

17 November 2021

Dr Nicki Crauford
Electricity Authority Chair
Electricity Authority
PO Box 10041
Wellington 6143

Dear Nicki

Advice resulting from the 21 October 2021 meeting of the Security and Reliability Council

The Security and Reliability Council (SRC) is tasked with providing the Electricity Authority (Authority) with independent advice on the performance of the electricity system and the system operator, and reliability of supply issues.

At the October SRC meeting

At its 21 October meeting, the SRC received presentations from gas participants and the Gas Industry Company, as part of its theme of gas reliability and resilience. SRC members also gave feedback on the independent dry year event review to the reviewers, received an update on progress of FSR project workstreams, and considered the system operator's annual self-review and annual security of supply assessment. This letter is the SRC's advice arising from the meeting.

Gas reliability and resilience

With the critical role that gas plays in the transition to decarbonisation and renewable sources of electricity generation, a cohesive strategy across the electricity and gas sectors is needed. The SRC encourages the regulators in both sectors to work closely with the government to ensure appropriate policy settings are in place to achieve a pan-industry approach that delivers the critical commercial arrangements required.

A key requirement is to have clarity, where possible, as to the expectations placed on key generation participants and large-scale gas users, like Methanex and others providing supply and demand flex in times of reduced gas and other fuel supplies.

Ongoing capital work is required to maintain current gas production. Without it, production starts to decay almost immediately. Recent successes with in-fill gas drilling campaigns, while promising, should not lead to sector complacency.

Regulators of both sectors should ensure the right level of information is available to government, so appropriate signals and policy settings attract capital early enough and for long enough. This regulatory certainty is important due to the timeframes between discovery of new gas supply and gas being available for consumption. New Zealand needs to ensure gas generation is available to at least 2030 (and beyond) to support the transition to renewables and for peaking to cover capacity shortfalls. There is concern that

the reality of needing capital to maintain gas generation to and through the transition will be overshadowed by the aspiration of 100% renewables, and there will be shortfalls before the target can be met.

With the favourable short-run costs of gas storage, as compared with grid-scale batteries and pumped-hydro, more options for deep gas storage and transitional thermal peaking are also likely to be needed for an affordable transition.

Dry year event review

The SRC appreciated the opportunity to hear from MartinJenkins and comment on the draft review. It was noted until the full report is provided, after consultation submissions have been considered, the Council is limited in the formal advice it can give the Authority Board. However, the SRC has provided comments to MartinJenkins for incorporation into the draft report that will be presented to the Authority for the consultation.

Member comments reinforced the draft report findings that the Authority, as Kaitiaki of electricity for New Zealanders, could be more explicit in its communications generally and about what it expects from sector participants during periods of constraint and emergency situations.

Such situations increase the pressure on the government to react. It is therefore critical for the government to have appropriate information from trusted sources at the right time. If appropriate lines of communication are not in place to enable this, the timing and strength of response, however well intentioned, may adversely impact the sector's reputation and reduce regulatory certainty for its participants.

It was noted there was a gender imbalance of interviewees for the report, albeit with acknowledgement this likely reflects more the current gender composition of the sector, rather than any intention of the interviewers. That said, the SRC encourages the Authority to always be mindful of any unintentional gender bias and strive for equality across all its engagements and workstreams.

The SRC would welcome the opportunity to provide further input once the consultation process has been completed.

FSR update

The SRC appreciated a further update from Authority staff on progress with its FSR and related workstreams. From a risk perspective, the SRC is pleased to see the Authority taking the time to learn from other relevant jurisdictions in this early phase.

Two areas members noted were:

1. the need to ensure technical standards keep pace with technological change and remain fit-for-purpose; and
2. the need for future engagement on suitable options to occur across the consumer spectrum to ensure the 'prosumers' of the future represent the broadest possible group of consumers and interests, including vulnerable consumers, regardless of their demographic and ability to take advantage of future technologies.

As with other workstreams potentially impacting security and reliability, the SRC welcomes the opportunity to provide further input as the FSR and related workstreams progress.

9 August 2021 event

Due to the timing of the SRC's October meeting and phase two of the Authority's review, the SRC gave feedback on the draft terms of reference out of cycle. There was further discussion at the meeting.

