

MINUTES

Meeting number: 24

Venue: Electricity Authority Boardroom

Time and date: 9:30 am until 1.06 pm, Friday, 22 June 2018

Members Present

- Bruce Turner (temporary deputy Chair)
- Anne Herrington
- Barbara Elliston
- Greg Skelton
- Guy Waipara
- Marc England (by videoconference)
- Nathan Strong (by videoconference from 10.55am)
- Vince Hawksworth (by videoconference)

Apologies

- There were no apologies among the eight remaining members. The former Chair resigned effective 18 June 2018.

In attendance

Name	Title	Agenda item # attended
<u>Electricity Authority (Authority):</u>		
Carl Hansen	Chief Executive	All (left 9:45 am, returned 10.37 am)
Rory Blundell	General Manager Market Performance	All
Grant Benvenuti	Manager Market Operations	All
Callum McLean	Adviser System Operations	All
Doug Watt	Manager Market Monitoring	#12 & #14 (11.55 am - 12.35 am)
<u>Transpower:</u>		
John Clarke	System Operations General Manager	#13-#14 (12:20 pm - 12:50 pm)
Bennet Tucker	Market Security Services Manager	#13-#14 (12:20 pm - 12:50 pm)
Paul Hume	Network and Security Services Manager	#8 (9:40 am - 10.04 am)
<u>Other:</u>		
Pamela Caird	Senior Adviser, Gas Industry Company	#9 (10:05 am - 10.45 am)
Andrew Walker	Senior Adviser, Gas Industry Company	#9 (10:05 am - 10.45 am)
Nick Russ	General Manager Regulation, Commerce Commission	#10-#11 (10:47 am - 11:55 am)
Simon Wakefield	Performance Analysis Team Manager, Commerce Commission	#10-#11 (10:47 am - 11:55 am)
Tim Hewitt	Chief Adviser Regulation, Commerce Commission	#10-#11 (10:47 am - 11:55 am)

The meeting opened at 9.28am

1. Attendance and apologies

- 1.1. The secretariat welcomed members to the twenty-fourth meeting of the Security and Reliability Council (SRC).
- 1.2. The secretariat noted no apologies for attendance were received, though one member apologised for not being able to attend from the start of the meeting.
- 1.3. A quorum was established.

2. Election of deputy chairperson

- 2.1. The secretariat facilitated the election of a deputy Chair.
- 2.2. One nomination for the position was tabled. The SRC elected Bruce Turner unopposed to the position of temporary deputy Chair of the SRC.

Anne Herrington moved, Barbara Elliston seconded.

3. Changes to disclosure of interests

- 3.1. The temporary deputy Chair (hereafter referred to as Chair) reviewed the latest interests register and approved members to act despite those declared interests.
- 3.2. The Chair noted that one member was leading a presentation to the meeting but was approved to act in relation to the presentation as this was an information presentation only.

4. Previous minutes

- 4.1. The minutes of the 28 March 2018 meeting were accepted as a true and accurate record.

Bruce Turner moved, Guy Waipara seconded.

5. Correspondence

- 5.1. The Chair gave an overview of the correspondence. The SRC agreed to write to Mike Underhill expressing the Council's appreciation for his service.

- 1. Action:** Secretariat to draft a letter expressing the SRC's appreciation to the former Chair, and deliver this to the SRC for its consideration by 6 July 2018.

6. Glossary and overview of meeting agenda

- 6.1. The Chair noted the agenda item. There was no discussion.

7. Action list and updates

- 7.1. The Chair asked the secretariat for a summary of the action list. The secretariat highlighted a few actions, including that the risk management framework action has not been achieved by the date indicated due to competing priorities.
- 7.2. The secretariat advised that the Authority Board recently received a paper highlighting key implications for the electricity sector arising from climate change. The Board found it an informative, high-level paper and expressed willingness for the SRC to receive a copy. The SRC agreed to receive it.

- 2. Action:** Secretariat to include the material from the Authority Board paper on the high-level electricity implications of climate change in the agenda for the October meeting of the SRC.

8. Debrief on electricity cybersecurity exercise

Paul Hume joined the meeting

- 8.1. Paul Hume presented the slides provided confidentially to the SRC. The SRC asked questions and discussed various matters including:
- 8.1.1. lessons learned
 - 8.1.2. the increasing importance of resilience
 - 8.1.3. particular threat vectors.

Carl Hansen left the meeting

- 8.2. The SRC thanked the CSSIE for its work and Transpower for its leadership in this area.

Paul Hume left the meeting

9. Management of critical contingencies in the gas network

Pamela Caird and Andrew Walker joined the meeting.

- 9.1. Representatives from the Gas Industry Company (GIC) presented the slides provided to the SRC.
- 9.2. The members' discussion with GIC representatives included:
- 9.2.1. the prioritised order of gas curtailment during a critical contingency
 - 9.2.2. the implications of a lengthy curtailment of gas-fired generation during a dry year
 - 9.2.3. whether there was any ability for the GIC to review/amend the curtailment order if there were unusual circumstances such as an extended dry year
 - 9.2.4. the correlation of electricity demand and critical contingencies, noting that severe critical contingencies may lead domestic gas users to substitute electricity for gas
 - 9.2.5. the importance of critical systems such as SCADA
 - 9.2.6. the interaction between the electricity system operator and the gas critical contingency operator that GIC representatives believed was working well.

