under subclause (6) (or published in amended form under subclause (8)) remain appropriate and reasonable and the **Commission** may, after considering **Transpower's** views, amend any of those matters to ensure that they remain appropriate and reasonable.

(8) Where the **Commission** materially amends any of the matters under subclause (7), the **Commission and Transpower**

	<p><i>must publish the amended matters or a summary of them as soon as reasonably practicable.</i></p>	
<p>3.3.1(9)</p>	<p><i>Transpower must consult interested persons in accordance with the published consultation programme and follow the published approach for consideration of non-transmission solutions.</i></p>	<p>Compliant.</p> <p>Information about the consultation programme and approach to considering non-transmission solutions is published on Transpower’s website at https://www.transpower.co.nz/waikato-and-upper-north-island-voltage-management-investigation.</p> <p>Please refer to:</p> <ul style="list-style-type: none"> • Sections 4.1 and 5;² • Attachment D: Stakeholder Consultation Summary.

² Unless stated otherwise, references to Sections are to Sections of the major capex proposal (i.e. not the Attachments).

Clause	Requirement	Compliance
3.3.4(b)	The Commission may reject a major capex proposal where- (b) the major capex proposal does not comply with clause 7.4.1.	See below.
7.4.1(1)(a)	A major capex proposal must- (a) comply with Schedule G; and	See below.
7.4.1(1)(b)	A major capex proposal must- (b) contain the certificates specified in clause 9.2.1 [Chief Executive's certification].	Compliant. Please refer to Attachment E: CEO Certification.
7.4.1(2)	The number of investment options contained in a major capex proposal must be appropriate given the magnitude of the estimated expenditure and the complexity of the investment need associated with the proposed investment .	We consider the major capex proposal complies with this requirement. We considered a large number of investment option components as part of our long-list consultation that were appropriate to consider as part of this investment need. These were subsequently reduced to several short-listed investment options that were analysed through the Investment Test. Please refer to: <ul style="list-style-type: none"> • Section 3; • Attachment C: Options and Costing Report, Section 3.
7.4.1(3)	With respect to each investment option described in such a proposal, the- (a) specificity of information; and (b) rigour and comprehensiveness of the analysis, must be commensurate with the estimated expenditure and complexity of that option.	We consider the major capex proposal complies with this requirement. Please refer to: <ul style="list-style-type: none"> • Section 3; • Attachment C: Options and Costing Report.

7.5.1(1)(a)	<p><i>All major capex proposals and listed project applications must include-</i></p> <p><i>(a) a description of the benefits the proposed expenditure is expected to deliver to Transpower's customers;</i></p>	<p>Compliant.</p> <p>Please refer to:</p> <ul style="list-style-type: none"> • Sections 3.3 and 3.4.2; • Attachment C: Options and Costing Report, Section 4.1 and 4.3.
7.5.1(1)(b)	<p><i>All major capex proposals and listed project applications must include-</i></p> <p><i>(b) to the extent reasonably possible, a quantitative estimate of the benefits the proposed expenditure is expected to deliver to Transpower's customers; and</i></p>	<p>Compliant.</p> <p>Please refer to:</p> <ul style="list-style-type: none"> • Section 3.4; • Attachment C: Options and Costing Report, Section 4.2.
7.5.1(1)(c)	<p><i>All major capex proposals and listed project applications must include-</i></p> <p><i>(c) an estimate of the expected increase in Transpower's transmission charges due to the proposed expenditure, including estimated increases in transmission charges-</i></p> <p><i>(iv) per kilowatt of demand;</i></p> <p><i>(v) per kilowatt hours of energy supplied; and</i></p> <p><i>(vi) for each affected grid exit point and grid injection point.</i></p>	<p>Compliant.</p> <p>Please refer to:</p> <ul style="list-style-type: none"> • Section 6.4; • Attachment C: Options and Costing Report, Appendix 1; • Attachment F: Spreadsheet of Pricing by GXP/GIP.

