

14 November 2012

Dr Brent Layton
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Dear Brent

SRC advice on aspects of the system operator's performance

As part of its functions, the Security and Reliability Council (SRC) is tasked with providing the Electricity Authority with independent advice on the performance of the system operator. During its review of system operator performance at its December 2011 meeting the SRC identified five issues that it wanted to consider further in the next review cycle.¹ These five issues were presented and discussed at the SRC meeting on 28 August 2012, and are summarised below:

- a) System operator's use of its discretion to dispatch out-of-merit order generation for system security reasons:
 - In January 2011 the system operator used its discretion to constrain on Huntly thermal units while addressing transmission constraints in the Waikato region. This resulted in significant additional costs for market participants that were only identifiable to them in invoicing in the month after the event.
 - Market participants would prefer to know the system operator is using its discretion as close to real time as possible, so they have an opportunity to respond to the potentially higher prices.
 - The system operator now notifies NZX that it has used discretion to constrain generation or reserves, the limit of the constraint and the node at which the generation or reserves has been constrained. NZX then publishes this notification through the standard market communications. This requirement has been included in the system operator's policy statement.²
- b) Integrity of the market systems:
 - The market system is the IT data and applications the system operator uses to operate the power system in a secure fashion. The failure of this system requires the system operator to use back-up systems. There have been at least two system failures in the last year, which is considered to be more frequent than is desirable.
 - The system operator is pursuing a range of improvements identified through both their own review and an independent review of the system failures.
- c) Performance of the Reserve Management Tool (RMT):
 - RMT is the software used by the system operator to calculate reserves procurement quantities. It has been identified that the assumptions used by RMT are conservative and result in the system operator

¹ As per the SRC's advice to the Board, 'Performance Assessment of the System Operator', 19 January 2012 (attached as Appendix A).

² The policy statement is incorporated into the Code by reference.

procuring more reserves than are actually required to meet the security standards, potentially resulting in significant additional cost to the industry.

- The Authority and system operator have been working together on a review of under-frequency management arrangements. This review includes consideration of this issue.
- d) System operator's processes for proactively delivering the most competitive market outcomes on behalf of the industry, particularly in respect of ancillary services:
- The system operator is working with industry participants such as demand aggregators and generators to increase the level of participation in both the instantaneous reserves and North Island frequency keeping market respectively.
 - The system operator engages with the industry and the Authority during its annual review of the ancillary services procurement plan.
 - The system operator is supporting the Authority's implementation of the multiple frequency keepers project, and will work with the Authority on other related initiatives such as the establishment of national frequency keeping and reserves markets, and the identification of potential new markets such as very-fast reserves and inertia.
- e) Delivery of major industry projects:
- Concerns have been raised as to the ability of the system operator to deliver and implement the system changes required for new market developments. The SRC had identified the market systems project (MSP) as being of particular interest as it is perceived by some industry participants to have been poorly managed.
 - The system operator has established and is implementing the 'System Operator Project Management Framework' as the platform for enhancing its medium and long term project capability.

The SRC discussed information presented by the SRC secretariat and the system operator on these five aspects of system operator performance at its 29 August 2012 meeting. The SRC was satisfied the system operator has addressed or is addressing these issues, so did not consider there was a need to provide advice to the Authority Board on any of these matters.

No further matters related to the performance of the system operator were identified for discussion.

Yours sincerely



Dr Kevin Thompson

Chair
Security and Reliability Council

cc SRC members, Carl Hansen (Authority).