

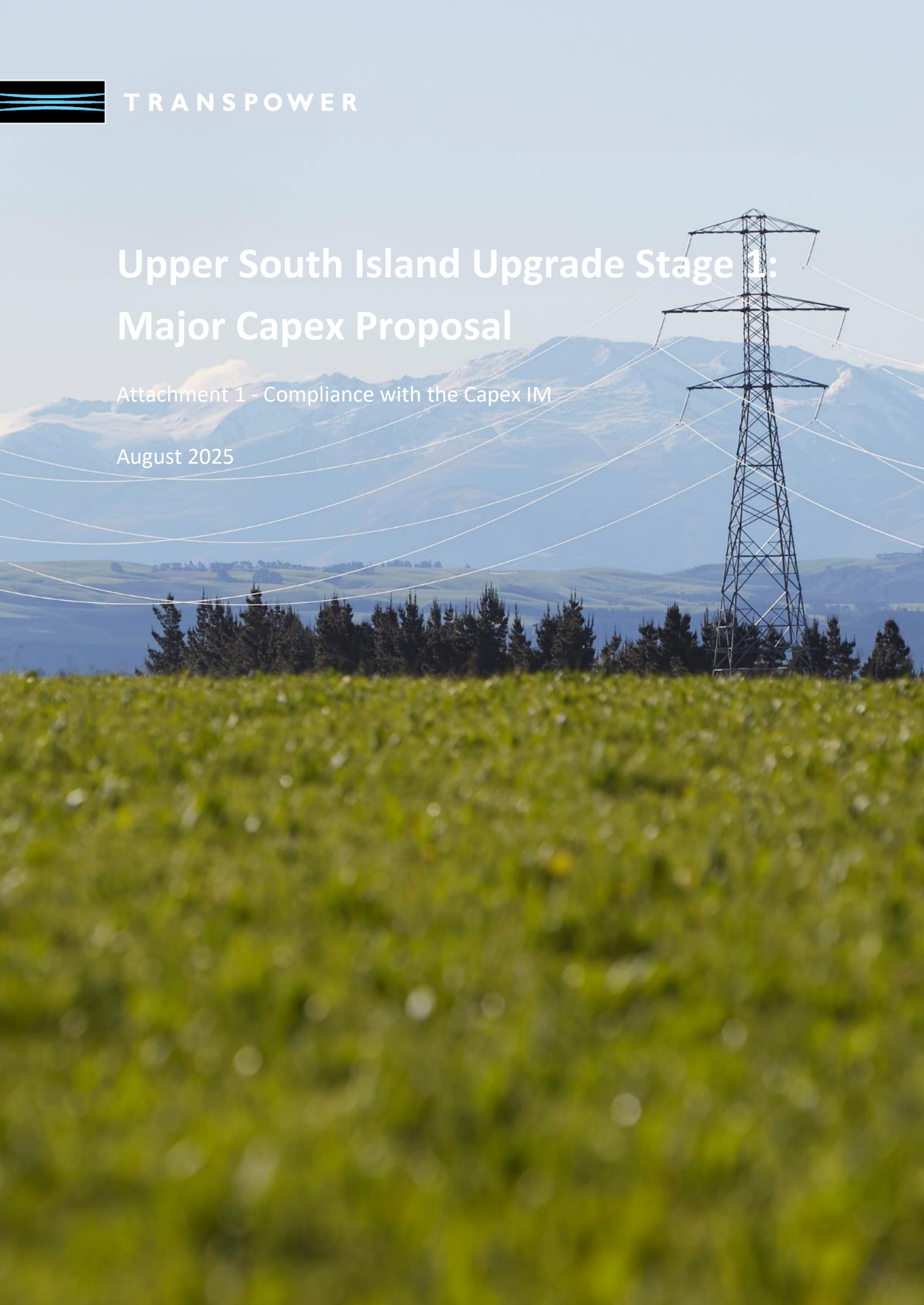


TRANSPOWER

Upper South Island Upgrade Stage 1: Major Capex Proposal

Attachment 1 - Compliance with the Capex IM

August 2025



1 Introduction

The Commerce Commission's *Transpower Capital Expenditure Input Methodology Determination 2012* (as amended) (**Capex IM**) contains a number of requirements Transpower must comply with in preparing a major capex proposal, and requirements the Commerce Commission must follow in determining whether to approve the proposed Stage 1 investment.

