Meeting Date: 4 August 2021

#### FORWARD WORK PROGRAMME

# SECURITY AND RELIABILITY COUNCIL

This paper presents the proposed SRC's multi-year work programme and upcoming papers.

**Note:** This paper has been prepared for the purpose of the Security and Reliability Council (SRC). Content should not be interpreted as representing the views or policy of the Electricity Authority.

# Work Programme

# 1. Purpose and background

- 1.1 This paper presents the SRC's work programme for the period 2021-23 as at the 4 August 2021 SRC meeting.
- 1.2 The purpose of this paper is to inform the SRC of the multi-year work programme and improve it with SRC feedback.
- 1.3 The objective of the work programme is to:
  - a) focus the SRC's attention using a risk-based method.
  - b) better coordinate the SRC's workload.
  - improve planning and budgeting for the secretariat to fulfil the SRC's workload.
- 1.4 The meeting themes are set out in Table 1 and the overarching themes in Figure 1. The SRC work programme for 2021-23 is set out in Table 2.
- 1.5 The associated input information is set out in Appendix A.

## Changes to the multi-year work programme

- 2.1 Some changes have been made to the work programme:
  - item no 42: system operator annual assessment of security of supply. The system operator applied and was granted an exemption to delay providing the draft report to participants for comment. Consequently item no 42 has been moved to Q4 of 2021
  - b) The 'Gas industry reliability and resilience' theme papers have been brought forward to Q4 of 2021
  - The emergency preparedness paper has been moved back to Q1 of 2022
  - d) The cyber-security survey report has been moved back to Q1 of 2022
  - e) The transmission papers have been moved to Q4 of 2022
  - f) The themes for Q1, Q2 and Q3 2022 have been moved to Q2, Q3 and Q4 respectively.

#### **Table 1: Meeting themes proposed**

Note: IDs marked in blue are considered standard papers which are presented either at each meeting or at least once per year.

Meeting			B 1 4 11B 1 T 11 A	
Year	Quarter	Theme/(s)	Related IDs in Table 2	Notes
	Q1	System operator functions	4,5,11,21,32,34,40	
	Q2	Fit-for-purpose reviews of regulation and monitoring	2,10,16,25,27,32,40	
2021	Q3	Strategy (morning) and understanding consumers	12,22,32,35,36,37,38,40	
	Q4	Gas industry reliability and resilience	9,26,32,33,34,40,42	Involves at least four different presenters. When this topic was last covered, the SRC also received a presentation from John Kidd of Woodward Partners.
	Q1	Emergency preparedness	3,7,13,14,21,23,34,40,41	Nine presenters involved
2022	Q2	Risk and asset management	15,19,24,40	
	Q3	Strategy	12,22,35,39,40,42	
	Q4	Transmission	28,29,30,33,34,40	
	Q1		1,21,34,40	
2023		Cyber-security	8,10,20,40,41	
2023	Q3		12,22,35,40,42	
	Q4		11,33,34,37,40	

### 3. Questions for the SRC to consider

- 3.1 The SRC may wish to consider the following questions:
- Q1. What changes, if any, does the SRC wish to make to the forward work programme?
- Q2. What advice, if any, does the SRC wish to provide to the Authority?

Figure 1: Overarching themes

#### 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 managemen

Workforce management and development

Management of internal separation of duties (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. climate 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

Table 2: Multi-year work programme

		lu fa una di au	l	2021				2022				2023			
Theme	ID	Information Provider	Information to be provided	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	20	Transpower (GO and SO)	Cyber-security management										DUE	-	-
Cyber	8	National Cyber Security Centre	Overall cyber- security management of the electricity industry										DUE	-	-
Security	41	Secretariat	Survey into the cyber-security management of participants (follow-up from InPhySec survey in 2020)					DUE					DUE		
Impacts of disruption	31	Electricity Networks Association	Improving reporting of 'Various measures of reliability'												
on the longer- term	12	Electricity Authority	Various measures of reliability			DUE				DUE				DUE	
outlook for security and	36	Secretariat	Understanding consumer behaviour and expectations			DUE									
reliablility	37	Secretariat	Understanding Demand for Electricity			DUE									DUE

				2021				2022				2023			
Theme	ID	Information Provider	Information to be provided	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	38	Secretariat	Understanding the value of electricity to consumers			DUE									
	39	Secretariat	Understanding the impacts of climate change							DUE					
	27	Electricity Authority and system operator	Regulatory arrangements for official conservation campaign and security of supply forecasting and information policy (SOSFIP) regulatory development.		DUE										
	13	Transpower and the Electricity Authority	The communication s plans and preparedness strategies of key agencies for supply emergencies.					DUE							
	9	Gas Industry Company	Reliability and resilience of the gas industry. Note this one includes the system operator				DUE								

