SECURITY AND RELIABILITY COUNCIL

24 August 2021

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

Dear Nicki

Advice resulting from the 4 August 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.

Events of 9 August

The SRC expresses its disappointment consumers did not receive a reliable electricity supply on 9 August 2021. The SRC acknowledges the Authority's inquiry into the events that led to consumers being disconnected and supports the need for urgent review and assurance the systems and processes support the highest level of reliability possible.

As it has with the Dry Year event review, the SRC would welcome the opportunity to help the Authority with the reviews of 9 August events.

At the August SRC meeting

At its 4 August meeting, the SRC held its annual strategy session, discussed the scope and terms of reference for the Dry Year review and discussed a range of papers, as part of its theme of understanding consumers. This letter is the SRC's advice arising from the meeting.

NZ Battery Project

The SRC appreciated receiving an update from MBIE's NZ Battery Project team at the August meeting. The SRC offered many questions and suggestions for the MBIE team to consider. Key points made included the need for the project to:

- a) obtain advice, suggestions and ideas from as wide an audience as possible
- b) consider whether to run a contested process to flush out any potential commercial solutions
- c) ensure the focus and approach to their work does not result in unintended consequences affecting security and reliability of the power system

 reduce potential issues during the transition to 100% renewable energy by balancing the need to manage security of supply and dry year risk against maintaining affordability for consumers and incentivising industry behaviour

The SRC would appreciate Authority staff passing on these comments to the NZ Battery Project team when engaging further on this important work.

Update on Future Security and Resilience matters being progressed

The SRC appreciated an update from Authority staff on Future Security and Resilience (FSR) matters being progressed. The SRC acknowledges the Authority's recent efforts in progressing this work and is interested in receiving regular updates, as to how the project streams progress.

The SRC's strategic focus

At the SRC's previous strategy and risk session in 2020 it established, with the assistance of the Authority's Chief Strategy Officer, strategic themes to ensure an appropriate focus at each meeting and guide its forward work programme. At the SRC's 2021 strategy session members confirmed the SRC's strategic themes framework remains fit-for-purpose.

The top focus areas included the need:

- a) to focus on cyber security (actions both before and after event) to minimise disruption and restore systems post-event. This may include the need to set standards
- to ensure information flow (from industry to the system operator, regulators and consumers) is at a level to ensure engagement, trust and confidence and incentives
- c) to have a just and reliable transition to a low-emissions economy, with clear timeframes, standards, supported by robust gas system performance
- d) for the SRC (with its diverse backgrounds and interests) to bring strong consensus advice on contentious issues

The SRC is broadly satisfied the current overarching themes encompass these focus areas and will add a purpose statement to reflect the SRC's aims more explicitly to positively impact consumers through its work.

Dry Year Risk review

The SRC gave feedback on the proposed scope for the Authority's Dry Year Risk review. Authority staff have agreed to refine the scope and circulate for further SRC comment.

The SRC acknowledges the Authority has now committed to its own review of the events of 9 August and encourages the Authority to ensure both reviews are given appropriate resource and timeframes and avoid unnecessary duplication.

The SRC looks forward to reviewing a draft of the Dry Year Risk review report at its October 2021 meeting.

Hazards from trees regulations

The SRC has previously advised the Authority of the need for urgency in reviewing the current hazards from trees regulations. The SRC notes with disappointment that the review, started by the Ministry of Business Innovation and Employment (MBIE) in 2019, has not yet progressed to the point of consultation. This is despite a stakeholder workshop occurring in December 2019.

The SRC requests the Authority pass on its concerns to MBIE, as this remains a significant reliability issue for consumers and MBIE should prioritise the work this year.

Understanding consumers (behaviours and expectations)

As part of its theme of understanding consumers, the SRC received an update on the Authority's initial steps under its refreshed strategic framework. The SRC acknowledges the Authority's approach in seeking an early assessment into how it is progressing and where improvements can be made.

To ensure the Authority meets its aspirations of consumer centricity, the SRC strongly encourages the Authority to take early opportunities to engage with the Consumer Advisory Council (CAC) once the members have been appointed.

The SRC considers significant benefit for the industry and consumers would come from broader research into consumer needs and expectations, similar in scope to that undertaken in Australia by the group, *Energy Consumers Australia*¹. The SRC considers the CAC may be the best-placed entity to undertake the work with the benefit of guidance from the Authority and input from other consumer organisations, including Utilities Disputes and industry association (such as ENA and ERANZ) consumer panels.

Understanding consumers (value placed on avoiding supply interruptions - the value of lost load or VoLL)

The SRC considered the value that consumers place on avoiding interruptions to their electricity supply. The measure of this value is known as *value of lost load* or *VoLL*, an economic value measured in a dollar amount for each Megawatt/hour (MWh). The default VoLL in the code is \$20,000 per MWh and has been since 2003.

