



COAG
Energy Council

ENERGY SECURITY BOARD

Retailer Reliability Obligation

Draft Rules Consultation Paper
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Overview

The Retailer Reliability Obligation (the Obligation) builds on existing spot and financial market arrangements in the National Electricity Market (NEM) to facilitate investment in dispatchable capacity and demand response. It is designed to incentivise retailers, on behalf of their customers, to support the reliability of the power system through their contracting and investment decisions.

The Obligation has three key drivers that will work together to lower electricity prices:

- increased contracting unlocking new investment
- increased contracting in deeper and more liquid contract markets to reduce the level and volatility of spot prices, and
- increased voluntary demand response.

The Obligation is specifically designed so that it does not undermine, and may indeed boost, competition through measures that enhance market liquidity and pricing transparency in retail and wholesale electricity markets. For example, when the Obligation is triggered, a Market Liquidity Obligation will require the largest participants to offer to buy and sell contracts with all participants in the region.

At the December 2018 COAG Energy Council meeting, Ministers approved the National Electricity Law (NEL) amendments necessary to give effect to the Obligation and tasked the Energy Security Board (ESB) with developing the draft Rules to support the legislation. This paper sets out the context and detail of the proposed changes to the draft National Electricity Rules (draft Rules) and seeks stakeholder feedback.

Operation of the Retailer Reliability Obligation

Making a reliability forecast

The annual Electricity Statement of Opportunities (ESOO) will include a Reliability Forecast identifying any potential reliability gaps in the coming five years. The final five years of the 10-year ES00 horizon will provide an indicative forecast of any future material breaches of the reliability standard.

The Reliability Forecast will identify:

AEMO's forecast of unserved energy for the forecast reliability gap period (USE);

- the size of the gap, expressed in MW;
- the forecast reliability gap period (i.e., the start and end date); and
- the likely time of occurrence of the shortfall, specified as trading intervals.

The draft Rules strengthen the existing regime to ensure that participants provide information to AEMO that gives a more robust understanding of the expected market outlook. The Rules also include specific requirements for AEMO to assess the accuracy of its supply and demand forecasts to enable improvements to the forecasting process for upcoming ES00s.

The draft Rules require the AER to provide guidance on AEMO's forecasting processes, including improved consultation, to ensure they are undertaken in line with identified best practices and minimum standards.

Updating a reliability forecast

AEMO will update the reliability forecast annually, in line with the existing ESOO process. More frequent 'out of cycle' updates may be required if there is a material change to the supply-demand outlook – such as when a generator announces retirement or there are significant changes in expected demand.

Triggering the reliability obligation

If a reliability gap is identified in the forecasts, the market will be expected to react. This could take the form of investment in new capacity (for example, generation, transmission, storage or demand response) or an offer of additional existing capacity to the market.

If there continues to be a forecast breach of the reliability standard, then AEMO must submit a Reliability Instrument Request to the AER three years and three months prior to the first day of the identified gap. The AER must then make its decision within two months of receiving the request from AEMO.

The AER will have some discretion not to issue a Reliability Instrument but there will be clear boundaries on the use of discretion by the AER. It would not be appropriate for the AER to replicate AEMO's ESOO modelling or provide alternative forecasts.

If the AER determines AEMO's assessment was robust, the AER will issue a T-3 Reliability Instrument, specifying the nature of the gap period.

Liable entities

If the reliability requirement is triggered, then all liable entities must assess their likely share of system peak demand and secure sufficient qualifying contracts to cover this by the Contract Position Day (T-1).

Liable entities will be each entity registered by AEMO as a market customer under the Rules (mostly retailers, but also other parties that purchase electricity directly from the NEM).

Large customers (who are not market customers) may be able to manage the obligation associated with their load more efficiently than their retailer. The NEL and draft Rules set out the conditions under which large customers may elect to 'opt-in' to manage their obligations directly.

New entrants, that enter the market in the final year before the gap period, will also be liable but will have different timeframes for reporting contracts.

Qualifying contracts

If the Obligation is triggered, liable entities will be required to enter into sufficient qualifying contracts to cover their share of system peak demand at the time of the reliability gap to meet possible future compliance.

Only certain types of contracts will count as qualifying contracts for the purposes of compliance with the Obligation. Qualifying contracts must be for the period of the reliability gap identified in the Reliability Instrument. When liable entities submit their net contract position to the AER for the reliability gap period, it must be adjusted for the relative 'firmness' of each contract.

The AER will publish a default methodology for calculating firmness. Entities can use a bespoke methodology but will need to have this audited independently and approved by the AER.

The firmness of a qualifying contract is a measure of the extent to which a qualifying contract reduces the exposure of a liable entity to the volatility of the spot price in a region during the gap period. The likelihood that the seller will 'defend' the contract by dispatching generation or other resources increases with the seller's exposure to spot market prices.

A 'Market Liquidity Obligation' will operate between T-3 and T-1 when the Obligation is triggered. Obligated participants will be required to post bids and offers, with a maximum spread, for standardised products that would cover the period of the gap. Obligated parties will be generators with a market share of 15 per cent or more in the region.

AEMO will also run a Voluntary Book Build mechanism to help liable entities to secure contracts which are underpinned by new physical resources.

Procurer of Last Resort

If, one year out (T-1), a material reliability gap remains in AEMO's forecast, the AER will require liable entities to report their net contract positions.

AEMO will commence procurement of resources at T-1 through the Reliability and Emergency Reserve Trader (RERT) framework to address the remaining gap with costs to be recovered through the Procurer of Last Resort cost recovery mechanism as detailed below.

Compliance

If peak demand exceeds the one in two-year forecast during the reliability gap, the AER will assess the contract positions submitted by liable entities and confirm if the level of contract coverage was adequate to meet their obligation.

The AER will compare liable entities' net contract position with their share of actual demand in that interval, scaled back to the one in two-year peak forecast.

Where liable entities are under-contracted in one or more trading intervals, the AER will calculate the shortfall. This shortfall will be used to determine that portion of the RERT costs incurred in relation to the reliability gap for which the noncompliant liable entity is responsible.

A liable entity found to be non-compliant will be charged a proportionate cost based on its contribution to the Procurer of Last Resort cost recovery mechanism. A non-compliant entity's costs for this first stage will be capped at \$100 million.

The AER will also maintain its ability to assess compliance and pursue enforcement of any requirements under the draft Rules in line with the powers of the AER under the draft NEL.

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1. Introduction

At the 26 October 2018 COAG Energy Council meeting, Ministers agreed that the Energy Security Board (ESB) would progress development of draft National Electricity Law amendments (draft NEL)¹ that would give effect to a Retailer Reliability Obligation (the Obligation). At the 19 December 2018 Energy Council meeting, Ministers agreed to the final draft bill of the NEL amendments related to the Obligation. It is expected that these NEL amendments will be passed by the South Australian Parliament and formally adopted in the NEL in the first half of 2019 and be effective by 1 July 2019.

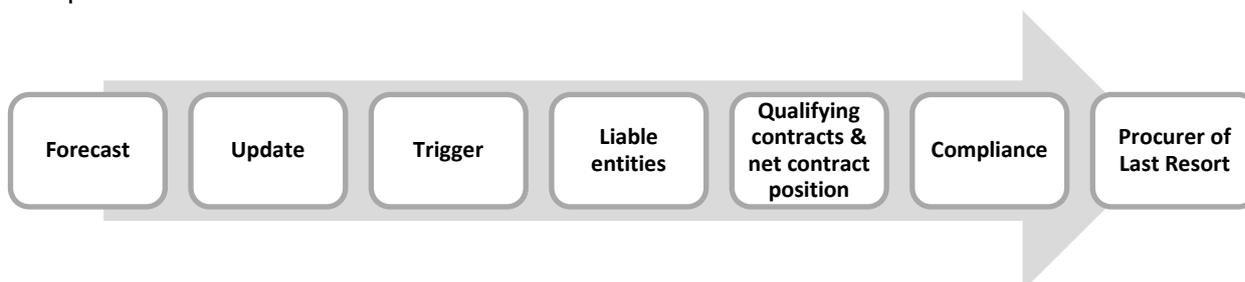
A Final Detailed Design for the Obligation (formerly the Reliability Guarantee, under the National Energy Guarantee) was published in August 2018.² The ESB has been tasked to develop the amendments to the National Electricity Rules (NER or Rules) necessary to implement the Obligation. Technical Working Groups were held in February 2019, to seek early feedback from stakeholders.

The ESB is now consulting on the attached exposure draft of the Rules amendments (the draft Rules). **Submissions are invited by close of business on 5 April 2019.** The ESB intends to present a final Rules package to Ministers in early May 2019, with the Obligation to commence on 1 July 2019.

1.1 Background

1.1.1 Retailer Reliability Obligation

The ESB's Final Detailed Design proposed that the Obligation would build on existing spot and financial market arrangements in the National Electricity Market (NEM) to facilitate investment in dispatchable capacity. The proposed mechanism is summarised in the figure and points below.