		Information	Information to	2021				2022				2023			
Theme	ID	Provider	be provided	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
			providing a presentation.												
	9	First Gas	Reliability and resilience of the gas industry.				DUE								
	9	OMV	Reliability and resilience of the gas industry.				DUE								
	9	Todd Energy	Reliability and resilience of the gas industry.				DUE								
	32	Electricity Authority	Security/resilien ce papers arising from Electricity Price Review request (G2/FSR)	DUE	DUE	DUE	DUE								
Impacts of new technolog Y	25	Electricity Authority	Fit-for-purpose review of regulation and monitoring: consumer-premise equipment		DUE										
Performa nce of network owners and operators	1	Electricity Authority and system operator	Automatic under- frequency load shedding (extended reserve)									DUE			

				2021				2022				2023			
Theme	ID	Information Provider	Information to be provided	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	33	System operator	Annual self- review of performance				DUE				DUE				DUE
	34	Electricity Authority	Annual review of system operator performance	DUE			DUE	DUE			DUE	DUE			DUE
	2	Commerce Commission	Fit-for-purpose review of regulation and monitoring: transmission.		DUE										
	10	Commerce Commission	Fit-for-purpose review of regulation and monitoring: distributors.		DUE								DUE		
	16	Electricity Authority	Fit-for-purpose review of regulation and monitoring: generation.		DUE										
	19	Grid owner	Risk & asset mgmt. planning						DUE						
	29	Grid owner	Transmission capacity planning								DUE				
	28	Grid owner	Transmission outage management (scheduling, reduced security)								DUE				

		Information	Information to	2021				2022				2023			
Theme	ID	Information Provider	Information to be provided	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	4	System operator	Ancillary services (frequency keeping, instantaneous reserves, over- frequency reserve, voltage support, but excluding black start).	DUE											
	11	System operator	Credible Event Reviews	DUE											DUE
	21	System operator	Generation capacity security (NZ Generation Balance)	DUE				DUE				DUE			
	22	System operator	Generation energy security (Security of supply updates)			DUE				DUE				DUE	
	30	Electricity Authority and Commerce Commission	Regulatory arrangements for transmission investment.								DUE				
Resilience of the system to	40	Secretariat	Industry Understanding of Risks	DUE	DUE	DUE	DUE	DUE	DUE	DUE	DUE	DUE	DUE	DUE	DUE
sudden, unexpect ed shocks	35	Secretariat	Risk and strategy environment scan			DUE				DUE				DUE	

		Information	Information to	2021				2022				2023			
Theme	ID	Information Provider	Information to be provided	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	14	Ministry of Civil Defence & Emergency Management	Emergency preparedness of the electricity industry					DUE							
	3	System operator	Emergency preparedness and business continuity planning.					DUE							
	5	System operator	Preparedness for rolling outages	DUE											
	7	System operator	Power system restoration arrangements including black start					DUE							
	24	Contact Energy	Risk and asset management						DUE						
	24	Genesis Energy	Risk and asset management						DUE						
	24	Mercury Energy	Risk and asset management						DUE						
	24	Meridian Energy	Risk and asset management.						DUE						
	15	Vector	Risk and asset management.					_	DUE						

				2021				2022				2023			
Theme	ID	Information Provider	Information to be provided	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	15	Powerco	Risk and asset management.						DUE						
	15	Orion	Risk and asset management.						DUE						
	15	Wellington Electricity	Risk and asset management.						DUE						
	15	Unison	Risk and asset management.						DUE						
	23	Contact Energy	Emergency preparedness, including fuel supply availability in a post-emergency situation					DUE							
	23	Genesis Energy	Emergency preparedness, including fuel supply availability in a post-emergency situation					DUE							
	23	Mercury Energy	Emergency preparedness, including fuel supply availability in a post-emergency situation					DUE							

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		Information	Information to	2021				2022				2023			
Theme	ID	Provider	be provided	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	23	Meridian Energy	Emergency preparedness, including fuel supply availability in a post-emergency situation					DUE							
	26	Electricity Authority	Business continuity and disaster recovery of market operation service providers other than the system operator				DUE								
	42	System operator	Security of Supply Annual Assessment (SoSAA)				DUE			DUE				DUE	