ACTION LIST

The following are actions to be completed after meeting number 28 on Thursday, 8 August 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. An update is included as agenda item #9
2	26	Secretariat to prepare a paper that explains what the grid reliability standards are and how they were derived, how they are used, how n-security outages are decided upon and planned for, and includes any available data on the uses of n-security and any related lessons learned.	24 October 2019	Complete. Included as agenda item #8
3	27	Secretariat to seek an update from the Gas Industry Company to the SRC about information disclosure.	24 October 2019	Complete. Included as agenda item #14
4	27	Secretariat to prepare a list of top industry risks (categorised by timeframe in which they can manifest) for the 24 October 2019 meeting.	24 October 2019	Complete. Included as agenda item #6
5	28	Secretariat to provide an update on the outcomes of 2 March 2017 compliance processes	Once outcomes are known	On hold.

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 16 October 2019, New Zealand and South Island controlled storage is, in aggregate, 95% of average storage for this time of year. North Island storage is above average. The risk meters for the New Zealand and the South Island are set to normal.
- 1.3. The three months of HVDC outages in early 2020 will tend to incentivise South Island hydro generators to draw storage lower than average, as they will have

reduced capacity to send electricity northward. Conversely, North Island hydro generators will tend to be incentivised to store water for production during early 2020.

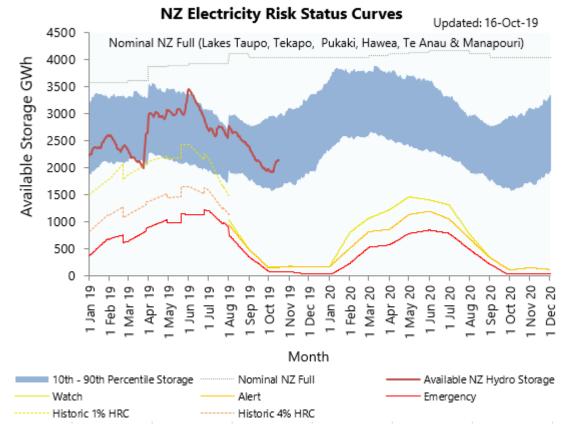


Figure 1: New Zealand-wide electricity risk curves as at 16 October 2019

Transpower formally warned over quality breaches

- 1.4. On 12 September 2019, the Commerce Commission wrote a warning letter to Transpower (in its role as the grid owner) in relation to admitted contraventions of quality standards in 2015/16 and 2016/17.¹
- 1.5. While the Commerce Commission noted its concerns with Transpower's conduct failing to meet good electricity industry practice, it also determined that a warning letter was appropriate rather than seeking civil pecuniary penalties.
- 1.6. Subscription news provider Energy News summarised the situation², and reported on earlier concerns from Vector Limited lacking clarity about the circumstances under which the Commerce Commission would seek civil pecuniary penalties.³

Government inquiry into the Auckland fuel supply disruption

1.7. In August 2019, the final report from the *Government Inquiry into The Auckland Fuel Supply Disruption* was published.⁴ The report summarises the event:

The letter is available here

Available from https://www.energynews.co.nz/news-story/transmission/44487/transpower-warned-breaching-quality-standards

Available from https://www.energynews.co.nz/news-story/regulation/42289/more-clarity-needed-transpower-quality-breach-penalties-vector

"On 14 September 2017, the pipeline that brings diesel, petrol, and jet fuel from Marsden Point Oil Refinery into Auckland ruptured. It leaked jet fuel into rural properties and stopped the transmission of fuels into Auckland for 10 days. The rupture resulted from damage caused by a digger when it was being used to dig for kauri logs some three years earlier. No one had been informed at the time that the pipeline had been struck, and over time, the pipe weakened and eventually ruptured."

- 1.8. While not directly relevant for electricity security and reliability, the report is of interest as an inquiry focussed on infrastructure resilience and the impact its recommendations could have on natural gas pipelines on which the electricity industry has some dependencies.
- 1.9. The report recommended:

"to complete the new National Fuel Emergency Plan;

for [the Ministry of Business, Innovation and Employment] to take a strong leadership role in making the new Plan effective, including organising regular sector-wide practice exercises to test it;

for the Fuel Sector Coordinating Entity (Fuel SCE), which is at the centre of any response effort to take on a broader role, to meet regularly, oversee a project on information-sharing protocols, and coordinate sector discussions on contingency planning and preparation."

