

MINUTES

Meeting number: 38

Venue: Boardroom, The Electricity Authority, Level 7, 2 Hunter Street, Wellington Central

Time and date: 9am until 3.30pm, Wednesday 2 March 2022

Members Present

- Hon Heather Roy (Chair)
- Barbara Elliston
- Ben Gerritsen
- Gretta Stephens
- Guy Waipara
- Mike Underhill
- Nanette Moreau
- Nathan Strong
- Nigel Clark
- Phil Gibson

In attendance

Name	Title	Agenda item # attended
<u>Electricity Authority (Authority):</u>		
James Stevenson-Wallace	Chief Executive	
Andrew Doube	General Manager Market Policy	
Grant Benvenuti	Principal Advisor Market Policy	#1-2 and #4-15 (from 9.01am – 9.05 am and 9.15am – 3.30pm)
James Blake-Palmer	Senior Advisor Market Operations (Secretariat)	#1-2 and #4-15 (from 9.01am – 9.05 am and 9.15am – 3.30pm)
Judy Lu	Project Coordinator, Wholesale Markets (Minute taker)	#1-2 and #4-15 (from 9.01am – 9.05 am and 9.15am – 3.30pm)
Sally Aitken	Director Communications and Engagement	#8c (from 10.42am-10.59am)
Sarah Gillies	General Manager Legal, Monitoring and Compliance	#10 (from 2.10pm-2.19pm)
Joey Au	Chief Strategy Officer	#12 (from 2.20pm-2.38pm)
<u>Other:</u>		
Ajay Makhija	Team Leader, Infrastructure Resilience, National Emergency Management Agency (NEMA)	#8-8e (from 10am-11.18am)
Diana Price	Head of Communications, Transpower	#8c (from 10.42am-10.59am)
Raewyn Moss	GM External Affairs, Transpower	#8c (from 10.42am-10.59am)
Daniel Miles	Managing Principal, MartinJenkins	#8d (from 10.59am-11.18am)

Name	Title	Agenda item # attended
Sargam Shah	Analyst, MartinJenkins	#8d (from 10.59am-11.18am)
Stephen Jay	General Manager Operations, Transpower	#8b-c and 12-13 (from 10.24am-11.15am and from 2.20pm-2.38pm)
Mark Herring	Market and Business Manager, Transpower	#13(from 2.38pm-2.52pm)
David Katz	Market & Security of Supply Manager, Transpower	#13(from 2.38pm-2.52pm)
Matt Copland	Power Systems Manager, Operations, Transpower	#12 (2.20pm-2.38pm)
Jonathan Pawley	Cyber security advisor, NCSC	#9a-b (from 12.35pm-1.32pm)
Darren Reynolds	Principal Security Consultant, InPhySec	#9b (from 12.57pm-1.32pm)
Nicole Bishell	Security Consultant	#9b (from 12.57pm-1.32pm)
AJ Millward	Director, Transcend Consulting	#10 (from 2.10pm-2.19pm)

The meeting opened at 9.01am.

Grant Benvenuti, James Blake-Palmer and Judy Lu joined the meeting at 9.01am.

1. Attendance and apologies

- 1.1. The Chair welcomed members to the thirty-eighth meeting of the Security and Reliability Council (SRC). A quorum was established, with members (except the Chair) appearing via Zoom, in line with Authority Covid-19 protocols.
- 1.2. The Chair noted this was the last SRC meeting for Guy Waipara, Nigel Clark and Gretta Stephens and thanked them for their contribution to the SRC over their tenure.

2. Changes to disclosure of interests

- 2.1. The Chair reviewed the interests register and noted changes had been sent to the Secretariat who updated the register after papers had gone out. These changes were reviewed by the Chair. There were no further changes disclosed.
- 2.2. The Chair approved members to act despite those declared interests.

Grant Benvenuti, James Blake-Palmer and Judy Lu left the meeting at 9.05am.

