

6 June 2025

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

Dear Anna,

Advice from 29 May 2025 SRC

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.

At the May SRC meeting

The focus of the May SRC meeting was for the SRC to gain an understanding of generator's asset management practices with a particular focus on maintaining ageing plant.

As part of the asset management theme, the SRC received presentations from and spoke with:

- Genesis Energy
- Contact Energy and
- Meridian Energy

The SRC also received a joint briefing from the Authority and the System Operator on the security of supply outlook for winter 2025.

Winter 2025 outlook

Following the February update on energy and *capacity challenges for winter 2025 and beyond* the SRC requested a joint update from the Authority and the system operator on the security of supply situation heading into winter 2025.

- Members congratulated the Authority on the publication of thermal fuel information, particularly regarding contracted gas availability.
- The SRC observed the security of supply situation is largely unchanged year to year – the power system relies on asset reliability and availability to provide resilience. This is a growing concern as those assets age.
- Earlier action on gas supply arrangements by participants this year was acknowledged and taken as a sign that industry had learned from last year and taken prompt action.
- Industry participants still consider there to be uncertainty on the access conditions to contingent storage. Noting that later in the day the SRC heard from three

gentailers that they have engaged with relevant consenting authorities to review their operating and contingent storage settings.

- The SRC looks forward to receiving the final report on the annual pan-industry exercise, noting that early feedback on the event has been positive.
- The System Operator noted the increased peak capacity risk is being seen in shoulder seasons in addition to the historical winter capacity issues. This concern was also raised by SRC members during a future risks discussion

Advice

- The SRC recommends the Authority work with the system operator and Genesis to understand the timelines for resolving the “Tekapo shadow constraint” issue
- The Authority should have a vision for the medium and long-term role of consumer DER to manage peak demand and capacity issues.
- The SRC encourages the Authority to consider issues and potential solutions for the reliance on slow start thermal plant during high hydro storage/inflow conditions.
- The SRC would appreciate further insight on the System operator’s concerns regarding contingent storage use.

Asset management and ageing plant

There were several common themes through the three presentations as well as some points specific to individual companies.

Common themes

- It was positive to see companies considering critical spares and thinking differently about how they use their assets. This included the purchase of dual use transformers to provide spares redundancy across multiple assets and sharing assets across organisations.
- All three generators demonstrated good asset management practices.
- A strong pipeline of future investment was presented, each tailored to the risk perception and appetite of the individual organisations. Sovereign risk for long duration asset investments were raised as a concern.
- The investment pipeline is predominantly in new wind and solar developments, with some large-scale battery storage also under development. No participants discussed future plans to invest in new thermal capacity. There was a common theme of enhancing existing assets as the lowest cost way of delivering additional capacity. Though issues working through the System Operator’s connections standards process was raised.
- Outage windows for maintenance are extending the security risk into shoulder seasons. There was also acknowledgement of the workforce capability issues that are increasing with these ageing assets.
- Concerns were raised with the System Operator’s perception of asset owner’s motives regarding access to contingent storage which identifies as a barrier to progress. All three generators highlighted their concerns regarding social licence to

operate in this regard and the need for a common understanding of the decision-making framework was required.

Genesis

- Huntly station is the only large-scale dry year reserve and capacity flex plant remaining.
- Industry has started to realise the importance of Huntly and discussions on the investment necessary to keep it running are underway, noting that market signals alone are no longer strong or consistent enough to keep the third Rankine unit in market.

Contact

- Recent Geothermal development was intended to displace TCC, there is no viable option to retain TCC past winter 2025.
- Concerns raised that oil and gas standard regarding pipework were being applied unnecessarily strictly to geothermal pipework.

Meridian

- The SRC took comfort from Meridian's long-term view of asset maintenance and upgrade work
- Meridian's approach of getting the maximum from existing assets is positive for addressing the need for uncreased renewable generation at lowest cost

Advice

- EA should engage with the SO to ensure that asset connection assessment requirements are proportionate to the risk being managed and that the timeframes for progressing connection requests supports development.