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 for its Upper South Island Upgrade Stage 1: Major Capex Proposal. This document should be read in conjunction with the rest of the major capex proposal documents.

The Commerce Commission amended the Capex IM in December 2023, but as this major capex proposal was notified to the Commerce Commission before 1 April 2025, the pre-amendment Capex IM applies (clause 4(b)(ii) of the Transpower Capital Expenditure Input Methodology (IM Review) Amendment Determination 2023). The relevant version of the Capex IM is [Transpower-Capital-Expenditure-Input-Methodology-Determination-consolidated-as-of-29-January-2020.pdf](#).

References to clauses below are to clauses of the Capex IM.

2 Information requirements for Major Capex Proposal

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

Clause	Requirement	Compliance
1.1.5(2), definitions of “major capex project” and “major capex project (staged)”	<p><i>major capex project means a project of major capex undertaken to address or enable a specific investment need to be met, which may be either or both, a transmission investment or non-transmission solution;</i></p> <p><i>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);</i></p>	<p>Compliant.</p> <p>The proposed investment is a major capex project (staged) because the expenditure:</p> <ul style="list-style-type: none"> will be incurred to provide a net electricity market benefit; is forecast to be capital expenditure in excess of the base capex threshold (\$20m); and will not be incurred in relation to the base capex categories of expenditure. <p>The forecast capital expenditure for Upper South Island Upgrade Stage 1 is \$167.0m with a major capex allowance of \$193.0m.</p> <p>The proposed investment consists of two staging projects (Stage 1 and Stage 2).</p>
3.3.1(1), (2)	<p>(1) <i>Transpower must notify the Commission of its intention to plan a major capex project that may become a proposed investment.</i></p> <p>(2) <i>Transpower’s notification under subclause (1) must include the following detail about the major capex project if it is planned to be a major capex project (staged)-</i></p> <p>(a) <i>all the proposed staging projects being planned; and</i></p> <p>(b) <i>if it is a continuation of an existing major capex project (staged), all related previously approved staging projects and whether those staging projects have been completed.</i></p>	<p>Compliant.</p> <p>Transpower notified the Commission of our intention to plan the proposed investment on 5 April 2023¹.</p> <p>Transpower updated the Commission of our intention to plan a major capex project (staged) on 28 March 2025² This notification included information about the two proposed staging projects.</p>
3.3.1(3)-(8)	<p>(3) <i>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-</i></p> <p>(a) <i>a consultation programme for a transmission investment or non-transmission solution, in accordance with clause 8.1.3;</i></p>	<p>Compliant.</p> <p>Transpower and the Commission agreed the clause 3.3.1(3) matters on 6 July 2023.³ Note that this letter referred to the project as ‘Upper South Island Stage 2 regional major capex project’ – stage 1 of the project has since been renamed to ‘Upper South Island Upgrade Project (Stage 1)’.</p>

¹ [Transpower's intention to plan a Major Capex Proposal - 5 April 2023](#)

² [Transpower's letter to Commission requesting a staged Upper South Island MCP - 28 March 2025](#)

³ [Letter of response to Commerce Commission on USI preliminary matters and timeframes - 6 July 2023](#)

