



For consultation - Draft Interim Reliability Instrument Guideline

Retailer Reliability Obligation

April 2019

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1 Public consultation process

At the 26 October 2018 COAG Energy Council meeting, Ministers agreed that the Energy Security Board (ESB) will progress development of draft National Electricity Law (NEL) amendments that would give effect to a Retailer Reliability Obligation (RRO).

The ESB was tasked to develop the National Electricity Rules (NER) necessary to implement the Obligation. The draft Rules were published for stakeholder consultation on 8 March 2019. The final Rules are proposed to commence on 1 July 2019.

As set out in the Rules, the Australian Energy Regulator (AER) is responsible for developing a number of guidelines on certain aspects of the RRO. Due to timing constraints the Rules specify that the AER will develop a number of interim guidelines which will be in place for 1 to 2 years. During this time the AER will run a full consultation process to develop final guidelines.

The AER's guidelines consultation process is set out in Table 1.1 below.

Table 1.1 Guideline consultation process

	Consultation on interim	Final Interim	Final guideline
Reliability Instrument Guideline	April 2019	31 July 2019	31 July 2020
Market Liquidity Obligation Guideline	April/May 2019	31 August 2019	31 December 2020
Contracts and Firmness Guideline	May 2019	31 August 2019	31 December 2020
Forecasting Best Practice Guideline	May/June 2019	30 September 2019	30 November 2020
Opt-in Guideline	Late 2019/early 2020 TBC	No interim arrangements	30 June 2020
Reliability Compliance Procedures and Guidelines	Mid 2020	No interim arrangements	31 December 2020

1.1 Draft Interim Reliability Instrument Guideline - consultation

The AER is seeking feedback on the Draft Interim Reliability Instrument Guideline. Submissions to the consultation process should be provided by 24 April 2019, to meet the

timing requirements. A final Interim Reliability Instrument Guideline will then be developed, taking in to account stakeholder submissions, and published by 31 July 2019.

Submissions can be sent to RRO@aer.gov.au with the following title in the email: For consultation - Draft Interim Reliability Instrument Guideline. Submissions received will be published on the AER's website (www.aer.gov.au).

We prefer that all submissions be publicly available to facilitate an informed and transparent consultative process. Submissions will be treated as public documents unless otherwise requested. Parties wishing to submit confidential information should:

- clearly identify the information that is the subject of the confidentiality claim;
- and provide a non-confidential version of the submission in a form suitable for publication.

We will place all non-confidential submissions on our website. For further information regarding our use and disclosure of information provided to us, see the ACCC/AER Information Policy (June 2014), which is available on our website.

The remainder of this document is the guideline we are consulting on, the section above is included to provide an overview of the RRO work program the AER will be consulting with stakeholders on.

2 Overview

This document is a guideline produced in accordance with the National Electricity Rule (Rules) transitional provision 11.115.2(a) taking into account the matters set out in draft rules 4A.C.2.(b)(4), 4A.C.3.(b)(4), 4A.C.9(b), 4A.C.11 and 4A.C.12.

2.1 Purpose of this guideline

The AER aims to engage with all stakeholders of the RRO process to ensure specific roles required of the AER are undertaken in a transparent and efficient manner. The purpose of this guideline is to inform stakeholders how the AER will consider the approval criteria in respect of a request from AEMO for a *reliability instrument* to be made as set out in the Rules, how the AER will consult with stakeholders on a reliability instrument request and define what information AEMO must provide the AER as part of a reliability instrument request and the form of this information.

2.2 Roles and functions of the AER

The AER has a range of roles in the RRO process which are outlined in Part 2A of the NEL and 4A of the NER.

Our roles and functions for the RRO include:

- Creation of a six guidelines including¹:
 - .1. Reliability Instrument Guideline
 - .2. Market Liquidity Guideline
 - .3. Contracts and Firmness Guideline
 - .4. Forecasting Best Practice Guideline
 - .5. Opt-in Guidelines
 - .6. Reliability Compliance Procedures and Guidelines
- Decision to make or not make a reliability instrument
- Monitoring of the Market Liquidity Obligation
- Approval of bespoke firmness methodologies
- Decision to approve or reject an application to adjust a net contract position
- Large customer opt-in process and approval
- Compliance

¹ Due to timing constraints the Reliability Instrument Guideline, MLO Guideline, Contracts and Firmness Guideline and Forecasting Best Practice Guideline will be developed as interim guidelines for operation in 2019 and 2020.

2.3 Definitions and interpretation

In this guideline the words and phrases presented in italics have the meaning given to them in the Rules.

