

TRANSPOWER NEW ZEALAND LIMITED

Minutes of a Meeting of Transmission Code Technical Working Group held on Thursday, 07 October 2010 at 2:30pm.

PRESENT: *Ray Brown (Meridian); James Collinson-Smith (Contact); Tas Scott (Orion); Dick Whitelaw (NZ Steel); Peter Calderwood (Trustpower); Michael Whalley (Powerco); Rodger Griffiths (Westpower); John Clarke (TP); Andrew Smaill (TP); Bob Simpson (TP); Graeme Ancell (TP); Kevin Small (TP); Ian Burgwin (TP) – part time; Carmen Blackler (Blackyard Consulting)*

APOLOGIES: *Tim Chatterton (Vector); Richard Pearce (Genesis); Andrew Renton (TP)*

1 Re-establishment of the Technical Working Group:

- 1.1 **Purpose:** Transpower outlined the background to the development of the Transmission Code, and the plan to seek industry input into updating the code including the addition of three more sections
- 1.2 **Governance:** Transpower has identified that the further development of the Transmission Code can be achieved with the Technical Working Group. It has been agreed that the need for a CEO steering group is no longer required, but that updates would be provided to the CEOs for information only. Transpower will operate an internal steering group for internal project management purposes only.

Transpower engineers will work with the technical work group, who will provide technical input, technical challenge and the provision of industry knowledge.

- 1.3 **Membership:** The membership of the group was confirmed. It was agreed that the members will act in an advisory role only, and their involvement will not bind their organisations to support or accept the Transmission Code.

It was proposed that Todd Energy be invited to be a participant in the Technical Working Group.

Action: Andrew Smaill to contact Tristan Maunsell (Todd Energy) and to invite them to participate.

- 1.4 **Guiding Principles:** It was agreed that the Transmission Code is a set of technical planning guidelines that Transpower will apply to ensure that

the transmission grid as a whole remains resilient and fit for purpose. The Code will contain planning requirements for certain key technical areas.

- 1.5 **Documentation name:** There was discussion on the name of the document, and the potential confusion with the new Electricity Industry Participation Code (which is also referred to as “the Code”). It was agreed that a new name would be required for the Transmission code, to avoid confusion. Suggestions included “Transmission Code of Practice Guide”.
- 1.6 **Action:** Members to forward proposed alternative names for the Transmission Code to CB, by close of business Friday, 15 October 2010. Transpower reserves the right to select and finalise the document name.

2 Topics for discussion:

- 2.1 Transpower proposed a list of potential topics for inclusion in the next version of the Transmission Code.
- Grid Connections (configuration options which meet GEIP) – relates to what assets are needed to connect either generation or connection (load) to the grid. It was noted that under this topic (if progressed) there is a need to ensure that the configuration option requirements are likely to be different for a generation connection vs. a load connection. It was proposed that this distinction should be discussed as part of this topic in the “guide”. In addition, it was proposed that any physical design of connection should be fit for purpose, economic and appropriate for grid connection.
 - Standard Substation configurations – relates to what assets are needed for through transmission
 - Secondary Systems and third party exchange – relates to understanding the interface between grid systems and connection assets and any negative impact they may have on each other.
 - Plant rating – related to grid connections, in that any asset used for connection is of a standard size or is replaced with a standard size. A suite of assets with standard plant ratings provides for efficiencies in inventory management and timing of returning assets to operation following an event/fault. It was noted that the “guide” should cover major replacements and not just “green fields” sites.
 - Fault level – relates to capability and/or performance of assets. There was some discussion as to whether this topic is covered by the EGR connection code.
- 2.2 The Technical Working Group proposed other potential topics
- Protection Systems – relates to the protection arrangements at the boundary between grid and connection (including the required degree of backup), and gaining transparency around protection systems.
 - Design life – relates to understanding variance in the life of the assets being connected to the grid and the transmission assets they are connected to. (E.g. wind assets with a 25 year life span

being connected to transmission assets with 50 year life span). A variation in the life of the assets impacts strategic decisions around maintenance and replacement.

- Security of Supply – was proposed as network specific and relates to configuration of connection to the grid and site strategies (e.g. MVA limits, when to diversify). It was proposed that maybe this could be covered through some sort of Security/Protection type policy.
- Reliability standards – review of the appropriateness of the reliability standards (e.g. n-1 for core grid). It was noted that this is more to do with the legislative requirements, and any changes should be through a discussion with the Electricity Authority.
- Spares policy. It was noted by Transpower that this topic did not fit the criteria for Transmission Code topics, as it is not technical in nature. In saying this however, Transpower has already undertaken some work in this area on strategic spares and mobile substations, and is intending to provide a progress report to the industry in another forum.

- 2.3 It was agreed that a short paragraph description for each of the proposed topics should be provided.

In discussing the development of topics, it was agreed that where Transpower already has “base documents” these would be provided to the TWG for critique, peer review and reconstruction as appropriate. Where a topic covers a new issue, the TWG will be responsible for the development of the topic for Transpower to build on.

- 2.4 **Action:** Each person who proposed a topic, to provide a one paragraph description of intent of topic. Paragraphs to be forwarded to CB (for collation) by close of business Wednesday, 13 October 2010. CB to circulate complete topic list to TWG for consideration and selection of top 3 preferences.
- 2.5 **Action:** TWG to forward preferred topics for inclusion in the next version of the Transmission Code, with associated ratings (i.e. top 3) to CB by close of business Wednesday, 20 October 2010.

Meeting closed at 3:25pm. Next meeting will be scheduled following the selection of three development topics.