

# MINUTES

Meeting number: 34

Venue: Boardroom, The Electricity Authority, Level 7, 5 Hunter Street, Wellington Central

Time and date: 9.31 am until 2.41 pm, Thursday, 25 February 2021

## Members Present

- Hon Heather Roy (Chair)
- Barbara Elliston
- Greg Skelton
- Gretta Stephens
- Nanette Moreau
- Nathan Strong
- Tracey Hickman (via videoconference)

## Apologies

- Vince Hawksworth
- Guy Waipara

## In attendance

Name	Title	Agenda item # attended
<b><u>Electricity Authority (Authority):</u></b>		
Andy Doube	General Manager Market Design	#4-5, and 7 (from 9.50 am–10.22am)
Grant Benvenuti	Manager Market Operations	#4-15 (from 9.50 am–2.41pm)
Callum McLean	Senior Advisor Market Operations	#10-12 (from 11.15 am–12.25 pm)
Nicole Gagnon	Advisor Market Operations (Secretariat)	#1-2 and #4-15 (from 9.29 am–9.34 am and from 9.50 am–2.41pm)
Barbara Eibl	Programme Coordinator, Wholesale Markets	#1-2 and #4-15 (from 9.29 am–9.34 am and from 9.50 am–2.41pm)
Joey Au	Manager Retail and Networks Markets	#4-9 (from 9.50 pm–11am) #15 (from 2.27pm – 2.41pm)
Alistair Dixon	Principal Advisor Market Design	#8 (from 10.36 am – 10.54 am)
James Blake-Palmer	Senior Advisor Market Operations (Designate)	#4-15 (from 9.29 am–9.34 am and from 9.50 am–2.41pm)
<b><u>Other:</u></b>		
Stephen Jay	General Manager Operations, Transpower	#9-10 (from 11.18 am– 11.48 am) #12-13 (from 1.03 pm–1.59 pm)
Katherine Moore	Operations Planning Manager, Transpower	#9-10 (from 11.18 am– 11.48 am) #12-13 (from 1.03 pm–1.59 pm)
Leigh Westerly	SO Market and Business Manager, Transpower	#9-10 (from 11.18 am– 11.48 am) #12-13 (from 1.03 pm–1.59 pm)

Name	Title	Agenda item # attended
Matt Copeland	SO Power Systems Group Manager, Transpower	#12-13 (from 1.03 pm–1.59 pm)
Clive Bull	Director, Strata Energy Consulting Limited	#13 (from 1.03pm – 2.27 pm)

*The meeting opened at 9.31 am.*

*Nicole Gagnon and Barbara Eibl joined the meeting at 9.31am.*

### 1. Attendance and apologies

- 1.1. The Chair welcomed members to the thirty-fourth meeting of the Security and Reliability Council (SRC). A quorum was established.
- 1.2. The Chair noted apologies received from Vince Hawksworth and Guy Waipara.

### 2. Changes to disclosure of interests

- 2.1. The Chair reviewed the interests register and noted there had been no changes disclosed.
- 2.2. An SRC member informed the Chair that there was a change to their interests, and these would be emailed to the secretariat to update in the register.
- 2.3. The Chair approved members to act despite those declared interests.

*Nicole Gagnon and Barbara Eibl left the meeting at 9.34am.*

### 3. Members-only session

- 3.1. The members discussed their priorities for the meeting.

*Nicole Gagnon, Barbara Eibl, Grant Benvenuti, James Blake-Palmer, Andy Doube, and Joey Au joined the meeting at 9.50 am.*

### 7. Register of top security and reliability risks

(Note: The Chair took this agenda item out of order to accommodate an Authority attendee who needed to leave the meeting early)

- 7.1. The Chair facilitated comments from members and attendees.
- 7.2. Members' comments included:
  - a) COVID-19 is still top of mind, including industry preparedness and managing under varying alert levels. The short-term risk to prepare for level 4 was still valid, however some changes might be required to include the roll out of vaccinations.
  - b) The dry-year risk and what work is required and underway to prepare for this risk. There might be a mismatch about the perception and reality of the severity of the dry-year risk.
  - c) How do we ensure the future planning for increased peak demand on some LV networks from electric vehicles is in place? The impact of electric vehicles and gas will be significant and to date there has been no oversight of industry preparedness.

