Security and Reliability Council ::: Meeting Number 5

Venue ::: Level 7, ASB Bank tower, 2 Hunter Street, Wellington

Time and date ::: 9:30 am ::: 29 August 2012

Minutes

Members Present

- ::: Kevin Thompson (Chair)
- ::: Patrick Strange
- ::: Albert Brantley
- ::: David Russell
- ::: Bruce Turner
- ::: Erik Westergaard
- ::: Vince Hawksworth
- ::: Dennis Barnes
- ::: Terrence Currie (by phone)

Leave of Absence

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In Attendance

Electricity Authority (Authority):

- ::: Carl Hansen, Chief Executive
- ::: Fraser Clark, General Manager Operations Development
- ::: Darryl Renner, Director Systems Operations and Common Quality
- ::: Mike Collis, Senior Adviser Common Quality
- ::: Bruce Smith, General Manager Market Performance (agenda items 9-12 only)
- ::: Doug Watt, Senior Economist (agenda items 9-12 only)

System Operator:

::: Kieran Devine, General Manager System Operations

Grid Owner:

- ::: John Clarke, General Manager Grid Development (agenda item 9 only)
- ::: Graeme Ancell, Planning and Development Manager (agenda item 9 only)

Commerce Commission:

::: Nick Russ, Chief Adviser (agenda items 9-12 only)

Gas Industry Company:

- ::: Steve Bielby, Chief Executive (agenda item 17 only)
- ::: Ian Dempster, General Manager Operations (agenda item 17 only)

Concept Consulting (as support for the secretariat):

::: Brian Bull, Consultant (agenda items 7 and 8 only)

The meeting opened at 09:34 am.

1 **Welcome and Apologies**

The Chair welcomed members to the fifth meeting of the Security and Reliability Council (SRC). All members were present and no apologies were received.

2 **Previous Minutes**

2. The minutes of the 10 May 2012 meeting were accepted as a true and accurate record.

(Thompson/Westergaard)

3 **Actions list**

3. Fraser Clark summarised progress on the action list and noted where actions and matters arising were covered in individual agenda items.

4 Correspondence

- 4. Letters from the Chair were sent to the Authority Board providing advice on security of supply and on under-supply of AUFLS in the South Island.
- 5. Inward correspondence was received from the Secretariat regarding the process for reviewing and updating the winter capacity margin and the winter energy margin, and from Hyland McQueen Limited seeking business opportunities in the field of hazard monitoring.
- 6. The chair noted a draft response to Hyland McQueen Limited has been prepared no changes to the draft were requested by members.

5 **Disclosure of interests**

- The Chair requested the Secretariat to provide him with a copy of the current register of members'
- 8. Albert Brantley noted he had a small change to his interests to disclose.

Actions	Ву	Date for action
Secretariat to provide the Chair with a copy of the current register of members' interests.	Secretariat	14 September 2012
Albert Brantley to provide details of his change in interests to the Secretariat.	Albert Brantley	19 September 2012

6 Results of survey into quality of secretariat support

- Fraser Clark summarised the findings of the members' survey and that following the discussion at the last meeting on Secretariat support, there were no outstanding actions in regard to this agenda item.
- 10. A member enquired if arrangements were in place for the SRC to obtain advice independent of the Secretariat (i.e. Authority), if it was judged prudent by members to do so. Carl Hansen advised members the matter was addressed under clause 5.2 of the 'Charter about Advisory Groups' (20 December 2010)

that states:

"Authority staff will administer the SRC, undertake analysis for it, and arrange external expertise at the Authority's sole discretion, although the SRC may recommend to the Authority resources, external to the Authority, which the SRC considers to be necessary to perform its function".

Security of Supply

7 **Security of supply standards** (review of winter energy and capacity standards)

Brian Bull joined the meeting at 9:45 am

- 11. Brian Bull overviewed the proposed changes to the security of supply standards and confirmed the Authority Board would be asked to consider proposed Code amendments for the changes in October 2012.
- 12. Members supported the move away from fixed capacity and energy margins to range based margins. The use of ranges better recognises that the margins are an indicator of an efficient level of security, and not to be taken as a determinate indicator of scarcity risk.
- 13. Members commented that papers should be careful with the style used, to avoid the potential for comments to be interpreted as market criticism (i.e. the "inefficient" level of investment referred to in 2.3.1(c) of the paper).
- 14. Members were concerned about the precedent that might be set by the use of modelled synthetic data as opposed to actual measured data to support the recommended increase of the wind contribution factor in the winter capacity margin from 20% to 25%. Members were not opposed to the use of the 25% figure, but advised caution in the use of modelled data in analysis of this type in the future. The Authority should exercise appropriate caution if it makes changes based on a limited data set.
- 15. A member questioned whether the average HVDC north-to south transfer figure of 480 MW had been appropriately justified. Patrick Strange commented that he thought the figure was correct and indicated that Transpower is considering hosting a forum for industry participants to ensure there was a more widespread and consistent understanding of the actual HVDC transfer capability. The member withdrew their question based on the feedback received from Patrick Strange and Kieran Devine.