The SRC repeats its previous advice that the Authority should review the VoLL specified in the Code, and that consideration should be given to including a range or several different VoLLs that apply to different customer types. The potential CAC research noted above could feed into a future VoLL review by the Authority, potentially in partnership with the Commerce Commission, given its use of VoLL.

Understanding consumers (Demand for electricity)

SRC members acknowledged the work being done by the system operator to better understand demand particularly as new technologies and climate change will make demand forecasting more uncertain in future.

¹ https://energyconsumersaustralia.com.au/wp-content/uploads/Future-Energy-Vision-Forethought-Household-Full-Report.pdf

While the reviews into the events of 9 August will look at how the system operator responded to record high demand, the SRC does not consider there is anything inherently flawed in the demand forecasting tools available to the system operator but will continue to consider demand forecasting, as part of its annual work programme.

Yours sincerely



Hon Heather Roy

Chair of the SRC

cc: SRC members, Grant Benvenuti (Authority)



24 September 2021

Hon Heather Roy Chair Security and Reliability Council (SRC)

By email: heatherjroy@gmail.com

Dear Heather

Response to your letter of 24 August 2021

Thank you for your letter of 24 August 2021 that gives the SRC's advice arising from its 4 August 2021 meeting. The Authority Board considered all the advice at its 7 September 2021 meeting and have asked me to write to you with their response.

Events of 9 August

The Authority appreciates and acknowledges the SRC's work to ensure reliable energy for all New Zealanders. The comprehensive approach being taken to review the events leading to consumers being disconnected on 9 August provides the opportunity to refine systems where necessary and give consumers confidence in the integrity of the system and its various components.

The Authority appreciates the SRC's input and understands the SRC will continue to receive information from its secretariat and Authority staff enabling input into the phase two work ahead.

NZ Battery Project

The Authority is mindful of the need for industry participants to consider what they can offer and engage meaningfully in solution-based discussions that maximise the benefits of a market-based supply chain and regulatory framework.

I will ensure the SRC's comments are passed on to the appropriate personnel within MBIE.

Update on Future Security and Resilience matters being progressed

The Authority is pleased to progress the Future Security and Resilience (FSR) project to support the power system through changes to technology and the transition to 100% renewable supply.

Authority staff will update the SRC, as to progress on the scenarios it is developing, seeking further SRC input, as part of a broad stakeholder engagement plan, also under development.

The SRC's strategic focus

The Authority notes the focus areas broadly align with the sector ambitions in the Authority's Annual Corporate Plan published in July, particularly maintaining reliability and a strong focus on consumer-centricity.

Regarding the role of the gas sector, we understand this is a key focus for the SRC's October meeting. We look forward to the SRC's feedback and advice, and how it can be incorporated in various Authority and wider industry and government workstreams where needed.

On point d) in your advice, this is a good opportunity to acknowledge the value of SRC members distilling their significant experience and diverse views into a consensus view that supports the SRC's core role and positively impacts trust and confidence.

Dry Year Risk review

The Authority has received positive feedback from staff about the SRC's suggestions for the review. I will ensure staff action those suggestions and keep the SRC up to date on progress, as the work continues.

As with other reviews, we acknowledge the timing of SRC input may not always align well with its meeting cycle, in which case we will ensure Authority staff have necessary channels open to capture SRC feedback and incorporate it to keep work on track.

Hazards from trees regulations

The Authority appreciates the SRC's candid view on these regulations and acknowledges the call for change aligns with both industry and government perceptions of the issue.

While this work will be subject to competing priorities, we acknowledge there is scope for more engagement with industry and consumers about how the work is progressing and what next steps are. I will ask Authority staff to follow up with MBIE, advising them of the SRC's concerns and seeking an update on progress.

Understanding consumers (behaviours and expectations)

A priority for the Authority is to ensure its initiatives and activities are guided by a consumercentric focus. Staff are reviewing the feedback from recent assessments and we expect the learnings will provide guidance for current and future work.

We can assure the SRC the Consumer Advocacy Council will be a key stakeholder for the Authority, and we are already developing key relationships to enable this.

We support more consumer research being undertaken, particularly around the areas of technology uptake and industry perception. This needs to be done by the appropriate agencies and appears in scope for the CAC.

Understanding consumers (value placed on avoiding interruptions – the value of lost load or VoLL)

The Authority acknowledges the SRC's advice on reviewing VoLL in the Code. The Code allows for different VoLLs through stakeholder engagement or direct application to the Authority. While the Authority acknowledges updating the Code is desirable, with the recent workloads this project will need to rank with other projects in the potential workplan.

Understanding consumers (demand for electricity)

The Authority acknowledges the SRC's ongoing consideration of demand forecasting.

There are several workstreams that touch on the issue of demand, including the FSR project noted above and other work by industry on the impact of distributed energy resources and the increasing role they will play in future. Authority staff will make sure to pass on information to the SRC through its secretariat.

Yours sincerely

Dr Nicki Crauford

Chair