

22 December 2011

Patrick Strange
Transpower New Zealand Ltd
PO Box 1021
Wellington 6140

By Email

Dear Patrick

Transpower report to SRC on Huntly outage, 13 December 2011

Following the incident on the afternoon of Tuesday, 13 December 2011, when an event at the Huntly substation resulted in an under-frequency situation and the activation of the automatic under-frequency load shedding (AUFLS) system, we agreed in a phone conversation that Transpower would provide a report on the event to the Security and Reliability Council (SRC).

In general terms the report is expected to cover why the event occurred, whether the backup systems worked as intended, and whether the appropriate actions were taken to restore power and return the electricity system to a stable state. We expect that this will require Transpower to obtain input to the report from both its grid owner and system operator business areas.

We also recognise that some additional reporting is being completed in parallel, including an investigation into the cause of the incident and the determination of the causer of the event that is required under s8.60-8.61 of the Code. We would be comfortable with the report to the SRC utilising information captured in these other investigations (i.e. it is not necessary for the report to the SRC to be a completely independent investigation).

It is expected that the report will be used by the SRC to consider whether the event has any implications for the longer-term reliability of the electricity system. It will need to consider both the incident itself and how the system and participants responded to it. We anticipate that the report will need to include consideration of, but not be limited to:

- the cause of the event, including the potential for it to be repeated either at Huntly or other parts of the electricity system (ie was the event "one of a kind" or potentially systemic);
- the scale of the event, including the amount of generation disconnected and the resulting impact on the power system (ie the timeline of the event, including the change in system frequency over time, when and how interruptible load and reserves were activated, etc);
- how actual dynamic system performance corresponded with modelled system performance;
- whether the system performed as expected in a response to an event of this magnitude (we understand that the event was larger than the extended contingent event (ECE) that the system would have been planned to cover);
- the extent of AUFLS activation, including whether the expected level and distribution of load shedding was achieved;

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- whether the process of reconnecting load proceeded in the expected manner;
- how the fault was identified and the measures that were implemented to ensure system security was maintained while this was occurring (including any consideration post-event as to whether this could have been achieved in a more efficient manner); and
- the effectiveness of communication between Transpower and industry participants and to the wider public.

We recognise that it has not been possible for Transpower to consider this report while the issue itself was identified and resolved. As this now appears to be progressing we would like to discuss suitable timing for the completion of the report. This will also allow us to start making the necessary arrangements with the SRC. We would anticipate that the report will also be made available publicly, but are willing to consider requests that some information be provided on a confidential basis if you consider this to be necessary.

Could you please in the first instance indicate who at Transpower will be the point of contact for the SRC secretariat, and your expected timeline for completing the report? We would also be happy to meet with you, or the relevant person at Transpower, to discuss and agree the content and timing of the report. This can be coordinated via Fraser Clark, who has responsibility for the SRC's activities here at the Authority. Fraser is available at (04) 460 8860, 0275 076 225 or fraser.clark@ea.govt.nz.

Yours sincerely



Carl Hansen
Chief Executive

cc: Kieran Devine
Kevin Thompson (SRC Chair)
Fraser Clark (Electricity Authority)