- The Australian Energy Market Operator (AEMO) will forecast annually whether the reliability standard is likely to be met or not in each National Electricity Market (NEM) region over the coming 10 years. AEMO may need to update the forecast outside the annual Electricity Statement of Opportunities (ESOO) cycle in the event of a material change in circumstances.

¹ Note: All references in this consultation paper are to the provisions of the NEL as amended by the National Electricity (South Australia) (Retailer Reliability Obligation) Amendment Bill 2018, unless otherwise stated.

² ESB, *National Energy Guarantee – Final Detailed Design*, 1 August 2018 (Final Detailed Design).

- If a material gap (defined as a breach of the reliability standard) persists or emerges three years from the period in question (T-3), AEMO must apply to the Australian Energy Regulator (AER) to trigger the Obligation.
- If the Obligation is triggered at T-3, liable entities (retailers and other market customers, along with entities that choose to 'opt-in' to manage the liability associated with their load) may be required to demonstrate future compliance by entering into sufficient qualifying contracts to cover their share of forecast one-in-two year peak demand during the gap.
- If one year out from a forecast material gap (T-1), the AER confirms a material gap remains, AEMO will use its safety-net Procurer of Last Resort function to close the gap by procuring resources under its Reliability and Emergency Reserve Trader (RERT) function. At this point, liable entities will be required to disclose their net contract positions for the gap period to the AER.
- If actual peak demand over the gap period (T) exceeds the one-in-two year forecast as set out in the T-1 Reliability Instrument Request, the AER will assess the compliance of liable entities. Costs incurred by AEMO for exercising its Procurer of Last Resort function will be recovered from non-compliant entities. This will be a proportionate cost commensurate with the level of non-compliance and capped at \$100 million per liable entity (per reliability gap).

1.2 Structure of this paper

This paper provides an overview of the proposed changes to the Rules, including amendments to Chapter 3 and a new Chapter 4A, that will be introduced to establish the Obligation. The remainder of this consultation paper sets out the rationale for the proposed Rules amendments in relation to each aspect of the Obligation. The structure of this paper is shown in the table below.

Consultation Paper Section	Description
Section 2	Forecasting the reliability requirement
Section 3	Updating the reliability requirement
Section 4	Triggering the reliability obligation
Section 5	Liable entities
Section 6	Qualifying contracts and net contract position
Section 7	Compliance
Section 8	Procurer of last resort
Section 9	Transitional arrangements
Section 10	Consultation timetable

This paper should be read with:

- The exposure draft of the National Electricity Rules amendments.

- The indicative online timeline prepared by the ESB, which provides a worked example to illustrate key Rules processes and requirements. The timeline can be found at www.rrotimeline.info.

It should be noted that the draft Rules contemplates several AEMO or AER guidelines or procedures to be put in place. However, there is scope for AEMO or the AER to decide if those guidelines or procedures should be stand-alone, combined with other guidelines or procedures required under the draft Rules or with other guidelines or procedures that are already in place.

2. Forecasting the reliability requirement

Relevant provisions of the draft National Electricity Rules:

- Clause 3.13.3A (Statement of Opportunities)
- Clause 4A.A.3 (One-in-two-year peak demand forecast)
- Chapter 4A, Part B (Forecasting the Reliability Requirements)
- Clause 11.115.3 (Forecasting Best Practice Guidelines)
- Clause 11.115.4 (Reliability Forecast Guidelines)

Relevant sections of the online RRO Illustrative Example:

- 2019 ES00
- ES00 Forecasting Process for 2020 Onward
- 2020 ES00
- ES00 Forecasting Process for 2021
- 2021 ES00 Reliability Forecast
- 2021 ES00
- 2022 ES00

These provisions of the Rules set out the processes and requirements to be followed by AEMO in identifying whether the reliability standard will be met, and if so whether there is a material reliability gap for the purposes of the Obligation.

2.1 Interactions between reliability forecasts and the ES00

The ESB's Final Detailed Design paper specified that AEMO will expand on its existing annual ES00 to forecast and publish information about whether or not the reliability standard is likely to be met in each NEM region.

The draft Rules provide a framework that requires the ES00 to now include reliability forecasts for each region for the purposes of the Obligation, in addition to existing content. The draft Rules state that the reliability forecasts will be defined as the forecasts of expected USE for the current financial year and the next four full financial years (for example, in the 2019 ES00, the reliability forecast would be the forecast up to 30 June 2024).³ The final five years of the 10-year ES00 horizon will provide an indicative forecast of future breaches of the reliability standard.

The draft Rules require that the parts of the ES00 relating to the reliability forecast are separately identifiable (for example, in a separate chapter or chapters). This is to ensure that

³ The AER's Forecasting Best Practice Guideline (see Section 2.4) will apply to the ES00 as a whole. However, for the purpose of assessing a reliability instrument request, the AER would focus on assessing whether the reliability forecast has complied with the Forecasting Best Practice Guideline. This means that elements of the ES00 that are not relevant to the reliability forecast would not be reviewed by the AER.

there is clarity on the material that needs to be covered by the AER in considering a T-3 or T-1 Reliability Instrument Request.

2.2 Provision of information to AEMO

To ensure that liable entities can have confidence in the reliability forecast, the ESOO forecasting needs to be based on information that is current and of sufficient quality. The existing Rules (clause 3.13.3(q)) require AEMO to publish certain information in the ESOO and this informs the requirements on industry and relevant government bodies to provide information under clauses 3.13.3(s) and 3.13.3(t). The ESB considers that these existing information gathering provisions are not sufficient for the Obligation. The draft Rules strengthen the existing regime to ensure that participants provide information to AEMO that gives a more robust understanding of the expected market outlook. Given there is already a specific information provision regime related to the ESOO, the draft Rules amend this existing regime rather than use a different one for the purposes of the reliability forecast component of the ESOO.

Under the draft Rules, AEMO will have rights (subject to certain limitations) to request information from Registered Participants for the purpose of preparing the ESOO and updates to the ESOO. Information requests issued by AEMO may include:

- Standard information requests via the AEMO portal to all relevant persons.
- Individual information requests to specific Registered Participants, where there is a need to clarify or obtain further information for the purpose of preparing the ESOO.

The draft Rules state that the nature and scope of this information and the timeframe for lodging this information will be set through AEMO's Reliability Forecast Guidelines and will be limited to the information required by AEMO for the purposes of developing the ESOO. The type of information that may be requested by AEMO will be broader than the current requirements under clauses 3.13.3(s) and 3.13.3(t). For example, in addition to the capabilities of existing generators and new committed generators, AEMO will be able to request information (from Registered Participants) regarding new generators that are proposed, but not yet formally committed. AEMO will also be able to request information on operational assumptions relating to generating units and contracted demand side participation, including outage information and auxiliary supply information.

Who will be obliged to provide information?

The information provision obligations will apply to all Registered Participants in the NEM. The ESB notes that the Registered Participant category may not include developers of new generation projects, who do not intend to register as intending participants. AEMO and the Australian Energy Council (AEC) have both submitted rule changes to the AEMC on this topic. The AEMO rule change requests the AEMC to consider amending the NER to allow developers to register as intending participants.⁴ The AEC rule change requests the AEMC consider increasing the information disclosure provisions on intending participants. The ESB does not propose to prejudge the outcome of these rule changes by including developers within the scope of the updated ES00 information provision regime. Depending on the outcome of the rule change requests, the Rules may require future changes to capture these types of entities, which can be done through the AEMC rule change process.

To ensure that the ES00 is based on high quality input data, the draft Rules include an information standard that information provided to AEMO must satisfy. This provision is based on the information standard included in Part 23 of the National Gas Rules (NGR) which relates to material required to be published under that Part⁵ and the information standards in relation to short term Projected Assessment of System Adequacy (ST PASA) inputs provided by Market Participants under clause 3.7.3 of the NER. Information providers will have an obligation to prepare and submit information to AEMO in accordance with the information request (from AEMO) and the information standard. The information standard requires that information provided:

- must not be false or misleading;
- where the information is of a technical nature, it must be prepared in accordance with *good electricity industry practice*; and
- must represent the Registered Participant's current intentions and best estimates.

The availability of high quality information to inform the reliability forecast is critical to the successful operation of the Obligation. Compliance with these requirements will therefore be a civil penalty provision.

To ensure that Registered Participants have sufficient visibility of their likely obligations under the information provision regime, the new regime would not commence until AEMO's interim Reliability Forecast Guideline is published. This is currently intended for the end of 2019, for use in the 2020 ES00. The existing information requirements will continue to apply for the 2019 ES00.

⁴ Rule change request reference ERC0257 (AEC – Transparency of New Projects) and ERC0260 (AEMO – NEM Information for Project Developers).

⁵ Part 23 requires service providers of non-scheme pipelines to publish certain information to facilitate timely and effective commercial negotiations in relation to non-scheme pipeline access.

2.3 Making a reliability forecast

The draft Rules set out a framework for making a reliability forecast, although most elements of the forecasting methodology and process will be covered in the Reliability Forecast Guideline. To assist in the development of the Reliability Forecast Guideline, the Rules include specific provisions relating to the content of a reliability forecast and requirements for AEMO to assess the accuracy of its supply and demand forecasts and improvements it makes to the forecasting process for upcoming ESOOs.

