

12 September 2025

Anna Kominik
Electricity Authority Chair
Electricity Authority
PO Box 10041
Wellington 6143

Dear Anna,

Advice from 26 August 2025 SRC Meeting

The Security and Reliability Council (SRC) provides the Electricity Authority Te Mana Hiko (Authority) with independent advice on the performance of the electricity system and the system operator, and reliability of supply issues.

This quarter's advice is the first following our recent decision to adapt SRCs operation, how we interface with the Authority and to increase the prominence of our advice to the Authority. To recap, SRC:

- has implemented an independent secretariat from 1 July. The SRC has agreed to invite the System Operator (SO) for most items at quarterly meetings
- is leveraging SRC's independence and 'whole of system' perspective to identify blind-spots, current and future risks where action now can reduce pain later
- will continue to act as a 'canary in the coal mine', but take a firmer stance where we consider insufficient action is being taken
- has refreshed the SRC webpage to make our advice more accessible and draw attention to this page and advice through the Authority's 'market brief'

The SRC is pleased the more direct tenor of our advice has been well received by the Authority and we intend to continue this.

SRC members appreciated the opportunity to meet with the Authority Board on 25th August. Members were pleased that the stimulating discussion helped set the scene for the SRC meeting.

The August SRC meeting

The main focus of the August SRC meeting was the annual strategy and risk review. SRC also conducted a deep-dive on cyber security.

In addition the SRC received:

- a joint security of supply briefing from the Authority and System Operator:
- a briefing from the system operator on its annual security of supply assessment (SOSA);
- a review of the security of supply forecasting and information policy (SOSFIP).

Advice

As a general comment, the SRC is less optimistic than the presenters that new generation will arrive 'in time' to mitigate growing capacity and energy risk as gas generation declines, demand increases and becomes peakier. The risk is acute for the period to ~2028.

This letter sets out the discussion at the SRC's August meeting and its recommendations to the Authority, which are reproduced below:

1. **maintain pressure on participants** to mitigate near term energy and capacity risk (as done for 2025), to firm up and execute on generation build plans
2. **apply scrutiny to generation build** critical paths, understand impediments and act to address potentially systemic risk areas, for example, network connections
3. **prioritise improvement to / maturing of the generation pipeline.** It is the type of plant, its capacity (MW) and energy (GWh), plant (and connection) commissioning that really need to be understood when assessing security of supply risk
4. **accelerate rule changes** to enable / incentivise battery investment and mitigate capacity risk. These changes are shifting from 'nice to have' to 'must have' to mitigate near-medium term energy and capacity risk
5. **address the capacity and energy risks arising from increased intermittency.** As the proportion of intermittent renewables increases more flexibility is required. This includes sufficient thermal plant / fuel, batteries, efficient demand response, strategic fuel reserves and judicious use of contingent hydro storage.
6. **encourage creative and joined up thinking** in reviewing contingent storage access / the "Tekapo shadow constraint". Pursuit of greater flexibility, lower prices, stable security of supply, low environmental risk are worthy goals.
7. **lift understanding of cyber security** through engagement with participants and regulatory bodies. The Authority should have a role in shaping tiered/ proportionate rules to lift readiness/responsiveness for system critical and non-critical participants.
8. **encourage participants to engage in DPMC's upcoming consultation and consider voluntarily self-assess against Australian Cyber Security Standards.**

The recommendations above are primarily to the Authority. However, the SRC intends to write to the DPMC, as policy lead for cyber security regulation, to convey our advice directly.

1. Security of supply outlook

The joint Authority and System Operator briefing has become a standing item at each meeting. SRC finds this valuable for its information content, and the opportunity it provides to clarify, test and discuss the information, assumptions and forecast methodologies.

The August briefing covered the winter 2025 situation, the forecast supply / demand balance and security of supply outlook for 2026, historical and futures prices, fuel availability (hydro, gas, coal), generation plant availability and the 'generation pipeline'.

In discussion with presenters, SRC:

- recognised proactive steps by industry and regulators, which reduced security of supply risk (and constrained prices) in the face of declining gas production combined with historically low hydro inflows.

- welcomed publication of the Authority's 'generation pipeline', while noting limitations of current data / views for assessing future generation capacity and energy risk.
- queried drivers of increased 'peakiness' (6 of 12 historical peaks have occurred in 2025), noted lower capacity margins, increasing reliance on slow-start thermal and elevated capacity risk.
- questioned the extent to which investment and regulatory initiatives will be sufficient to address elevated capacity and energy risk to ~2028.

