

Security and Reliability Council ::: Meeting Number 23

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

Time and date ::: 9:30 pm ::: 28 March 2018

Minutes

Members present

::: Mike Underhill (Chair)
 ::: Barbara Elliston
 ::: Bruce Turner (by videoconference, then teleconference)
 ::: Erik Westergaard
 ::: Guy Waipara
 ::: Nigel Barbour
 ::: Vince Hawksworth (by teleconference)

Apologies

::: Anne Herrington
 ::: Marc England

In Attendance

Name	Title	Agenda item # attended
<u>Electricity Authority (Authority):</u>		
::: Carl Hansen	Chief Executive	All
::: Rory Blundell	General Manager Market Performance	All
::: Grant Benvenuti	Manager Market Operations	All
::: Callum McLean	Adviser System Operations	All
<u>Transpower:</u>		
::: John Clarke	System Operations General Manager	#8-#12 (10.30 am until 11.55 am)
::: Leigh Westley	Market and Business Manager, System Operations	#3-#4 (10.30 am until 11.55 am)
::: Gari Bickers	Market Technologies Specialist/Analyst, System Operations	#7-#9 (9.55 am until 11.15 am)
::: Angela Houston	Planning and Project Support Manager, System Operations	#8-#9 (10.30 am until 11.15 am)
<u>Other:</u>		
::: John Kidd	Director, Sector & Equity Research, Woodward Partners	#7 (9.55 am until 10.30 am)
::: Ben Gerritsen	General Manager Commercial and Regulation, First Gas	#10 (11.15 am until 11.48 am)
::: Ryan Phipps	Transmission Operations Manager, First Gas	#10 (11.15 am until 11.48 am)

Welcome and apologies

The meeting opened at 9.30 am.

1. The Chair welcomed members to the twenty-third meeting of the Security and Reliability Council (SRC).
2. The Chair noted the apologies received from Anne Herrington and Marc England.

Administration

Changes to disclosure of interests

3. The Chair noted an update to the interests of Marc England was the only update received since the interests were circulated to the members. The Chair reviewed the latest interests register and considered that those interests would not lead to a conflict. The Chair approved members to act despite those declared interests.

Previous minutes

4. The minutes of the 6 November 2017 meeting were accepted as a true and accurate record.

Barbara Elliston moved, Erik Westergaard seconded.

5. The minutes of the 13 December 2017 meeting were accepted as a true and accurate record, subject to inserting the word “industry” before “control room” in paragraph 7i of the minutes.

Nigel Barbour moved, Bruce Turner seconded.

Action list

6. No discussion of action items was required.

Correspondence

7. There were no questions in relation to the correspondence tabled. The secretariat noted the advice was recently received by the Authority Board and a response letter is underway.

Glossary and overview

8. Members provided positive feedback to the secretariat for the new standing agenda item.

Initial discussion of the annual assessment of security of supply

9. A member not in attendance provided written comments on agenda item #8 (the annual assessment of security of supply). These comments were circulated at the meeting and members given an opportunity to read them.

ACTION

1. Secretariat to send the written comments on agenda item #8 to Transpower, subject to the
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relevant member's agreement.

10. The members' discussion about the comments included that:

- a. the SRC should accept the offer to receive more detailed reporting on thermal fuel availability, though the presenter and the secretariat should take care to ensure the SRC is not given important information not already released under continuous disclosure
- b. the Authority should consider the framework under which information like thermal fuel availability is released to inform the market
- c. the Huntly Rankine units are old and while there is legitimate discussion to be had about when their retirement happens, it will happen eventually. When the Huntly Rankine units become unavailable at any price, this will be a major transition for the generation market
- d. there has been little change to the annual assessment over the years that the SRC has been receiving it. There are many important assumptions that need careful consideration and verifying with generators
- e. there is some value in the system operator's focus on physical capability and this may meet the system operator's legislative requirements, but this will always be an incomplete view without better accounting for the dynamic nature of markets
- f. longer-term analysis of the overall transition to a low-carbon future is one of the tasks of the Productivity Commission and the Interim Climate Change Commission.

Security of Supply

Future gas supply

John Kidd and Gari Bickers joined the meeting at 9.55 am

11. The Chair noted the SRC's interest is not in the gas industry itself, but in the impact that upstream security of supply can have on electricity generation from gas.

12. John Kidd spoke to a slide presentation.

13. The members' discussion with John Kidd included that:

- a. Methanex is by far and away the dominant gas user and is also the marginal user. Methanex's gas use has some flexibility: shutting down plant prior to a five-yearly major investment; selling contracted gas to other users when the price is right; controlled shutdown during critical contingencies
- b. there is potential for storage at Ahuroa to be expanded
- c. New Zealand typically has gas reserves for 10-12 years. If gas supply became seriously constrained, Methanex might be forced to reduce usage or shutdown completely. In that event, the expected lifespan of gas reserves could double
- d. there is some delivery risk posed by major gas fields with declining extraction rates leading to insufficient intra-day supply to meet peak capacity demand
- e. proposed new owners of key gas production facilities have a good track record of extending the life of mature gas fields and an investment mandate to do so
- f. owners of gas-fired electricity generation appear to have their strongest gas positions in

years. Broadly, they've contracted enough gas for their own infrastructure and customers while still having more options to procure additional supply

- g. the gas transmission network poses risks to gas-fired electricity generators, though that is the topic for a later agenda item.