2.3.1 Content of a Reliability Forecast

The draft Rules set out a high-level description of a reliability forecast content. The draft Rules state that, for the reliability forecast horizon (i.e. the first five years of the ESOO), the reliability forecast must identify:

- AEMO's forecast of unserved energy for the forecast reliability gap period (USE);
- the size of the gap, expressed in MW;
- the forecast reliability gap period (i.e., the start and end date); and
- the likely time of occurrence of the shortfall, specified as trading intervals.

In addition to these minimum requirements, AEMO must publish additional supporting material to assist with understanding a forecast, which may assist liable entities in planning how they respond if the Obligation is triggered. Details of supporting material to be published alongside a reliability forecast will be covered in AEMO's Reliability Forecast Guidelines, rather than the Rules.

In determining what supporting information to publish, the draft Rules require AEMO to consider: the AER's Forecasting Best Practice Guidelines; AEMO's obligations regarding confidential information and the best form of the supporting information.

2.3.2 Annual performance review and improvement program

The Final Detailed Design noted that forecast performance of the ESOO will be reported and published at least on an annual basis. AEMO will also be required to publish and consult on a proposed improvement program, and then report on this as part of the next ESOO.

The existing Rules include a performance review and improvement mechanism for the ESOO under clause 3.13.3(u), which specifies that AEMO must, no less than annually, prepare and publish on its website information on:

- the accuracy of the demand forecasts in the most recent statement of opportunities; and
- any improvements made by AEMO or other relevant parties to the forecasting process that will apply to the next statement of opportunities.

AEMO currently meets these requirements through publication of the Forecasting Accuracy Report. The draft Rules modify clause 3.13.3(u) to better align with the reliability forecasting processes. In particular, the scope of the analysis is extended to cover the accuracy of both the demand and supply forecasts, as well as other inputs judged by AEMO to be material to reliability forecasts. Instead of covering only the most recent ESOO, the draft Rules allow the

review to encompass ESOO forecasts published within the preceding two years. This is because certain information required to complete the performance assessment may only become available 18 months after the ESOO forecast.

Other aspects of AEMO's performance assessment and improvement program will be set out in the Reliability Forecast Guideline.

2.4 The AER's Forecasting Best Practice Guideline

To provide confidence to Market Participants in the quality and transparency of reliability forecasts, the AER will develop and publish the Forecasting Best Practice Guideline. The draft Rules state that AEMO must have regard to this Guideline when developing the ESOO forecast. When assessing a reliability instrument request, the AER will consider whether AEMO has prepared the reliability forecast in accordance with the Forecasting Best Practice Guideline (among other factors – see Section 4.4).

The Forecasting Best Practice Guideline will provide guidance about forecasting processes to ensure they are undertaken in line with identified best practices and minimum standards. It will not contain technical detail about how AEMO forecasting should be undertaken as this is beyond the scope of the AER's role. The AER will not be undertaking any forecasting or redoing the forecast undertaken by AEMO.

The draft Rules set out the following high-level principles that the AER must have regard to when developing the Forecasting Best Practice Guideline:

- **Accuracy and Lack of Bias** – forecasts should be as accurate as possible, based on comprehensive information prepared in an unbiased manner.
- **Transparency** – the basic inputs, assumptions and methodology that underpin forecasts should be disclosed.
- **Open Processes** – stakeholders should have as much opportunity to engage as possible, through effective consultation and access to documents and information.

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 assessing the reliability gap and associated parameters 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 does not compromise confidentiality, such as by aggregating in the publicly released Plexos dataset.

AEMO's Reliability Forecasting Guideline will contain further detail on how AEMO will undertake forecasting. It is expected that both the AER and AEMO guidelines will be developed through significant collaboration between the market bodies.

By allowing the forecasting best practices to be set out in an AER guideline rather than in the Rules, the AER can, using the Rules Consultation Procedures, update the guideline as needed to take into account changes in best practices and operational changes required by AEMO to develop its forecasts.

Section 9 sets out transitional arrangements for publication of the AER's interim Forecasting Best Practice Guidelines.

2.5 AEMO's Reliability Forecast Guidelines

The draft Rules set out some aspects of the forecasting framework (Section 2.3). However, most elements of the forecasting methodology and process will be covered in AEMO's Reliability Forecast Guideline. The Guideline will set out how the approach outlined in the AER's Forecasting Best Practice Guideline (Section 2.4) will be implemented. AEMO's Guidelines will not be inconsistent with the Reliability Standard Implementation Guidelines (RSIG), which set out how AEMO implements the reliability standard, and the approach and assumptions it uses to implement the reliability standard.

To ensure that the transparency requirements envisaged in the ESB's Final Detailed Design are incorporated, the draft Rules set out a range of matters that must be included in the Reliability Forecast Guideline, including:

- AEMO's forecasting methodology and relevant assumptions and inputs relied upon.
- The updated information provision regime described in Section 2.2.
- The process by which AEMO will meet the transparency and accountability requirements set out in the Final Detailed Design paper, including the annual improvement program.
- The supporting material that will be published by AEMO to assist liable entities in understanding their obligations.
- The process for updating the reliability forecast outside of the annual ESOO cycle.
- The methodology for determining actual system demand for the purpose of assessing compliance under the Obligation (as described in Sections 7.1 and 7.2).
- Identification of confidential information by Registered Participants provided in response to information requests.
- Consultation processes with stakeholders in preparing reliability forecast and indicative reliability forecast.

As with the AER's Forecasting Best Practice Guideline, Section 9 of this paper sets out transitional arrangements for publication of AEMO's interim Reliability Forecast Guideline. The draft Rules provide that, subject to these transitional arrangements, AEMO may periodically amend or replace the Reliability Forecast Guideline in accordance with the Rules consultation procedures. AEMO would not be required to comply with the Rules consultation

procedures to make administrative or minor amendments. This is similar to provisions included in the existing Rules for other guidelines.

The ESB welcomes stakeholder feedback in relation to all aspects of the draft Rules relating to forecasting described in this paper.

3. Updating the reliability forecast

Relevant provisions of the draft National Electricity Rules:

- Clause 3.13.3A (Statement of opportunities)
- Clause 4A.C.1 (AEMO request for a reliability instrument)
- Clause 4A.C.2 (AEMO request for a T-3 reliability instrument)
- Clause 4A.C.3 (AEMO request for a T-1 reliability instrument)
- Clause 4A.C.7 (Withdrawing a request)

Relevant sections of the online RRO Illustrative Example:

- Updating the Reliability Forecast for Change in Market Conditions
- Update to the Reliability Forecast does not Introduce a New Gap

These provisions of the draft Rules set out the process and requirements to be followed by AEMO in updating a reliability forecast.

3.1 Updating the reliability forecast

AEMO will update the reliability forecast annually, in line with the existing ESOO process. More frequent 'out of cycle' updates may be required if there is a material change to the supply-demand outlook – such as when a generator announces retirement or there are significant changes in expected demand. The existing Rules contain provisions for updates to the ESOO. The draft Rules clarify the role of updates in the context of the Obligation and include additional provisions to guide how updates will be undertaken for the purposes of the Obligation.

Clause 3.13.3(r) of the existing Rules provides that if AEMO becomes aware of significant new information of the kind specified in the Rules⁶, it must publish that information as soon as practicable. The draft Rules expand the existing triggers for 'out of cycle' ESOO updates to reflect the additional information to be included in the ESOO.

In addition, the draft Rules provide that AEMO may, if appropriate having regard to the new information, publish an updated reliability forecast in accordance with the Reliability Forecast Guideline. The Guideline may set out a process for forecast updates that is different from the standard ESOO forecast process. The update process would still need to align with the AER's Forecasting Best Practice Guidelines.

The draft Rules specify that updates to the ESOO and the associated reliability forecast may be used as the basis for a Reliability Instrument Request by AEMO. Reliability Instrument

⁶ Specifically: (1) projections of aggregate MW demand and energy requirements for each region; (2) capabilities of existing generating units and generating units for which formal commitments have been made for construction or installation; or (3) planned plant retirements (including any expected closure year or closure date).

Requests issued on the basis of an updated forecast would need to follow the normal timeframes set out in the draft Rules (see Section 4.2). In particular, the latest date that AEMO may issue a request is three months before the relevant T-3 or T-1 cut-off day, and the AER would have two months from this point to assess the request. The standard AER process (as set out in Section 4.4) would apply for assessing an instrument request based on an updated forecast.

The ESB welcomes stakeholder feedback in relation to the draft Rules relating to updating the reliability forecast.

4. Triggering the reliability obligation

Relevant provisions of the draft National Electricity Rules:

- Chapter 4A, Part C (Reliability instruments)

Relevant sections of the online RRO Illustrative Example:

- T-3 Reliability Instrument Requests
- T-3 Reliability Instrument Requests Prepared
- T-3 Reliability Instrument Requests Submission
- AER Assessment of T-3 Reliability Instrument Requests
- Publication of T-3 Reliability Instrument Requests
- Issuing T-3 Reliability Instruments
- T-1 Reliability Instrument
- T-1 Reliability Instrument Requests
- AER Assessment of the T-1 Reliability Instrument Requests
- AEMO Reliability Instrument Request Publication
- T-1 Reliability Instrument Not Issued

These provisions of the draft Rules set out the process for AEMO to request a T-1 or T-3 Reliability Instrument and for the AER to decide whether to make the Reliability Instrument.