The SRC recommends the Authority:

- **apply scrutiny to generation build** critical paths, understand impediments and act to address potentially systemic risk areas, for example, network connections
- **prioritise improvement to / maturing of the generation pipeline.** It is the type of plant, its capacity (MW) and energy (GWh), plant (and connection) commissioning that really need to be understood when assessing security of supply risk

2. Annual strategy and risk review

The SRC held its annual strategy and risk review session. This involved:

1. Facilitated members discussion: SRC purpose, performance, environmental scan, a SWOT (strengths, weaknesses, opportunities and threats) assessment to inform a refresh of how the SRC can provide greatest value to New Zealand.
2. Hearing what stakeholders think: their perceptions of SRC, security and reliability risks and concerns, and, getting the most value from SRC. The
SRC heard from and spoke with James Kilty from Transpower, Tracey Kai from Electricity Networks Aotearoa, Andy Knight from the Gas Industry Company and Lucie Drummond from the Energy Transition Framework.
3. Discussion and capture. See below.

Common themes and sentiment from presenters were similar to those arrived at independently by SRC members in the prior discussion; and, broadly aligned with sentiment from the previous days' SRC – Authority Board discussion. These are summarised below.

Common themes / sentiment

Presenters thought the SRC:

- has a strong statutory mandate, the potential to draw on expertise of members and willingness of stakeholders to share information; to provide a firm, clear, expert and independent voice on the electricity system performance, security and reliability
- hasn't lived up to its potential - stakeholders perceive SRC as not truly independent of the Authority, are critical of its low profile and muted public voice. Support for independent secretariat and planned action to give prominence to its advice.
- has an increasingly important role to play. An independent, expert view, looking across the whole system is essential at this time, as vested interests interact with increasing pace of change, complexity and pressure on participants.

- focus is on the electricity system, but increasingly awareness of the broader energy system is needed as energy demand and supply side changes drive ‘energy convergence’ - now for gas/coal, over time for (some) liquid fuels.
- needs to retain its role as ‘canary in the coalmine’ but take a firmer stance where its advice is ignored or inadequate action is taken (by participants, regulators or both) to mitigate risk and prevent avoidable harm to New Zealand.
- is right to have done a self-assessment and have invited feedback, should make this routine – set goals, assess performance regularly so able to learn, improve and enhance value to New Zealand.

The SRC is fortunate that members individually have their own experience and information sources and stakeholders who are generally willing to share information. The SRC welcomed an offer to collaborate with the Energy Transition Framework where valuable and appropriate.

3. Cyber security

The National Cyber Security Centre (NCSC), Transpower and Vector presented to the SRC and joined a group discussion with the SRC. The discussion was facilitated by Tracey Kai from Electricity Networks Aotearoa.

The NCSC:

- provided an overview of the global cyber threat environment, which is worsening with three geopolitical shifts playing out: from rules to power, from economics to security and from efficiency to resilience.
- summarised the New Zealand cyber threat landscape, which is worsening with geopolitics and strategic competition, increasing cyber dependent / enabled crime, improving ‘tradedcraft’, lower technical barriers to entry for malign actors and increase in state sponsored activity.
- noted 34 cyber incidents for nationally significant organisations in energy, water and waste services, the majority of which were financially motivated and of which five were service impacting / required remedial action incidents.
- expects these trends to continue, with energy as a target for sophisticated actors who have the ability to access and remain undetected for a long period of time. Encourages regulators to support / mandate pursuit of good practice, proportional to the risk / criticality of the entities.

Transpower:

- considers the gap between threat and readiness to be widening as the sophistication of malign actors outpaces local parties’ readiness. Recognises entity reporting, information sharing and regulation needed.
- considers much to learn from the Australian experience as regulation is developed in New Zealand (by DPMC). Specifically, that a ‘one size fits all’ rules, which fail to account for the differing risk and criticality levels of each entity, risks setting the bar too high for some and too low for others. This risks weakening protections for both system critical and non-critical parties.

Vector:

- described its work to grow a cyber security community amongst New Zealand's electricity distributors, that there had been a significant uplift in awareness, engagement and understanding and, as a result, readiness in recent years.
- observed that most of the cyber security technology products available today are very good now (this was not the case previously). Vector provided an overview of the services it offers and these are intended to lift capability and readiness and to “teach to fish, rather than catch the fish for them”.