- d) The Climate Change Commission report and the government's rejection of the report's recommendation concerning the extent of renewables, including the uncertainty it creates in the short-term with a void in the long-term. Recommendations have been made but there has been no indication about who will implement any changes.
- e) Whether the long-term risk of gas supply running down is also a short-term risk.
- f) The risk of insufficient gas supply for gas fired thermal (P9) appears to be manifesting.
- g) The hydro risk curves are not reflecting concerns with the high spot prices. Looking at the electricity risk curves as we head into winter, they are not indicating any type of concern and the curve is not showing low lake levels, gas shortages etc. There is a disjoint between these two measurements and discussion is required on what we do to resolve it.
- h) There is a need for measures/standards for the industry, for example standards for electric vehicles.

7.3. Several members also noted concerns around the lack of cohesive strategy for the future, silo thinking and possible distortions to market dynamics. Recent examples include the Climate Change Commission report, the hold on the project to examine the security and resilience of the electricity sector (G2), the NZ Battery project, the hold up of mandating the inverter standards. The risk of not having a cohesive strategy is that various reviews, projects, and initiatives could produce contradictory outcomes.

7.4. Attendees comments included:

- a) Agreeing with the concerns raised by members, including the dry-year risk and verifying whether the systems in place are appropriate.
- b) Having the secretariat investigate some of the short-term risks to determine whether they remain short-term or should be moved to a different category.
- c) With the experience of Covid19 and what is now known about potential interruptions to the supply chain, the persistent national pandemic risk (P4) should be updated to include the availability of imported goods and services.

- 1. Action:** Secretariat to make the following changes to the table 'Top security and reliability risks':
- a) review S1, S2, and P4 (Covid19 and national pandemic risks) to ensure they are fit for purpose and make updates as required
  - b) review the short-term risks S4 and S5 to determine whether they still fall into the short-term risk category (within 1 year).

- 2. Action:** Secretariat to provide additional information to the SRC about the mismatch between the hydro-risk curves and the high electricity prices in the spot market.

#### 4. Minutes of previous meeting

- 4.1. The minutes of the 22 October 2020 meeting were accepted as a true and accurate record.

*Greg Skelton moved and Nanette Moreau seconded. All members approved.*

#### 5. Correspondence

- 5.1. The Chair gave an overview of the correspondence including that the letters sent to the Authority (and the Authority's replies) were split due to the confidential nature of the cyber-security advice.

*Andy Doube left the meeting at 10.22am.*

#### 6. Action list and updates

- 6.1. The Chair summarised the action list.
- 6.2. The secretariat provided an update on action 12 and advised there is an Authority investigation underway which will include several events. A paper will be provided to the SRC at its October 2021 meeting. Action 13 will be discussed during agenda item 15.
- 6.3. Members discussed security of supply in relation to coal storage, hydro levels and how the security can be managed in real-time when meteorological events occur.
- 6.4. Members also discussed the perception in the market relating to the electricity risk curves. Authority staff advised there are assumptions behind the electricity risk curves which Transpower does not make public due to commercial confidentiality including gas supply, usage, and stockpiles. Members discussed that it would be beneficial to understand these assumptions (historical ones) and to invite Transpower to present at the next meeting to gain better understanding.
- 6.5. The secretariat provided an update on the MBIE's review of the Electricity (Hazards from Trees) Regulations 2003 and noted a consultation paper would be released in the second half of 2021. However this was still subject to Cabinet approval. Members noted their disappointment that after 20 years of poorly conceived Regulations there are further delays on this work being undertaken by MBIE.
- 6.6. The Chair noted that Te Waihanga (New Zealand Infrastructure Commission) had released a consultation paper and discussed inviting them to an SRC meeting.

- 3. Action:** Secretariat to add to the SRC October 2021 meeting agenda a paper with the results of the investigation of several system operator events.

- 4. Action:** Secretariat to invite the system operator to provide a short presentation on the assumptions used for the Electricity Risk Curves at the SRC May 2021 meeting.

