SECURITY AND RELIABILITY COUNCIL

MINUTES

Meeting number: 37

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

Time and date: 9am until 4.05, Thursday, 21 October 2021

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
	Electricity Authority (Authority):	
Nicki Crauford	Chair, Electricity Authority Board	#3-7 (from 9.15am- 10.55am)
Andrew Doube	General Manager Market Policy	#3-7 (from 9.15am- 10.55am)
Grant Benvenuti	Principal Advisor Market Policy	#1-2 and #4-15 (from 9.01am – 9.05 am and 9.15am – 4.05pm)
James Blake-Palmer	Senior Advisor Market Operations (Secretariat)	#1-2 and #4-15 (from 9.01am – 9.05 am and 9.15am – 4.05pm)
Barbara Eibl	Project Coordinator, Wholesale Markets (Minute taker)	#1-2 and #4-15 (from 9.01am – 9.05 am and 9.15am – 4.05pm)
James Tipping	Chief Strategy Officer	#10 (from 1.51pm – 2.11pm)
Alistair Dixon	Principal Advisor Market Policy	#10 (from 1.51pm – 2.11pm)
Doug Watt	Manager Market Monitoring	#11 (from 2.11pm – 2.47pm)
	Other:	
John Kidd	Director, Head of Research, Enerlytica Limited	#8a (from 9.53am – 10.46am)
Alan Young	Director, Enerlytica Limited	#8a (from 9.53am – 10.46am)
Iwan Bridge	Chief Operating Officer, First Gas	#8b (from 10.55am – 11.20am)
Dylan Reid	Senior Expert, Gas Sales and Trading OMV	#8c (from 11.20am – 11.55am)
Paul Eckford	Commercial Manager, OMV	#8c (from 11.20am – 11.55am)

Name	Title	Agenda item # attended
Charles Teichert	General Manager – Commercial & Strategy, Nova Energy	#8d (from 11.55am – 12.21pm)
Liesbeth Koomen	General Counsel and Government Relations, Nova Energy	#8d (from 11.55am – 12.21pm)
Andrew Knight	Chief Executive, Gas Industry Company	#8e (from 12.21pm – 12.50pm)
Kevin Jenkins	Founder, MartinJenkins	#9 (from 1.22pm – 1.51pm)
Daniel Miles	Managing Principal, MartinJenkins	#9 (from 1.22pm – 1.51pm)
Sargam Shah	Analyst, MartinJenkins	#9 (from 1.22pm – 1.51pm)
Stephen Jay	General Manager Operations, Transpower	#10 and 12-14 (from 1.51pm – 2.11pm and from 2.47pm – 3.40pm)
Daniel Crawshay	Operations, Technology and Process Manager, Transpower	#12-14 (from 2.47pm – 3.40pm)
Lisa Tinkley	Business Planning and Reporting Advisor, Transpower	#12-14 (from 2.47pm – 3.40pm)

The meeting opened at 9.01am.
Grant Benvenuti, James Blake-Palmer and Barbara Eibl joined the meeting at 9.01am.

1. Attendance and apologies

1.1. The Chair welcomed members to the thirty-seventh meeting of the Security and Reliability Council (SRC). A quorum was established, with members appearing via Zoom, in line with Authority covid-19 protocols.

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 interests register after the papers had been sent out. These changes have been reviewed by the Chair and did not impact the topics discussed. There were no further changes disclosed.

2.2. The Chair approved members to act despite those declared interests.

Grant Benvenuti, James Blake-Palmer and Barbara Eibl left the meeting at 9.05am.

3. Members-only session

3.1. The members discussed their priorities for the meeting.

Nicki Crauford, Barbara Eibl, Grant Benvenuti, James Blake-Palmer, and Andrew Doube joined the meeting at 9.15am.

4. Minutes of previous meeting

4.1. The minutes of the 4 August 2021 meeting were accepted as a true and accurate record.

Nigel Clark moved, and Phil Gibson seconded. All members 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 the updates sections was discussed. The Chair noted the 9 August event occurred just after the last meeting, and thanked members for providing comments on event reports via email.