Carl Hansen re-joined the meeting

- 9.3. The SRC expressed an interest in hearing from the system operator on the management of gas critical contingencies.
- 9.4. The SRC responded to the secretariat's written questions:
- 9.4.1. The SRC agreed it would like to understand the implications of a dry year and an extended critical gas contingency coinciding.

9.4.2. The SRC directed the secretariat to request the system operator to provide its perspective on management of critical gas contingencies.

3. Action: Secretariat to amend action item #6 to incorporate a scenario in which a shortage of stored fuel other than gas (such as hydro, coal, diesel) and an extended critical gas contingency coincide.

4. Action: Secretariat to request the system operator to provide the SRC its perspective on management of critical gas contingencies.

10. Wellington Electricity's earthquake preparedness

Nick Russ, Simon Wakefield and Tim Hewitt joined the meeting

10.1. Greg Skelton presented the slides provided to the SRC.

Nathan Strong joined the meeting by videoconference

10.2. Discussion included:

10.2.1. the role of Wellington Lifelines Group

10.2.2. the particularities of Wellington's topography (hills, valleys and harbour) and infrastructure (electricity, roading, water and gas), and the difficulties of moving staff and equipment after a major event

10.2.3. the preparedness of other lines companies given the requirements of the Civil Defence Emergency Management Act to "function at the fullest possible extent, even though this may be at a reduced level, during and after an emergency." A member gave examples of investments made by Unison for the purposes of improving network resilience and response capability.

10.3. The SRC appreciated Wellington Electricity's presentation and that it improved their understanding of this local example of a distributor seeking to be prepared. The SRC expressed an interest in improving its understanding about distributors' overall emergency management preparedness.

5. Action: Secretariat to report to SRC about the emergency management preparedness of distributors by the first meeting of 2019.

11. Commerce Commission's focus on asset management

11.1. Commerce Commission representatives introduced the paper and presented an abridged set of slides (Annex 1 to these minutes) compared to the comprehensive slides provided in advance to the SRC.

11.2. A member asked the presenters what the Commerce Commission is planning to do to reduce the likelihood of reliability issues from recurring. The presenters noted the tools available to them include:

11.2.1. Retrospective penalties and remedial action for breaches of quality/reliability standards, which act as a powerful deterrent for other parties.

11.2.2. Information disclosure requirements that create pressure on distributors to improve the reliability of their networks

- 11.2.3. Facilitative methods such as encouraging best practice asset management so that investment is well-timed and sufficient to meet consumers' expectations.
- 11.3. A member asked the presenters about the challenges and trends facing its regulation of the sector, such as the effects of new technology. The presenters responded that:
 - 11.3.1. The fundamentals of their regulatory purpose are unchanged.
 - 11.3.2. Answering those questions is getting more complicated.
 - 11.3.3. The Commerce Commission reviews its regulations to ensure it remains fit for purpose.
 - 11.3.4. The Commerce Commission has been surveying distributors' use of new technology.
- 11.4. A member noted that resilience was not reflected in current metrics. A presenter responded that they have found resilience to be poorly suited to quantification in a metric, but that there are better qualitative ways to analyse it.
- 11.5. A member noted that when it comes to reporting on distributor performance (including asset management), it makes sense for the Commerce Commission to be the lead agency and for the Authority to avoid duplication.
- 11.6. A member encouraged the use of 'heat maps' to give a national overview of performance on a given metric.
- 11.7. The SRC responded to the secretariat's written questions:
 - 11.7.1. The SRC did not request any additional information from the secretariat.
 - 11.7.2. The SRC was unable to reach any preliminary conclusions about the adequacy of reliability. The action from the earlier agenda item may help inform this, and the SRC expected to discuss this further in the following agenda item.
 - 11.7.3. The Chair considered that the Authority should be advised that the Commerce Commission's focus on encouraging best practice asset management was a positive step for reliability of supply, but that measures of resilience are hard to quantify.

Nick Russ, Simon Wakefield and Tim Hewitt left, and Doug Watt joined the meeting

12. Measures of reliability

- 12.1. The secretariat briefly described the history that led to this paper.
- 12.2. The members' overall impressions of the paper were mixed:
 - 12.2.1. Some liked it and found the absence of alarm bells a worthy exercise
 - 12.2.2. Some found it to be a slew of data without meaningful commentary to give context and point to next steps.
- 12.3. The members suggested various improvements to the next year's edition of the paper:
 - 12.3.1. Improve the breadth of metrics available that relate to distributors, such as asset condition.