Some comments from the discussion were the need to acknowledge differences in expectations and impacts of supply interruptions in different communities, such as between rural and urban customers, and for reviewers to consider how this could be reflected in the approach taken for phase two.

The SRC also recommends the phase 2 review include the use of a systematic investigative approach, such as Incident Cause Analysis Method (ICAM) to determine the root cause(s) and wider systemic contributory factors. This would help ensure appropriate policies and procedures are in place for an effective chain of command and resulting communications for any future emergencies.

System Operator Security of Supply Annual Assessment

The SRC was generally comfortable with this year's security of supply annual assessment (SOSAA), noting the slightly higher projected level of security of supply for the first half of the decade.

The SRC is concerned there may be a disconnect in the second half of the decade between the need for potential new supply during a time of transition in line with current decarbonisation policy settings. Members felt this may have potential to discourage critical investment in new plant and storage opportunities.

To maintain appropriate security margins beyond 2026 there is continued need for more investment in non-intermittent solutions to maintain appropriate security margins. Final Investment Decisions (FIDs) will need to be taken in the next couple of years if the new generation is to be commissioned when needed.

Annual self-review of system operator performance

The SRC appreciated the opportunity to consider an indicative draft of the Authority's response to the system operator's self-review.

Members commented a self-review is valuable but is much the same year on year. Members were mindful of the resource required to produce it and whether there are potential opportunities for efficiencies.

The SRC is aware the Authority still conducts its own review in line with Service Operator Service Provider Agreement (SOSPA) requirements and general Market Operation Service Providers (MOSP) oversight.

The SRC understands there is work on forming a rolling 10-year plan for the system operator and looks forward to discussing this when it is rolled out.

Plain language approach to maximise understanding and impact

The SRC is mindful of the benefits of plain language in communications and is pleased to see this in more recent communications from the Authority, for example information papers, executive summaries, reduction in overly technical language and both visual and written representations of key data. To maximise engagement with the widest audience, plain language principles should be part of all Authority communications.

The technical nature of the power system and market operation often requires detailed explanation, and the SRC acknowledges the Authority's development of plain language in its communications. The SRC encourages the Authority to continue its work improving the accessibility of its communications for the non-technical audience and believes this will help increase its positive engagement with industry participants and consumers.

Yours sincerely

A handwritten signature in black ink, appearing to read 'H Roy', is centered below the closing. The signature is fluid and cursive.

Hon Heather Roy
Chair of the SRC

cc: SRC members, Grant Benvenuti (Authority)

22 December 2021

Hon Heather Roy
Chair
Security and Reliability Council (SRC)

By email: heatherjroy@gmail.com

Dear Heather

Response to your letter of 17 November 2021

Thank you for your letter of 17 November 2021 that gives the SRC's advice arising from its 21 October 2021 meeting. The Authority Board considered all the advice at its 7 December 2021 meeting and have asked me to write to you with their response.

Gas reliability and resilience

The Authority acknowledges the call for a cohesive cross-sector energy strategy to manage the interdependencies between gas and electricity. The Authority recently hosted the Gas Industry Co (GIC) at the Authority's November Board meeting. This engagement provided opportunities to share information and discuss relevant issues affecting both sectors.

The GIC briefed Authority members on gas availability and storage over the next two years and beyond, conclusions from the GIC's recent gas market settings consultation, and information disclosure. The general view of the gas sector is the gas market settings are fit-for-purpose to support an increasingly renewable electricity sector, but policy certainty is needed to drive investment.

The Authority has recently made improvements to the information disclosure requirements by temporarily lowering the threshold of what information must be disclosed. We have now approved this as a permanent change. Earlier in 2021, we approved Code changes to require certified quarterly reporting of how information is disclosed and how exemptions to the disclosure obligations are being used. This is to ensure participants make conscious decisions around information disclosure and information that is withheld. These changes help ensure fitness-for-purpose of the wholesale information disclosure regime¹.

Information from this and other work informs engagement Authority staff regularly have with government Ministers and officials. The Authority agrees, a high level of engagement is needed to support the government's role to establish a cohesive strategy, for example through its Emissions Reduction Plan. Authority staff will continue to engage with the government and participants to pass on timely and accurate information and support a reliable and sustainable transition to a low emissions future.