Clause	Requirement	Compliance
G1	<p>For the purpose of clause 7.4.1(1)(a)-</p> <p>(a) a major capex proposal must include the information listed or described in this schedule;</p>	
G2	<p>explanation of the need for investment, including-</p> <p>(a) information on its nature, extent, location and timing;</p> <p>(b) commentary as to how the investment need is consistent with the most recent integrated transmission plan; and</p> <p>(c) a summary of consultation participants' views on the investment need and how Transpower had regard to those views and if not, why not.</p>	<p>Compliant.</p> <p>Please refer to:</p> <ul style="list-style-type: none"> Sections 2 and 5; Attachment B: Power System Analysis Report, Sections 2 to 4; Attachment D: Stakeholder Consultation Summary.
G3	<p>(1) detailed description of each demand and generation scenario variation, including-</p> <p>(a) an explanation of the major variations between the demand and generation scenario variation and the related original demand and generation scenario;</p> <p>(b) the rationale for the variations; and</p> <p>(c) a summary of consultation participants' views on them;</p> <p>(2) in respect of each relevant demand and generation scenario-</p> <p>(a) the relative weighting of each scenario; and</p> <p>(b) where that weighting was determined by Transpower, the methodology used to determine it.</p>	<p>Compliant.</p> <p>Please refer to:</p> <ul style="list-style-type: none"> Sections 2.2.1, and 2.4; Attachment C: Options and Costing Report, Sections 4.1.1.4 and 4.1.1.5; Attachment D: Stakeholder Consultation Summary.
G4	<p>In relation to each investment option contained in the major capex proposal-</p> <p>(1) description of the investment option;</p> <p>(2) net electricity market benefit of each investment option under each relevant demand and generation scenario;</p> <p>(3) in respect of each investment option, quantum of-</p>	<p>Compliant.</p> <p>Please refer to:</p> <ul style="list-style-type: none"> Sections 3.2 to 3.4; Attachment B: Power System Analysis Report, Section 6;

	<p>(a) each electricity market benefit or cost element;</p> <p>(b) each project cost;</p> <p>(c) aggregate electricity market benefit or cost element; and</p> <p>(d) the P50,</p> <p>used to calculate each net electricity market benefit;</p> <p>(4) methodology used to determine the quantum of all information provided pursuant to subclause (3), including details commensurate with the estimated capital expenditure and complexity of the investment option of any-</p> <p>(a) internal and external benchmarking and how the results were applied;</p> <p>(b) relevant existing or proposed supply or procurement processes;</p> <p>(c) modelling tools or techniques; and</p> <p>(d) key publications and data sources;</p> <p>(5) key assumptions used to determine the net electricity market benefit of each investment option, including-</p> <p>(a) discount rate;</p> <p>(b) calculation period; and</p> <p>(c) cost per megawatt hour used to determine the value of expected unserved energy; and</p> <p>(6) expected net market benefit of each investment option.</p>	<ul style="list-style-type: none"> Attachment C: Options and Costing Report, Sections 4 to 6 and Appendix 2.
<p>G5</p>	<p>(1) identification of the proposed investment and, where the proposed investment is a major capex project (staged), provide-</p> <p>(a) a description of all the proposed staging projects of the major capex project (staged);</p> <p>(b) full details of each staging project for which approval is being sought;</p> <p>(c) reasons for the proposed staging, including the extent to which splitting the major capex project (staged) into</p>	<p>Compliant.</p> <p>More detail about how the proposed investment satisfies the investment test (clause G5(13)) is provided in Part 3 of this document.</p> <p>Please refer to:</p> <ul style="list-style-type: none"> Sections 1 to 4 and 6;

