



# Reliability Forecast Guidelines

Consultation paper

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New South Wales | Queensland | South Australia | Victoria | Australian Capital Territory | Tasmania | Western Australia

Australian Energy Market Operator Ltd ABN 94 072 010 327

## Explanatory statement and consultation notice

This consultation paper commences the first stage of the standard rules consultation procedure conducted by AEMO to review the Reliability Forecast Guidelines (the Guidelines), in order to maintain the Guidelines as required under National Electricity Rules (NER) 4A.B.4. This consultation will follow the standard rules consultation procedure described in NER 8.9.2.

Given the preliminary status of the consultation topics, AEMO is not including a draft update to the Guidelines with this consultation paper. A draft update to the Guidelines will be released with the draft determination.

## Consultation notice

AEMO is now consulting on this proposal and invites written submissions from interested persons on the issues identified in this paper to [energy.forecasting@aemo.com.au](mailto:energy.forecasting@aemo.com.au) by **5:00 pm (Melbourne time) on 5 February 2024**.

Submissions may make alternative or additional proposals you consider may better meet the national electricity objective in section 7 of the National Electricity Law (NEL). Please include supporting reasons.

Before making a submission, please read and take note of AEMO's consultation submission guidelines, which can be found at <https://aemo.com.au/consultations>. Subject to those guidelines, submissions will be published on AEMO's website.

Please identify any parts of your submission that you wish to remain confidential, and explain why. AEMO may still publish that information if it does not consider it to be confidential, but will consult with you before doing so. Material identified as confidential may be given less weight in the decision-making process than material that is published.

AEMO is not obliged to consider submissions received after the closing date and time. While exceptional circumstances may enable consideration, any late submissions should explain the reason for lateness and the detriment to you if AEMO does not consider your submission.

Interested persons can request a meeting with AEMO to discuss any particularly complex, sensitive or confidential matters relating to the proposal. Please refer to NER 8.9.1(k). Meeting requests must be received by the end of the submission period and include reasons for the request. We will try to accommodate reasonable meeting requests but, where appropriate, we may hold joint meetings with other stakeholders or convene a meeting with a broader industry group. Subject to confidentiality restrictions, AEMO will publish a summary of matters discussed at stakeholder meetings.

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# 1. Stakeholder consultation process

AEMO must maintain its Reliability Forecast Guidelines in accordance with National Electricity Rules (NER) clause 4A.B.4. Apart from any minor or administrative changes, any revisions must be consulted on in accordance with the Rules consultation procedures set out in NER 8.9. The Australian Energy Regulator's (AER's) Forecasting Best Practice Guidelines<sup>1</sup> (FBPG) require AEMO to consult on these guidelines at least once every four years.

This paper commences AEMO's consultation to review the Reliability Forecast Guidelines. While AEMO proposes that the guidelines remain fit for purpose and has proposed only one material modifications, it welcomes submissions regarding potential changes that stakeholders consider should be included.

Note that this document uses terms defined in the NER, which are intended to have the same meanings.

AEMO's indicative process and timeline for this consultation are outlined below. Future dates may be adjusted and additional steps may be included if necessary, as the consultation progresses. In the event that these dates change, AEMO will clearly identify the timetable on the webpage for this consultation.

| Consultation steps                                                  | Dates           |
|---------------------------------------------------------------------|-----------------|
| Notice of first stage consultation and Issues Paper published       | 5 January 2024  |
| First stage submissions closed                                      | 5 February 2024 |
| Draft Determination & Notice of second stage consultation published | 4 March 2024    |
| Submissions due on Draft Determination                              | 8 April 2024    |
| Final Determination published                                       | 20 May 2024     |

Prior to the submissions due date, stakeholders can request a meeting with AEMO to discuss the issues and proposed changes raised in this Consultation Paper.

<sup>1</sup> <https://www.aer.gov.au/system/files/AER%20-%20Forecasting%20best%20practice%20guidelines%20-%2025%20August%202020.pdf>

## 2. Background

### 2.1. Context for this consultation

AEMO is required to publish Reliability Forecast Guidelines (Guidelines) to meet the requirements under NER clause 4A.B.4. The previous consultation on the Guidelines was undertaken in 2020. AEMO is required to consult on all of its methodologies every four years, in line with the Forecasting Best Practice Guidelines.

### 2.2. The national electricity objective

Within the specific requirements of the NER applicable to this proposal, AEMO will seek to make a determination that is consistent with the national electricity objective (NEO) and, where considering options, to select the one best aligned with the NEO.

The NEO is currently expressed in section 7 of the National Electricity Law (NEL) as:

*to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:*

- (a) price, quality, safety, reliability and security of supply of electricity; and*
- (b) the reliability, safety and security of the national electricity system; and*
- (c) the achievement of targets set by a participating jurisdiction—*
  - i. for reducing Australia's greenhouse gas emissions; or*
  - ii. that are likely to contribute to reducing Australia's greenhouse gas emissions.*

### 3. Possible changes to the Guidelines

AEMO has considered the current drafting of the Reliability Forecast Guidelines and proposes that the guidelines remain fit for purpose, with only one material change proposed.

#### 3.1. Calculation of a One-in-two year peak demand forecast.

The current drafting in the guideline states that AEMO uses its 50% Probability of Exceedance (POE) 'as generated' forecast as the one-in-two year peak demand forecast identified in NER clause 4A.A.4. The forecast of 50% POE maximum demand is produced following the methodology outlined in AEMO's most recent Electricity Demand Forecasting Methodology.

The use of 'as generated' for the one-in-two year peak demand forecast is developed to allow stakeholders to readily compare against demand in real time, because actual historical demand is reported ongoing by AEMO using this point of measurement.

However, since AEMO last consulted on this guideline, numerous factors have arisen that have the potential to result in larger variation between the definitions applied in forecasting, and those used operationally. These factors are:

- Demand side participation is considered by AEMO in its reliability forecasts, but is not considered in the operational demand definitions reported ongoing by AEMO. This factor has increased in materiality since last considered.
- Distributed aggregated storages are considered by AEMO in its reliability forecasts but are not separately considered in the operational demand definitions reported ongoing by AEMO. This factor has increased in materiality since last considered.
- Operational demand is reported on five minute average demand values, while the reliability forecasts are developed on thirty minute average demand values.

AEMO proposes to update the guidelines to reflect these factors in the calculation of the one-in-two year peak demand forecast per the following formula:

$$\begin{aligned} \text{One-in-two year demand forecast} = & \\ & 50\% \text{ POE maximum operational sent out demand forecast} \\ & + \text{forecast auxiliaries} \\ & - \text{average forecast demand side participation at time of maximum demand} \\ & - \text{average forecast distributed aggregated storages at time of maximum demand} \\ & + \text{thirty minute to five minute maximum demand adjustment.} \end{aligned}$$

#### 3.2. Minor and administrative changes

While only one material change is proposed, AEMO notes that the following minor and administrative changes are required:

- updates to reflect the current NEL, NER and NEO.
- updates to the names of consultation forums and engagement opportunities consistent with current practise.
- note the extension of the interim reliability measure until June 2028.
- updates to reflect the Integrating Energy Storage Systems (IESS) rule change and to extend all relevant obligations to bidirectional units.

- updates to AEMO's forecasting approach which have previously been consulted on.
- updates to address minor spelling issues.

AEMO has not included draft or proposed drafting with this consultation paper, which will instead be released with the draft report, once any other stakeholder perspectives are considered.

AEMO welcomes submissions regarding potential changes stakeholders consider should be included in the Guidelines consistent with NER clause 4A.B.4 and AER FBPG requirements.