3. Members-only session

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

Judy Lu, Grant Benvenuti and James Blake-Palmer joined the meeting at 9.15am.

4. Minutes of previous meeting

- 4.1. The secretariat noted that OMV (a presenter at the previous meeting) had requested several minor changes to the minutes of their presentation:
 - a) 8.8(a) change the word 'Electricity' to 'primary energy'

- b) 8.8(c) change the words 'onshore site' to 'offshore fields'
 - c) 8.8(d) change the word 'contracts' to 'investments with long-term gas offtake agreements'
 - d) 8.8(e) delete the last sentence and insert 'Diversity of supply has improved over the last few years'
- 4.2. The minutes of the 21 October 2021 meeting as amended were accepted as a true and accurate record.
All members agreed/ approved.

5. Correspondence

- 5.1. The Chair gave an overview of the correspondence including the letter sent to the Authority and the Authority's reply.

6. Action list and updates

- 6.1. The secretariat provided an update on the action list and members briefly discussed the updates section
- 6.2. Members approved deleting the action on periodic FSR updates, as this is now a BAU item to include in the Updates section when needed.
- 6.3. When asked by the Chair, members confirmed they were comfortable to receive the New Zealand Generation Balance (NZGB) report via the updates section, instead of a standalone agenda item.
- 6.4. Members expressed frustration with slow progress on updating the *Electricity (Hazards from Trees) Regulations 2003*. One member noted much of the damage from the recent storms (including Cyclone Dovi) were caused by trees and outages could have been prevented through better tree management if the Regulations supported this. The letter of advice to the Authority Board is to request MBIE be notified again of the importance of getting the review completed and the new regulations promulgated.

7. Top Security and Reliability risks

- 7.1. The Chair facilitated comments from members and attendees, covering both short-term and longer-term risk.
- 7.2. Members' comments included:
 - a) Covid-19 continues to be a concern. Cumulative effects of interruptions to the supply chain are concerning, and the list of stock and critical kit for upgrade projects being delayed is continuing to grow
 - b) Short-term staffing levels including difficulty coping with management of rolling Covid infections among staff and trying to keep people safe
 - c) There may be significant movement of young people overseas to take up job and other OE opportunities
 - d) Housing shortages may impact staffing issues, even with the border reopening

- e) Critical emergency support agencies, for example, NEMA, need to have greater visibility of the sector's level of emergency preparedness
- f) An informed sector needs to avoid mixed regulatory and policy signals impacting necessary longer-term investment. For example, the impact on the sector of decisions around the NZ Battery Project and incentives it may create for participants
- g) North Island energy capacity beyond 2026 is a risk, as we transition to a low emissions future
- h) Closure of thermal generation may occur sooner than predicted
- i) There is concern around decarbonisation and EV charging infrastructure

7.3. Attendees' comments included:

- a) Consensus with the concerns raised by Members, including:
 - i. Supply chain issues impacting lead times and transport
 - ii. Potential downstream economic impact of sanctions over Russia's invasion of Ukraine
 - iii. Workforce issues leading to loss of industry knowledge and capability
 - iv. There is concern around training in industry processes

7.4. The table 'Top security and reliability risks' was discussed, and changes needed are:

- i. In S2, change 'a second wave' to 'the next wave'
- ii. Check the wording on Government settling of carbon goal (M3)
- iii. Move L8 to Medium term
- iv. Secretariat to review register of top security and reliability risks and re-word to better describe the potential risk

Andrew Doube joined the meeting at 9.30am

Ajay Makhija joined the meeting at 10am

8a. Presentation from NEMA

8.1. The Chair welcomed Ajay Makhija from NEMA to the meeting.

Ajay took members through the presentation including:

- a) NEMA is responsible for leadership and stewardship of the emergency management system. It is also the lead agency for natural hazard and infrastructure emergency response
- b) How the coordination and arrangements work, including the National Crisis Centre