3 Reliability instrument process

If a *reliability forecast* (including an update of it under rule 3.13.3A(b)) identifies a *forecast reliability gap* for a region, AEMO must request the AER to consider making a *reliability instrument* at least three months before the T-3 / T-1 cut off day(s) for the relevant *forecast reliability gap* in accordance with section 14I of the NEL and the requirements of Part C, Division 1 of the Rules.

Following the receipt of a request form AEMO and subject to any corrections to the request, the AER has two months to consider whether to make a reliability instrument.

In making its decision the AER must:

- Consider the criteria set out in rule 4A.C.11
- Consult with stakeholders

Once a decision has been made the AER will publish the decision, the reasons supporting that decision and if applicable, the reliability instrument.

The *reliability instrument* takes effect once published on the AER's website.

4 Form of instrument

As specified under Rules 4A.C.2(b)(4) and 4A.C.3(b)(4) the Reliability Instrument Guideline will prescribe the form and information AEMO must include in a T-3 or T-1 *reliability instrument* request.²

4.1 T-3 and T-1 Instrument request

Under sections 14I(5)(a) and (b) of the NEL, the reliability instrument request may only apply to one *forecast reliability gap* period, however a request may be made on more than one occasion in a year for different forecast reliability gap periods in the same region or in different regions.

When making a reliability instrument request to the AER, AEMO must provide all of the relevant information set out at Rules 4A.C.2, 4A.C.3 and at section 14I.4(c) of the NEL. This includes:

- the *forecast reliability gap* (in MW)
- region in which the *forecast reliability gap* is forecast to occur
- first and last days of the *reliability gap period*
- AEMO's one-in-two year peak demand forecast for the *forecast reliability gap period*.
- for a T-3 reliability instrument request
 - .1. clarify that the *reliability forecast* published in the 6 months immediately preceding the T-3 cut-off day identifies the *forecast reliability gap*
 - .2. the trading intervals during the *forecast reliability gap period*, for which liable entities may be required to hold net contract positions that are sufficient to meet their share of the one-in-two year peak demand forecast for the *forecast reliability gap period*.
- for a T-1 reliability instrument request
 - .1. clarify that, the *forecast reliability gap* published in the related T-3 *reliability instrument* still persists
 - .2. The trading intervals during the *forecast reliability gap* period, for which liable entities will be required to hold net contract positions that are sufficient to meet their share of the one-in-two year peak demand forecast for the *forecast reliability gap period* if a T-1 instrument is made.

Our approach

Along with the information set out above, AEMO should also provide (or highlight where this information is located in the ESOO document) the following information to the AER when submitting a reliability instrument request:

² T-3 is 3 years from the forecast reliability gap. T-1 is 1 year from the forecast reliability gap.

- Data inputs, calculations, assumptions and methodology used in the *reliability forecast*
- How they have complied with the AER's Forecasting Best Practice Guideline
- Any additional supporting information, including but not limited to;
 - .1. Sensitivity matrix and/or sensitivity analysis of the dataset to assist in determining materiality of inputs and assumptions.
 - .2. Consultancy reports
 - .3. Input data and responses provided by AEMO in the stakeholder consultation process of the ESOO

This information must be clearly set out and provided in an electronic form to the AER when making a reliability instrument request.

5 AER decision making criteria

This section covers how the AER will consider the criteria set out in 4A.C.11 in whether to make or not make a reliability instrument.

Rule 4A.C.11 states that in considering if it is appropriate to make a *reliability instrument* the AER must only have regard to the following criteria:

- there are no material errors in AEMO's calculations or input data as it relates to the *reliability forecast*;
- AEMO has not made any assumptions underpinning its forecast data that are inaccurate and which have had a material impact on unserved energy outcomes in the *reliability forecast*; and
- AEMO has used reasonable endeavours to prepare the *reliability forecast* in accordance with the Forecasting Best Practice Guidelines.³

Section 14K(3) of the NEL also references the AER's decision to make a *reliability instrument* only if it is satisfied that a *forecast reliability gap* is forecast (for the relevant region and trading intervals) and it is appropriate in the circumstances having regard to the criteria stated in the Rules (above).

Our approach

The AER can therefore only make its decision to make or not make a *reliability instrument* based on the decision making criteria. If it is reasonably satisfied there are no material errors or incorrect assumptions and AEMO has used reasonable endeavours to prepare the *reliability forecast* in accordance with the Forecasting Best Practice Guidelines (aside from 2019), the *reliability instrument* will be made.

The AER's role in this process is not to re-create AEMO's *reliability forecast*, nor is it to duplicate the methodology or modelling used in the *reliability forecast*.