	<p><i>stages has the potential to reduce the timing, scope or cost uncertainties of the major capex project; and</i></p> <p><i>(d) the estimated project costs, proposed major capex project outputs and planned timing of each staging project for which approval is being sought;</i></p> <p><i>(2) detailed description of the components of the major capex project or staging projects, including at least-</i></p> <p><i>(a) identification of the extent to which the major capex project or each staging project includes a transmission investment or a non-transmission solution;</i></p> <p><i>(b) a summary of requirements for completion of the major capex project or each staging project, such as property or property right acquisition, resource management approvals, asset purchases, asset construction and site remediation;</i></p> <p><i>(c) any proposed major capex allowance for the major capex project or each staging project, which must be the P50, of capital expenditure and the estimated probability distribution of the P50;</i></p> <p><i>(d) where a major capex allowance is applicable, the commissioning date assumption and rationale for it;</i></p> <p><i>(e) any proposed maximum recoverable costs;</i></p> <p><i>(f) where maximum recoverable costs are applicable, the completion date assumption and rationale for it;</i></p> <p><i>(g) the major capex incentive rate where a different rate to the default rate of 15% is proposed and the rationale for it;</i></p> <p><i>(h) all relevant supporting technical information and costing information;</i></p> <p><i>(i) where the major capex project or a staging project includes a non-transmission solution-</i></p> <p><i>(i) the proposed recovery scheme; and</i></p>	<ul style="list-style-type: none"> Attachment C: Options and Costing Report, Sections 4 to 6.
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	<p>(ii) an explanation of the relationship between any proposed major capex allowance and any proposed maximum recoverable costs for that non-transmission solution; and</p> <p>(j) proposed approval expiry date and rationale for it;</p> <p>(3) detailed description of the rationale for the proposed investment;</p> <p>(4) summary of the key evidence that supports the rationales such as contracts, reports, memos, financial or other data, results of modelling exercises, customer documentation and letters, and statements from directors;</p> <p>(5) commentary as to how consistent the proposed investment is with the most recent integrated transmission plan, and if not, why not;</p> <p>(6) identification of anything associated with the proposed investment falling under any of clauses D4(1)(a) to D4(1)(g) that did not meet the definition of electricity market benefit or cost element only by virtue of its being unlikely to affect the net electricity market benefit to an appreciable degree;</p> <p>(7) description of considerations, assumptions and calculations used to determine that something falling under any of clauses D4(1)(a) to D4(1)(g) did not meet the definition of electricity market benefit or cost element by virtue of its being unlikely to affect the net electricity market benefit to an appreciable degree;</p> <p>(8) outcome of sensitivity analysis;</p> <p>(9) description of the methodology applied in undertaking sensitivity analysis;</p> <p>(10) explanation as to how robust to sensitivity analysis the proposed investment is;</p> <p>(11) reasons for any selection of a-</p> <p>(a) discount rate other than 7%; and</p> <p>(b) calculation period other than 20 years;</p>	
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	<p>(c) <i>cost per megawatt hour determined using paragraph (b) of the definition of value of expected unserved energy;</i></p> <p>(12) <i>a description as to how consistent with good electricity industry practice the proposed investment is;</i></p> <p>(13) <i>rationale for determining that the proposed investment may satisfy the investment test by reference to each subclause and paragraph of that test; and</i></p> <p>(14) <i>a plan for monitoring costs, project milestones and deliverables that reflects the best information available to Transpower.</i></p>	
<p>G6</p>	<p><i>In relation to the major capex project or, each staging project for which Transpower seeks approval-</i></p> <p>(1) <i>the major capex project outputs that are proposed;</i></p> <p>(2) <i>the quantum of each proposed major capex project output;</i></p> <p>(3) <i>the rationale for the proposed major capex project outputs, including-</i></p> <p>(a) <i>description of key factors and key assumptions relevant to their determination including the uncertainty associated with each such factor or assumption; and</i></p> <p>(b) <i>explanation of the extent to which the quantum of each proposed major capex project output reflects:</i></p> <p>(i) <i>the assets to be commissioned;</i></p> <p>(ii) <i>the forecast changes to the functional capability of the grid;</i></p> <p>(iii) <i>the quantum of forecast electricity market benefit or cost elements directly related to the supply of electricity transmission services; and</i></p> <p>(iv) <i>in respect of a non-transmission solution, any service provided by a third party;</i></p> <p>(4) <i>explanation of the relationship between the proposed major capex allowance and the quantum of each major capex project output that is proposed including the sensitivity of the</i></p>	<p>Compliant.</p> <p>Please refer to:</p> <ul style="list-style-type: none"> • Sections 3 and 6.3; • Attachment C: Options and Costing Report, Sections 3, 4.1 and 6.5.

	<p><i>quantum of each major capex project output that is proposed to changes in the proposed major capex allowance, including commentary in terms of increases or decrease in the scope of the project;</i></p> <p><i>(5) description of factors that may affect Transpower's ability to achieve each major capex project output that is proposed, including identification of each factor, with reasons, as within or outside Transpower's control; and</i></p> <p><i>(6) in the case of a non-transmission solution, a description of the transmission investment it avoids in terms of both assets and expected costs avoided.</i></p>	
<p>G7</p>	<p><i>In respect of consultation, the specified information is a description as to how the consultation programme referred to in clause 3.3.1(9) was followed, including-</i></p> <ul style="list-style-type: none"> <i>(a) a list of the relevant consultation steps and confirmation by Transpower that each occurred;</i> <i>(b) a list of respondents to the consultation;</i> <i>(c) a description of all issues raised by interested persons in response to Transpower's intended major capex proposal;</i> <i>(d) a summary of the arguments raised in respect of each issue to which paragraph (c) applies; and</i> <i>(e) in respect of the issues to which paragraph (c) applies, an explanation as to whether the major capex proposal accommodates the arguments referred to in paragraph (d); and</i> <ul style="list-style-type: none"> <i>(i) if so, how; and</i> <i>(ii) if not, why not.</i> 	<p>Compliant.</p> <p>Please refer to:</p> <ul style="list-style-type: none"> • Section 5; • Attachment D: Stakeholder Consultation Summary.
<p>G8</p>	<p><i>In respect of non-transmission solutions, a description as to how the requirements of Schedule 1 Division 2 were met, including-</i></p> <ul style="list-style-type: none"> <i>(a) summary of the process followed to identify and assess non-transmission solutions;</i> 	<p>Compliant.</p> <p>More detail about compliance with the relevant Schedule 1 requirements is provided below.</p>