14. The Chair thanked John Kidd for his presentation.

John Kidd departed, John Clarke, Leigh Westley and Angela Houston joined the meeting at 10.30 am

2018 Annual Assessment of Security of Supply

15. Transpower introduced their annual assessment scenarios and results. Transpower see it as a central view of generation adequacy that informs industry and helps provoke discussion on the need for investment in generation.

16. The SRC asked questions of the presenters and discussed various matters including:

- a. there is a 'consents cliff' approaching with a significant number of resource consents for prospective electricity generation expiring in 2022-23. Consents for wind generation may be particularly challenging to re-consent, as the optimal technology has developed significantly and is now more intrusive (larger and taller) than when consents were issued over 10 years ago
- b. the reporting indicates that there is an adequate pipeline of generation available, but whether the investment signals are adequate to bring options to market is out of scope. Members questioned what indicators the SRC should look for, noting that listed companies will signal potential generation investment in their annual reports as well as announce investment decisions to the market, and the forward price curve can provide a leading indicator of future price expectations. A member questioned when the SRC should be seeing evidence of some generators committing to new generation investments
- c. the build-times listed for generation are generally accurate, though there may be some projects with unusual characteristics that would take longer
- d. there is value in understanding the physical capability of the existing and prospective generation fleet to meet demand, but this would be better augmented with analysis to ensure the dynamic nature of markets are accounted for. Members encouraged the system operator to explore ways to give insight on the financial/investment dynamic aspect of the generation pipeline
- e. members encouraged the system operator to consider analysis to better account for climate change, such as giving more weight to recent hydro sequences as a better indication of the future
- f. a member questioned whether there is merit in performing regional supply assessments. A system operator representative noted the system security forecasts do this, and used to do so with a longer-term horizon. The system security forecasts now have a medium-term horizon that aligns with transmission investment timeframes
- g. a member questioned whether distributed generation (especially when combined with batteries) may be being overlooked by the annual assessment. Distributed generation is an investment option with shorter build-times and installed by a multitude of smaller organisations.

ACTION

2. Secretariat to report back to the SRC on the sensitivities of the annual assessment assumptions and how the assessment could better take into account the dynamic nature of the market.

New Zealand Generation Balance

17. Transpower introduced the paper, noting:
 - a. that the NZGB reporting looks out six months into the future, but there is also a version of NZGB with a three-week outlook that doesn't assume any demand growth
 - b. generators and the grid owner schedule their outages in the system operator's planned outage coordination protocol (POCP) software and this provides NZGB with an industry-wide view of outages
 - c. latest NZGB results are still not forecasting any shortfalls. The lowest margin at the time was ~400 MW.
18. The SRC was comfortable with the NZGB process and results. One member noted that New Zealand Aluminium Smelter's (NZAS) demand is very stable and unlikely to grow, meaning that assuming 2% demand growth on the entire South Island load is effectively applying a much higher percentage to non-NZAS demand.

Gari Bickers and Angela Houston departed, Ben Gerritsen and Ryan Phipps joined the meeting at 11.15 am

Reliability of supply**Gas transmission network security and reliability**

19. Representatives from First Gas spoke to their presentation.
20. In response to questions from members, First Gas representatives noted that:
 - a. there are no major issues outstanding from the audit of its adherence to relevant gas pipeline standards
 - b. after health and safety, security and reliability are the top priority for First Gas
 - c. First Gas aims to eliminate risks where it can, and minimise risk when it cannot
 - d. having a pension fund as an owner provides good alignment with the long-term investment view needed for reliability assets managed well
 - e. there have been no New Zealand studies of the value of unsupplied gas. First Gas are familiar with the high-level costs estimated by the Ministry of Business, Innovation in relation to the 2011 Maui pipeline outage. First Gas uses that estimate in some of its investment decisions.
21. The Chair thanked First Gas for their presentation and noted that their presentation indicated that there were no material unmitigated risks to security of supply by the gas transmission network.

Ben Gerritsen and Ryan Phipps departed the meeting at 11.48 am

Debrief on information security exercise

22. This item was postponed to a future SRC meeting.

Performance of the system operator**For the year ending 30 June 2017**

23. The SRC were satisfied with the Authority's review of system operator performance.
24. A member questioned the system operator whether it found the Authority's review useful and conducive to a healthy working relationship. The system operator was supportive of the review process and considered the relationship with the Authority was already strong.
25. A member noted that the Authority should recognise there will be limits to the transparency that the system operator (or other participants) can provide, especially if it introduces legal risk to an organisation.

Leigh Westley and John Clarke departed the meeting at 11.55 am

General Business**Administration**

26. An Authority representative explained that the Authority would be announcing the appointment of Greg Skelton, Nathan Strong and reappointment of Vince Hawksworth to the SRC effective from 1 April 2018.
27. The Chair thanked Erik Westergaard and Nigel Barbour for their excellent contributions to the SRC.

Meeting close

28. The meeting was closed at 11.58 am.