4.1 Materiality test

The Final Detailed Design paper proposed that materiality decisions would be based on an objective metric, linked to the NEM reliability standard. The *Material Reliability Gap Definition and Communication* consultation paper published by the ESB in December 2018 set out four options. Stakeholder submissions supported Option A (annual regional expected USE exceeds the reliability standard) and Option B (annual regional expected USE exceeds the reliability standard by a given margin).

Taking these responses into account, the ESB considers that the most appropriate metric is Option A. That is, a reliability gap will be considered material if regional annual expected USE is above the reliability standard. The ESB notes that this is a standard that is currently used and understood by the market. Exceeding the reliability standard provides a straightforward, objective and relatively predictable basis for a materiality assessment. The ESB is of the view that it is not appropriate to set a given margin on top of the reliability standard as this could change the nature of the reliability standard that is in place and create a new standard. The same metric will be used for assessing materiality at T-3 and T-1.

4.2 Timeframes for requesting and making reliability instruments

The Rules establish the time allocated to AEMO and the AER respectively to request and make a Reliability Instrument. There are a number of factors which must be considered when establishing these timeframes, including:

- The benefits of using the most up-to-date ESOO forecast and the likely gap between release of the ESOO and T-3 or T-1 gap period (between three and six months, assuming a gap period over the summer months from November to February).
- The requirements under the Generator three year notice of closure rule which requires large electricity generators to provide at least three years' notice to the market before closing.
- The extent of consultation conducted by the AER in reaching its decision on a Reliability Instrument.
- The lead-time and any actions by the AER required to support commencement of market making obligations under the Market Liquidity Obligation, or MLO (noting these would commence from T-3 – see Section 6.5).
- Activities that would need to take place between the AER issuing a T-1 Reliability Instrument and liable entities being required to finalise their contract positions.

The draft Rules state that:

- AEMO must submit a Reliability Instrument Request to the AER not less than three months before the applicable T-3 or T-1 cut-off day (one year prior to the first day of the identified reliability gap).
- The AER must make its decision within two months of receiving a reliability instrument request from AEMO.
- AEMO must only make a T-3 or T-1 reliability instrument request based on a reliability forecast, in an ESOO or ESOO-update issued in the prior six months. The intention of this provision is to ensure that, given the wording of the draft NEL (Section 14I), AEMO is only obliged to make a reliability instrument request for an upcoming T-3 or T-1 reliability gap (and not, for example, in relation to a reliability gap identified five years ahead).

The ESB's intention is that, under the timeframes above, there would ordinarily be at least one month between the AER issuing a T-1 Reliability Instrument and liable entities being required to finalise their contract position in line with their reliability obligation.⁷

The ESB notes that some submissions to its December 2018 consultation paper⁸ suggested that AEMO provide more notice when issuing a T-1 reliability instrument request (for example, at least six months before the T-1 cut-off day). Given that a forecast reliability gap could change substantially between ESOOs, the ESB considers that a three month notice period remains appropriate for both T-3 and T-1 Reliability Instrument Requests. As proposed by several stakeholder submissions, AEMO will be required to publish a request on its

⁷ These timeframes could change in the event that AEMO issues a corrected reliability instrument request. Refer to Section 4.5.

⁸ ESB, *Material Reliability Gap Definition and Communication – Consultation Paper*, December 2018.

website once submitted to the AER (the draft Rules state within five business days of submission to the AER).

The ESB notes that the AER and liable entities will have visibility of a likely T-1 Reliability Instrument in advance of the formal request being published, as a result of AEMO's stakeholder engagement and consultation during the ES00 forecasting process. Further, the AER's framework for assessing a request will be clearly set out in published guidelines, allowing liable entities to judge with a relatively high degree of certainty whether a T-1 Reliability Instrument Request is likely to be accepted by the AER. Liable entities will therefore be able to make preparations ahead of the AER issuing a final decision on a T-1 Reliability Instrument Request.

In developing the timeframes associated with requesting and making a reliability instrument, the ESB has become aware of an issue which may arise in relation to the interaction between the required three year notice of closure of a generator and the ability to incorporate that information into the ES00 and T-3 reliability instrument request. In particular, both the development of the ES00 and the preparation of a T-3 reliability instrument request need to be completed more than three years in advance of any gap period. Therefore, depending on when a gap is forecast to occur, the notice of a generator exiting the market may be provided too late for a T-3 reliability instrument to be issued even though as a result of the closure a gap arises. The ESB is interested in stakeholder's views on this timing issue.

4.3 Preparing an instrument request

The draft NEL (Section 14I) requires that, at a minimum, a Reliability Instrument Request issued by AEMO must include:

- AEMO's one-in-two year peak demand forecast for the forecast reliability gap period, as set out in the ES00.
- The first and last days of the forecast reliability gap period.
- The region in which the forecast reliability gap period is forecast to occur.
- For a T-3 instrument: the indicative trading intervals for which liable entities may be required to demonstrate compliance to meet the one-in-two year peak demand forecast for the forecast reliability gap period (if assessed).
- For a T-1 instrument: the trading intervals for which liable entities will be required to demonstrate compliance to meet the one-in-two year peak demand forecast for the forecast reliability gap period (if assessed).

The ESB's December 2018 consultation paper⁹ sought comment on whether the Rules could allow AEMO flexibility in how it defines a reliability gap period when requesting a reliability instrument or, alternatively, place additional constraints on how the reliability gap is specified. The expected timing of forecast reliability gaps is likely to vary from year to year and AEMO's ability to forecast reliability at different levels of granularity is also likely to evolve over time. Therefore, the ESB considers that it would be appropriate to provide AEMO with flexibility in how it defines a T-3 reliability gap period (within the NEL requirements above).

⁹ Ibid.

However, AEMO must only make a T-1 Reliability Instrument Request that is related to a prior T-3 Reliability Instrument. The draft Rules specify that a T-3 Reliability Instrument Request is related to a T-1 Reliability Instrument if it is for the same region, the same forecast reliability gap period or falls within the same forecast reliability gap period and the trading intervals in the T-1 Reliability Instrument are the same as, or fall within, the reliability gap period (start and end date) and brackets of trading intervals set out in the T-3 Instrument. Within these boundaries, the size of the reliability gap (MW) may be different from the related T-3 Instrument. This strikes a balance between providing AEMO with flexibility to adjust for unforeseen changes in the forecast, while minimising the compliance burden associated with meeting the Obligation.

The ESB's December 2018 consultation paper¹⁰ also sought feedback on the mandatory information that should be included in requests from AEMO to the AER to make a Reliability Instrument. The draft Rules provide that, in addition to the minimum requirements set out in the NEL, an instrument request must include any other information as prescribed by the AER in its Reliability Instrument Guideline (see Section 4.4), which will be developed in consultation with stakeholders.

For the purposes of determining and allocating Procurer of Last Resort (POLR) costs, a translation of the reliability gap to MW will be required (see Sections 8.2 and 8.3) and this information will be included in the Reliability Instrument Request. The ESB considers that it would not be appropriate for the Rules to be overly prescriptive in relation to the content of a Reliability Instrument Request, beyond these requirements. Stakeholders will have the ability to propose requirements for additional information to AEMO through the reliability forecasting process.

4.4 Assessing an instrument request

The Final Detailed Design paper stated that the AER would have some discretion not to trigger the Obligation, even if the materiality test is met objectively. The ESB's December 2018 consultation paper¹¹ proposed that the Rules would require the AER to have regard to clear criteria in making its decision. The ESB considers that the Rules should provide boundaries on the use of discretion by the AER, to ensure liable entities are able to predict and plan for their obligations as effectively as possible. The ESB is of the view that it would not be appropriate for the AER to replicate AEMO's ESOO modelling or provide alternative forecasts. Forecasting of this nature is beyond the scope of the AER's role and requiring the AER to replicate forecasts would be impractical and inefficient.

The AER's assessment of a Reliability Instrument Request will focus on the quality of AEMO's forecasting process, including the validity of input assumptions.

In line with this position, the draft Rules set out that the AER may only have regard to the following criteria when considering whether it is appropriate to make a Reliability Instrument:

- Whether there is a material error in AEMO's calculations or input data.

¹⁰ Ibid.

¹¹ Ibid.

- Whether AEMO has made an inaccurate assumption that materially impacts the forecast unserved energy outcomes in the reliability forecast.
- Whether the forecast process was undertaken in a manner inconsistent with the AER's Forecasting Best Practice Guideline.

Further details on how the AER will apply these criteria in assessing a Reliability Instrument Request will be set out in the AER's Reliability Instrument Guideline.

The draft Rules provide that the AER will consult with stakeholders on whether the Reliability Instrument Request should be confirmed or rejected, based on these criteria. The consultation process, including timeframes, will be set out in the Reliability Instrument Guideline. The confined nature of the criteria described above means that this consultation process is not an opportunity for stakeholders to seek to interrogate AEMO's reliability forecast on technical grounds.

