



## Terms of reference for Kinleith, Tokoroa and surrounding areas reduced security levels.

### 1. Background

On 27 October 2010, there was a loss of electricity supply to Kinleith Mill, Tokoroa and surrounding areas. A number of contributing factors leading to this event need to be considered.

### 2. Purpose

The purpose of the review is to understand the circumstances and management of events relating to the decision to split the KIN-TRK circuits thereby placing the Kinleith GXP on reduced security.

The review will also make recommendations on any improvements that could be made to market design or to the operational policies of the System Operator in the management of similar future events.

This review is not intended to look at the asset operations issues leading to the loss of supply. This issue is being investigated as part of a separate review by Transpower, as grid owner. Recognizing the interconnection between the review of security and the review of asset operations, Transpower will run both reviews in parallel.

In addition, this review is not intended to focus on participants' compliance with the Code, although it is recognised that questions regarding a participant's compliance with the Code may arise in the course of this review. For clarity the Code is an integral part of the review because the interpretation and application of the Code by participants is important and identifying areas where the Code has contributed to the event.

### 3. Scope

The review will include, but not be limited to, consideration of the following items:

- i. Identification of all contributing factors that led to the decision to reduce security at the Kinleith GXP.

Factors considered should include but not be limited to:

- a. availability of the transmission network;
- b. availability of generation plant;
- c. demand levels;
- d. local system issues.



- ii. The sequence of relevant events relating to the decision to reduce security at the Kinleith GXP including, but not limited to:
  - a. actions taken by the System Operator
  - b. actions taken by the Grid Owner
  - c. notices issued by the System Operator
  - d. System Operator attempt to develop and use security constraints
  - e. use of discretion by the System Operator to solve dispatch problems
- iii. Consideration of operation of market design
  - a. How is the market intended to operate in such situations? Did it operate in this manner?
  - b. Are there other situations where the same issues have arisen?
  - c. How could the code and the policy statement be changed to enable a better outcome in these situations?
- iv. Consideration of alternative solutions available to potentially avoid the reoccurrence of these events:
  - a. network solutions such as thermal upgrades and other grid reinforcement;
  - b. non network solution such as SPS, demand response etc;
  - c. improvement to scheduling and dispatch tools;
  - d. changes to market design;
  - e. means to improve thermal offers in future similar events.

#### 4. Outputs and deliverables

The main output and deliverable from the review will be a stakeholder conference followed by a final report (including supporting material).

The report will include, but not be limited to:

- i. a summary of how key decisions were made, recorded and communicated by the System Operator and Grid Owner regarding placing Kinleith on reduced security;
- ii. documentation of the actions of relevant parties and how these are considered to have contributed to the events and outcomes including analysis of whether alternative options were available to Transpower;
- iii. recommendations on how improvements can be made should similar events occur in the future. This would include recommendations on possible physical changes to grid assets, configuration and operation and other non grid solutions (e.g. SPS) that might eliminate or minimise the need for bus/circuit splits being necessary in future.

It is intended that this terms of reference and final report will be made available on the System Operator website.



## 5. Process and Timing

The review will be led by Kevin Small (the SO Investigations and Planning Manager).

The initial findings of the review will be prepared by the System Operator and presented to a group of stakeholders (a stakeholder panel) for consideration. The following participants will be invited to be part of the stakeholder panel:

- Transpower:
  - System Operator representative
  - Grid Owner representative. The Grid Owner representative will also be the lead and primary contact for the review of asset operations relevant to this review.
- Stakeholders
  - CHH representative
  - NST representative
  - MEUG representative
  - Powerco representative
  - Mighty River Power representative
  - Genesis representative
  - Contact Energy representative
  - Trustpower representative

It is intended to convene the stakeholder panel once the initial findings have been prepared by the System Operator. The System Operator will appoint an independent peer review of its analysis if the stakeholder panel requests the System Operator to do so following receipt of the initial findings.

The proposed timetable for this review is as follows:

- General agreement on this terms of reference – first week of December
- Stakeholder panel nominated – second week of December
- Provision of the sequence of events and options considered – third week of December
- First meeting of stakeholder panel to consider initial findings – first week of February

## 6. Costs

Costs borne by Transpower and stakeholders shall lie where they fall.