- c) The positive relationship and engagement NEMA has with industry through collaboration, workshops and meetings
 - d) Giving an update on the proposed legislative changes to the Civil Defence Emergency Management (CDEM) Act
 - e) Information about *Lifeline Utilities* (critical infrastructure participants) and NEMA's expectations of them
 - f) Critical infrastructure overview
 - g) Information about the Trifecta Programme and the National Disaster Resilience Strategy (NDRS)
- 8.2. Members discussed the paper. Comments and questions raised included:
- a) The level of the emergency services and what NEMA's upcoming consultation is focused on
 - b) Recent electricity sector collaboration on COVID response
 - c) Changes to the obligations of critical infrastructure participants
 - d) Sector response on information sharing
 - e) Acknowledgment of the work Andrew Renton is doing at Transpower around sector coordination with NEMA
 - f) What involvement NEMA has in MBIE's review of the Electricity (Hazards from Trees) Regulations 2003. In response, Ajay confirmed NEMA would progress discussions with MBIE, acknowledging the SRC's ongoing concerns over delays

Stephen Jay and Matt Copland joined the meeting at 10.24am

8b. System Operator preparedness (including business continuity, rolling outages, system restoration)

- 8.3. The Chair welcomed Stephen Jay and Matt Copland to the meeting and introduced the paper.
- 8.4. Stephen/Matt took members through the presentation including:
 - a) Information about the system operator's approach to emergency management preparedness and business continuity planning
 - b) Noting emergency preparedness across the industry is driven primarily by the CDEM Act
 - c) Noting use of a Coordinated Incident Management System (CIMS) is key and the events of 9 August has helped the system operator think more broadly about what the processes on the day should be
 - d) In May 2022, the system operator is running simulations of energy shortfall and rolling outages to test current preparedness. The system operator is running simulations both internally and with external parties (including generators, distributors and possibly retailers)

- e) Cyber Security issues, including assurances against sabotage or terrorist threat to security systems and tools such as the scheduling, pricing and dispatch and reserve management tools
- 8.5. After the system operator had presented and left the meeting, members discussed the paper. Comments and questions raised included:
- a) Positive feedback about the simulations, which have been helpful to participants, especially for staff continuity
 - b) Supply chain issues related to the 9 August event
 - c) Transpower's introduction of a new forecasting tool
 - d) The demand-side of the sector is important, so it is critical for the system operator to know what is available. In response the system operator noted they have upgraded their forecasting
 - e) Concern the system operator may still view the events of 9 August 2021, as being solely caused by a lack of generation, which members felt downplays the impact communications and information from the system operator had in consumers being disconnected.

Matt Copland left the meeting at 10.42am. Steve Jay left the meeting at 11:15am.

Sally Aitken, Raewyn Moss and Diana Price joined the meeting at 10.42am

8c. Authority and system operator communications plans

- 8.6. The Chair welcomed Sally Aitken, Raewyn Moss and Diana Price to the meeting and introduced the paper.
- 8.7. Sally took members through the presentation including:
- a) The Authority's security of supply communications plan is largely up to date but is intending to make some small but significant changes as a result of the response to the 9 August event
 - b) Transpower is responsible for taking the lead on external communications during an event. The Authority will lead communication with, and advice to, Ministers with Transposer providing content
 - c) There is a need for flexibility, taking into account the nature of the emergency situation and how it occurs
 - d) Staff changes at both the Authority and system operator require constant review and update of plans to ensure fitness for purpose
 - e) Communication between the Authority and the Minister will be led by the Chief Executive (CE)
- 8.8. Members discussed the paper. Comments and questions raised included:
- a) Testing the plans is important, is this being done? In response it was noted the Authority is to work with Transpower to continue the discussion and ensure appropriate communications across the system
 - b) Social Media engagement is positive in general

