Security and Reliability Council ::: Meeting Number 13

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

Time and date ::: 9:30 am ::: 01 July 2015

Minutes

Members present

- ::: Mike Underhill (Chair)
- ::: Barbara Elliston
- ::: Albert Brantley
- ::: Vince Hawksworth (via teleconference)
- ::: Bruce Turner (via teleconference)
- ::: Guy Waipara
- ::: Erik Westergaard

Apologies

- ::: Judi Jones
- ::: Nigel Barbour

In Attendance

Electricity Authority (Authority):

- ::: Fraser Clark, General Manager Market Services (until 11:14)
- ::: Grant Benvenuti, Manager Market Operations (until 11:14)
- ::: Callum McLean, Adviser System Operations (until 11:14)
- ::: Rory Blundell, General Manager Market Performance (From 10:35 until 11:14)

Apologies

::: Carl Hansen

Transpower:

::: Stephen Jay, General Manager Grid Development, grid owner (From 9:45 until 10:52)

System Operator:

- ::: John Clarke, General Manager System Operations, system operator (From 9:40)
- ::: Kevin Duckworth, Business Manager, system operator (From 10:52)

Others:

- ::: Paul Atkins, Chair, Smart Grid Forum (From 9.45 until 10:28)
- ::: John Hancock, secretariat, Smart Grid Forum (From 9:45 until 10:28)
- ::: Bill Heaps, Strata Energy, consultant supporting the SRC secretariat (from 10:35 until 10:52)

The meeting opened at 09:30 am.

1 Welcome and apologies

- 1. The Chair welcomed members to the thirteenth meeting of the Security and Reliability Council (SRC).
- 2. Judi Jones and Nigel Barbour sent their apologies.
- 3. The Chair noted that Fraser Clark was acting as the Authority's representative in the absence of Carl Hansen, who was unable to attend.
- 4. The Chair discussed the need for a more disciplined approach as to who will attend in regard to parties invited for specific papers, and that he would be applying this approach to this meeting.

2 Changes to disclosure of interests- chairperson

Two members advised they had some changes to their disclosures, but that these changes would have no impact on the matters before the SRC.

ACTION POINT

- 1. The members are to notify the secretariat of the changes to their disclosures.
- The Chair reviewed the latest interests register and approved members to act despite those declared interests.

3 **Previous minutes**

7. The minutes of the 20 March 2015 meeting were accepted as a true and accurate record.

4 **Action list**

8. Authority staff provided an update on item 1. It was agreed that a further update should be provided to the October 2015 meeting.

5 Correspondence

- 9. There were no questions in relation to the correspondence tabled. It was agreed that it was not necessary for Transpower to undertake a formal review of the relationship between its system operator and grid owner divisions.
- 10. There was a discussion on the extent of the system operator's proposed black start exercise. It was noted that communications would be a significant element of any black event so it was important that any exercise simulate actual operating conditions, with industry participants at their typical locations.

John Clarke entered the meeting at 9:40 am

11. A member asked the system operator if the proposed simulation was a full exercise or more of a planning exercise. The system operator responded to say it was closer to a planning exercise. The preference is to start with a small desktop exercise and ultimately progress up to a full simulation. A member asked if the system operator could set a date for the full exercise. The system operator commented that the initial plan is to test maturity first, before the full exercise is considered.

ACTION POINT

- 2. System operator to set a provisional date for the initial exercise.
- 12. A member questioned the likelihood of the system operator involving people from the North-East United States who were involved in actual black start events in that area. The system operator advised that it had

been mainly drawing on the planning exercises that are undertaken in Australia as a reference.

Reliability of supply

6 **Smart Grid Forum**

Paul Atkins, John Hancock and Stephen Jay entered the meeting at 9:45am

- 13. The Chair explained how the Smart Grid Forum (SGF) came to be presenting to the SRC. This had included the SGF directly contacting the Chair. The SGF Chair gave some background on the SGF and introduced the paper.
- 14. A member asked what 'smart grid' means to the SGF. An SGF representative responded by highlighting two key aspects of smart grids: new technology (such as electric vehicles or photovoltaics) and innovations in distribution automation.
- 15. A member observed that new technology carries new risks, such as cyber-security attacks. As New Zealand will be a 'technology taker', it is important that there be active management of what standards equipment needs to comply with. As an example, a concern was expressed that electricity distribution businesses need to be actively involved in the development of standards such as AS/NZS 4777 or Australian requirements will be imposed that are too onerous or not appropriate for New Zealand.
- 16. Members discussed the nature of the challenges posed by the changes associated with the development of smart grids. Members agreed that the New Zealand electricity industry has a history of innovation and has proven adaptable enough to cope with the many changes planned by the supply-side. Many members were concerned that the nature of upcoming changes are radically different in terms of:
 - a) the rate of change being much faster
 - b) the source of the change being the demand-side
 - c) the outcomes being less predictable.
- 17. Representatives from the grid owner, the system operator and the Electricity Authority explained aspects of what their organisations can and have done to plan for future change.
- 18. The SRC agreed that it did not share the Authority's confidence in regulators' abilities to keep pace with the speed of change. Several members went further still, concluding that the relevant regulators would not keep pace and would be a limiting factor in the growth of smart grids.
- 19. The SRC discussed what its role ought to be with respect to the transition from the status quo. While no conclusions were reached, topics covered in the discussion included:
 - a) the importance of a market-based approach rather than a return to central planning regardless of what the governance oversight of that planning might be. Nonetheless, industry players have an interest in ensuring able coordination and communication of issues
 - b) the variety of parties with an oversight interest, such as government and regulators, the SRC, the SGF, the Energy Futures Forum, the GREEN grid forum
 - c) whether data collection is adequate to enable accurate modelling of technology uptake (such as the growth of distributed generation)
 - d) that Commerce Commission regulation will be particularly critical for creating an environment where electricity distribution businesses can plan and react

- e) as New Zealand is not at the 'bleeding edge' of change, there will be many lessons to learn from overseas.
- 20. The SRC agreed that it needs to discuss this issue further. The SRC requested that the SGF provide some scenarios that show the expected results of modelled changes that could better inform the SRC about the potential impacts of the technology changes. A SGF representative noted that such modelling has already been done, so the scenarios exist.