7. Register of 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 delayed is continuing to grow. The transport routes for equipment are interrupted. The closed border is also of concern for getting qualified people into the country for maintenance and getting consumers connected on the network. There is also concern around the policy settings not being fit for purpose if Covid spreads, for example, the need to keep critical generation running if one staff member in a team becomes infected. There is also concern around the ability of industry to resource the current interest in major new connections such as grid scale solar. Clear communication is needed from government around elimination or other strategies being pursued. Mandatory vaccination for the industry may need to be considered.

b) There is concern around the transition to 100% renewables and what this means for security and reliability. The technical issues are complex and there is a concern around the industry's ability to resource the transition and the extent and implications of industry-led vs regulatory driven solutions. The Tiwai situation and Lake Onslow are further creating uncertainty. A disconnect between energy and capacity is apparent and whether capacity, particularly in the North Island, will cope with a renewable system. There are still questions around how the transition will work and whether all participants can transition successfully. There is also concern around where the capital for renewable investments will come from to support the transition.

c) There is uncertainty over thermal fuel availability. Gas supply will remain tight in the near to mid-term and if the hydro levels are low, there could be further dry years with adverse implications for electricity supply security.

d) There appears to be a lack of a cohesive policy about the ability of the industry to invest for electrification. Industry could do more to inform consumers about demand-side issues and potential use of demand management as a paid service.

e) There is a need to ensure commercial opportunities that increase variable load align with any changes needed for supporting infrastructure. Failures can result in supply issues affecting consumers and damaging industry reputation

f) Infrastructure dislocation is a concern, particularly around the potential of stranded assets, for example LPG businesses. There is a need for policy to align with the forward investments industry is needing to maintain supply through the transition to avoid a disconnect between aspiration and reality

g) With regard to risk register item, P1 *cyber-attack damages power system assets and/or cuts supply*, it will be crucial to ensure that industry participants continue to focus on cyber security and take part in the cyber-security survey.

7.3. Attendees' comments included:

a) Consensus with the concerns raised by Members, including:

i. the need for the industry to work together and be seen to produce good outcomes for consumers to reduce the risk of Government intervention

ii. the issues around Covid and the move away from pure elimination strategies to living with Covid. It might be appropriate to have a conversation with the DHB's now the Government is moving away from an elimination strategy.

iii. the difference between energy and capacity.

iv. protecting consumers' interests during the transition.

v. supply chain issues.

vi. will there be sufficient investment incentives for thermal transition and who pays

vii. gas tightness and hydro conditions.

b) The table 'Top security and reliability risks' was discussed, and changes needed are:

i. extend S1 to include the transition from elimination to "living with COVID" and the potential impact on critical industry plant such as generating stations and control rooms; and the ability to get enough critical expertise into the country with the aggregate impacts of COVID, a growing economy and big investments.

ii. add a new L1: the risk of a growing disconnect between energy and capacity issues causing regular disruption and becoming critical.

iii. change L4 to read "the increasing dependence on AI and automation reduces the industry's ability to deal with unusual and unexpected critical issues (in real time or to quickly recover)"

iv. add a new L – “the risk of stranded assets increasing the cost for those left using them (the “death spiral”) becoming increasingly apparent

v. extend L8 to include the transition to 100% renewables

8a. Presentation from Enerlytica

Guy Waipara joined the meeting at 9.31am.

John Kidd joined the meeting at 9.53am.

8.1. The Chair welcomed John Kidd to the meeting and explained this meeting included a deep dive into gas reliability and resilience, given the importance of gas to electricity supply reliability.