- c) There is an important role for distributors and retailers, so there needs to be focus on getting accurate timely information to the demand-side
- d) The recent HVDC planned bi-pole outage extension was an example where an industry forum (on the Sunday evening, with a follow up the next morning) was positively received and helped with transparency
- e) An acknowledgment from the system operator there's more work to do and the system operator wants feedback, for example from industry fora and through learnings from other events, such as the 13 August HVDC failure and February bi-pole outage
- f) CE involvement is positive to demonstrate leadership; consideration should be given to pre-approved communications to be efficient when there is a fast-moving situation the Authority will be using pre-approved message from the CE to send out so that the need for internal approval doesn't slow communications
- g) The Authority plan does not mention the SRC. The SRC Chair should be informed of security of supply emergencies, enabling circulation to members, if necessary
- h) The system operator uses regular updates on social media for planned and unplanned events.

Sally Aitken, Raewyn Moss and Diana Price left the meeting at 10.59am

Daniel Miles and Sargam Shah joined the meeting at 10.59am

James Stevenson-Wallace joined the meeting at 11.05am

8d. Generator preparedness

- 8.9. The Chair welcomed Daniel Miles and Sargam Shah to the meeting and introduced the paper.
- 8.10. Daniel spoke to the report MartinJenkins had prepared, highlighting:
 - a) The generators prioritise their risk management and preparedness heavily and they all have coverage across risks along with experience and expertise at every level of governance
 - b) Some generators think the market mechanisms at play aren't incentivising the level of coordination and black start capabilities that are necessary in the case of a national or regional emergency
 - c) There were disproportionate levels of certainty about coordination and fuel availability in varying sizes of generator, a gap in the overarching regionally led frameworks to ensure that the lights stay on and an underlying logical reasoning behind a lack of development in this area
 - d) There is a potential mismatch between the corporate framework in place and what's happening *on the ground*. Training may be occurring too infrequently to achieve best practice outcomes
 - e) The report highlights thermal fuel supply chains are often considered a health and safety or financial risk rather than a security of supply risk.

Although the resulting level of preparedness achieved may be the same, incentives to prepare for security of supply risk could be beneficial

- f) The Authority may wish to consider endorsing or establishing a non-mandatory form of accreditation to further promote an increased overall level of industry-preparedness

8.11. Members discussed the paper. Comments and questions included:

- a) A cost benefit analysis should be done before the Authority considers any form of emergency preparedness accreditation
- b) An alternative option to accreditation could be for the Authority to issue best practice guidelines to clearly state the base level of expectation, including of Transpower and distributors

Daniel Miles, Sargam Shah and Ajay Makhija left the meeting at 11.18am

8e. Wrap up discussion on emergency preparedness

8.12. Members discussed the presentations on Emergency Preparedness and what advice to provide to the Authority including:

- a) NEMA appears to lack detailed visibility of the sector's preparedness for security of supply emergencies.
- b) Distributors have been involved in helping NEMA understand post-event circumstances.
- c) CDEM Act changes appear front of mind for NEMA and greater visibility of what the industry is doing would be helpful for NEMA
- d) The Authority should note the generally consistent approaches and high level of professionalism among generators in their emergency preparedness
- e) It is important to distinguish between acute and chronic issues when thinking about security of supply
- f) Generators should be encouraged to review training and induction processes and simulation schedules to ensure all staff are familiar with emergency protocols
- g) The need to address perceptions from the system operator that 9 August was solely a generation event, rather than also being a communications event
- h) Transpower should seek input from external groups to test and specify areas to focus on to make communications more effective, as this would enable it to be more proactive
- i) There appears to be a lot of focus on lessons from the 9 August event, not on other potential high impact low probability (HILP) events – “preparing for the war just fought” and the next one is then unexpected
- j) Communications around supply emergencies is an opportunity for the Authority to demonstrate leadership by getting advanced notice from the system operator so the Authority can prepare and brief ministers

and their staff appropriately. The Authority should also take the lead on proactive communications and educating the media

The meeting broke for lunch at 12pm and reconvened at 12.30pm

Jonathan Pawley joined the meeting at 12.35pm

9a. Cyber security management of the electricity industry and discussion

- 9.1. The Chair introduced Jonathan Pawley, the representative from the National Cyber Security Centre.
- 9.2. Jonathan took members through their recent annual report, gave feedback about the report and gave a confidential presentation on current threat areas.