	<p>(b) description of non-transmission solutions suitable to meet the relevant investment need identified either by Transpower or by consultation participants;</p> <p>(c) explanation as to how the non-transmission solutions to which paragraph (b) applies were taken into account when determining the investment options and applying the investment test; and</p> <p>(d) description and justification of how any assets that would be commissioned by Transpower form part of the non-transmission solution.</p>	<p>Please refer to:</p> <ul style="list-style-type: none"> • Section 4.1; • Attachment C: Options and Costing Report, Sections 3 and 5.2; • Attachment D: Stakeholder Consultation Summary.
<p>G9</p>	<p>Any additional supporting material Transpower reasonably considers is relevant to the decision of the Commission under clause 3.3.5.</p>	<p>We consider that we have included all relevant information in the major capex proposal.</p>

Clause	Requirement	Compliance
<p>I5(1), (2) and (3)(a) to (c)</p>	<p>(1) <i>The approach to enabling consideration of whether one or more non-transmission solution may meet an investment need must take into account-</i></p> <ul style="list-style-type: none"> (a) <i>the size and nature of the investment need; and</i> (b) <i>the likelihood that one or more non-transmission solutions could reasonably meet it.</i> <p>(2) <i>The approach must enable the-</i></p> <ul style="list-style-type: none"> (a) <i>reasonable information needs of interested persons, including potential proponents of non-transmission solutions to be met; and</i> (b) <i>views of interested persons, including potential proponents of non-transmission solutions to be expressed and taken into account.</i> <p>(3) <i>As a minimum, the approach must include the requirements that-</i></p> <ul style="list-style-type: none"> (a) <i>when consulting on an investment need, Transpower must-</i> <ul style="list-style-type: none"> (i) <i>invite interested persons to provide views or information relevant to possible non-transmission solutions to meet that need; and</i> (ii) <i>provide sufficient information to enable interested persons, including potential proponents of non-transmission solutions to propose non-transmission solutions; and</i> (b) <i>Transpower need not seek proposals for non-transmission solutions from interested persons prior to the initial consultations on its long list of investment options, but must take those views and information on or relevant to possible non-transmission solutions into account to the extent they have been provided prior to or during the period in which the long list is developed,</i> 	<p>We consider we have complied with these requirements.</p> <p>Our approach to enabling consideration of non-transmission solutions (NTSs) is as follows:</p> <ul style="list-style-type: none"> • Initial request for information about NTSs in our long list consultation. • Inclusion of an NTS option in our short list consultation. • NTS RFI and formal procurement process to be run in parallel with the MCP process due to the proximity of the need date and quickly evolving NTS options (such as batteries). The NTS RFI opened on 2 October 2019 and closed on 26 November 2019. Please refer to Section 4.1.1 for commentary on the outcome of the RFI. • We will either amend the MCP or apply for an amendment to the approved project if the NTS procurement process reveals one or more viable, economic NTS options. <p>Respondents to our short list consultation were asked whether they agreed with our approach to enabling consideration of NTSs. Most respondents agreed with our approach.</p>

	<p>including pro-actively engaging with the parties providing them, where appropriate; and</p> <p>(c) when consulting on its long list of investment options, Transpower must-</p> <p>(i) include potential non-transmission solutions in its list of investment options; and</p> <p>(ii) invite interested potential proponents of non-transmission solutions to provide information or proposals on non-transmission solutions; and</p>	
<p>15(3)(d)</p>	<p>(d) when developing the short list of investment options that includes a non-transmission solution, Transpower must invite proponents of non-transmission solutions to provide comprehensive proposals in respect of their non-transmission solution(s).</p>	<p>We departed from this requirement under clause 8.1.3(2)(a)(iii) of the Capex IM, having regard to the urgency of the investment need in this case.</p> <p>Our short list options included an NTS option, but we did not invite comprehensive proposals for NTSs at that stage (although we had received some in response to our long list consultation).</p> <p>As discussed above, our approach to enabling consideration of NTSs includes inviting comprehensive proposals for NTSs (by way of RFI and a formal procurement process) in parallel with the MCP process. We will either amend the MCP or apply for an amendment to the approved project if the NTS RFI and formal procurement process reveal one or more viable, economic NTS options.</p>