Stakeholders, including the AER, will have the opportunity to provide feedback to AEMO on the inputs used, assumptions made and chosen methodology for each ESOO (which will be used for the *reliability forecast*) as part of AEMO's consultation processes and in accordance with the AER's Forecasting Best Practice Guideline. The AER considers this is the appropriate step in the process of creating a *reliability forecast* where these issues should be discussed.

As the AER has a two month period in deciding whether to make or not make a reliability instrument, the AER will use submissions to AEMO and their responses as they consult with stakeholders on each ESOO, as part of the AER decision making process. The AER will also run a two week consultation period commencing immediately after the receipt of a reliability

³ Transitional provision 11.115.3(d) excludes the 2019 statement of opportunities from following the Reliability Forecast Guideline, which outlines how AEMO will implement the AER's Forecasting Best Practice Guideline.

instrument request seeking stakeholder comment on issues directly relating to our decision making criteria.

5.1 Whether there are material errors in AEMO's calculations or input data

Rule 4A.C.11(a) states that the AER, in considering whether it is appropriate in the circumstances to make a *reliability instrument*, must have regard to whether there are material errors in AEMO's calculation or input data that relate to the *reliability forecast*.

The AER will make an instrument unless there are material errors identified in AEMO's calculation of, or inputs used to create, the *reliability forecast*.⁴

Our approach

The process the AER will use to be reasonably satisfied of this rule will be a combination of data validation methods.

The AER will undertake a review of the data provided as part of the reliability instrument request, attempting to identify any inconsistencies within the data (internal validation) while also comparing it to external data sources for any material discrepancies (external validation).

The AER will also look to identify any significant changes in the input data, for example material changes from previous ESOO datasets or step changes in generation or demand forecasts. We would expect these changes to be explained and consulted on in the preparation of the ESOO or provided in supporting documents of the reliability instrument request.

Due to the large amount of data used to create the *reliability forecast* and the short timeframe in deciding whether to make or not make a *reliability instrument* the AER will undertake risk based targeted sample data checks. A focus will be placed on input data that could have a material impact on the *forecast reliability gap* which will be informed by the sensitivity matrix and/or sensitivity analysis provided to the AER by AEMO as part of the reliability instrument request.

The AER will also have regard to arithmetic or calculation errors when deciding whether to make or not make a *reliability instrument*. A disagreement on a technical aspect of the *reliability forecast* would not be considered. The AER considers issues such as these should be raised in AEMO's consultation processes on the inputs and methodology of the ESOO.

As specified in earlier, AEMO must provide a sensitivity matrix and/or sensitivity analysis as part of a reliability instrument request. This will be used as a guide to indicate how sensitive the results are to changes in inputs and assumptions (for example forced outage rates, or forecast peak demand). The AER will use this as a basis to determine if any errors identified in the calculation or input data are material.

⁴ Subject to 4A.C.11(b) and 4A.C.11(c)

Submissions from stakeholders will also be used to determine if any material errors in AEMO's calculation or input data have occurred in the *reliability forecast*.

5.2 Whether AEMO has made inaccurate assumptions that materially impact the forecast reliability gap.

Rule 4A.C.11(b) states that the AER, in considering whether it is appropriate in the circumstances to make a reliability instrument, must have regard to whether AEMO has made any inaccurate assumptions that underpin its forecast data and which have had a material impact on unserved energy outcomes in the *reliability forecast*.

This means that unless the AER identifies an inaccurate assumption used in the forecast to identify a reliability gap, and it had a material impact on unserved energy outcomes in the *reliability forecast*, it must make the reliability instrument.⁵

Our approach

For the AER to be reasonably satisfied of this rule it will consider the assumptions used by AEMO in its *reliability forecast*. Assumptions currently used by AEMO include, but are not limited to,

- Forced outages
- Demand forecasting scenarios
- Economic growth and population outlook
- Rooftop PV
- Non-scheduled PV
- Electric Vehicle uptake
- Battery storage installed capacity
- Weather and climate

For an assumption to be considered inaccurate the AER considers that it must be proven to be non-credible. For example, a contradicting view of an assumption from a publicly available highly reputable external data source.

However, to satisfy the rule it must also have had a material impact on unserved energy outcomes.

As discussed under section 5.1 above, the AER will use AEMO's sensitivity matrix and/or sensitivity analysis provided as part of the *reliability instrument* to determine if any inaccurate assumption is material.

Submissions from stakeholders will also be used to determine if any assumptions are inaccurate and have had a material impact on unserved energy outcomes.