8.2. John took members through the presentation including:

a) A key focus is on extracting life from existing assets, in addition to ongoing asset performance

b) There is a need to focus more on *contracted* supply of gas, as opposed to *physical* supply, which captures more media and consumer attention

c) The coherency of the end-to-end gas supply system has improved.

d) Kapuni has been onstream for 50 years and it still has around 50 years of life.

e) Although there hasn’t been any new discovery in the last 10 years reserves are still increasing at a slightly higher rate than consumption. 96% of all reserves are concentrated in six fields. This concentration over a small number of assets means the sector is exposed to potential disruption.

f) Last year was the first year that onshore reserves surpassed offshore reserves. Onshore requires broader drilling where offshore the concentration of hydrocarbon is easier to access from fewer wells.

g) There have been reserves upgrades to Maui and Turangi in the last year. These have come about through significant investment and more capital and time is needed to deliver on potential. The Turangi field is a great success story for the industry. There is more gas coming onto the market from capex spends.

h) In the last 10 years there has been an acceleration of bringing gas to market, though deliverability has been an issue.

i) Much blame has been placed on Pohukura but the decline in gas has been systemic, not limited to a certain field. Pohukura has been declining since early 2020 but has provided 40-45% of the gas available in the market in the last decade.

j) There has been and continues to be a lot of interest in Maui. The Maui A work programme has gone well, adding 30TJ a day. A very large rig is coming from Scotland to sit over the top of Maui B and this is expected to be the backbone of recovery, materially adding to production from next year

k) There is commercial interest in Tariki (depleted field) for a storage site.

l) Methanex is of critical importance as it underwrites 40% of the sector and de-risks capex programmes to support the sector.

8.3. Members discussed the paper. Comments and questions raised included:

a) There are better options than Lake Onslow for deep energy storage and the continued uncertainty caused by the Lake Onslow work is damaging the investment environment. This includes the need for continued investment in gas until at least 2030.

b) New Zealand is the only gas market in the world that does not have interconnection on gas and no import capability meaning New Zealand is a stranded and islanded system with no option to support security of supply.

c) Methanex has a very long future in New Zealand as it is the world's largest producer of methanol. New Zealand is the biggest part of their portfolio and includes a direct line to Asia.

d) Volatility of supply on unplanned outages and planned outages – Maui will be offline for all of March next year which will impact, given the timing is leading into winter. The sector goes as far as it can to minimise the impact on the downstream sector.

Alan Young joined the meeting at 10.05am.

Nanette Moreau joined the meeting at 10.25am.

John Kidd and Alan Young left the meeting at 10.46am.

Nicki Crauford and Andrew Doube left the meeting at 10.55am.

Iwan Bridge joined the meeting at 10.55am.

8b. Presentation from First Gas

8.4. The Chair welcomed Iwan Bridge to the meeting and introduced the paper.

8.5. Iwan took members through the presentation including:

a) There are 2,500km of pipelines starting in Taranaki, traversing approximately 4,000 properties. Risks associated with this are reduced through engagement with landowners, using surveys, mail drops and direct discussion

b) The system was designed and built for reliability including earthquakes, so the geotechnical risk is not large. Use of drones and LIDAR, which picks up millimetre movements, give further visibility and reduce risk

c) Coastal erosion is causing some pipes to be moved including at the Gilbert site in Taranaki and there is a buckle in the pipe requiring replacing at the Pariroa site.

d) First Gas has a similar continency plan as the Electricity sector, including priority of shedding load when required.

e) Ahuroa is a depleted gas field which was purchased from Contact in 2018 and has recently had an upgrade. Contracted users inject into the

reservoir and then nominate when they want to get it out. Ahuroa is estimated to hold approximately two thirds of the energy stored in the hydro system.

8.6. Members discussed the paper. Comments and questions raised included:

a) Coastal erosion is being monitored especially for pipes located within 1-2 metres of sea level.

b) First Gas is looking into hydrogen injection into the system and what that means. They commissioned a report of viability and what overseas examples can apply to New Zealand. The conclusions of the report are that the network is suitable for conversion and the plan is to start with a hydrogen blend of 20% and move towards 100%. Research from overseas show that end user appliances will still work with the blend but will need to be upgraded for full hydrogen. Trials are expected to start next year.

c) The role of storage was discussed including whether current facilities can be converted to store hydrogen.

