SECURITY AND RELIABILITY COUNCIL

ACTION LIST

The following are actions to be completed after meeting number 29 on Thursday, 24 October 2019.

Action #	Meeting created	Action	Date for completion	Status
1	17	Secretariat to keep the SRC updated with the progress of Transpower's major capital project for voltage stability issues in the upper North Island. Updates of milestones should be provided until the investment decision is made.	As needed until investment decision made	Ongoing. Several updates already given, most recently at 24 October 2019 meeting.
2	28	Secretariat to provide an update on the outcomes of 2 March 2017 compliance processes.	Once outcomes are known	On hold.
3	29	Secretariat to request the system operator to present an overview of the 9-19 August 2019 power blackout in England and Wales.	ASAP	Complete. Included as agenda item #11.
4	29	Secretariat to ensure two matters are prioritised in SRC meeting agendas for 2020: a cyber-security overview from relevant central government agencies, and Transpower communications plans.	ASAP	Complete. Transpower communications plans is included in agenda item #14. Relevant diaries are booked for a cyber-security overview to the May 2020 SRC meeting.

1. Updates

1.1. This section provides information on matters that don't warrant a dedicated agenda item, such as updates on matters that have previously been discussed by the SRC.

The current security of supply situation

- 1.2. As at 1 March 2020, national hydro storage was 91% of nominal full, which is 115% of mean storage for this time of year. For 1 July (an indicator of winter-time risk) the 10% electricity risk curve in 2020 is the lowest since 2015.
- 1.3. The system operator advised stakeholders on 20 February 2020 that:
 - "In November 2019, Meridian shared that they had carried out engineering evaluations of access to contingent storage at Lake Pukaki, and were confident that access to the remaining 367GWh of storage was feasible. This month we will be incorporating this change into our Security of Supply reporting and into the Electricity Risk Curve update."
- 1.4. That change is reflected in Figure 1 below, which is sourced from an Authority dataset.

5,000 4,000 3,000 GWh 2,000 1,000 0 May '19 Sep '18 Sep '19 Jan '20 May '20 May '18 Jan '19 Jan '21 - Controlled storage - Mean - all records -- 1% risk Nominal full --- 4% risk — 10% risk

Figure 1: New Zealand-wide electricity risk curves as at 5 March 2020

emi.ea.govt.nz/r/hi4qm

27 November 2019 Northland power outage

- 1.5. On Wednesday 27 November 2019, various media reported that ~90,000 Northland properties lost power for three hours. The transmission system was on reduced security when a trip occurred. By 29 November 2019, the grid owner announced that it believed that bird excrement was the likely cause of the trip.
- 1.6. Refining New Zealand lost power and estimated the outage would reduce its net profit after tax by \$1.5-\$2.5 million.
- 1.7. The system operator commenced an investigation and is due to deliver its report in March 2020. The SRC secretariat will consider the findings and whether an SRC paper on the outage is warranted.

Progress on the review of the 'Tree Regulations'

- 1.8. As noted in the 17 December 2019 correspondence from the Authority Board, the Authority has a permanent representative on the Ministry of Business, Innovation and Employment's (MBIE) review of the Electricity (Hazards from Trees) Regulations.
- 1.9. MBIE have held one workshop with broad representation of interested stakeholders, seeking to settle on a 'problem definition' to use when assessing further policy development. MBIE has another workshop scheduled.

Report from Australia's Energy Security Board

- 1.10. Australia's Energy Security Board have published <u>The Health of the National</u> <u>Electricity Market</u>. The SRC secretariat has reviewed only the Executive Summary at this time. The following quote from pages 8-9 highlights some key findings:
 - "...the issue of most concern in the [National Electricity Market] is security. This is a critical issue at present and for the future. While there has been understandable concern about reliability, and whether or not there is sufficient supply or demand response when wind and solar is not available, the more immediate worry is maintaining security. To be secure the electricity system must operate within defined limits of frequency, voltage, inertia and system strength and be able to maintain that through disturbances. Failure to do so can seriously damage a power system and lead to significant supply interruptions.

Reliability has been rated as critical a worse rating [sic] than last year. Even though no immediate gap in supply was identified in [the Australian Energy Market Operator's *Electricity Statement of Opportunities*], maintaining reliability has been a challenge. More severe weather conditions in summer, along with ageing generators, is an immediate issue."