⁵ Subject to 4A.C.11(a) and 4A.C.11(c)

5.3 Whether AEMO used reasonable endeavours to prepare reliability forecast in accordance with the Forecasting Best Practice Guideline.

Rule 4A.C.11(c) states that the AER, in considering whether it is appropriate in the circumstances to make a reliability instrument, must have regard to whether AEMO has used reasonable endeavours to prepare the *reliability forecast* in accordance with the AER's Forecasting Best Practice Guideline.

As identified in rule 4A.B.5, the AER will develop and publish a Forecasting Best Practices Guideline. The Guideline will provide guidance to AEMO's forecasting practices and processes which will need to have regard to the following key principles:

- Forecasts should be as accurate as possible, based on comprehensive information and prepared in an unbiased manner
- Basic inputs, assumptions and methodology that underpin forecasts should be disclosed
- Stakeholders should have as much opportunity to engage as is practicable, through effective consultation and access to documents and information

Our approach

Without prejudging the contents of the Guideline, the subject matter is likely to include:

- Consultation – the mechanisms which AEMO should use to consult with stakeholders and when these mechanisms may be appropriate, including a two-stage public consultation process, industry reference groups and expert reference groups.
- Methodology - to facilitate stakeholder examination, AEMO should use a component-based methodology when forecasting, with the components developed through consultation. The analytical approach AEMO uses for the reliability assessment should also be subject to some consultative scrutiny.
- Key parameters – AEMO should publish sample output of key non-confidential parameters so that the drivers of the combined components can be more readily evident. For example, customer demand forecasts are likely to be made up of inputs relating to GDP, residential solar, DER, battery uptake and battery dispatch.
- Scenarios – AEMO should publish information on the construction of scenarios and sensitivities and identify any reliability gap using the neutral or most likely scenario.
- Confidential data – AEMO should use the most accurate data in its reliability assessment including where available confidential data but release indicative data in such a way that doesn't compromise confidentiality, such as by aggregating in the publicly released Plexos dataset.

AEMO should provide the AER with information as to how they have undertaken their forecasting practices and process in line with the Forecasting Best Practice Guideline, or highlight where it is contained with the ESOO document, as part of the supporting documents for the reliability instrument request. They should also provide how they have responded to stakeholder feedback.

For the AER to be satisfied of this rule it will consider this information, along with stakeholders' submissions on the respective reliability instrument request and its own experience when engaging with AEMO as part of each year's ESOO process.

6 Stakeholder consultation

A two week consultation period will commence when the AER publishes the reliability instrument request on its website. The short time frame is a result of the AER's two month timeline to make a decision on the instrument request and allowing enough time to consider stakeholders feedback in the decision making process.

Stakeholders will be asked to provide submissions on whether AEMO's request for the AER to make a reliability instrument request should be approved or rejected. Stakeholders making submissions should consider that the AER is limited to the decision making criteria identified in section 14K(3) of the NEL and rule 4A.C.11, which states it can only have regard to the following criteria when considering to make or not make a reliability instrument:

1. there are no material errors in AEMO's calculations or input data as it relates to the *reliability forecast*,
2. AEMO has not made any assumptions underpinning its forecast data that are inaccurate and which have had a material impact on unserved energy outcomes in the *reliability forecast*, and
3. AEMO has used reasonable endeavours to prepare the *reliability forecast* in accordance with the Forecasting Best Practice Guidelines.⁶

Stakeholder submissions will be published on the AER's website and will be considered by the AER in its decision to make or not make a reliability instrument.

⁶ Transitional provision 11.115.3(d) excludes the 2019 ES00

7 AER decision

Section 14K(6) of the NEL states the AER must publish its decision to make or refuse to make a reliability instrument, and the reasons for its decision, on its website. If the AER makes the reliability instrument, it takes effect from the day it is published.

A decision must be made before the respective cut-off day (T-3 or T-1) for the reliability instrument request.⁷

As per clause 14K(3)(b) the AER can only make a *reliability instrument* for the region, *forecast reliability gap period* and trading intervals as stated in AEMO's request without modification.

If the AER makes a *reliability instrument* it will state the information set out in section 14I(4)(C). For a T-1 *reliability instrument* it will also set out the *contract position day* (including the new entrant contract *position day*) and *reporting day*.

The AER's decision on the reliability instrument request will outline how it has assessed the request in line with the decision making criteria, and how it has responded to stakeholder submissions.

⁷ The T-3 cut-off day for a forecast reliability gap is the day that is 3 years before the day the forecast reliability gap period for the forecast reliability gap starts. The T-1 cut-off day is 1 year before the day the forecast reliability gap period for the forecast reliability gap starts.