Common themes

- the sophistication of and tools available to malign actors continue to grow and proliferate. Cyber threat environment is worsening.
- awareness, understanding, engagement and commitment has increased markedly in the last three years – with almost all (or all) network providers and generators involved in NCSC ‘exchanges’ such as the CSSIE group (Control Systems Security Information Exchange).
- the understanding of risk and system criticality is maturing, this should support design of proportionate regulation that lifts maturity, readiness and responsiveness of both system critical and non-critical parties.
- the perceived protection between internet/cloud based systems and physical plant control based systems is a misnomer as supply chain threats can compromise physical systems remotely.

SRC's advice to the Authority:

- **lift understanding of cyber security** through engagement with participants and regulatory bodies such as NCSC and DPMC. The Authority should have a role in shaping tiered/ proportionate rules to lift readiness/responsiveness for system critical and non-critical participants.
- **encourage participants to** engage in DPMC's upcoming consultation and consider voluntarily self-assess against Australian Cyber Security Standards.

It is evident electricity sector participants are engaged on cyber risk and improving readiness. This is an area where risk appears to be increasing, despite endeavours of participants. The Authority should have (a) a good understanding of risk and readiness (for example, regular survey or information provision¹) (b) can provide a valuable role in shaping rules under development by the DPMC.

4. 2025 Security of Supply Assessment

SRC members were already in possession of the System Operator's final 2025 annual security of supply assessment (SOSA). The System Operator was invited to present headlines from the SOSA, changes since it was published on 30 June and share key insights.

¹ The surveys conducted by SRC in 2021 and 2022 were cited by presenters as an example of what could be done annually by the Authority. An AEMO survey was also referenced.

The presenter explained that SOSA looks at winter energy and capacity margins over a ten-year period taking into account forecast demand, demand profile and new generation known or expected to come online:

- the SOSA analysis presents a very tight energy and capacity outlook where there is little margin for higher than forecast demand growth, plant retirement, fuel shortage or delayed commissioning of new generation
- there is a moderate likelihood that even faster build of new generation will be needed to keep winter energy margins above the NZ electricity standard

The SRC recommends the Authority:

- **maintain pressure on participants** to mitigate near term energy and capacity risk (as done for 2025), to firm up and execute on generation build plans.
- **accelerate rule changes** to enable / incentivise battery investment and mitigate capacity risk. These changes are shifting from 'nice to have' to 'must have' to mitigate near-medium term energy and capacity risk.
- **address the capacity and energy risks arising from increased intermittency.** As the proportion of intermittent renewables increases more flexibility is required. This includes sufficient thermal plant / fuel, batteries, efficient demand response, strategic fuel reserves and judicious use of contingent hydro storage.

5. SOSFIP review

The System Operator updated the SRC on progress with its SOSFIP review. The SRC:

- supports the System Operators work and recognises the opportunity to refine energy risk curves, simulated storage trajectories and “watch” and “alert” triggers
- notes the project timeline and intention to submit proposals to the Authority in December 2025, with the intention changes are in place before winter 2026.

The SRC's view is, if flexibility can be increased (and prices reduced) while preserving or enhancing security of supply and without unduly impacting local environments, then this should be done. SRC recognises there are regulatory complexities and hopes the System Operator, Authority and Government are all joined up and thinking laterally about how to overcome these.

The SRC recommends the Authority:

- **encourage creative and joined up thinking** in reviewing contingent storage access / the “Tekapo shadow constraint”. Pursuit of greater flexibility, lower prices, stable security of supply, low environmental risk are worthy goals.

6. The SRC's next meeting

The SRC's Q4 (October 2025) agenda is still being finalised. The following themes are being considered:

- a. Technical standards: the extent to which standards falling out of date exposes New Zealand to future system security risk and unnecessary costs. Case study: inverter standards.

- b. Implications of falling gas production on the electricity system: fuel for generation (capacity/energy), impacts of accelerated gas to electricity conversion (generation / network capacity, energy)
- c. Annual System Operator performance assessment

Yours sincerely,

A handwritten signature in dark ink, appearing to read 'H Roy', is positioned above the typed name.

Hon Heather Roy
Chair of the SRC

cc: SRC members, Natalie Bartos, Hayden Glass (Authority)