The SRC's next meeting

The SRC's Q3 (August 2025) agenda is still being finalised. The following themes are being considered:

- a. Cyber risk – invite NCSC, Transpower and ENA – what concerns them at a holistic level and cyber specifically
- b. System Operator contingent storage analysis and concerns presentation

Yours sincerely,



Hon Heather Roy
Chair of the SRC

cc: SRC members, Chris Otton and James Blake-Palmer (Authority)

1 July 2025

Hon Heather Roy
Chair
Security and Reliability Council (SRC)

By email: heatherjroy@gmail.com

Dear Heather,

Re: SRC advice from its 29 May meeting

Thank you for your letter of 6 June 2025. The Electricity Authority Te Mana Hiko (Authority) Board considered the SRC's advice at its 17 June 2025 meeting. This response reflects that consideration.

Energy and capacity challenges for winter 2025 and beyond

The Authority strongly supports the SRC's approach of having a joint Security of Supply update from Authority staff and the System Operator. This combined view of security of supply risks will help ensure we collectively are focusing on the most critical issues and should allow the SRC to draw out points of difference between the view of the Authority and that of the System Operator.

- **Tekapo shadow constraint** - We agree that certainty and clarity around the impacts and management of the Tekapo shadow constraint would benefit the market as a whole.

We are engaging with the System Operator on the SOSFIP review (where the shadow constraint, among other issues, is being considered). Authority staff will also seek regular updates on the progress of the discussions we understand that the System Operator is facilitating between Genesis and Environment Canterbury. It may be that the most efficient way to resolve this issue is via the resource consent system.

- **Develop a vision for the medium and long-term role of consumer DER to manage peak demand and capacity issues** - We recently released our green paper on decentralisation which discusses the emergence of small scale, widespread DER resources and how they will impact the power system and market. We plan to use this green paper as the foundation for discussions on what a more decentralised electricity system could look like, and what steps might be needed to get there. The outcome of this consultation will shape our vision and work programme for DER.
- **Consider issues and potential solutions for the reliance on slow-start thermal plant during high hydro storage/inflow conditions** - The power system's reliance on slow-start thermal plant to back up wind generation in times of high hydro storage or inflows is a concern. We acknowledge industry is responding through products such as the Huntly firming options and the Heads of Agreement discussions. It is also positive to see the recently announced collaboration around the strategic energy reserve centred on the Huntly power station.

For our part, we are looking at enhancements to existing ancillary services to provide additional incentives for resources to be committed during periods of high risk. We are aiming to consult on options in early 2026. We are also engaging at a Board level with GIC on collaboration opportunities to support security of supply.

- **System Operator concerns about contingent storage use** – We understand you have asked the System Operator to outline its concerns at your August meeting. We welcome SRC's continued attention on the issues around contingent storage.

Asset management and ageing plant

- **Asset management practices** – It is reassuring generators demonstrate good asset management practices. Given the increasingly important role of smaller generators in supporting regional resilience, we encourage the SRC to include their perspectives for the fullest understanding of the issues and differing views.
- **Asset connection assessment requirements** – We are engaging with the System Operator to ensure its asset connection assessment requirements are proportionate to the risk being managed, and the timeframes for progressing connection requests supports development. In particular, the Authority's Future Security and Resilience team is engaged with the System Operator as it develops its connection assessment information requirements and is working with the Common Quality technical group to ensure the information requirements are reasonable and justifiable.

The SRC's next meeting

We welcome the SRC's plan to look at Transpower's annual Security of Supply Assessment (SOSA) and to explore the System Operator's contingent storage access concerns at its next meeting.

We also look forward to meeting your new members at our Board / SRC engagement in August and the opportunity to discuss how the new approach to supporting the SRC's work is going.

Thanks again for your letter. The SRC plays an important role in contributing to and testing the Authority's work.

Yours sincerely,



Anna Kominik
Chair
Electricity Authority Te Mana Hiko