The draft Rules will only require the AER to assess AEMO's adherence to forecasting requirements when a reliability instrument request is made. It is important to note that the AER has existing powers in the Rules to ensure AEMO is adhering with forecasting requirements, which continue to apply irrespective of whether a Reliability Instrument Request is made.

4.5 Correcting or withdrawing a Reliability Instrument Request

The draft NEL (Section 14J) provides that AEMO may correct a Reliability Instrument Request if it contains a material miscalculation, a material mistake or a defect in form. The intention is to allow identified errors to be corrected and still allow the assessment process to proceed without undue delay.

Under the draft Rules, AEMO may only issue a correction within two weeks of the original request. If a corrected request is issued by AEMO, the AER may extend its assessment period by the time that elapsed between receiving AEMO's corrected request and the original request, in order to allow for appropriate consultation and consideration of the revised request. This would have the effect of reducing the notice period to liable entities between issuance of a reliability instrument and the T-1 or T-3 cut-off day.

The draft Rules provide that:

- AEMO must issue a correction as soon as possible after it identifies that this is necessary (within the maximum two-week window specified in the Rules).
- If possible, the AER must make its decision within the original timeframe (i.e., not use the extension option allowed in the Rules).
- The AER must notify the market of the impact of the corrected reliability request on its assessment timeline.

The draft Rules also provide that AEMO may withdraw a Reliability Instrument Request if there is a material error in the reliability forecast, by providing written notice to the AER. AEMO may issue a withdrawal notice, provided that the AER has not yet made a decision confirming or rejecting the request.

However, it is a requirement under the draft NEL (Section 14I) that AEMO make a Reliability Instrument Request if a material reliability gap exists. Therefore, while AEMO may withdraw a request in some circumstances, it must then issue another instrument request if it is satisfied that a material gap still exists and if there is still sufficient time to do so. AEMO may only issue a new request in accordance with the standard timeframes and other requirements set out in the Rules.

4.6 Making a Reliability Instrument

The draft Rules require the AER to set out the reasons for its decision to confirm or reject a Reliability Instrument Request, in line with the criteria set out in its Reliability Instrument Guideline. The AER will not be undertaking its own forecasting in order to make this decision. As required by the draft NEL (Section 14K), the AER can only make an instrument for the region, gap period and trading intervals as stated in AEMO's request, without modification.

A Reliability Instrument issued by the AER must include the information stated in AEMO's Reliability Instrument Request. For a T-1 instrument, the AER must also specify the Contract Position Day (when liable entities are required to hold a sufficient net contract position for the reliability gap period) and the Reporting Day (when liable entities must report their net contract position to the AER). The draft Rules state that the Contract Position Day must be on the T-1 cut-off day or up to one week earlier. The Reporting Day must be at least two months after the Contract Position Day. The AER must also nominate the New Entrant Contract Position Day (this must be after the first day of the reliability gap period) and New Entrant Reporting Day (this must be at least ten days after the New Entrant Contract Position Day) in the T-1 Reliability Instrument.

A reliability instrument takes effect when published on the AER's website. To ensure clarity over the duration of a Reliability Instrument and associated MLO, the draft Rules:

- **Require AEMO to notify the AER if a forecast reliability gap has is no longer material at T-1.** The draft Rules include a requirement for AEMO to formally notify the AER if this occurs, so that the AER may in turn notify obligated entities that the MLO will no longer operate (in accordance with the Rules described in Section 6).
- **Specify circumstances in which a T-1 reliability instrument can no longer be made.** The draft Rules set out that if a T-1 Reliability Instrument Request is not made by the cut-off date specified in the Rules, the AER will formally notify the market that a T-1 instrument can no longer be made in relation to that gap period.

4.7 Questions for Stakeholders

The ESB welcomes stakeholder feedback in relation to the provisions in the draft Rules related to triggering the Obligation. Stakeholder feedback is sought in particular on the issues set out below.

Questions

- Three year notice of closure: The ESB is interested in stakeholder's views on whether the period of notice of closure of a generator should be extended, for example from three years to four years (or some period of time in between), to provide sufficient time for this information to be incorporated into the ESOO, reliability forecast and T-3 reliability instrument request?

5. Liable entities

Relevant provisions of the draft National Electricity Rules:

- Chapter 4A, Part A (Introduction)
- Chapter 4A, Part D (Liable entities)
- Clause 4A.F.8 (AER assessment)
- Clause 11.115.5 (AER Opt-in Guidelines)
- Clause 11.115.6 (Contracts and Firmness Guidelines)

Relevant sections of the online RRO Illustrative Example:

- Liable Entities
- Opt-in Register
- Prescribed Opt-in Customer Application
- Prescribed Opt-in Customer Approval
- Large Opt-in Customer Application and Approval
- Reliability Forecast in 2020 ES00
- Final Day for Prescribed Opt-in Customer Applications
- Opting-out
- Opt-in Cut-off Day
- New Entrants
- New Entrant Retailer

These provisions of the draft Rules provide detail on which entities are liable under the Obligation, including how non-liable entities will be able to 'opt-in' to manage their obligation and how entities that enter the market after the Contract Position Day are treated.

5.1 Liable entities

The draft NEL (Section 14D) defines a liable entity as: an entity who is a Registered Participant (a retailer or other market customer); or an entity that has elected to assume responsibilities on another's behalf; or another entity if specified in the Rules. Reliability obligations apply to entities that meet the definition of a liable entity on the Contract Position Day, or an alternative date if specified in the Rules (draft NEL, Section 14N).

The Rules do not amend or add to this definition of a liable entity but provide detail on opt-in eligibility and processes and the liability of new entrant liable entities.

5.2 Opt-in customers

Large customers (who are not market customers) may be able to manage the obligation associated with their load more efficiently than their retailer. The draft NEL and draft Rules

set out the conditions under which large customers may elect to 'opt-in' to manage their obligations directly.

The draft NEL (Section 14E) prescribes that a non-liable entity is able to opt-in to manage the obligation associated with its load if it: purchases electricity from a liable entity (such as a retailer) and has a demand greater than the threshold specified in the Rules; or is otherwise defined in the Rules as being eligible.

The Rules introduce two categories of opt-in customer:

- **Large Opt-in Customers**, that meet the definition provided in the NEL (exceed a demand threshold and purchase from a liable entity), must opt-in for the entire load at a connection point and have been approved by the AER.
- **Prescribed Opt-in Customers**, that do not technically meet the definition provided in the draft NEL (for example, do not purchase electricity directly from a retailer), but have been approved by the AER as eligible to opt-in, and may opt-in for all or part of the load at a connection point. Generally, this category will be used by joint venture partners.

The draft Rules set out that Large Opt-in Customers and Prescribed Opt-in Customers may only opt-in for the full reliability gap period and all trading intervals within this period to which the Obligation applies.

5.2.1 Opt-in Customer threshold for Large Customers

The objective of the opt-in arrangements is to provide large customers who wish to manage their own obligation with the flexibility to do so. The draft Rules prescribe a minimum consumption threshold for customers to be eligible to opt-in (which may be satisfied by way of aggregation across sites).

The draft Rules currently set the threshold for large customer opt-in as the annual upper consumption threshold for a large customer, as provided in the National Electricity Retail Law (NERL) and Rules (NERR) in all regions except Victoria. In Victoria, where the existing large customer definition uses a much lower threshold, the draft Rules apply a threshold of 100 MWh per annum for the purposes of the Obligation.

The advantage of this approach to thresholds is that it is consistent with the existing large customer definition in the NERL and NERR, and does not seek to introduce a new definition. Further, the existing regulations contain provisions for determining and reviewing these consumption thresholds.

The National Energy Retail Rules allow entities to meet the threshold by aggregating demand across multiple connection points and sites.

Potential alternative Opt-in Customer threshold for large customers

There are currently more than 80,000 connection points across the NEM that would meet this threshold on a standalone basis (i.e., without aggregation) which presents challenges from an implementation and operational perspective. As a result, the ESB questions whether the administrative burden of the threshold as set out in the draft Rules may result in the costs outweighing the potential benefits.

Stakeholders have proposed several other annual consumption thresholds which could be applied instead of that currently proposed (for example, 8760 MWh annual consumption, which is 1 MW demand in every hour of the year).

5.2.2 Prescribed Opt-in Customer category

The Prescribed Opt-in Customer category has been introduced to address particular contracting arrangements in the energy market which could potentially exclude some large energy users from registering as a Large Opt-in Customer. For example, some large customers may require flexibility to share or manage the Obligation between more than one entity (such as between joint venture partners).

The draft Rules include the following eligibility conditions for Prescribed Opt-in Customers:

- The entity may apply to opt-in for all or part of a total load, where that connection point has an annual peak demand that is greater than or equal to 30 MW. The percentage of the total load that the entity wishes to opt-in for must have annual peak demand greater than or equal to 5 MW.¹²
- The entity must not be eligible to register as a Large Opt-in Customer.
- The entity must meet other conditions as prescribed in the AER's Opt-in Guideline.

