Meeting Date: 4 August 2021

## STRATEGY AND PRIORITIES

# SECURITY AND RELIABILITY COUNCIL

This paper is to aid the Security and Reliability Council's (SRC) discussion of its strategic environment. It provides a framework for considering the SRC's strategic issues, sets out some discussion material, and includes a brief environment scan of current strategic issues.

**Note:** This paper has been prepared for the SRC. Content should not be interpreted as representing the views or policy of the Electricity Authority.

## Background

The Security and Reliability Council's (SRC) statutory function is to provide independent advice on the performance of the electricity system and the system operator, and reliability of supply issues.

The SRC Chair's 2019 survey of SRC members found that "establishing an agreed SRC strategy would help drive a work programme and agenda relevant to the SRC brief, ensure the SRC is fulfilling its role, and provide the Authority with more meaningful, actionable advice." It concluded that once a year there should be an opportunity to discuss the current SRC work programme, explore emerging strategic issues, consider these in the context of the SRC role and develop an agreed SRC strategy.

This session has been scheduled to address this need. Two hours 20 minutes have been allocated for this session and David Hunt of Concept Consulting will act as a facilitator for the discussion. An agenda for this session has been provided ([Appendix A]). Key components of the strategy session will be:

- 1. Brief recap on the SRC's role and function.
- 2. A scan of recent developments relevant to security and reliability.
- 3. Reflect on the SRC's 2020 strategy document and identify any gaps.
- 4. Identification of the SRC's top three priorities for next 12-24 months.

Ahead of the facilitated strategy session the SRC will receive updates on the NZ Battery Project and matters progressing as part of Future Security and Resilience (FSR – previously called G2).

### The attached slides are to aid SRC discussion

As preparation for the SRC's strategy session, the secretariat has compiled the attached supporting material. It builds on the five key strategic themes developed out of the 2020 SRC strategy session and considers the significant developments in past twelve months that may affect the SRC strategy.

Although set out as a series of Powerpoint slides, the secretariat does not intend to verbally present that material in the meeting. Rather, the material provides a framework for considering the SRC's strategic issues and some material to spur discussion.

In advance of the meeting, we ask that you review the slides and **consider the questions** in slide eight. This preparation will help ensure we can get the most value from the session on the day.

# Goals

- 1. Recap on SRC function and scope of advice
- 2. Scan current environment and update SRC 'Strategic Themes' document as necessary
- 3. Identify top three priority themes/issues for work programme

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# The function of the SRC

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The function of the SRC is to "provide independent advice on the performance of the electricity system and the system operator, and reliability of supply issues". [Electricity Industry Act, s.20]

# Scope of SRC role

The Authority may seek the SRC's advice on:

- (a) the system operator's performance including against its PPOs, security of supply function and any other function important to the performance of the electricity system and/or to reliability of supply
- (b) system operation issues, including industry development needs and priorities relating to system operations
- (c) security of supply issues, including system security assessments and security of supply forecasts
- (d) reliability of supply issues, including planned and unplanned loss of supply and quality of supply issues
- (e) any other matters that the Authority considers to be within the function of the SRC.



### Security

- Energy
- Capacity



### Reliability

- Quality
- Outages



System operator performance



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# Scope of SRC advice

### **Authority scope**

Functions and powers under the Electricity Industry Act 2010

### **SRC** scope

Matters related to "the performance of the electricity system and the system operator, and reliability of supply issues"

### **Commerce Commission scope**

Functions and powers under the Commerce Act 1986

The SRC can (and should) provide advice on any security/reliability aspect of the electricity industry.

The Authority is the direct recipient of all SRC advice. Where advice is relevant to another party, the Authority passes that advice to the relevant party.

# 'Strategic themes' from SRC's 2020 strategy session provide the foundation

#### Performance of network owners and operators

How do we know that network operators and owners (covering both transmission and distribution) are doing a good job and managing their risks appropriately?

Performance assessments

Risk management

Incident management

Workforce management and development

Management of internal separation of dubes (e.g. between network owner and network operator functions)

### Impacts of new technology

How do we monitor the impacts of new technology and assess the ability of the system to absorb and take most advantage of these technologies?