Darren Reynolds and Nicole Bishell joined the meeting at 12.57pm

9b. Cyber security survey results and discussion

- 9.3. The Chair welcomed InPhySec representatives, Darren Reynolds and Nicole Bishell to the meeting and introduced the paper.
- 9.4. Darren gave a confidential anonymised overview of the participant survey and confirmed participants had been sent their anonymised results, allowing them to see where they rank compared to other respondents.

Darren Reynolds and Nicole Bishell left the meeting at 1.32pm

Wrap up discussion on 9a and 9b

- 9.5. Members discussed the presentations on Cyber Security and what advice to provide to the Authority.

Sarah Gillies and AJ Millward joined the meeting at 2pm

10. EA System Leadership

- 10.1. The Chair welcomed Sarah Gillies and AJ Millward to the meeting and introduced the paper.
- 10.2. Sarah outlined the project's phases, noting phase 1 included recommendations for Transpower from the Authority. The purpose of phase 2 is to take the recommendations from the various different reports and consider if there are any other recommendations to be made. An immediate focus is what can be achieved before winter 2022.
- 10.3. Members discussed the paper. Comments included:
 - a) Following the 9 August event, a number of views and investigations were commissioned and carried out by various parties. There is a need to avoid these going on and on

- b) 9 August was more a poorly managed event, than a disaster, so with all the reviews there is potential to overdo the issue when endeavouring to seek assurances
 - c) A representative noted the Authority, to prioritise, had indicated that some of the policy recommendations needed further consideration and in any event could not be completed ahead of Winter 2022
 - d) The Authority is working with MBIE to understand the policy recommendations contained in its report, The authority is also working with Transpower to progress recommendations that relate to Transpower and its role as system operator
- 10.4. Members confirmed they did not see any further role for SRC in this work but encouraged the Authority to conclude this work.

Sarah Gillies and AJ Millward left the meeting at 2.10pm

James Stevenson-Wallace left the meeting at 2.19pm

11. Consumer demand paper and discussion

- 11.1. Mike Underhill introduced the brief paper “Why the demand side is important for security and reliability”. Discussion was held including:
- a) The Authority is currently progressing a number of workstreams that include Distributed Energy Resource (DER) and consumer demand. The Chair noted the SRC is keen to avoid overlap with other work
 - b) Some members consider the approach to regulation and security of supply issues is too focused on the supply side
 - c) Some members expressed a concern the industry is not taking a holistic approach
 - d) Real-time pricing implementation is changing the way that wholesale prices are calculated to reduce barriers and encourage demand side participation. This was noted as an example of what’s being done to consider the demand side
- 11.2. Members agreed to consider other ideas and share these through the secretariat after the meeting for passing on to the CE.

Action 1: Secretariat to receive further thoughts from members to pass on to the CE.

Matt Copland, Stephen Jay, Joey Au joined the meeting at 3.13pm

12. FSR update

- 12.1. Joey Au introduced the paper, noting FSR is a substantial piece of work and the SRC’s ongoing input is very important to its success.
- 12.2. The system operator representative led the presentation, noting over the next 10 years, the NZ power system is expected to undergo a significant transformation. The Authority has asked for the draft roadmap to be presented to the Authority Board for approval for consultation.