Gretta Stephens left the meeting at 11.15am.

Iwan Bridge left the meeting at 11.20am.

Dylan Reid and Paul Eckford joined the meeting at 11.20am.

8c. Presentation from OMV

8.7. The Chair welcomed Dylan Reid and Paul Eckford to the meeting and introduced the paper.

8.8. Dylan and Paul took members through the presentation including:

a) Gas provides approximately 20% of all New Zealand's primary energy needs.

b) One of the key features of gas is that capex is required to maintain output otherwise production slowly degrades. OMV has invested half a billion dollars into Maui and Pohukura.

c) Investment in new fields includes exploring oil and gas, appraising, and building commercially producing fields. This can take 10 years to complete for offshore fields. For offshore sites, organising a rig and drill from overseas takes both money and time.

d) In terms of meeting the entire sector's needs, Methanex is critically important for the long term as they underpin capex investment wit long term gas offtake agreements which is beneficial to other participants. Methanex also plays an important role in the sector as flex to balance the market in both the short and long terms, including closing trains when there is not enough gas availability for the domestic market.

e) In the past, Pohukura supplied one third of all gas needs which meant reliance on just one field. Diversity of supply has improved in recent years.

f) In recent years limited spare capacity has been an issue. The transition to 100% renewables will impact the sector, with a greater focus on

security and reliability over flexibility, and uncertainty around the demand trajectory as we move through the decade.

g) Maui and Pohukura will be able to produce more in 2022/23 but less in 2024. Then new investments will be needed if reserves cannot be upgraded for supply to meet demand.

h) Consumers (especially residential and small business) expect to be able to turn to gas.

i) OMV is pleased they are expected to have a role through to 2050. They raised issues in their submission to the Climate Change Commission, including regulatory stability being important to encourage investment. The energy system requires investment and the ETS needs to promote engagement to function effectively.

8.9. Members discussed the paper. Comments and questions raised included:

a) The role of capital for investment. The current programme and investment decisions are always viewed against the global view in the need to compete for capital. No two projects are alike and OMV has been fortunate to attract current capital at better than usual prices for their programmes.

Dylan Reid and Paul Eckford left the meeting at 11.55am.

Charles Teichert and Liesbeth Koomen joined the meeting at 11.55am.

8d. Presentation from Todd Energy

8.10. The Chair welcomed Charles Teichert and Liesbeth Koomen to the meeting and introduced the paper.

8.11. Charles and Liesbeth took members through the presentation including:

a) Planned outages to fields in April. These are not expected to be major, and Todd expects to mitigate through Ahuroa and building reserves there.

b) The outlook for 2022 is expected to be better than 2021. Methanex is planning a train down for 30-60 days in the winter so Todd's gas will be available to the market during this period.

c) During the transition to renewables the risk of winter and dry year problems will grow, but there is uncertainty over how much. Fast-starting gas peakers can come online in 20 minutes and will still be required. Storage will play a critical role.

d) Future investments and upgrades are being deferred due to regulatory uncertainty.

e) There is an expectation that over time customers will switch from coal and gas.

Charles Teichert and Liesbeth Koomen left the meeting at 12.21pm.

Andy Knight joined the meeting at 12.21pm.

8e. Presentation from GIC

8.12. The Chair welcomed Andy Knight to the meeting and introduced the paper.

8.13. Andy took members through the presentation including:

a) Overall, there was a fuel supply shortage, with gas production down, storage was not full and new supply was delayed due to Covid. GIC estimates production was down by 120TJ a day, which then impacted electricity prices.

b) There is an expectation there will be a small increase in production for gas in 2022 but gas supply for electricity next winter will be tight. Unless there is a 'wettest' year, there will be a need to draw on storage.