¹ See [Wholesale Market Information Disclosure — Electricity Authority \(ea.govt.nz\)](https://www.ea.govt.nz/wholesale-market-information-disclosure)

Dry Year Event review

The Authority acknowledges the SRC's feedback on the review so far and welcomes more formal feedback post-consultation. I will ensure staff keep the SRC up to date on progress, through the secretariat.

Communications around emergency situations are critical, and the Authority has a role to ensure this happens effectively through engagement and regulatory settings. As part of this role, real-time management of the power system and related communications are carried out by the system operator, in line with the System Operator Service Performance Agreement, the System Operator Security of Supply Forecasting and Information Policy (SOSFIP) and the Participation Code.

The arrangements between the Authority and the system operator include clear objectives, performance requirements and periodic and incident reviews. The dry year put a spotlight on these arrangements and, as noted in reviews so far on 9 August, there is scope for improvement in how the system operator communicates with participants in an emergency. Further improvements may arise from the SOSFIP/EMP (Emergency Management Policy) review now underway.

As noted above, Authority staff regularly meet with the Minister's officials and the Minister on events impacting the energy portfolio. There is a high level of trust in the information being exchanged. The frequency and weight of these communications, and the level they are given at, depends on the issue at hand and its criticality. Information provided to government is checked, and peer reviewed to ensure it is meaningful and accurate.

The SRC's comments on gender equality reminds all of us of the need for inclusion to underpin meaningful engagement across the sector and with consumers. While we see improvements there is always more to do, which is part of the basis for the Authority's strategic aim to build trust and confidence in the sector.

Future Security and Reliability (FSR) update

The Authority appreciates the SRC's advice on the FSR workstreams. The two points raised

(appropriate technical standards and understanding the demand-side through engagement) are challenges noted by the system operator to be addressed in later phases of the FSR work programme once the phase 2 roadmap is established.

There will be further opportunity for the SRC to input into this work. We understand the SRC will devote some time at its next meeting and the Authority welcomes further SRC advice on the issues raised.

Events of 9 August

The Authority appreciates the feedback the SRC has provided on the 9 August event reviews so far. I will ask Authority staff to pass onto the reviewers the further comments from your letter, so they can assess how the suggestions may be incorporated.

With other reviews on 9 August events also in progress, there is a need to avoid duplication of effort and, where possible, align methodologies to maximise the learnings and benefits. To that end, the SRC's proposed ICAM approach, or a suitable equivalent, appears sensible and we have passed this advice onto the team managing the Phase 2 review.

System operator security of supply annual assessment (SOSAA)

The Authority is pleased to hear the SRC is generally comfortable with the findings in this year's SOSAA. While we are confident the framework is in place to manage security of supply there is

ongoing need to monitor whether policy settings will drive the necessary investment in generation security in the right timeframe.

The FSR workstreams noted above will assist in this work, as will the government's updates on its Emissions Reduction Plan.

Annual self-review of system operator performance

The Authority acknowledges the work the SRC does to ensure high levels of system operator performance. The real-time role of system operator in managing the power system is critical and therefore periodic reviews are essential to maintaining confidence in the work done by the system operator. We will consider further the SRC's comments on the self-review and any potential opportunities for efficiencies.

Regarding this year's report, the Authority considers the system operator performed well during the reporting period. There will be some recommendations around additional reporting and other reviews may highlight further areas for consideration.

We understand the SRC will consider the final report at its first meeting for 2022 and welcome further advice on any areas impacting security and reliability.

Plain language approach

The Authority acknowledges the SRC's feedback on how its communications are received. Plain language is indeed an important component of meaningful engagement. The Authority's strategic aim of consumer centricity reinforces our commitment to this and the results and feedback from stakeholders, for example around the consumer care guidelines, have affirmed the benefits plain language can deliver.

Accessible communications from the Authority are core to our statutory function and are an important component of our engagement and educational strategies. The Authority Board fully supports a plain language approach, to help us deliver a world standard power system for all New Zealanders.

Yours sincerely



Dr Nicki Crauford
Chair