<p>I5(4) and (5)</p>	<p>(4) <i>The invitations described in subclauses (3)(c) and (3)(d) must grant interested persons and proponents of non-transmission solutions 6 weeks to respond, subject to subclause (5).</i></p> <p>(5) <i>For the purpose of subclause (4), the approach may specify a longer or shorter period where appropriate in light of the factors specified in subclause (1).</i></p>	<p>We complied with these requirements for our long list consultation, which allowed around seven weeks for submissions.</p> <p>As discussed above, we departed from the requirement to seek comprehensive proposals for NTSs at the short list consultation stage, having regard to the urgency of the investment need in this case. However, our recent NTS RFI allows around eight weeks for submissions. Any formal NTS procurement process will allow at least six weeks for submissions.</p>
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3 Application of Investment Test

Clause G5(13) requires a major capex proposal to include Transpower's rationale for determining that the proposed investment may satisfy the investment test in Schedule D Division of the Capex IM, by reference to each subclause and paragraph of the test. The table below describes how the proposed investment in this proposal satisfies the investment test.

Clause	Requirement	Compliance
<p>D1(1)</p>	<p>(1) <i>The investment test is satisfied in respect of a proposed investment if the proposed investment is an investment option that-</i></p>	
<p>D1(1)(a)</p>	<p>(a) <i>is sufficiently robust under sensitivity analysis;</i></p>	<p>Compliant. The proposed investment (option 3) is robust under sensitivity analysis.</p> <p>Please refer to Attachment C: Options and Costing Report, Section 4.2.2.</p>

<p>D1(1)(b)</p>	<p>(b) has a positive expected net electricity market benefit unless it is designed to meet an investment need the satisfaction of which is necessary to meet the deterministic limb of the grid reliability standards; and</p>	<p>Compliant. The proposed investment (option 3) has a positive expected net electricity market benefit of \$155m.</p> <p>Please refer to Attachment C: Options and Costing Report, Section 4.2.1.</p>
<p>D1(1)(c)</p>	<p>(c) has-</p> <p>(i) the highest expected net electricity market benefit, where only quantified electricity market benefit or cost elements are taken into account; or</p> <p>(ii) the highest expected net electricity market benefit including a qualitative assessment to take into account the contribution of associated unquantified electricity market benefit or cost elements, if the proposed investment has a similar expected net electricity market benefit to the investment option with the highest expected net electricity market benefit where only quantified electricity market benefit or cost elements are taken into account.</p>	<p>Compliant. The proposed investment (option 3) has the same expected net electricity market benefit to option 2 (\$155m) and has a higher unquantified benefits ranking.</p> <p>Please refer to Attachment C: Options and Costing Report, Sections 4.1, 4.3 and 5.1.</p>
<p>D1(2)</p>	<p>(2) For the purpose of subclause (1)(c)(ii)-</p>	
<p>D1(2)(a)</p>	<p>(a) a similar expected net electricity market benefit is one where the difference in quantum, subject to subclause (3), is 10% or less of the aggregate project costs of the investment option to which the proposed investment is compared; and</p>	<p>The difference in the quantum of expected net electricity market benefit between the proposed investment (option 3) and option 2 is zero.</p> <p>Please refer to Attachment C: Options and Costing Report, Section 4.2.</p>
<p>D1(2)(b)</p>	<p>(b) an electricity market benefit or cost element may be treated as unquantified where-</p> <p>(i) the cost of calculating its quantum in accordance with clause D6(4) is likely to be disproportionately large relative to the quantum; or</p>	<p>The unquantified benefits relate to environment, competition, (unquantified) avoidance of unserved energy, operations and optionality.</p> <p>We consider the expected value of these benefits cannot be calculated with an appropriate level of certainty due to the extent</p>

	<p>(ii) <i>its expected value cannot be calculated in accordance with clause D6(4) with an appropriate level of certainty due to the extent of uncertainties in underlying assumptions or calculation approaches.</i></p>	<p>of uncertainties in underlying assumptions or calculation approach.</p> <p>Please refer to Attachment C: Options and Costing Report, Section 4.3.</p>
<p>D1(3)</p>	<p>(3) <i>For the purpose of subclause (2)(a), the Commission may, at its discretion, adopt an alternative percentage to 10% as proposed by Transpower.</i></p>	<p>Not applicable.</p>