Clause	Requirement	Compliance
	<p>(b) <i>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;</i></p> <p>(c) <i>an application submission date; and</i></p> <p>(d) <i>an approval timeframe.</i></p> <p>(4) <i>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.</i></p> <p>(5) <i>The consultation programme referred to in subclause (3)(a) may also include any consultation processes that the Commission intends to follow.</i></p> <p>(6) <i>The Commission and Transpower must publish the matters agreed under subclause (3) or specified under subclause (4) as soon as reasonably practicable.</i></p> <p>(7) <i>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.</i></p> <p>(8) <i>Where the Commission materially amends any of the matters under subclause (7), the Commission and Transpower must publish the amended matters or a summary of them as soon as reasonably practicable.</i></p>	<p>Following an update to the 5 April 2023 notice of intention on 28 March 2025, the Commission agreed to a staged Upper South Island Upgrade major capex proposal and an amended timeframe.⁴</p> <p>Information about the consultation programme, approach to considering non-transmission solutions, application submission date and approval timeframe is published on Transpower's website at Upper South Island upgrade project Transpower.</p>
3.3.1(9)	<p>(9) Transpower must consult interested persons in accordance with the published consultation programme and follow the published approach for consideration of non-transmission solutions.</p>	<p>Compliant.</p> <p>Information about the consultation programme and approach to considering non-transmission solutions is published on Transpower's website at Upper South Island upgrade project Transpower.</p> <p>Please refer to:</p> <ul style="list-style-type: none"> • Overview Document, Section 3; • Attachment 3: Short list of investment options, Sections 2 and 4; • Attachment 7: Stakeholder Consultation; • Attachment 8: Approach to non-transmission solutions.
3.3.3(1)	<p>(1) Transpower must submit a major capex proposal to the Commission when it seeks approval for-</p> <p>(a) <i>a major capex project that is not major capex projects (staged); or</i></p> <p>(b) <i>one or more staging projects of a major capex projects (staged).</i></p>	<p>Compliant.</p> <p>This major capex proposal seeks approval for the first stage of the proposed investment (Upper South Island Upgrade Stage 1).</p>

⁴ [Commerce Commission reply to Transpower agreeing the USI staged MCP, and amended timeframe - 14 April 2025](#)

Clause	Requirement	Compliance
	<i>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.</i>	
3.3.3(2)	<p>Where Transpower seeks approval of one or more staging projects-</p> <p>(a) <i>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></p> <p>(b) <i>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></p>	<p>Compliant.</p> <p>The proposed investment, which comprises the Upper South Island Upgrade Stage 1 and the potential future Stage 2, is a major capex project because the aggregate forecast expenditure and forecast maximum recoverable costs for both stages exceeds the base capex threshold (\$20m).</p> <p>The forecast capital expenditure for Upper South Island Upgrade Stage 1 is \$167.0m with a proposed major capex allowance of \$193.0m. The proposed maximum recoverable costs for a potential non-transmission solution is \$7.0m.</p> <p>The forecast capital expenditure for a future Stage 2 is estimated to be \$202.6m before inflation and interest during construction costs.</p>
3.3.3(3)	<i>(3) A major capex proposal may be submitted at any time during a regulatory period.</i>	Compliant.
3.3.4	<i>The Commission may reject a major capex proposal where-</i>	
3.3.4(a)	<i>(a) Transpower has not complied with the requirements specified in clause 3.3.1; or</i>	We consider we have complied with the requirements of clause 3.3.1. See above.
3.3.4(b)	<i>(b) the major capex proposal does not comply with clause 7.4.1.</i>	We consider this major capex proposal complies with clause 7.4.1. See below.

Clause	Requirement	Compliance
7.4.1(1)	(1) A major capex proposal must-	
7.4.1(1)(a)	(a) comply with Schedule G; and	We consider this major capex proposal complies with Schedule G. See below.
7.4.1(1)(b)	(b) contain the certificates specified in clause 9.2.1 [Chief Executive's certification].	Compliant. Please refer to Attachment 11: CEO Certification.
7.4.1(2)	(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 this major capex proposal complies with this requirement, having regard to the estimated expenditure and investment need. During our long-list consultation we evaluated a wide range of investment components that were appropriate to address the identified investment need. This long-list of components was reduced after further refinement into a final short-list of three development plan options, which were subsequently assessed using the investment test. Please refer to: <ul style="list-style-type: none"> • Overview Document, Section 3; • Attachment 2: Need, Demand and Generation Scenarios, Section 1; • Attachment 3: Short list of investment options. • Attachment 10: Power Systems Analysis Report
7.4.1(3)	(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 this major capex proposal complies with this requirement. Please refer to: <ul style="list-style-type: none"> • Overview Document, Section 3; • Attachment 3: Short list of investment options. • Attachment 10: Power Systems Analysis Report
7.5.1(1)	(1) All major capex proposals and listed project applications must include-	
7.5.1(1)(a)	(a) a description of the benefits the proposed expenditure is expected to deliver to Transpower's customers;	Compliant. Please refer to: <ul style="list-style-type: none"> • Overview Document, Section 4 and Section 5; • Attachment 4: Application of the Investment Test, Section 4 and Section 5; • Attachment 6: Benefits Modelling.
7.5.1(1)(b)	(b) to the extent reasonably possible, a quantitative estimate of the benefits the proposed expenditure is expected to deliver to Transpower's customers; and	Compliant. Please refer to: <ul style="list-style-type: none"> • Overview Document, Table 4; • Attachment 4: Application of the Investment Test, Section 5, Table 6;