Safety

Security

Standards and regulation

investment and market settings

Monitoring and enforcement of the above

### Cyber security

how do we ensure that the sector is managing and adapting to these constantly evolving risks on an ongoing basis?

Risk and threat identification and management

Reporting of incidents

Dissemination of information

#### Impacts of disruption on the longer-term outlook for security and reliability

How do we ensure the sector remains secure and reliable through significant changes in demand and supply?

Lumpy decommissioning decisions (including Tiwai and Huntly)

Government intervention (e.g. Onslow PS announcements)

Policy decisions (e.g. 100% renewables, offshore oil and gas

Longer termfuel outlook (e.g. dimate change impact on hydro, thermal fuel supply)

Ability of the settings for investment (e.g. Part 4, Transpower IPP, market) to deliver appropriate levels of security and reliability, and evolve over time

Climate change mitigation and adaptation

### Resilience of the system to sudden, unexpected shocks

How do we ensure that the sector is resilient to shocks?

Identification of potential shocks as they emerge (e.g. COVID-19, major transmission or fuel supply outages)

Industy's planning and risk management for short- and longterm shocks

System resilience to and readiness for short-term shocks (e.g. AUFLS, black start)

Post-incident review and learning

# PEST analysis to identify recent/new factors affecting security/reliability outlook\*

### **Policy**

- Climate Change Commission released <u>Ināia tonu</u> nei: a low emissions future for Aotearoa
- Various climate policy announcements (clean car discount etc)
- Government's 100% renewable generation target brought forward five years to 2030
- Government investigation into storage solutions (NZ battery project) underway

#### **Economic**

- Recovery from Covid-19 recession underway
- Tight near term outlook for power supply
- Closure/uncertain outlook for some large users
- New supply commitments starting to flow
- · Skills shortages in some areas
- Disruption to global supply chains

#### Social

- Rising electricity use
- Increasing concern about climate change
- Rising use of internet enabled devices/platforms
- Rising number/severity of cyber attacks

### Technology

- · Gas market uncertainties
- Thermal-related reviews underway (Contact, Genesis)
- · Falling costs for wind, solar, lithium batteries
- Rising uptake of distributed energy resources (eg, Aurora's agreement with <u>SolarZero</u>)

<sup>\*</sup> Although some items could be categorised under multiple headings, only one is included for brevity

# How factors identified in 2021 PEST analysis map to 2020 Strategic Themes

	Performance of network operators and owners	Impacts of new technology	Cyber security	Impacts of disruption on the longer term outlook for S&R	Resilience of system to sudden unexpected shocks
Climate Change Commission report released		<b>✓</b>		✓	
Various climate policy announcements (clean car discount etc)				✓	
Government's 100% renewable generation target 2030				✓	
NZ battery project underway				✓	
Recovery from Covid-19 recession underway					✓
Tight near term outlook for power supply					✓
Closure/uncertain outlook for some large users				✓	
New supply commitments starting to flow				✓	✓
Skills shortages in some areas	<b>✓</b>				✓
Disruption to global supply chains					✓
Rising electricity use	<b>✓</b>			✓:	
Increasing concern about climate change				✓	
Rising use of internet enabled devices/platforms		1	<b>★</b>		
Rising number/severity of cyber attacks			<b>√</b>		
Gas market uncertainties				<b>√</b>	✓
Thermal-related reviews underway				✓	✓
Falling costs for wind, solar, lithium batteries				✓.	
Rising uptake of distributed energy resources				<b>√</b>	

# Preparation before the meeting

To get the most out of the session, we ask that you come prepared to answer the following questions:

- 1. Given the developments in the past year, is there anything in the SRC's 2020 'Strategic themes' document that needs updating?
- What are the top 3 issues that the SRC should focus on over the next 2 -3 years? In identifying these issues, SRC members should consider:
  - relevance of each issue to SRC functions
  - importance of each issue to achieving sector ambitions
  - extent to which SRC can add a perspective/value not already covered by other bodies/processes.