c) The Minster for Energy asked GIC about the 100% renewables target and GIC concluded the market settings are largely fit for purpose but there are some issues including significant investment required for upstream. The RMA currently says all industrial plants will be required to re-consent in 2025. Investment programmes take 5 years or more, even in existing fields. The second conclusion was that commercial arrangements are insufficient, but GIC believes these can be solved but are not in place yet. GIC noted there is a feeling this year's situation was not healthy for the electricity or gas sectors.

d) There is a need to improve commercial arrangements for gas thermal fuel. GIC believes that there will need to be arrangements between Methanex and Genesis or between Methanex and a collaborative organisation, such as *Thermal Co,* proposed by Contact Energy. The issue remains who will pay for it.

e) Planned demand response by industrial gas users (especially Methanex)

i. will require participants to be fully hedged in the electricity market to minimise exposure.

ii. The issue of who will pay for demand response keeps continuing to be asked. Some parties have suggested a levy.

iii. A form of *energy certificate* similar to overseas has been suggested.

iv. There has been some discussion around capacity markets by some participants.

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

a) Whether the industry understands the problems and issues.

b) There is a longer-term challenge for the industry as to whether enough thermal generation will exist in the future.

c) If new generation is required, there are questions around who will pay for it and who will build it. Gas storage is never more than 40% full, and onshore supply will not provide the security of supply needed.

d) Everyone is facing the same uncertainty with the future.

e) Stability of the system and health and safety (maintenance) was raised and is a significant risk across all aspects of the system. There comes a point where investments will stop.

f) As a sector modelling risk is done through scenario modelling, which is not a correct way to model risk. This was included in the GIC submission to Transpower.

Andy Knight left the meeting at 12.50 pm.

8f. Wrap-up discussion on gas resilience

8.15. Members discussed the presentations from the Gas sector and what advice to provide to the Authority including:

a) The trade-off between electricity (both grid scale batteries and pumped hydro) and gas storage. Gas is cheaper to store but more options for deep storage are needed.

b) There needs to be more regulatory certainty for investments and early investment is needed due to timeframes between discovery of new supply and gas entering the market.

c) How to separate the transition of renewables with security and reliability and public interest in this. Gas will play a critical role in the transition. There needs to be an overarching strategy.

d) How to attract capital to the sector. There is concern of short-term gas production successes in the next few years leading to complacency over the longer term.

e) Need for new thermal peaking capacity which is difficult to attract capital for.

f) Methanex is very important, as New Zealand relies on the flexibility they provide. There needs to be clarity of expectations on key organisations such as Methanex providing such flex.

g) The Government may need to play a role with appropriate policy settings across both electricity and gas sectors to achieve a pan-industry approach and securing the commercial arrangements required. Some companies are motivated to do deals but others are not.

The meeting broke for lunch at 1.11 pm and reconvened at 1.22 pm.

Kevin Jenkins, Daniel Miles and Sargam Shah joined the meeting at 1.22pm

9. Dry Year Event review – progress report

9.1. The Chair welcomed Kevin Jenkins, Daniel Miles and Sargam Shah to the meeting and introduced the paper.

9.2. Kevin took members through the report and discussion was held including:

a) The scope of the review, and explicitly noting the scope exclusions.

b) To highlight, the key point of the report is that the system worked. High prices were a feature of the system working, however the report noted there are opportunities to improve.

c) The reputation of the industry was raised. While the system worked, were customers brought along? Mass market customers cause political pressures, the reactions to which have the potential to damage industry reputation and impact the market.

d) Media coverage during the event was discussed. When there is a vacuum, the media will fill this. Media may not go to the most appropriate commentators for accurate information. The Authority should consider taking a proactive educative role so the public gains accurate information.

e) The communication plan for the release of the report was discussed. The report will go to the Authority Board to consider ahead of broad industry consultation on the issues identified.

f) The interviewee list was discussed, including the deliberate choice to focus on the supply side. Reviewers noted the intention was to avoid a focus on price, which is the focus of other work. Discussion also noted the gender imbalance of interviewees.

g) If the market worked, are the mechanisms suitable going forward? The most important factor going forward is transparency of information to demonstrate the market is fit for purpose. Due to sensitivities, the information held by some parties could not be disclosed, which impacted public perceptions when picked up by media

h) The audience for the report was discussed, including the use of plain English, including executive summaries, to increase understanding of the core issues and engagement on them.