Clause	Requirement	Compliance
		<ul style="list-style-type: none"> Attachment 6: Benefits Modelling.
7.5.1(1)(c)	<p>(c) <i>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) <i>per kilowatt of demand;</i></p> <p>(ii) <i>per kilowatt hours of energy supplied; and</i></p> <p>(iii) <i>for each affected grid exit point and grid injection point.</i></p>	<p>Compliant.</p> <p>The proposed investment will be a benefit-based investment, the covered cost of which will be recovered through benefit-based charges under the transmission pricing methodology.</p> <p>We have calculated indicative charges on a \$/kWh basis for each affected GXP. We have not calculated indicative charges on a \$/kW basis because doing so would not provide meaningful information - the new TPM does not base transmission charges on demand supplied by the grid. We have received email confirmation from Commission staff that the Commission is comfortable with Transpower not providing this specific information.</p> <p>Please refer to:</p> <ul style="list-style-type: none"> Attachment 9: Indicative Pricing Impacts, Section 4.

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>	We consider this major capex proposal complies with this requirement. See below.
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"> • Overview Document, Section 2; • Attachment 2: Need, Demand and Generation Scenarios, Section 1; • Attachment 7: Stakeholder consultation. <p>Attachment 2: Need for Investment, Demand and Generation Scenarios, Section 1.3 contains commentary about the consistency of the investment need with our latest Transmission Planning Report (2023). The Transmission Planning Report is part of the suite of documents making up our Integrated Transmission Plan.</p> <p>Consultation participants' views on the investment need are summarised at:</p> <ul style="list-style-type: none"> • Long-list consultation – summary of submissions; • Short-list consultation – summary of submissions; • Further short-list consultation – summary of submissions.
G3(1), (2)	<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>We have used demand and generation scenario variations (i.e. reasonable variations to the EDGS 2019).</p> <p>Please refer to:</p> <ul style="list-style-type: none"> • Overview Document: Section 2.2; • Attachment 2: Need, Demand and Generation Scenarios, Sections 2 to Section 4; • Attachment 4: Application of the Investment Test, Section 2; • Attachment 7: Stakeholder consultation. <p>Consultation participants' views on the demand and generation scenario variations are summarised at:</p> <ul style="list-style-type: none"> • Long-list consultation – summary of submissions; • Short-list consultation – summary of submissions; • Further short-list consultation – summary of submissions.
G4	In relation to each investment option contained in the major capex proposal -	
G4(1)	(1) description of the investment option ;	Compliant.

