

25 May 2005

Ralph Craven  
Chief Executive  
Transpower New Zealand Limited  
PO Box 1021  
Wellington

Dear Ralph

**Transitional Approvals for Interim Grid Expenditure under Electricity Governance Rules, Part F, Section III, Rule 16**

Thank you for your letter of 14 April and associated report regarding the Transitional Approvals for Interim Grid Expenditure (Tactical Transmission Upgrades or TTU) under the Electricity Governance Rules 2003 (EGR), part F, section III, rule 16, applied for by Transpower (TTU Application).

The Electricity Commission (Commission) has completed a preliminary review of the TTU Application and now requests, pursuant to rule 16.3, additional information that it considers reasonably necessary to facilitate its consideration of the TTU Application in accordance with the statutory criteria set out in rule 16.

To assist Transpower to respond to this request, the Commission has broadly divided the information sought into that addressing the statutory criteria set out in rule 16, and that regarding technical aspects of each proposed upgrade in the TTU Application.

As soon as the Commission receives the information requested, it can continue its consideration of the TTU Application in accordance with the statutory criteria set out in rule 16. To this end, the Commission staff are available to discuss this request with Transpower, if this would be of assistance, to ensure that the information required can be provided efficiently.

**Statutory Requirements**

**Question 1:**

Rule 16.2.3 requires that the Board be satisfied that the interim grid expenditure proposed by Transpower is:

- 16.2.3.1 reasonably prudent or necessary to meet Transpower's current grid reliability standards; or

- 16.2.3.2 prudent expenditure on preparatory work necessary for other grid expenditure that have not yet been approved in a grid upgrade plan; or
- 16.2.3.3 emergency expenditure.

Please identify under which paragraph Transpower is applying for approval of interim grid expenditure for *each upgrade* within the TTU Application.

**Question 2:**

Please *confirm* what Transpower considers to be the "current grid reliability standards" to be applied for the purposes of the application of rule 16.2.3.1 to the Commission's consideration of the TTU Application.

**Question 3:**

The Commission would appreciate understanding the basis for Transpower's application as it will greatly assist the Commission's consideration of the TTU Application.

Accordingly, please explain in detail the test or methodology used by Transpower to determine that the interim grid expenditure for *each upgrade* within the TTU Application is "reasonably prudent or necessary to meet Transpower's current grid reliability standards" as required by rule 16.2.3.1.

**Question 4:**

The Commission considers that a consideration of alternatives is relevant to an assessment of whether proposed grid expenditure is "reasonably prudent or necessary" to meet the "current grid reliability standards". If Transpower's test or methodology for determining whether proposed grid expenditure is "reasonably prudent or necessary" does not apply an alternative to establish the least cost means of achieving the "current grid reliability standards", please explain why.

**Question 5:**

Please *advise* the timeframe over which Transpower assessed that each of the proposed upgrades in the TTU Application are "reasonably prudent or necessary to meet Transpower's current grid reliability standards".

**Question 6:**

Rule 16.2.2 states that "The Board must be satisfied that the proposed grid expenditure is additional to Transpower's normal ongoing grid expenditure". Accordingly, it will greatly assist our consideration of the TTU Application if Transpower could substantiate why the proposed grid expenditure for *each upgrade* contained in the TTU Application is grid expenditure "additional to Transpower's normal ongoing grid expenditure". Please provide details.

**Question 7:**

For each proposed upgrade within the TTU Application, please provide details, including costings, of any alternative projects that were considered by Transpower, and the basis that Transpower determined that the proposed upgrade was preferable to any alternative projects.

**Question 8:**

If a least cost analysis was performed to determine whether a proposed upgrade is "reasonably prudent or necessary" when compared with alternatives, please substantiate that each proposed upgrade within the TTU Application is prudent, in that it is the least cost means of meeting the "current grid reliability standards".

**Question 9:**

If a least cost analysis was not performed, please provide details regarding the basis underpinning each proposed upgrade within the TTU Application, and why each is considered "reasonably prudent or necessary".

**Question 10:**

Please detail an indicative customer cost allocation for each proposed upgrade within the TTU Application.

**Question 11:**

If you have consulted with customers regarding any proposed TTU upgrade project, please provide specific details of the consultation process and the responses you received from the relevant customers. Please also let us know:

- if customers were aware that they may be required to pay charges to fund the relevant TTU project; and
- if any customers agreed to pay charges to fund the relevant TTU project.

**Technical Requirements**

**Question 12:**

Please supply power system analysis study cases in DIgSILENT format relevant to each proposed upgrade within the TTU Application and any alternatives considered that can be used to demonstrate the need for each upgrade.

**Question 13:**

Please explain, in detail, the analysis undertaken to investigate voltage stability issues and margins, the assumptions relating to demand modelling, and the determination of the mix of static and dynamic reactive support for each proposed upgrade within the TTU Application that are driven by voltage stability issues.

**Question 14:**

What alternatives have been considered for each solution to each voltage stability issue noted in the TTU Application and why and how were these discounted?

**Question 15:**

In each proposed upgrade within the TTU Application where thermal transmission limits have driven investment decisions, has dynamic line rating been considered as a lower cost option and, if so, why has this been discounted?

**Question 16:**

In each of the proposed upgrades within the TTU Application, have demand side alternatives, such as capacity reserves, been considered as lower cost options and, if so, why have these been discounted?

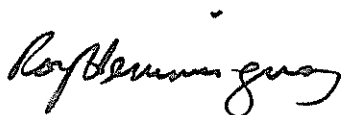
The Commission may require further information from Transpower to that requested in this letter to facilitate its consideration of the TTU Application in accordance with the statutory criteria set out in rule 16. If the Commission does require further information, it shall ensure that any such request is timely and does not duplicate any prior request.

While the information required by the Commission may appear to be substantial for a number of the proposed upgrades within the TTU Application, the questions may be answered in a straightforward manner.

The Commission intends to engage with stakeholders as much as possible within the confines of the transitional provisions set out in rule 16. In the interests of giving stakeholders as much information as possible, the Commission will publish this letter on its website.

In the meantime, please do not hesitate to contact me if you have any further questions. For detailed queries, the Commission's contact in this area is John Gleadow, Senior Advisor Transmission.

Yours sincerely



Roy Hemmingway  
**Chair**

Cc: Kevin Mackey  
David Laurie