8 **Summer security measures**

- 16. The paper on the summer security measures was taken as read.
- 17. Members supported the paper's recommendation that summer capacity issues are well monitored under current arrangements and accordingly, a summer capacity margin is not required.
- 18. A member noted by way of a correction to the paper that closure of one coal fired unit at Huntly would not change the summer river heating limitations at the station because all four units were never run during the summer.

Brian Bull left the meeting at 10:15 am

Reliability of Supply

9 Transpower's approach to transmission system reliability

John Clarke, Graeme Ancell and Nick Russ joined the meeting at 10:15 am Bruce Smith and Doug Watt joined the meeting at 10:18 am

- 19. John Clarke spoke to a presentation on customer focused transmission service measures.
- 20. Transpower is required to provide quality reporting to both the Commerce Commission under the part 4 of the Commerce Act, and to the Authority under the Code. The next five year Commerce Commission regulatory reset period will include an incentive regime based on delivering the desired long term performance of the grid.
- 21. Transpower is looking to identify better output measures that are relevant to end consumers and connected customers. Measures calculated as averages over the whole power system such as lost system minutes are of little interest to customers.
- 22. Customer experience is driven by the reliability of supply at the point of service and Transpower plans to develop measures around grid resilience which will help to target improvements to specific grid connections based on performance and criticality. Transpower also suggested the reporting to the Authority required under the Code should be reviewed and rationalised.

John Clarke and Graeme Ancell left the meeting at 10:50 am

10 **Commerce Commission monitoring of lines company reliability**

- 23. Nick Russ overviewed the Commerce Commission's role in the reliability of electricity networks.
- 24. The price-quality regulation in part 4 of the Commerce Act has two mechanisms a limit on maximum revenue and a limit on the minimum level of quality. ('Quality' refers to anything not price related. Its assessment is dominated by reliability, but also includes factors such as service response).
- 25. The quality measures for Transpower in the current regulatory period are for system minutes, number of loss of supply events and HVDC availability. The long term objective of these measures is unclear, but this is being addressed through the work being carried out by John Clarke (as discussed in the previous presentation).
- 26. In the next regulatory reset period Transpower will be responsible for developing updated quality measures and targets and there will be financial incentives for performance. The focus will be on a continuous scale across penalties and incentives to avoid the boundary issues that can arise with a binary approach.
- 27. A number of lines companies have breached the quality standards. The Commerce Commission's work in this area is now moving from establishing the regime to monitoring. They expect to review the quality framework in the next (2016-2021) reset period.

11 Supply-side reliability data (information only)

28. The paper on supply-side reliability data was taken as read.

12 Authority's intended approach to reliability monitoring

- 29. Doug Watt spoke to a presentation outlining the Authority's approach to reliability monitoring. The intended approach is to create incentives for an efficient level of investment in reliability that reduces overall costs to consumers.
- 30. There is no practical way to measure efficiency of reliability because it is not possible to know what costs have been avoided due to some action. Within this limitation, the Authority plans to focus on making sure the incentives are right for investors and to discourage activity which suppress price signals.
- 31. Members identified the practice used by the system operator during periods of scarcity known as "RAFs to zero" and the differences between 5 minutes and real time pricing as activities that supress price signals. The Authority is looking at these issues together with the system operator.
- 32. Members felt that the system operator must always be able to use a degree of discretion when making reliability decisions in real-time, but that a balance was required to ensure investment is not artificially suppressed.