Clause	Requirement	Compliance
		Please refer to: <ul style="list-style-type: none"> Overview Document, Section 3.1; Attachment 3: Short list of investment options. Attachment 10: Power Systems Analysis Report
G4(2)	<i>(2) net electricity market benefit of each investment option under each relevant demand and generation scenario;</i>	Compliant. Please refer to Attachment 4: Application of the Investment Test, Section 6, Table 9.
G4(3)	<i>(3) in respect of each investment option, quantum of-</i> <i>(a) each electricity market benefit or cost element;</i> <i>(b) each project cost;</i> <i>(c) aggregate electricity market benefit or cost element; and</i> <i>(d) the P50,</i> <i>used to calculate each net electricity market benefit;</i>	[Compliant.] Please refer to: <ul style="list-style-type: none"> Attachment 4: Application of the Investment Test, Sections 4 and 5, including Tables 2-6; Attachment 5: Costing, Sections 1 - 4; Attachment 6: Benefits Modelling, Tables 2 – 4.
G4(4)	<i>(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-</i> <i>(a) internal and external benchmarking and how the results were applied;</i> <i>(b) relevant existing or proposed supply or procurement processes;</i> <i>(c) modelling tools or techniques; and</i> <i>(d) key publications and data sources;</i>	[Compliant]. Please refer to: <ul style="list-style-type: none"> Attachment 2: Need, Demand and Generation Scenarios; Attachment 4: Application of the Investment Test, Section 4; Attachment 5: Costing, Sections 1 to 3, and Section 5; Attachment 6: Benefits Modelling.
G4(5)	<i>(5) key assumptions used to determine the net electricity market benefit of each investment option, including-</i> <i>(a) discount rate;</i> <i>(b) calculation period; and</i> <i>(c) cost per megawatt hour used to determine the value of expected unserved energy; and</i>	Compliant. Please refer to <ul style="list-style-type: none"> Overview Document, Section 4; Attachment 4: Application of the Investment Test, Sections 2 - 5; Attachment 5: Costing; Attachment 6: Benefits Modelling, Sections 1 - 3.
G4(6)	<i>(6) expected net [electricity] market benefit of each investment option.</i>	Compliant. Please refer to: <ul style="list-style-type: none"> Overview Document, Section 4; Attachment 4: Application of the Investment Test, Section 5.
G5	Information relating to proposed investment only	
G5(1)	<i>(1) identification of the proposed investment and, where the proposed investment is a major capex project (staged), provide-</i>	Compliant. Please refer to:

Clause	Requirement	Compliance
	<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 stages has the potential to reduce the timing, scope or cost uncertainties of the major capex project; and</p> <p>(d) the estimated project costs, proposed major capex project outputs and planned timing of each staging project for which approval is being sought;</p>	<ul style="list-style-type: none"> • Main Document, Tables 1 - 3, Section 5 and Section 6; • Attachment 3: Short list of investment options, Table 1 (Option 2) and Section 4.2; • Attachment 4: Application of the Investment Test, Section 8; • Attachment 5: Costing, Section 3 and Section 4.
G5(2)	<p>(2) detailed description of the components of the major capex project or staging projects, including at least-</p> <p>(a) identification of the extent to which the major capex project or each staging project includes a transmission investment or a non-transmission solution;</p> <p>(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;</p> <p>(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;</p> <p>(d) where a major capex allowance is applicable, the commissioning date assumption and rationale for it;</p> <p>(e) any proposed maximum recoverable costs;</p> <p>(f) where maximum recoverable costs are applicable, the completion date assumption and rationale for it;</p> <p>(g) the major capex incentive rate where a different rate to the default rate of 15% is proposed and the rationale for it;</p> <p>(h) all relevant supporting technical information and costing information;</p> <p>(i) where the major capex project or a staging project includes a non-transmission solution-</p> <p>(i) the proposed recovery scheme; and</p> <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>Compliant.</p> <p>Please refer to:</p> <ul style="list-style-type: none"> • Main Document, Tables 1 -3; • Attachment 3: Short list of investment options, Table 1 (Option 2) and Section 4.2; • Attachment 4: Application of the Investment Test, Section 8; • Attachment 5: Costing; • Attachment 8: Approach to non-transmission solutions. <p>This major capex proposal does not include details of the potential non-transmission solution(s), or completion date assumption(s) or proposed recovery scheme(s) for them, because that information is not yet known. We are seeking a maximum recoverable costs allowance for potential future non-transmission solution(s), the quantum of which is based on the deferral value of the non-transmission solution(s). Proceeding with any future non-transmission solution will be subject to the investment satisfying a net benefit test at the time. This is consistent with the approach to non-transmission solutions used in the Western Bay of Plenty MCP. We notified the Commerce Commission that we intended to follow this approach in our letter to the Commerce Commission of 28 March 2025.</p>
G5(3), (4)	<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>Compliant.</p> <p>The proposed investment is required to meet the deterministic limb of the grid reliability standards and to enable a reliable supply for future demand growth in the Upper South Island region.</p>