The AER's Opt-in Guidelines will set the criteria to guide the AER's assessment of Prescribed Opt-in Customer applications, including how to determine whether the entity is financially exposed to the cost of some or all of the load at the relevant connection point.

Prescribed Opt-in Customers may elect to assume part (a fixed percentage, across all days and trading intervals for the relevant gap period) of the load at a connection point¹³.

5.2.3 Opt-in process

In order to opt-in, eligible entities must apply to the AER and be granted opt-in approval. Applications must be made in accordance with the AER Opt-in Guideline and, if AEMO chooses to develop an additional Opt-in Procedure¹⁴, in accordance with that procedure.

Applications for the Large Opt-in Customer category must be received by the AER by close of business on the Opt-in Cut-off Day, and applications for the Prescribed Opt-in Customer category must be received by no later than 40 business days before the Opt-in Cut-off Day. Once AER approval is secured, Large Opt-in Customers and Prescribed Opt-in Customers will be listed on the opt-in register (Section 5.2.5).

¹² Peak demand is defined as maximum coincident demand for a trading interval at a site over the 12 months preceding the application for registration with the AER. The AER may consider other data in the case of new entrants or a significant change in circumstances that would make the preceding 12 months irrelevant.

¹³ The category of Prescribed Opt-in Customer is intended to provide flexibility in select circumstances, including the splitting of liability between entities for a load at a single connection point. This additional flexibility is restricted to the Prescribed Opt-in category, rather than applying to all opt-in customers, to ensure that the cost and administrative burden of the opt-in arrangements does not become excessive.

¹⁴ If AEMO elects to develop this procedure, it may also require an assessment of creditworthiness or credit support from Opt-in customers.

5.2.4 Opt-in Cut-off Day

The draft Rules provide that the Opt-in Cut-off Day is 18 months after the T-3 Reliability Instrument is effective (i.e., 18 months prior to T), or the next possible business day. Ordinarily, this will give retailers around six months' notice of the opt-in load of its customers before the Contract Position Day, and time to adjust its contract position accordingly.

5.2.5 Opt-in register

An opt-in register will be established for each forecast reliability gap period for which a T-3 Reliability Instrument has been issued, to record the connection points of customers that have opted-in to the Obligation. The opt-in register will be treated as a definitive record of entities that have opted-in and will be used for compliance purposes.

Ordinarily, the draft Rules require the AER to establish an opt-in register within 30 business days of issuing a T-3 Reliability Instrument. However, as a transitional measure, the AER will not establish an opt-in register until the AER's Opt-in Guidelines are in place (which must be before 30 June 2020). As a result, if a T-3 Reliability Instrument is issued before 30 June 2020, eligible large customers will not be able to opt-in until this time.

The draft Rules state that, at a minimum, the register will need to record:

- Large Opt-in Customers and Prescribed Opt-in Customers¹⁵;
- the connection point(s) these customers have opted-in to; and
- for Prescribed Opt-in Customers, the percentage of load at the associated connection point(s) for which they have assumed responsibility.

The Rules state that, if an opt-in register has been established and the relevant T-1 Reliability Instrument is not made, the AER will close the register and will no longer be required to maintain it.

The AER Opt-in Guideline will detail the processes for establishment and maintenance of the register. For example, the Guideline will cover what information in the register will be publicly accessible, taking account of confidentiality requirements.

5.2.6 Adjusting opt-in status and opting-out

The draft Rules provide that, after having opted-in, customers can opt-out or otherwise adjust their opt-in position (such as Prescribed Opt-in Customers adjusting the portion of opt-in load) up until close of business on the Opt-in Cut-off Day.

In order for an existing opt-in customer to reduce or opt-out of its liability, the liable entity that will assume liability for that load (a new opt-in entity, a retailer or other market customer, or – for Prescribed Opt-in Customers – the party managing the remaining load) must provide written consent to the AER. There is no obligation on a market customer or another opt-in customer to agree to assume an existing opt-in customer's obligation. The required form of the notification will be set out in AER procedures.

¹⁵ AEMO's market participant data will be taken as evidence of who the Market Customer is for a connection point at any point in time. If additional data is required or the provided data needs to be verified the AER may request data from AEMO (such as data concerning connection points and customer load).

5.3 New entrants

The draft NEL (Section 14N) states that the reliability obligation applies to a person if they are a liable entity on the Contract Position Day or in circumstances for which a later day is prescribed in the Rules. The draft NEL does not provide any further detail on how the reliability obligation should apply to entities that meet the definition of a liable entity but enter the market after the Contract Position Day. The ESB's Final Detailed Design paper indicated that new entrants would be required to take steps to manage their obligation for load over the forecast gap period, and to report relevant actions to the AER.

For the purposes of the reliability obligation, the draft Rules define a new entrant as an entity who:

- meets the definition of a liable entity on the New Entrant Contract Position Day but not on the Contract Position Day; and
- has, or is anticipated to have, an annual consumption of electricity that is more than 100 MWh per annum.

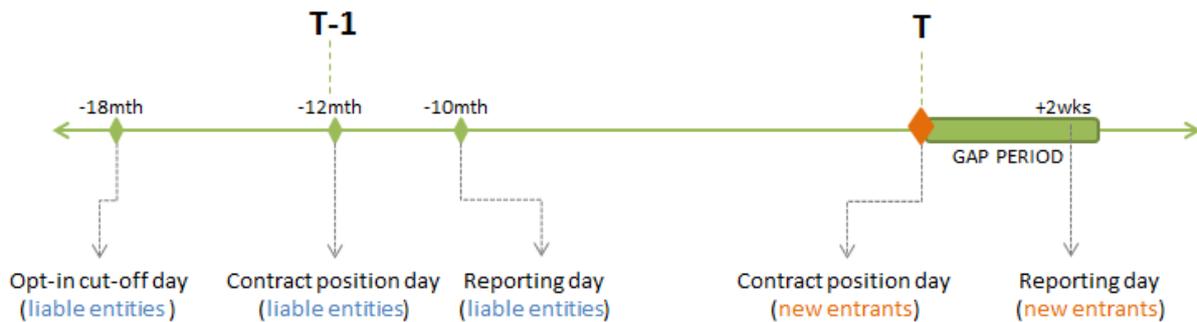
The ESB is still considering the appropriate magnitude of the annual consumption threshold applicable to new entrants. Stakeholders are invited to provide feedback on how the threshold for new entrant liability should be set or if all new entrants, regardless of size, should have to comply with the requirements of the RRO.

The draft Rules require all entities that meet this definition to comply with the Obligation. Non-market customers that enter the market after the Contract Position Day will not be eligible to opt-in and will not be required to take steps to comply with the Obligation.

The draft Rules define the New Entrant Contract Position Day as the day defined in the T-1 Reliability Instrument that must be after the first day of the forecast reliability gap period for a region (T). On the New Entrant Contract Position Day, new entrants must have a net contract position for the gap period that is sufficient to cover its share of the 1 in 2 year peak demand under the Obligation.

New entrants must report their net contract position, as at the New Entrant Contract Position Day, to the AER by the New Entrant Reporting Day. This will be the day stated in the reliability instrument and must not fall within 10 business days of the New Entrant Contract Position Day (i.e., it must be at least 10 business days after the first day of the reliability gap period).

The following timeline illustrates the relative timing of key reporting dates for liable entities and new entrant liable entities as set out in the draft Rules. Note that the timing of these days will be defined in the relevant T-1 Reliability Instrument, and the figure below indicates the earliest possible timing allowed by the draft Rules.



5.4 Questions for stakeholders

The ESB welcomes stakeholder feedback in relation to all aspects of the draft Rules described in the liable entities section of this paper. Stakeholder feedback is sought in particular on the issues set out below.

Questions

- **Large Opt-in Customer threshold:** This threshold needs to balance the administrative burden with providing the flexibility to opt-in for those that do. The ESB is interested in feedback on the current approach of using the existing large customer definition. In particular, the ESB is interested in feedback on whether this threshold is too low and, if so, at what level an alternative large customer threshold should be set.
- **Prescribed Opt-in Customer threshold:** The Rules currently require that the total load at a connection point must have annual peak demand of greater than or equal to 30 MW, and the portion that the entity wishes to opt-in for must have annual peak demand equal to or greater than 5 MW. The ESB is interested in feedback on these proposed thresholds for Prescribed Opt-in Customer eligibility.
- **New Entrant liability threshold:** The Rules currently apply the threshold of 100 MWh of anticipated annual consumption to new entrants. The ESB is interested in feedback on whether a different threshold should be defined for the purposes of determining new entrant liability and – if so – how the threshold for new entrant liability should be set.

6. Qualifying Contracts and Net Contract Position

Relevant provisions of the draft National Electricity Rules:

- Chapter 4A, Part A (Introduction)
- Chapter 4A, Part E (Qualifying contracts and net contract position)
- Chapter 4A, Part G (Market Liquidity Obligation)
- Chapter 4A, Part H (Voluntary Book Build)
- Clause 11.115.7 (Qualifying contracts under interim Contracts and Firmness Guidelines)
- Clause 11.114.8 (Grandfathering arrangements)

Relevant sections of the online RRO Illustrative Example:

- Qualifying Contracts
- Default Approach to Calculating Firmness of Qualifying Contracts
- Bespoke Approach to Calculating Firmness of Qualifying Contracts
- Grandfathering of Contracts
- Contract Position Day
- Adjustments to Net Contract Positions
- Reporting Day
- Contract Position Adjustment
- New Entrant Contract Position Day
- New Entrant Reporting Day

These provisions of the draft Rules cover how liable entities can use qualifying contracts to meet their obligation and requirements for reporting their net contract position to the AER.