*Alistair Dixon joined the meeting at 10.36am.*

## **8. Update on the project to examine the security and resilience of the electricity sector (G2)**

- 8.1. The Chair welcomed Joey Au and Alister Dixon to the meeting and invited them to present.
- 8.2. Authority staff noted that MBIE has recognised there is an overlap between the Authority's G2 project and MBIE's NZ battery project. To ensure overlap does not occur, MBIE will be progressing with phase 1 of its battery project, while G2 is on pause.
- 8.3. However, certain other projects not related to MBIE's NZ battery project would be continuing. Members expressed disappointment regarding the pause of the G2 project as a whole and requested a list of the complementary projects underway.
- 8.4. Members discussed signalling to the Authority and MBIE the importance of G2. The advice should include ensuring any complementary projects are progressed and whether G2 can partially proceed to review the areas not covered by the NZ Battery project.
- 8.5. Members discussed inviting MBIE to a future SRC meeting to provide an update on its NZ battery project.

- 5. Action:** Secretariat to provide the SRC with a list of complementary projects in progress while G2 is on pause.

- 6. Action:** Secretariat to discuss with the SRC Chair the timing for inviting MBIE to a future SRC meeting to discuss its battery project.

*Alistair Dixon left the meeting at 10.54am.*

*Katherine Moore, Stephen Jay and Leigh Westerly joined the meeting at 10.54 am.*

## **9. Review of February 2021 New Zealand Generation balance report**

- 9.1. The system operator provided members with a commentary on the New Zealand Generation balance report and what the report covers.
- 9.2. The Chair noted it was very helpful to have the New Zealand Generation balance report at the beginning of each year.

*The meeting paused for a short break at 11am.*

*The meeting recommenced at 11.15 am. Katherine Moore and Joey Au left the meeting.*

*Callum McLean joined the meeting at 11.15am*

## **10. Authority's annual review of system operator performance**

- 10.1. The Chair reminded members that at the previous meeting SRC members provided input into the Authority's review of the system operator's

performance and this had been incorporated into the final paper that was published in January.

- 10.2. System operator representatives thanked members for their feedback and noted it was taken onboard. The representatives advised they would work this year to address the issues raised by SRC members.
- 10.3. Members provided further feedback including that it would be good to include what did not go well, lessons learned, and examples would be beneficial as well.
- 10.4. Members asked questions around whether there were global associations for system operators and equivalent system operator standards. The system operator noted there were no equivalent international standards, but there was an international group (APEX) which was beneficial in providing high-level discussion. It was noted there was also a CIGRE group which provides more detailed technical advice, such as issues with inverter-based technology.
- 10.5. Members noted that there is currently a proposed Standard for inverters, but this is with MBIE. The Authority should be asked to request MBIE progress making this Standard mandatory.

[Secretariat's note: Subsequent to the meeting, the Secretariat has confirmed Worksafe is the correct agency dealing with mandating the latest inverter standard through the Electricity (Safety) Regulations]

- 7. Action:** Secretariat to investigate receiving more regular updates from the system operator to include in the SRC papers (similar to the updates provided to the SOC).

*The meeting broke for lunch at 12.30 pm and reconvened at 1 pm.*

### **11. Paper on impartiality, separation between Transpower services (SO and GO)**

- 11.1. The Chair introduced the agenda item and invited the system operator representatives to begin the discussion.
- 11.2. Members discussed several aspects of the system operator's impartiality, including:
  - a) Whether the cultural environment was a safe place where Transpower staff members felt they could speak out. The system operator noted the culture is such that the system operator felt comfortable reminding the grid owner of what is required (if necessary).
  - b) How the segregation of the role of the Compliance and Impartiality manager worked, and whether the role was truly impartial when employed by the same company. The system operator noted there are processes and procedures in place the Compliance and Impartiality Manager must follow and there will be audits conducted (internal and possibly external as well).
  - c) The perception of the separation between the system operator, the grid owner, and Energy Market Services (EMS), especially with regard to potential conflicts such as where the grid owner is looking into using

distributed energy resources (DER) procured by EMS to manage constraints when distributors may have been able to provide the service if asked by the system operator.

- d) Ensuring the incentives and rewards are appropriate and not encouraging incorrect behaviour.

11.3. The Chair noted the paper was of a high quality and requested the system operator pass this along to the author of the paper.

*Katherine Moore, Stephen Jay, and Leigh Westerly left the meeting at 11.48 am.*

## **12. Wrap up discussion on agenda items 9, 10, 11**

12.1. Members discussed item 9 with Authority staff providing further explanations of the report including the New Zealand Generation Balance report looks at capacity not energy, with an underlying assumption there is enough fuel. Authority staff also noted there was a clear hierarchy used by the system operator of when gas users are cut off during a gas emergency, there was not much flexibility for electricity and it was the first to be cut off.