Clause	Requirement	Compliance
		<p>Please refer to:</p> <ul style="list-style-type: none"> Overview Document, Section 2; Attachment 2: Need, Demand and Generation Scenarios;
G5(5)	<i>(5) commentary as to how consistent the proposed investment is with the most recent integrated transmission plan, and if not, why not;</i>	<p>Compliant.</p> <p>Please refer to Attachment 2: Need, Demand and Generation Scenarios, Section 1.2. The proposed investment is consistent with our latest Transmission Planning Report (2023). The Transmission Planning Report is part of the suite of documents making up our Integrated Transmission Plan.</p>
G5(6), (7)	<p><i>(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;</i></p> <p><i>(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;</i></p>	Not applicable.
G5(8)-(10)	<p><i>(8) outcome of sensitivity analysis;</i></p> <p><i>(9) description of the methodology applied in undertaking sensitivity analysis;</i></p> <p><i>(10) explanation as to how robust to sensitivity analysis the proposed investment is;</i></p>	<p>Compliant.</p> <p>The proposed investment is reasonably robust to sensitivity analysis.</p> <p>Please refer to:</p> <ul style="list-style-type: none"> Attachment 4: Application of the Investment Test, Section 6.
G5(11)	<p><i>(11) reasons for any selection of a-</i></p> <p><i>(a) discount rate other than 7%; and</i></p> <p><i>(b) calculation period other than 20 years;</i></p> <p><i>(c) cost per megawatt hour determined using paragraph (b) of the definition of value of expected unserved energy;</i></p>	<p>Compliant.</p> <p>We have used a discount rate of 5%. This will be the default discount rate applicable to major capex proposals notified after 1 April 2025.</p> <p>We have used a 20-year calculation period (2031 to 2050).</p> <p>For the value of expected unserved energy, we have applied deficit cost tranches as a proportion of island hourly demand. The \$ per MWh increases from 5% (\$600/MWh) to 15% (\$10,000/MWh), rather than using the default \$20,000/MWh.</p> <p>Please refer to:</p> <ul style="list-style-type: none"> Attachment 4: Application of the Investment Test, Sections 3.1 and 3.2; Attachment 6: Benefits Modelling, Section 2.3.
G5(12)	<i>(12) a description as to how consistent with good electricity industry practice the proposed investment is;</i>	<p>Compliant.</p> <p>Please refer to Attachment 4: Application of the Investment Test, Section 7.1.</p>
G5(13)	<i>(13) 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>Compliant.</p> <p>More detail about how the proposed investment satisfies the investment test is provided below.</p>

Clause	Requirement	Compliance
G5(14)	(14) a plan for monitoring costs, project milestones and deliverables that reflects the best information available to Transpower .	Compliant. Please refer to Attachment 5: Costing, Section 6.
G6	In relation to the major capex project or, each staging project for which Transpower seeks approval-	
G6(1)-(4)	<p>(1) the major capex project outputs that are proposed;</p> <p>(2) the quantum of each proposed major capex project output;</p> <p>(3) the rationale for the proposed major capex project outputs, including-</p> <ul style="list-style-type: none"> (a) description of key factors and key assumptions relevant to their determination including the uncertainty associated with each such factor or assumption; and (b) explanation of the extent to which the quantum of each proposed major capex project output reflects: <ul style="list-style-type: none"> (i) the assets to be commissioned; (ii) the forecast changes to the functional capability of the grid; (iii) the quantum of forecast electricity market benefit or cost elements directly related to the supply of electricity transmission services; and (iv) in respect of a non-transmission solution, any service provided by a third party; <p>(4) 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 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;</p>	<p>Compliant.</p> <p>There is no flexibility in the quantum of the major capex project outputs. The major capex project outputs will either be provided (for a cost up to the major capex allowance) or they will not. However, the transmission investments may be deferred if an economic non-transmission solution is discovered.</p> <p>Please refer to:</p> <ul style="list-style-type: none"> • Overview Document, Sections 1 and 6; • Attachment 2: Need, Demand and Generation Scenarios; • Attachment 3: Short list of investment options, parts relating to Option 2; • Attachment 5: Costing, parts relating to Option 2; • Attachment 8: Approach to non-transmission solutions.
G6(5)	(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	Compliant. Please refer to Attachment 5: Costing, Section 6.
G6(6)	(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.	<p>Compliant</p> <p>Given the electricity demand growth in the Upper South Island region and the need to meet the deterministic limb of the grid reliability standards, non-transmission solutions alone are unlikely to eliminate the need for the transmission investments in the proposed investment (or our other short-list development plans). However, non-transmission solutions could help defer these transmission investments and manage project risks. Due to current uncertainties, we are not proceeding with a further RFP for non-transmission solutions now, but may consider it at a later date when we have clearer requirements and providers are better positioned to meet them. This is consistent with the approach to non-transmission solutions used in the Western Bay of Plenty MCP. We notified the Commerce Commission that we intended to follow this approach in our letter to the Commerce Commission of 28 March 2025.</p>