6.1 Qualifying contracts

Only certain types of contracts will count as qualifying contracts for the purposes of compliance with the Obligation. Section 14O(1) of the draft NEL states that a qualifying contract is a contract or other arrangement that:

- Is directly related to the purchase or sale, or price for the purchase or sale, of electricity from the wholesale exchange during a stated period; and
- The liable entity entered into to manage its exposure in relation to the volatility of the spot price.

Qualifying contracts can therefore be contracts a liable entity “buys” and contracts a liable entity “sells”.

The draft NEL allows for further detail to be provided in the Rules or an AER guideline. Except for demand response contracts (described below), the Rules will not specifically provide for permitted or excluded contracts, since this could stifle innovation. The draft Rules therefore provide that the AER's Contracts and Firmness Guidelines:

- may include guidance on what contracts satisfy the draft NEL definition – in providing this guidance, the AER must take into account the principle that qualifying contracts should support investment in sources of electricity or demand reduction that are dispatchable as required;
- may not prescribe other types of contracts to be qualifying contracts; and
- may specify particular contracts that are not qualifying contracts.

6.2 Demand side participation contracts

Demand side participation allows customers to manage their electricity consumption and therefore their expenditure. This can include improved energy efficiency, peak demand shifting, changing consumption patterns, consumers generating their own electricity and other demand management options. Retailers, and other market customers, may enter into demand side participation contracts as an additional means of managing their total load and, ultimately, reducing their exposure to wholesale prices.

The draft Rules state that, in addition to complying with the normal requirements for being a qualifying contract, a demand side participation contract may only be a qualifying contract if it is also registered on AEMO's Demand Side Participation Information Portal (DSPIP).

The DSPIP is an online mechanism for AEMO to collect demand side participation information from participants that is then used to inform AEMO's electricity load forecasts.

In practice, the DSPIP consists of online forms for users to provide information about any contracted or price-responsive demand management they have entered into. All NEM registered participants are already required to submit information to AEMO using the DSPIP, even if this is a null submission.

6.3 Firmness

The firmness of a qualifying contract is a measure of the extent to which a qualifying contract reduces the exposure of a liable entity to the volatility of the spot price in a region during the gap period. All qualifying contracts (including whether they are "bought" contracts or "sold" contracts) must be allocated a firmness factor between zero and one. The MWs that are the subject of the contract are multiplied by the firmness factor to determine the extent to which the contract contributes to the net contract position.

The draft Rules set out principles that guide how firmness factors are determined, as outlined in the text box below.

Firmness principles

The firmness principles consider the extent to which a qualifying contract 'protects' the buyer from spot price volatility. The lower the exposure, the higher the firmness factor. This is because the likelihood that the seller will 'defend' the contract by dispatching generation or other resources increases with the seller's exposure to spot market prices. The firmness principles are:

- Price terms of the contract reduce which reduces the liable entity's exposure to the volatility of the spot price.
- Variability and profile of the volume settled under the contract.
- Likelihood of the contract providing cover to the buyer during the reliability gap.
- Any other contractual terms which limit the coverage or otherwise reduce the incentive for a seller to cover the position.

Current approach to firmness methodologies

The draft Rules currently propose that the AER Contracts and Firmness Guidelines will set out a range of default methodologies for determining the firmness factor of standard contracts. Liable entities that use default methodologies to calculate the firmness of their contracts can submit their net contract position reports to the AER without engaging an independent auditor.

The draft Rules allow liable entities to develop and use bespoke methodologies, rather than using default methodologies, when calculating the firmness of non-standard contracts.

Currently, the draft Rules provide that a liable entity using a bespoke methodology may apply to the AER to have this methodology approved ahead of the Contract Position Day (or New Entrant Contract Position Day). This will give those liable entities certainty that the firmness they have calculated for the relevant contracts will be accepted by the AER in the case of compliance audits. Liable entities can choose to not seek AER approval of their bespoke methodologies but will then bear the risk that the AER later audits their net contract position and finds the methodology unsuitable.

The draft Rules currently require entities using bespoke methodologies (approved or not) to engage an independent auditor to confirm that the bespoke methodology developed is appropriate having regard to the firmness principles (if not pre-approved) and has been correctly applied to calculating firmness for the net contract position.

Potential alternative approach to firmness methodologies

The ESB understands that the proposed approach for the treatment of bespoke firmness methodologies may be challenging for some liable entities to implement. In particular, liable entities need to know the firmness of a contract while they are negotiating the contract terms because the firmness may impact the value of that contract. However, the timeframes for negotiating contracts are often far shorter than the timeframe required for the AER to undertake a robust assessment of a bespoke methodology.

An alternative approach has been proposed that satisfies the same policy intent (allowing for innovative products and bespoke contracts without the AER having to develop a default methodology for all contract arrangements). Under this alternative approach, the AER would

publish guidelines setting out principles that are to be applied in relation to all firmness methodologies used.

In the case of bespoke methodologies, however, the AER would establish a panel of auditors that have been pre-approved to review firmness methodologies for bespoke products. A liable entity could engage an auditor from this panel to work with it during contract negotiations to develop the firmness methodology that would apply. The auditor would provide a report that the methodology used is in line with the principles as set out by the AER. The AER would not subsequently approve the firmness methodology for the bespoke contract. This approach is likely to better accommodate contract negotiation timeframes. The auditor's report would be binding on the AER as long as the auditor confirms the firmness principles set out in the AER guideline were applied.

The AER would also publish default firmness methodologies and liable entities using these would not be required to engage an independent auditor.

The ESB is still actively considering the approach to bespoke firmness methodologies and the role of independent auditors. As flagged in Section 6.8, below, the ESB welcomes stakeholder feedback on the proposed approach and potential alternative approaches.

6.4 Grandfathering of contracts

Contracts of large customers (market customers, or large customers that have opted-in) which were in place prior to 10 August 2018 will be grandfathered as qualifying contracts and will automatically receive a firmness factor of one. The draft Rules propose that this firmness factor will apply until the end of the original contract term or 1 July 2023, whichever comes later.

6.5 Market Liquidity Obligation

To help manage stakeholder concerns regarding the liquidity and transparency of contract markets, the Final Detailed Design paper indicated that a Market Liquidity Obligation (MLO) would operate when a T-3 Reliability Instrument is made.

6.5.1 Triggering the MLO

The draft Rules provide that obligated parties (Section 6.5.2) must commence market making under the MLO within five business days after a T-3 Reliability Instrument is made by the AER in that region (provided that there are at least two corporate groups which exceed the 15 per cent market share threshold in that region – see below). When the AER receives a T-3 Reliability Instrument Request from AEMO, it will provide obligated parties with advance notice that the MLO could be triggered.

An MLO will continue to operate, even if the ESOO at T-2 indicates the forecast reliability gap has closed, to ensure that liquidity remains in the market. This is necessary as a T-1 Reliability Instrument could still be issued on the basis of the T-3 Reliability Instrument, if the forecast reliability gap later reopens. The draft Rules therefore state that once the MLO commences, it will operate until:

- a T-1 Reliability Instrument is issued; or
- the AER informs obligated parties that the MLO is no longer required.

The latter case would only occur where a T-3 instrument is issued, but no related T-1 instrument is made within the timeframe required by the Rules, or where there are less than two corporate groups in a region which exceed the 15 per cent market share threshold for the last two consecutive quarters (on average) in that region (see Section 6.5.2).

The MLO only operates in the region for which a T-3 reliability instrument is issued.

Potential alternative approach to determining whether the MLO is triggered

Stakeholders have proposed an approach under which the MLO would not need to operate at all if parties in the relevant region are already voluntarily market making through the ASX. This would be conditional on the voluntary market-making satisfying, at a minimum, the requirements associated with the MLO.

The benefit of this approach is that it allows for the most efficient market-making, ensuring additional market-making obligations are only introduced where parties do not already have incentives to do so. However, the ESB has identified complications with this approach including:

- Determining the volume that needs to be offered under the voluntary scheme for it to be equivalent to the MLO, as the MLO is based on obligated parties' generating capacity.
- Determining what happens if the parties engaging in voluntarily market-making decide to cease market making sometime between T-3 and T-1.
- The limited authority the Rules may have to monitor or influence the market-making if the volunteering parties are financial intermediaries or other parties and not Market Participants.

Therefore, this alternative approach would need to be carefully considered to ensure that the underlying intent of the MLO could be satisfied.

6.5.2 Obligated parties

The draft Rules propose that the MLO will only require obligated parties to make contracts available for the period of the forecast reliability gap where there are at least two corporate groups in that region which exceed the 15 per cent market share threshold for the last two consecutive quarters (on average) in that region (each corporate group, being a '**MLO group**'). The MLO will not apply to Tasmania, as the Tasmanian Electricity Supply Industry Act 1995 already requires Hydro Tasmania to offer a range of regulated over the counter (OTC) electricity contracts to authorised retailers operating in the state.