- 12.3.2. Include more commentary, including what interpretation members should take out of the graphs, and highlight any next steps for the SRC.
- 12.3.3. Seek to establish baseline performance against which future results can be assessed.
- 12.3.4. A useful additional version of Figure 8 could be a scatter plot by average length of lines.
- 12.3.5. Either describe why the growth of small-scale distributed generation is meaningful for reliability, or remove/replace it in favour of data that is meaningful (perhaps a measure of low voltage network constraints imposed on distributed generation).
- 12.4. A member questioned whether the full capability of the HVDC is available or not, and what role reserves arrangements play in constraining HVDC flow.
- 12.5. The SRC did not identify any matters requiring advice to the Electricity Authority Board.

13. The Electricity Authority's review of winter 2017 (item 14 on agenda)

John Clarke and Bennet Tucker joined the meeting

- 13.1. Electricity Authority staff introduced the paper, noting the review had been published earlier in the week so would almost certainly not be amended unless the SRC noted a major error.
- 13.2. The SRC agreed that the security of supply regulatory arrangements played a part in the observed differences in managing hydro storage, but some members considered that other important factors were ignored or underemphasised by the review, such as:
 - 13.2.1. the analytical scrutiny and commercial focus that accompanied public listing of major gentailers
 - 13.2.2. asset swaps.
- 13.3. The SRC considered that the review didn't convey the level of concern felt within the industry at the time the events were unfolding. During the event, it was not obvious to stakeholders how the winter would play out. There was a lot of industry activity that occurred to maintain sufficient hydro storage for an extended dry period. Different decision-making or an asset breakdown could have created significant consumer impacts.
- 13.4. The SRC agreed to advise the Authority Board of its observations on the review of winter 2017.

Doug Watt left the meeting

14. Treatment of thermal fuels in the hydro risk curves (item 13 on agenda)

- 14.1. Transpower representatives introduced the paper, noting that a letter from Genesis Energy was the catalyst for Transpower's consultation.
- 14.2. A member commented that Genesis Energy raised the topic as its modelling in late-2017 showed a potential to run out of coal in April 2018. Given a three month lead time for coal delivery, it seemed prudent to confirm the suitability of thermal fuel assumptions in the hydro risk curves,

14.3. The discussion included:

- 14.3.1. That the system operator's final decision will be tested when the power system comes under stress with low hydro inflows. As such, there will be considerable interest and scrutiny at that time.
- 14.3.2. It would be ideal if wholesale electricity purchasers understood all their risks and had products available to facilitate covering of risks where appropriate. Many purchasers are likely unaware of the risk of thermal fuel unavailability and that their options to protect themselves after the fact are limited.
- 14.3.3. The system operator's communication process will be important. If information comes available that the system operator considers would constitute a thermal fuel limitation, it needs to carefully consider the merits of that and how to communicate the results in a manner that minimises alarm or perceptions of it having made a hasty decision.

System operator staff left the meeting

15. Strategic alignment of the SRC

- 15.1. The secretariat briefly introduced the paper, noting that it has been hearing over the last 2-3 years that the SRC is functioning better.
- 15.2. In terms of the environmental scan, the SRC was satisfied there were no major oversights. The members discussion included the following environmental factors:
 - 15.2.1. There is still a psychological and financial transition to be completed from an era when state-owned gentailers were informally expected to maintain dry-year security.
 - 15.2.2. The reliability of aging assets appeared in the environmental scan, but not the retirement of aging assets. The eventual retirement of the Huntly Rankine units will be a challenge for the sector.
 - 15.2.3. Distributors are undergoing a transition from a mentality of 'simply turn it off' to a complex web of permissions and two-way power flows.
- 15.3. The SRC advised its secretariat that:
 - 15.3.1. the recent series of agenda items on electricity dependencies on the gas industry has been valuable
 - 15.3.2. the annual pattern of agenda items has functioned as a useful work plan
 - 15.3.3. the group's attentiveness to industry-wide risks is useful.
- 15.4. The SRC discussed potential advice for the Authority Board:
 - 15.4.1. Poor public understanding coupled with political pressure to 'do something' can lead to costly interventions for consumers. Australia demonstrated this very clearly and the 'social capital' lost with consumers will take a lot of time and effort to rebuild. The SRC considers the Authority should be endeavouring to talk to consumers to improve their understanding.

- 15.4.2. The diffuse responsibility for providing security of supply is an uncomfortable fact for many people to accept and therefore an important and harder thing to communicate.
- 15.4.3. It will come as no surprise to the Authority that the strategic environment will force significant changes within the electricity sector. However, that change will be preceded by a bow-wave of uncertainty and volatility.
- 15.4.4. Keeping alert to the possibility of 'black swan' events will be of even more importance than usual as there are likely to be exacerbating risks that emerge in the medium-term.

16. General business

- 16.1. The Chair commented that a key part of the former Chair's success with the SRC was his industry experience and the Authority Board should value that when appointing a new SRC Chair.
- 16.2. The SRC thanked Carl Hansen for his contribution to the SRC and the industry during his time as the Electricity Authority's Chief Executive.

The meeting ended at 1:06pm