Nick Russ, Bruce Smith and Doug Watt left the meeting at 11:45 pm

13 Report from the SRC to Authority Board on reliability of supply issues

- 33. Members had a wide ranging discussion on the broad parameters of reliability and identified the following matters of interest:
 - the coverage and alignment of the regulatory regimes approaches to reliability are well developed at the system operator level, but at a consumer level there are regional variations and confusion between the respective roles of retailers and network companies;
 - the is a need to identify the lead signals, metrics and performance indicators that could be used to drive any changes required in the current reliability levels, so that reactions to short term issues are avoided. The issues are primarily energy rather than capacity related;
 - load growth for the last five years has been flat, there is minimal capital available for generation investment and the profile of the industry is changing as retail positions rebalance due to changes in asset ownership. It is an uncertain market and the uncertainties may change quicker than expected. Investment signals have worked previously, but will they continue to do so?;
 - the market is now more aggressive and the day ahead and real-time markets have effectively been compressed into one market. Do we have adequate metrics in place to ensure participants are able to take a view on the changes that are occurring? Is there a growing need for a forward physical market of the type used in Europe? The kind of metrics required to provide a picture of risks are not provided through the system operator's annual security of supply assessment; and
 - there needs to be much more communication about reliability expectations with user groups and there needs to be a more rigorous communication regime in the event there is a loss of supply.
- 34. Members agreed the most pressing issues are (i) the communication of expected reliability levels to consumers and (ii) communication of information during loss of supply situations, and that these issues ought to be raised in the SRC's report to the Authority Board on reliability of supply issues.

System Operator performance

14 System operator alignment review project (information only)

- 35. Fraser Clark overviewed scope of the system operator performance alignment review work being undertaken by the Authority.
- 36. Members noted the need to carry out industry consultation at an appropriate stage.

Carl Hansen left the meeting at 12:20 pm

15 System operator performance – discussion topics identified at the August 2011 SRC meeting

- 37. Darryl Renner summarised the system operator's work in progress to address the issues identified by the SRC from the last system operator performance review:
 - out-of-merit order generation the system operator is now releasing notices about the use of discretion close to real time to better communicate with participants;
 - integrity of market systems the system operator is pursuing a range of systems improvements identified in its review of recent system failures;
 - performance of the Reserve Management Tool (RMT) the system operator is investigating a replacement model for RMT; and
 - competitiveness of ancillary services markets –the Authority has initiated work such as the Multiple Frequency Keepers project to improve the level of competition in these markets.
- 38. Kieran Devine identified that the system operator was experiencing increasing work load around real time operational work, particularly asset commissioning and was carrying out restructuring to deal with the issues. He also noted the Authority and system operator needed to continue to work together to ensure the Code and the system operator's internal processes kept pace with the extent of change occurring in the power system.

16 System operator performance – items for discussion at the next meeting

39. Members did not raise any issues with the work in progress or identify any additional system operator performance matters of concern.

Security of Supply

17 Update from the Gas Industry Company on the review of gas contingency planning following the Maui outage

Steve Bielby and Ian Dempster joined the meeting at 1:00 pm

- 40. Steve Bielby updated the SRC on progress with improvements to the gas contingency planning processes as follows:
 - the critical contingency operator has implemented the immediate learnings from the Maui outage;
 - Vector has reported on the cause of the pipeline failure and is looking at ways to improve the

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maintenance and monitoring of the pipeline together with the pipeline owner;

- 35 improvements to the Gas Governance regulations have been identified and work is underway to update the regulations on an urgent basis – including provision for electricity security of supply issues such as the need for Huntly to use a certain amount of gas to start coal burners;
- a number of larger industries are reviewing their risk management processes as a result of the Maui outage;
- if major plant failure or environmental damage causes simultaneous outages on both pipelines, curtailment would need to be tighter than used during the Maui outage and gas supply could be lost for several days;
- there is a need to improve the quality and timeliness of contingency information provided to the market; and
- it is unlikely that a 3rd pipeline to Auckland would be economic due to falling demand for gas.
- 41. Kieran Devine advised members that the system operator had produced a report on the impacts of gas supply disruption on electricity generation in conjunction with the New Zealand Centre for Advanced Engineering (CAENZ). The results of this analysis will influence the review of the emergency management policy (EMP) that the Code requires the system operator to complete by 31 October 2012 (clause 7.3(3)(b) requires the EMP review to include consideration of a gas transmission or supply failure).

Albert Brantley left the meeting at 1:20 pm Bruce Turner left the meeting at 1:30 pm

General Business

18 **Other Business**

- 42. No matters of other business were raised for discussion.
- 43. The date of the next meeting is 8 November 2012. The meeting is expected to conclude discussions on system operator performance and start the next round of discussions on security of supply.

The meeting closed at 1:40 pm.