Paul Atkins and John Hancock departed the meeting at 10:28am

21. The SRC considered the questions posed for it in the cover paper for the SGF paper:

QUESTIONS

 Does the SRC wish to challenge any of the key facts or conclusions in the reports as summarised by the Forum's attached paper? (reports from the system operator, the ENA, EnerNOC, the Authority and two reports from John Scott)

There was some discussion around some of the assumptions being made in the reports, but no specific issues were identified for comment.

2. Does the SRC agree with the Forum's recommendation that the Government should establish an information and advisory service to help consumers transition to new technologies?

A comment was made regarding the likely impossibility of any one person or agency being able to co-ordinate an area as large and diverse as this.

3. Does the SRC agree with the Forum's recommendation that the SRC should monitor and report on this transition over time? In order to be consistent with the SRC's role, this monitoring and reporting would need to be in the context of security and reliability outcomes, and not, for example, the penetration levels of a particular technology.

It was generally agreed there is a role for the SRC to play.

4. Does the SRC agree with the Forum's recommendation that the Forum ought to continue to operate, but with the goal of phasing itself out of existence in a way that embeds its experience into the relevant permanent industry organisations?

The members agreed it was not the SRCs role to have a view on this.

5. Is the SRC willing to hear directly from the ENA's Smart Technologies Working Group once its investigation is sufficiently developed?

Yes.

6. What advice, if any, does the SRC wish to provide to the Authority?

It was agreed that the Authority does not have the remit it appears to infer it has from its report. The implication in the report appears to be that the Authority has the power to force consumer decisions, but this is a remit it does not have. A question was also raised on the ability of the industry's regulators to keep up with the changes.

22. The SRC's discussions resulted in the following action items.

ACTION POINTS

- 3. SGF to work with the SRC secretariat on models/scenarios for the SRC's consideration.
- 4. SRC secretariat to prepare a letter to the Authority outlining the SRC's concerns about the

- Authority's perception of its remit in relation to consumer choice, and the ability of regulators to keep pace with the extent of change resulting from smart grid initiatives.
- 5. SRC Secretariat to arrange ENA's Smart Technologies Working Group presentation once its investigation is sufficiently developed.

7 Risk management framework

Bill Heaps and Rory Blundell entered the meeting at 10:35am

- 23. The Authority's representative introduced the paper and the background to it.
- 24. The SRC agreed that there is potentially some value in a risk management framework (RMF) for the group. Discussion centred on:
 - a) establishing processes that facilitate a meaningful SRC discussion at an appropriately high-level
 - b) ensuring that the next development steps stay small and exploratory at this stage
 - c) the potential for the RMF to become big and bureaucratic if it was not appropriately managed, with the risk of it creating unwarranted cost on industry (particularly in terms of data collection)
 - d) the need to trust that individual risk owners will appropriately manage their own risks.
- 25. An attendee observed that the exercise of establishing the RMF will be a valuable scope-setting exercise for the SRC and mean the SRC's deliberations are robust to scrutiny should there ever be any post-event enquiries wide-ranging enough to encompass the SRC.

ACTION POINT

6. Secretariat to continue to develop the RMF criteria.

Bill Heaps and Stephen Jay departed the meeting, and Kevin Duckworth entered the meeting at 10:52am

Performance of the system operator

8 Strategy

- 26. The system operator representatives spoke to a selection of the presentation slides, highlighting that the system operator is moving from a 'security only' focus to a competition/reliability/efficiency balance that aligns with the Authority's objective.
- 27. Several members sought assurance that the alignment with the Authority's objective would not inappropriately compromise security or reliability. A system operator representative explained that the review process is a multi-year undertaking that will, for key documents in particular, involve consultation with industry. An Authority representative noted that for the documents incorporated by reference into the Electricity Industry Participation Code 2010, the Authority Board's approval is also required.
- 28. A member asked whether 'value for money' was intended to be synonymous with economic efficiency. A system operator representative responded that was an intended meaning, though 'value for money' is also intended to encompass the direct outputs of the ~\$40M/year to run the system operator.
- 29. A member noted that longer-term trends may diminish the role of the system operator, though the content of this five-year strategy is appropriate.

John Clarke and Kevin Duckworth departed the meeting at 11:08am

General Business

9 General Business

30. A member noted that they're assisting the Authority with reviewing a draft standard for inverters (AS/NZS 4777).

10 Administration

31. The SRC discussed the scheduling of a special meeting to review papers relating to the Penrose substation event. The SRC agreed that they would prefer to meet in Auckland in order to visit the substation. A member offered the use of nearby premises for the meeting after the site visit.

Fraser Clark, Rory Blundell, Grant Benvenuti and Callum McLean departed the meeting at 11:14am

- 32. The SRC discussed the performance of the SRC secretariat and concluded that they would like:
 - a) to see the SRC focus more on strategic security issues, particularly in the light of the potential changes the electricity sector will face in the future
 - b) more opportunity to discuss security and reliability of supply throughout the whole supply chain so that a customer perspective can be considered as part of their deliberations.
- 33. There was no discussion of agenda items 10c or 10d.

ACTION POINT

7. The Chair committed to submitting the members survey results to the secretariat.

Meeting close

The meeting was closed at 11:25 pm.