- 12.3. The presentation noted the project phases, the workshops done so far and how the project team has developed timeframes and prioritised the work, including measures to track progress and account for future adaptations. Examples of measures include the amount, type and location of DER and the tracking rate and frequency of excursions.
- 12.4. Members and the FSR team discussed the paper. Comments included:
 - a) There is a concern that non-urgent important things may not be given the priority really required due to the ramifications / changes required
 - b) The need to annually review the plan and take a proactive approach to ensure priority settings are correct
 - c) The need to progress what can be done - be early followers, taking into account initiatives from other countries

Matt Copland and Joey Au left the meeting at 2.38pm

David Katz and Mark Herring joined the meeting at 2.35pm

Chair welcomed Mark Herring, as his first time attending an SRC meeting

13. Capacity and energy issues associated with low hydro storage and inflows

- 13.1. David Katz introduced and spoke to the paper, highlighting the paper outlines a worst-case scenario that has a low probability but high impact. The benefit of the analysis is to help test assumptions across a range of scenarios.
- 13.2. System operator will use the analysis to update rolling outage processes and policies, including monitoring for forecast load shedding and when to begin rolling outage modelling.
- 13.3. System operator offered to share further insights from this work with the SRC.
- 13.4. Members thanked the system operator for the analysis and discussed the paper. Comments included:
 - a) In the most recent security of supply annual assessment (SOSAA) the system operator has noted significant new generation (over that currently proposed) will be needed by 2026.
 - b) The difficulty in predicting the uptake of rooftop solar by 2030 and the impact of that and battery storage on reliability.

14. The purpose of next meeting's substantive papers

- 14.1. The Chair introduced the paper. Members discussed the purpose and scope of each paper for the June (Q2) meeting.
- 14.2. **Risk and Asset Management – Distributors and Grid owner**
 - a) Members accepted the Chair and secretariat's proposal to focus on distributor and grid owner asset management and expand the group of distributors to approach for information.

- b) Members noted it would be good to consider including other smaller distributors (for example Network Waitaki, Alpine Energy, Waipa Networks, Eastland Networks) and to get an understanding of North Island and South Island differences and distributors' utilising non-network alternatives.
- c) Members generally agreed with the proposed scope for the grid owner paper, noting it would be good to get information on the impacts on asset management of greater electrification, for example of transport and process heat, for both the grid owner and distributor papers
- d) Members preferred using interviews over surveys for this work and acknowledged the work done by MartinJenkins
- e) Regarding both grid owner and distributor asset management, a member noted some assets were close to capacity so it would be good for the paper to give a sense of the considerations underpinning growth and assets, the approach to optimisation (and the appetite for building excess capacity, and the ability to actually deliver on asset management plans (both resources and funding)

- 14.3. **Commerce Commission's role in asset management:** The secretariat to invite the Commerce Commission to present at the Q2 meeting to update its previous work and provide information on any areas of concern

Wrap up discussion on items 11-13

- 14.4. Members discussed the papers for items 11 and 13 and the advice to the Authority.
- 14.5. **Item 10 (System Leadership)** – The SRC would like to receive updates on the project workstreams that impact issues relevant to the SRC's role in security and reliability and system operator performance.
- 14.6. **Item 11 (Consumer demand)** – Members to provide further information to the secretariat regarding concerns around a perceived lack of demand-side focus by the industry. For the secretariat to pass on to the Authority CE
- 14.7. **Item 12 (FSR)** – Members acknowledge the work done so far to bring the roadmap together and would like to receive further updates as the workstreams progress.
- 14.8. **Item 13 (capacity and energy issues associated with low hydro)** – Members acknowledge the work the system operator has done on the analysis. Comments included there is likely to be a capacity issue in a future where there is no thermal generation, so care needs to be taken with assumptions that factor in thermal generation.

15. The SRC's forward work programme

- 15.1. The Chair introduced this item, noting there had been no changes since the last meeting.

- 15.2. Members agreed with the proposal for the Chair and secretariat to review the forward work programme and include in the pack for discussion at the 1 June (Q2) meeting.
- 15.3. A member noted the focus should be on where the SRC can add the greatest value.

The meeting ended at 3.30pm