Kevin Jenkins, Daniel Miles and Sargam Shah left the meeting at 1.51pm.

James Tipping, Alistair Dixon and Steve Jay joined the meeting at 1.51pm.

10. Future Security and Resilience project (FSR) update

10.1. Authority staff introduced the paper and provided members with an update including:

a) The draft report would be available for SRC members in the next few days. Feedback will be sought from SRC members.

Action 1: Secretariat to circulate to members the draft report and discussion paper when available

b) The related MDAG project is going well. They have commissioned a lot of work and are intending to have their problem definition paper ready by mid-December or early in the new year.

c) FSR, as a parallel workstream, is looking at the grid and system overall and is split into three phases of work.

10.2. Members raised questions and discussed:

a) This work is about identifying what needs to be implemented in the next few years and to be prepared for this. Many other countries did not take the time to step back and take this view, instead going ahead with new technologies and then running into issues. We have the opportunity to learn from others.

b) The goal is a smooth transition.

c) As the project is looking at a range of views, it incorporates the views at the start rather than leaving these to the end.

d) There will be a range of sensitivities and there will not be a 'one size fits all' view.

James Tipping, Alistair Dixon and Steve Jay left the meeting at 2.11pm.

AJ Millward and Doug Watt joined the meeting at 2.11pm.

11. 9 August 2021 event review

11.1. The Chair welcomed AJ Millward and Doug Watt to the meeting. AJ thanked members for their comments to date and welcomed further input to assist with the project going forward in Phase 2.

11.2. Members discussed the paper including:

a) Next steps: the Phase 2 report will be published and depending on findings, actions taken. There have already been conversations with generators, lines companies and others.

b) The body of work around customer expectation may need further consideration as expectations vary, for example rural and urban customers often view their needs differently. A more detailed understanding of this would aid effective engagement.

c) The report is future focussed and not a backwards look at the event.

d) The system operator generally has good policies and procedures in place, but they failed for this event so there should be a systematic approach to reviewing events such as Incident Cause Analysis Method (ICAM).

e) End users need to be considered and how they were affected. For example, how many farmers were impacted and had to dump milk due to cold storage requirements being impacted.

f) The benefits of including an investigation of the potential demand-side contribution and how communications to that sector should best be managed.

Wrap up discussion on items 9-11

11.3. Members discussed the papers for items 9,10 and 11 and agreed on the following advice to the Authority. Comments included:

a) Until the full report is provided for the Dry Year Event review, the Council is limited in the advice it can give the Authority Board.

b) There is an opportunity for the SRC to encourage the Authority to proactively look forward and take the lessons learned, potentially as part of FSR

c) For item 11, there is need to include a broad range of consumers and to look at standardised investigation processes like ICAM.

Steve Jay, Dan Crawshay and Lisa Tinkley joined the meeting at 2.47pm.

12. Security of supply annual assessment (SoSAA)

12.1. The Chair welcomed the system operator representatives to the meeting and introduced the paper.

12.2. Members discussed the paper. Comments included:

a) The assumptions for batteries for the North Island capacity.

b) The Transpower commercial team provided the data modelling and sensitivity for Tiwai departure and data centre impact was included in the analysis.

c) The capacity issue in 2026, whether this was a new issue and if it was of concern.

d) A need for more investment. This is needed both for gas supply and batteries as a potential solution, which has not yet been built. There is investment occurring, but this has a focus on intermittent generation such as solar and wind

e) Optimal security margins were discussed. The Authority last looked at security margins in 2018 and recalculated these to represent economic marginal investment. There is nothing currently on the work programme to look at them again.

f) System operator received feedback around gas availability and capacity, and it appears limits will be reached in 2026 and 2027.

g) For the transition significant investment will be needed.

