

Meeting Date: 27 May 2021

PURPOSE AND SCOPE OF NEXT  
MEETING'S SUBSTANTIVE PAPERS

SECURITY  
AND  
RELIABILITY  
COUNCIL

**Note:** This paper has been prepared for the purpose of the Security and Reliability Council. Content should not be interpreted as representing the views or policy of the Electricity Authority.

# 1 Purpose and scope of next meeting's substantive papers

## 1.1 This is the SRC's opportunity to provide verbal guidance for next meeting's substantive papers

- 1.1.1 The Security and Reliability Council (SRC) directed its secretariat to facilitate in all future SRC agendas information which would allow the SRC to provide expectations for the following meeting's substantive papers.
- 1.1.2 The purpose of this direction was to improve the efficiency and effectiveness of the secretariat's preparation of the substantive papers. If there is any particular context or SRC concerns/questions, these would be valuable to share with the secretariat.
- 1.1.3 The next meeting's substantive papers are:
  - a) understanding consumer behaviour and expectations
  - b) understanding the value of electricity to consumers
  - c) demand for electricity
  - d) various measures of reliability
  - e) security of supply updates
  - f) risk and strategy environment scan.

## 1.2 Understanding consumer behaviour and expectations

- 1.2.1 The secretariat considers the purpose of this paper is to:
  - a) ensure the SRC understands consumers
  - b) provide assurance about the suitability of the arrangements by which the electricity industry and its regulators remain informed about consumers.
- 1.2.2 This is item #36 in the SRC's forward work programme, due in Q3.
- 1.2.3 The secretariat intends to compile and review published information about consumers (such as surveys, or Utilities Disputes' summaries of what consumers complain about) from the Authority, EECA, Utilities Disputes, Commerce Commission, Transpower, Transpower's consumer advisory panel, Federated Farmers, Electricity Retailers' Association, Otago Energy Research Centre, and the Ministry of Business, Innovation and Employment.
- 1.2.4 From that review, the secretariat would present a selection of data and the insights as identified by the relevant researchers or the secretariat.
- 1.2.5 The secretariat would also list the various data sources and their publication cycle (if any). This should provide visibility of what organisations are doing to stay 'in touch' with consumers. The extent to which those arrangements are providing a comprehensive and current understanding of consumers will provide some degree of assurance on the topic.

## 1.3 Understanding the value of electricity to consumers

1.3.1 The secretariat considers the purpose of the paper is to:

- a) ensure the SRC is familiar with a few key statistics about estimates of the value of lost load (VoLL) to consumers
- b) provide assurance about the suitability of the arrangements by which VoLL is estimated and used throughout the electricity industry.

1.3.2 This is item #38 in the SRC's forward work programme, due in Q3.

1.3.3 The secretariat will list previous studies of VoLL and summarise key statistics from the most recent and best practice study. The secretariat will put these statistics in context: how they compare with a few foreign jurisdictions, how they are used by key organisations and how they compare with \$/MWh assumptions used elsewhere.

1.3.4 However, the secretariat anticipates that the paper's scope will exclude *analysis on the suitability* of how the industry and its regulators are using VoLL. The paper will examine the accuracy of VoLL as an input assumption only.

## 1.4 Understanding demand for electricity

1.4.1 The secretariat considers the purpose of this paper is to:

- a) ensure the SRC understands the range of demand forecasts over various timeframes
- b) provide assurance about the industry arrangements for demand forecasting.

1.4.2 This is item #37 in the SRC's forward work programme.

1.4.3 The secretariat will summarise actual historical demand trends. The secretariat will list the organisations that undertake demand forecasting and, where information is publicly available, summarise the forecasts.

1.4.4 The secretariat is not intending to retrospectively analyse which forecasters have been most accurate, or to examine the incentives on different types of demand forecasters.

## 1.5 Various measures of reliability

1.5.1 The secretariat considers the purpose of this paper is to:

- a) provide the SRC with **available** security and reliability data, at network and transmission level, excluding data already published<sup>1</sup>
- b) Include the below list of measures that could be provided to the SRC, if they are seeking that level of detail:
  - i. the count of under-frequency events (UFE)
  - ii. the count of grid warning notices
  - iii. the count of voltage and frequency excursion notices

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<sup>1</sup>

If further detail is required, SRC members may be interested in reading last year's paper: <https://www.ea.govt.nz/assets/dms-assets/27/SRC10-Measures-of-Reliability.pdf>

- iv. the count of times when reserves are less than required for security
- v. primary and secondary transmission outage counts
- vi. primary and maximum transmission outage duration in minutes
- vii. key metrics derived from the Authority's electricity distribution business (EDB) monitoring of disclosed data, including the average system availability index (ASAI)
- viii. changes in embedded generation volumes and trends.

c) note any limitations to the monitoring regime and forecasting reliability

1.5.2 This is #12 on the SRCs forward work programme.

## 1.6 Security of supply updates

1.6.1 The secretariat considers the purpose of this paper is to:

- a) guide the SRC on the relevant and essential reading parts of the look back at the winter just passed, while reviewing the system operator's Security of Supply Annual Assessment if it is available (SoSAA - #42 on the SRC's work programme)
- b) Outline the assessment framework, including the security standards
- c) Summarise the findings of each year's assessment
- d) Set out key differences between each year's assessment

1.6.2 This is #22 on the SRCs forward work programme. The secretariat considers it makes sense to have this paper and work programme #42 together if available.<sup>2</sup>

## 1.7 Risk and strategy environment scan

1.7.1 The secretariat considers the purpose of this paper is to:

- a) provide the SRC with information about its role to inform its strategy discussion
- b) ensure the SRC's focus enables it to provide the Authority with meaningful, actionable advice

1.7.2 The secretariat will provide supporting material, drawing on material from the strategic framework established in previous sessions

1.7.3 The secretariat does not intend to verbally present the material, instead offering it to provide a framework for considering the strategic issues and spur discussion.

1.7.4 The secretariat anticipates the session will have three main components:

- a) The SRC's role/function/purpose and other introductory context.
- b) Review of the top 3 SRC priorities.
- c) Review of the EPR G2 programme of work.

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<sup>2</sup>

If further detail is required, SRC members may be interested in reading last year's paper:

<https://www.ea.govt.nz/assets/dms-assets/26/26994SRC11-SO-Annual-Assessment-of-Security-of-Supply-Appendix-Combined.pdf>

1.7.5 This is #35 on the SRC's forward work programme.