12.2. The SRC agreed to provide advice to the Authority that:

- a) The SRC considers the work done to date by Transpower with regard to impartiality is important and is pleased the recommendations have been implemented. The SRC remains interested in future developments in this area.
- b) The SRC is disappointed with the delay of the G2 project. The original drivers for G2 have increased and G2 momentum should be increased to prepare for climate changes. The SRC strongly encourages the Authority to continue with the complementary projects underway, and to explore continuing with the parts of the G2 review that do not overlap with the NZ Battery project.
- c) The SRC acknowledges the release of the Climate Change Commission report and notes many of the Commission's recommendations requires a bedrock of affordable reliable electricity. As such, there will be implications for security and reliability and a cohesive industry strategy is required.
- d) With the projected exponential increase in inverter-based technology, it is important standards be set which will ensure consumers and small-scale generators realise the full benefits of this technology. MBIE should be requested to mandate the inverter standard before any potential issues become too embedded in the power system.
- e) The SRC considers it is important the Electricity (Hazards from Trees) Regulations 2003 are completed. The SRC strongly suggests the consultation for these regulations is progressed and note the regulations have been up for discussion for the last 20 years.

*The meeting broke for lunch and reconvened at 1.03 pm*

*Katherine Moore, Stephen Jay, Leigh Westerly, Matt Copeland and Clive Bull joined the meeting at 1.03 pm*



### 13. Management of short-term system risk (includes credible event review and ancillary services)

- 13.1. The Chair introduced the Strata representative and invited the representatives from the system operator to take the members through their paper.
- 13.2. Members overall were satisfied with the paper but would have liked to see more information about the risk management and assurance process that is in place.
- 13.3. The Chair advised the system operator representatives the SRC would like to provide input into the scope of papers being provided by the system operator (as well as with other non-system operator papers) as part of the paper commissioning process. The system operator representatives were supportive of this approach.
- 13.4. There was discussion on the scope for the papers to be provided to the SRC at its May 2021 meeting. Members comments included the use of illustrative examples, description of assumptions made, information about the risk management framework, future undertakings, and major concerns.

*Katherine Moore, Stephen Jay, Leigh Westerly, and Matt Copeland left the meeting at 1.59 pm*

### 14. Wrap up discussion on agenda items 13a and 13b

- 14.1. Members and the Strata representative discussed the papers and the quality of the communication, which required further information on the system operator's risk management framework in order for the SRC to provide assurance to the Authority about the system operator's processes..
- 14.2. Members noted, while the paper itself did not provide sufficient information to provide assurance, the system operator provided the missing information to the members at the meeting. The SRC agreed to provide more explicit expectations for papers provided by the system operator (and all papers from external parties) as part of the paper commissioning process.
- 14.3. The SRC agreed to provide advice to the Authority that:
  - a) The SRC is satisfied that the system operator's short-term risk management for credible event reviews and ancillary services is adequate.
  - b) The SRC will work closely with the system operator to ensure the SRC receives the information required to provide continued assurance to the Authority that the system operator has good risk management processes in place.
  - c) The system operator should be encouraged to communicate its future focus with participants (in relation to short-term risk management).

*Clive Bull left the meeting at 2.27 pm*



## 15. The SRC's forward work programme

- 15.1. The Chair advised Members future meetings would include a list of upcoming papers requiring scope assessment.
- 15.2. The Chair noted, and members agreed, the consumer focussed papers would be moved to the Q3 meeting in August 2021.
- 15.3. Members discussed inviting the Climate Change Commission to present at an SRC meeting in 2021 and discussed what brief could be given to them.
- 15.4. Members agreed to investigate bringing forward gas-related items from Q4 in 2022 to Q4 2021.

**8. Action:** Secretariat to adjust the forward work programme to include the changes listed in 15.1, 15.2, and 15.4.

**9. Action:** Secretariat to invite the Climate Change Commissioner to an SRC meeting in 2021.

## 16. Other business

- 16.1. The Chair noted it was Vince Hawksworth and Tracey Hickman's last meeting and thanked them for their valued service.
- 16.2. The appointment process is underway for new SRC members.
- 16.3. The Chair noted it was Nicole Gagnon's last meeting as the current secretariat and thanked her for excellent service to the SRC. Authority staff introduced the new secretariat who was observing today's meeting and noted he would be starting with the Authority in late March.

*The meeting ended at 2.41 pm.*