Nathan Strong left the meeting at 3.13pm

13. Annual self-review of system operator performance

13.1. The System operator introduced the paper. Discussion was held including:

a) This year was a *game of two halves*, the first half of the year was a dry year and the second was one of the wettest.

b) The System operator is working on the FSR project which will help the industry shape where it needs to go in the future.

c) The review had a focus on impartiality as the system operator has increased focus on this over the review period and updated procedures around this.

d) A hard Tiwai exit creates challenges for the power system.

e) The System Operator is working with the Authority on inverter issues.

f) There is work on forming a rolling 10-year plan for system operator and looking forward to discussing when this is rolled out.

g) Met all KPI's and working on project delivery.

13.2. Members discussed the paper. Comments included:

a) Pleased to see the lessons learnt have been included

b) A thorough report which adds balance and credibility.

14. The purpose of next meeting's substantive papers

14.1. The Chair introduced the paper. The Members discussed the purpose and scope of each paper for the February meeting.

14.2. **Emergency preparedness**: System operator discussed the balance of time spent on papers and the suggestion was made that the 2019 BCP paper could be provided with the system operator adding what has changed since the report was written. Discussion was held around having representatives from Mercury, Meridian, Contact and Genesis presenting at the meeting as they have not attended for the last 5-6 years. Members agreed there was a need to be very clear on what the Council wants to know. It was agreed to have the Ministry of Civil Defence and Emergency Management (CDEM) attend to provide information about emergency preparedness of the electricity industry, including coordination and alignment across industry.

Action 2: Secretariat to invite CDEM, now National Emergency Management Agency (NEMA) to Q1 2022 meeting

14.3. There was a general comment to consider how information in reports can be condensed to enable the best possible feedback

14.4. The focus for this theme is to gain a sense of the operational approach the industry is taking and what plans they have for the longer term, so both concerns and assurances can be brought to the Board's attention.

14.5. **Cyber Security*:*** The survey is currently out, and responses are due on 22 October.

14.6. **Annual self-review of system operator performance**: To continue on from today's meeting and comments provided.

14.7. **New Zealand's Generation capacity security (NZ Generation Balance Report):** The Chair suggested that this paper can be part of the update papers rather than a stand-alone item. Members agreed.

14.8. During members'-only time, members agreed the issue of the importance of the demand side, as it relates broadly to security and reliability, is often not fully considered. The chair invited the two members to produce a brief paper for members to consider at the next meeting.

Action 3: – Secretariat to add agenda item on demand side for Q1 2022 meeting and to include the provided paper in the meeting pack

Steve Jay, Dan Crawshay and Lisa Tinkley left the meeting at 3.40pm.

Wrap up discussion on items 12-13

14.9. Members discussed the papers for items 12 and 13 and the advice to the Authority. Comments included:

a) There is general comfort with the 2021 SOSAA

b) Concern in the Gas Industry with the system operator that there is a disconnect in 2026 between the need for potential new supply, during a time of transition, in line with current decarbonisation policy settings. This will be a critical period for gas. The question raised was whether industry will be prepared to build plant given the renewables target is meant to take effect from 2030.

c) On item 13 members commented a self-review is valuable but each year it is much of the same and appears sanitised. There was discussion about the resource required to produce it and potential opportunities for efficiencies which will be passed to the Authority. The Authority still conducts its own review in line with SOSPA requirements and general MOSP oversight.

15. The SRC's forward work programme

15.1. The Chair opened discussion on the Q1 papers for 2022.

15.2. Members discussed a chair-proposed approach for the Q1 Emergency Preparedness papers of having an independent agency conduct interviews of generator participants, and present to the SRC. This was favourably considered.

15.3. Q2 will have a focus on risk and asset management.

15.4. 2022 meeting dates were discussed. Chair and secretariat to prepare draft dates for circulation.

15.5. The Chair reminded members that some were due to finish their term. Authority staff noted the nominations process will likely commence next month.

The meeting ended at 4.05pm.