Clause	Requirement	Compliance
		<p>Please refer to:</p> <ul style="list-style-type: none"> • Main Document, Section 3.2; • Attachment 8: Approach to non-transmission solutions.
G7	<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"> (a) <i>a list of the relevant consultation steps and confirmation by Transpower that each occurred;</i> (b) <i>a list of respondents to the consultation;</i> (c) <i>a description of all issues raised by interested persons in response to Transpower's intended major capex proposal;</i> (d) <i>a summary of the arguments raised in respect of each issue to which paragraph (c) applies; and</i> (e) <i>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> (ii) <i>if not, why not.</i> 	<p>Compliant.</p> <p>Information about the consultation programme is published on Transpower's website at Upper South Island upgrade project Transpower.</p> <p>Please refer to:</p> <ul style="list-style-type: none"> • Main Document, Section 3; • Attachment 3: Short list of investment options; • Attachment 7: Stakeholder consultation. <p>A description of all issues raised and a summary of arguments raised on each issue are summarised at:</p> <ul style="list-style-type: none"> • Long-list consultation – summary of submissions; • Short-list consultation – summary of submissions; • Further short-list consultation – summary of submissions.
G8	<p><i>In respect of non-transmission solutions, a description as to how the requirements of Schedule I Division 2 were met, including-</i></p> <ul style="list-style-type: none"> (a) <i>summary of the process followed to identify and assess non-transmission solutions;</i> (b) <i>description of non-transmission solutions suitable to meet the relevant investment need identified either by Transpower or by consultation participants;</i> (c) <i>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</i> (d) <i>description and justification of how any assets that would be commissioned by Transpower form part of the non-transmission solution.</i> 	<p>Compliant.</p> <p>More detail about compliance with the relevant Schedule I requirements is provided below.</p> <p>Please refer to:</p> <ul style="list-style-type: none"> • Overview Document, Section 3.2; • Attachment 3: Short list of investment options, Section 2.1; • Attachment 8: Approach to non-transmission solutions.
G9	<p><i>Any additional supporting material Transpower reasonably considers is relevant to the decision of the Commission under clause 3.3.5.</i></p>	<p>We consider we have included all relevant information in this major capex proposal.</p>