1.10. With respect to resilience, the report noted:

"Resilience is a broad concept with many competing definitions in the literature. The Inquiry drew on definitions used by the Ministry of Civil Defence and Emergency Management and the Rockefeller Foundation 100 Resilient Cities Project, which between them encompassed all the different stages of activity that make up a resilient system and the different types of stresses and shocks that a system needs to be able to cope with. As a result, the Inquiry looked at:

- prevention;
- planning and preparation;
- response;
- the ability of a system to deal with both acute shocks (such as the sudden rupture of the [refinery-to-Auckland pipeline]) and

gradual stresses (such as increasing demand);

- whether we could see evidence of a system that learns from experience; and
- whether the system was aiming to provide a platform for the region to grow and thrive."

Available from here.

SRC secretariat email account

- 1.11. The SRC's secretariat has established an email account for correspondence involving the secretariat. The address is src.secretariat@ea.govt.nz
- 1.12. The secretariat requests that SRC members use that address when corresponding with the secretariat. This will ensure your email is dealt with in a timely manner, especially if individual staff members are on leave.

Post-script addition as at 27 November 2019

The Authority provided the below information to the SRC in confidence. Subsequently, the Authority Board considered the SRC's advice at its 14 November 2019 meeting. The Authority announced its decisions on 15 November 2019 in a <u>special edition of Market Brief</u>. Accordingly, the Authority no longer regards the below information as confidential.

CONFIDENTIAL: Electricity Authority considering special measures for the first quarter of 2020

- 1.13. The Authority's 16 September 2019 letter requested the SRC's advice, in relation to coincident HVDC and Pohokura outages in March 2020, on "what level of concern is warranted and whether there are additional actions that the Authority, the System Operator and market participants could be taking to mitigate risk."
- 1.14. The Authority is considering using and/or creating special powers with regard to the stress test regime for the first quarter of 2020 and would welcome any input from the SRC. The Authority has provided this information in confidence to SRC members. SRC members have accepted confidentiality obligations described in the Crown Entities Act 2004.

The stress test regime

- 1.15. The stress test regime was created by the Authority in 2011 as a regulatory obligation on some industry participants to anonymously disclose what the financial effect of the Authority's stress test scenarios would be on their business. Results are disclosed quarterly, in relation to the coming quarter. In December, disclosing participants will provide their results for the January to March 2020 quarter.
- 1.16. There are two stress test scenarios specified by the Authority: an energy test and a capacity test. The energy test envisages a scenario where spot prices for electricity average \$250 for the entire quarter. The capacity test envisages a scenario where spot prices rise to \$10,000 for eight hours during the quarter.
- 1.17. The Authority identified three objectives for the stress test regime when it was introduced in 2011:
 - a) reduce the scope for opportunistic lobbying by adversely affected participants to socialise the cost of poor risk management decisions
 - b) enhance incentives for participants to appropriately manage their spot price exposure
 - c) enhance access to information on spot price exposure for participants and for the Authority.

1.18. Figure 2 below highlights one of the reports available from stress test results. It illustrates what changes in cash flow are reported, indexed to the positive changes in cash flow reported in the first ever quarter of results.

300 Gain Loss 250 200 150 100 50 0 -50 -100 -150 2014 Q3 2015 Q3 2016 Q3 2017 Q3 2015 Q1 2016 Q1 emi.ea.govt.nz/r/lgmrz

Figure 2: Cash flow gain:loss index for energy stress test scenario

Special measures being considered by the Authority.

- 1.19. There are several options available to the Authority:
 - request disclosing participants include a third stress test scenario that specifically targets stress caused by high price separation between the North and South Islands for an extended period
 - b) in late January or February, request disclosing participants refresh the stress tests for the first quarter of 2020 using their then-current position
 - c) in late January or February, require disclosing participants to perform new stress tests for the first quarter of 2020
 - d) a combination of these options
 - e) no change to the stress test regime.
- 1.20. This is a late-developing situation so an Authority representative will provide a verbal update on these options, and any other options that have been identified.
- 1.21. The intention behind considering options for the stress test regime is to ensure participants have considered the risks to their businesses and will use appropriate risk mitigation. This will help to ensure reliability of supply by ensuring generators remain in business and their plant remains available prior to winter, and traders will send appropriate incentives to generators to manage their fuel supply so they can provide the contracted energy.