Clause	Requirement	Compliance
15(1)-(3)	<p>(1) The approach to enabling consideration of whether one or more non-transmission solution may meet an investment need must take into account-</p> <ul style="list-style-type: none"> (a) the size and nature of the investment need; and (b) the likelihood that one or more non-transmission solutions could reasonably meet it. <p>(2) The approach must enable the-</p> <ul style="list-style-type: none"> (a) reasonable information needs of interested persons, including potential proponents of non-transmission solutions to be met; and (b) views of interested persons, including potential proponents of non-transmission solutions to be expressed and taken into account. <p>(3) As a minimum, the approach must include the requirements that-</p> <ul style="list-style-type: none"> (a) when consulting on an investment need, Transpower must- <ul style="list-style-type: none"> (i) invite interested persons to provide views or information relevant to possible non-transmission solutions to meet that need; and (ii) provide sufficient information to enable interested persons, including potential proponents of non-transmission solutions to propose non-transmission solutions; and (b) 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, including pro-actively engaging with the parties providing them, where appropriate; and (c) when consulting on its long list of investment options, Transpower must- <ul style="list-style-type: none"> (i) include potential non-transmission solutions in its list of investment options; and (ii) invite interested potential proponents of non-transmission solutions to provide information or proposals on non-transmission solutions; and (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>We consider we have complied with these requirements.</p> <p>We issued a high level RFI for non-transmission solutions with our long-list consultation and received some responses (Upper South Island upgrade project - Long-list consultation Transpower).</p> <p>Following our long-list consultation, we sought non-transmission options to support the USI needs via an RFP in February 2024 (Request for Proposals: Upper South Island Non-Transmission Solutions Transpower). However, market responses indicated that the available non-transmission solution capacity was limited, and pricing was uncertain. As a result, we decided not to proceed at that time. Nevertheless, we believe non-transmission solutions have future potential to support the needs of the USI.</p> <p>Given the electricity demand growth in the USI region, and the requirement to meet the deterministic limb of the grid reliability standards, non-transmission solutions alone are unlikely to eliminate the need for the transmission investments in the proposed investment (or the other short-list development plans). However, non-transmission solutions could help defer these transmission investments and manage project risks. Due to current uncertainties, we are not proceeding with a further RFP for non-transmission solutions now, but may consider it at a later date when we have clearer requirements and providers are better positioned to meet them. This is consistent with the approach to non-transmission solutions used in the Western Bay of Plenty MCP. We notified the Commerce Commission that we intended to follow this approach in our letter to the Commerce Commission of 28 March 2025.</p> <p>Please refer to:</p> <ul style="list-style-type: none"> • Overview Document, Section 3.2; • Attachment 3: Short list of investment options, Section 2.1; • Attachment 7: Stakeholder consultation; • Attachment 8: Approach to non-transmission solutions.

Clause	Requirement	Compliance
I5(4), (5)	<p>(4) 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).</p> <p>(5) 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).</p>	<p>Compliant.</p> <p>Our long-list consultation document, which included an RFI for non-transmission solutions, was published on 24 August 2023 and submissions were open until 6 October 2023 (6 weeks and 1 day).</p> <p>Following our long-list consultation, we issued an RFP seeking proposals for non-transmission solutions on 21 February 2024 and responses were open until 5 April 2024 (6 weeks and 2 days).</p>

3 Application of Investment Test

Clause G5(13) requires a major capex proposal include Transpower’s rationale for determining that the proposed investment may satisfy the investment test in Schedule D Division 1 of the Capex IM, by reference to each subclause and paragraph of the test. The table below describes how the proposed investment satisfies the investment test.

Clause	Requirement	Compliance
D1(1)	(1) The investment test is satisfied in respect of a proposed investment if the proposed investment is an investment option that-	
D1(1)(a)	(a) is sufficiently robust under sensitivity analysis ;	<p>Compliant.</p> <p>The proposed investment is reasonably robust under sensitivity analysis.</p> <p>Please refer to:</p> <ul style="list-style-type: none"> • Main Document, Section 4; • Attachment 4: Application of the Investment Test, Section 6.
D1(1)(b)	(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>Not applicable.</p> <p>The proposed investment is to meet the deterministic limb of the grid reliability standards. In any event, Option 2 has positive expected net electricity market benefit.</p>
D1(1)(c)	(c) has-	
D(1)(c)(i)	(i) the highest expected net electricity market benefit , where only quantified electricity market benefit or cost elements are considered; or	Compliant.

Clause	Requirement	Compliance
		<p>The proposed investment (Option 2) has the highest expected net electricity market benefit (\$7.8m) of the options considered. Expected net electricity market benefit for Option 1 is -\$273.9m and for Option 3 is -\$350.1m.</p> <p>Please refer to:</p> <ul style="list-style-type: none"> Overview Document, Section 4; Attachment 4: Application of the Investment Test, Section 5.
D1(1)(c)(ii)	(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>Not applicable.</p> <p>The proposed investment has the highest expected net electricity market benefit of the options considered.</p>
D1(2)	(2) For the purpose of subclause (1)(c)(ii)-	
D1(2)(a)	(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>Not applicable.</p> <p>The proposed investment has the highest expected net electricity market benefit of the options considered.</p>
D1(2)(b)	<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>(ii) 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.</p>	<p>Not applicable.</p> <p>The proposed investment has the highest expected net electricity market benefit of the options considered.</p>
D1(3)	(3) For the purpose of subclause (2)(a), the Commission may, at its discretion, adopt an alternative percentage to 10% as proposed by Transpower .	Not applicable.