The draft Rules provide that the MLO will apply to scheduled generators whose generation (based on the registered capacity of all scheduled generating units in a region), is controlled by a MLO Group. Registered capacity is not defined in the Rules but is included in AEMO's published registration list. The ESB is considering whether this concept should be defined in the Rules or some other measure should be used.

Each generator Market Participant whose generation capacity is controlled by a MLO group will be an obligated party subject to the MLO. The draft Rules specify that the MLO will not apply in a region if there is only one MLO group in that region (i.e. only one generator or generator group in that region which exceeds the 15 per cent market share threshold). The ESB notes that based on current ownership structures, these provisions would result in two or three MLO groups in Queensland, New South Wales, Victoria and South Australia.

For the purpose of identifying obligated parties, the AER will calculate generation market shares at least once every quarter. The draft Rules provide that the MLO is imposed on NEM generators that satisfy the following test:

- A parcel of traced capacity of that generator is held by an entity that is part of a MLO group; and
- The MLO group as a whole holds aggregate scheduled generation capacity above 15 per cent in that region.

For the purposes of this test:

- The draft Rules provide for the identification of the trading right holder for the market generator, being the person who has “dispatch control” over some or all of the generator capacity. Dispatch control is the ability to control the dispatch offers made to AEMO and will be further defined in the MLO guidelines. As this is a critical building block to the MLO regime, the ESB welcomes feedback on this concept.
- In most cases the Market Participant for the generating unit is also likely to be the trading right holder.
- However, it may be a separate entity if the Market Participant has entered into a contract which provides control over market bidding decisions to a third party. It is possible that there may be more than one trading right holder for a Market Participant’s generator capacity.
- Trading right holders are then grouped for the purpose of determining trading groups based on a ‘control or influence’ test such that an entity with an equity interest of more than 10 per cent in another entity will be deemed to be in the same trading group. The control and influence test is broad and based on the test used in the Security of Critical Infrastructure Act 2018 (Cth). The breadth of the test reduces the risk of associated trading right holders and their trading rights being structured so as to not count towards the threshold. The ESB welcomes feedback on the appropriateness of this test.
- A trading group which exceeds the 15 per cent threshold is a MLO group. Generators who have all, or a part of, their capacity controlled by a MLO group, are obligated parties under the MLO.

While the definition may be complex, containing a range of sub-tests and calculations and requiring various inputs, it is necessary to:

- Address the sophisticated corporate structures which are present in the market;
- Ensure that the market share test applied to entities which have the greatest control and influence; and
- Fall clearly within the ambit of the Rules – i.e. imposing obligations on Market Participants.

When the AER publishes the market shares of each MLO group for each region, it will also publish a list of the obligated parties under the MLO. For each MLO group, market share will be calculated by summing all the MWs that it is able to control or trade (through its subsidiaries) in a region. So that the AER can make this assessment, the draft Rules require new and existing generators to provide information to the AER on generating units under their influence and control, and on the corporate grouping to which they (or the person that holds their trading rights, if a third party) belong.

Between the AER's quarterly assessments, the circumstances of a MLO group may change, such that it no longer exceeds the market share threshold (for example, if it sells or retires a generating unit). In this case, an obligated party may request the AER to reassess its status. If a party is successful in its reassessment application, where the AER determines a MLO group no longer meets the threshold, the AER will need to determine if any new party should be classified as a MLO group for the purposes of the MLO. To ensure that there are always at least two MLO groups in a region (where possible), the respective obligations for the former and new MLO groups will cease/commence at the same time. The ESB notes that decisions to sell or retire generation assets take time. Therefore, the new obligated party should have sufficient visibility that it may need to commence market making under the MLO, and to ensure it has the necessary systems, processes and procedures in place to do so.

A change in obligated parties may also occur outside the application process, for example, where as part of an obligated party's continuous reporting obligations to the AER, a new or alternative MLO group is identified. Where circumstances change such that information previously provided to the AER (as described above) is no longer correct then the generator must provide updated information to the AER. If this results in a change to market shares of generators the obligated parties under the MLO may then change.

Potential alternative approach to determining liable parties in the first two years

Currently, the draft Rules provide for generating units to be grouped by tracing control over the trading of a generating unit's capacity, to the relevant corporate group. In other words, the aggregate capacity of a corporate group, will be determined for a region, by adding together all the MW that it is able to control/trade (through its subsidiaries) in a region. This comprehensive way of determining obligated parties will ensure it captures the various ways that people may structure their business and provides flexibility so that companies can organise themselves as they see fit.

Given the likely time required to determine the appropriate grouping, in consultation with relevant stakeholders, the ESB is considering whether an alternative 'deeming' approach should apply for the first two years of the Obligation (1 July 2019 to 1 July 2021). This would be implemented by:

- Including a list of deemed MLO generators into the transitional Rules
- Providing the AER with an ability to alter the list of MLO generators
- Deferring application of the MLO generator definition (as discussed above) in the Rules until 1 July 2021.

The deeming approach would allow for adjustments if there are changes within the two year deeming period.

In order to determine which Market Participants would be deemed as transitional MLO generators, the ESB proposes the following process:

- The ESB will make an initial assessment of which Market Participants should be deemed as MLO generators, based on publicly available information on AEMO’s register of Market Participants
- Market Participants will be invited to comment on the proposed list and provide supporting information
- The ESB will publish a final list for inclusion in the transitional Rules.

The deemed MLO generator list would comprise a detailed file (based on the current participant list maintained by AEMO) and include the MLO information for each generating unit; namely:

- Participant
- Station name
- Region
- Physical unit no
- DUID
- Registered capacity
- Trading rights holder
- Quantity of trading rights held
- Corporate group
- Corporate group aggregate capacity.

6.5.3 Market making requirements

Obligated parties will be required to post bids and offers, with a maximum spread, for standardised ‘firm’ products in the relevant region that cover the period of the reliability gap. The requirements included in the draft Rules are set out in the table below.

Requirement	Details per Draft Rules	Rationale
Product type	<ul style="list-style-type: none"> • MLO products are taken to be qualifying contracts with a firmness factor of one. MLO products are: • Base and peak futures (monthly or quarterly) • Cap futures (quarterly) • The AER may approve other exchange-traded products. • The combination of products offered is at the discretion of the obligated party. 	Allowing obligated parties to sell base/peak futures or caps recognises the differences between the generation resources of obligated parties. For example, peaking generators are better suited to selling caps than swaps.
Size of bids and offers	<ul style="list-style-type: none"> • Bids and offers must be posted 	A lot size of 1 MW is likely to fit the requirements of small retailers and

	that allow 1 MW lot trades to occur.	large customers.
Bid/offer spread	<ul style="list-style-type: none"> The maximum difference in bid and offer prices is 3% for flat base load or peak load contracts in NSW, VIC and QLD and 5% in SA. The maximum bid-offer spread on cap contracts is 10% for any region. Regardless of maximum bid-offer spread requirements, the bid-offer spread is not required to be less than \$1 per MW. 	A maximum bid/offer spread prevents parties posting prices that make their contracts wholly unattractive. A nominal minimum threshold will be provided to provide an upper limit to the risk of the spread.
Requirement to place bids / offers	<ul style="list-style-type: none"> An obligated party must post bids and offers such that they are available during a 'trading session', between 11:00 and 11:30 am and 3:30 – 4:00 pm or two alternative thirty minute periods nominated and published by an approved exchange. However, this is only required for 35 sessions per month, except in January and December where it is only 25 sessions per month. 	Bids and offers must be available for a reasonable time during market making windows each day. 35/25 sessions of 30 minutes each per month is consistent with the terms and conditions of the ASX's market making agreements.
Net sales limits	<ul style="list-style-type: none"> The draft Rules set daily, quarterly and total net sales limits. An obligated party is not required to be a net seller above these limits (i.e., once the limit is reached, a MLO group may cease market making for the remainder of that day, quarter or market making period). Daily net sales limit: 5 MWs per session in NSW, QLD and VIC, and 2 MWs per session in SA. Quarterly net sales limit: 1.25% of the MLO group's aggregate generation capacity, in any quarter the MLO is in force. Total net sales limit: 10% of the 	<p>The daily, quarterly and total sales limits are designed to ensure that a proportion of obligated parties' unhedged volumes is delivered to the market gradually between T-3 and T-1 through the MLO. The intent is that, as far as possible, contracts are available over the entire period of market making activity.</p> <p>The 10% threshold represents aggregate total volumes across obligated parties of 750 – 1,100 MW in NSW, VIC and QLD and approximately 250 MW in South Australia.</p>

MLO group's aggregate generation capacity, over the period the MLO is in force.

Some stakeholders have indicated that the prescribed bid/offer spreads are too narrow. The ESB welcomes comments on the prescribed bid/offer spread as well as any other aspects of the market making requirements.

6.5.4 MLO trading arrangements

The MLO relies upon contracts being easily accessed and traded. Therefore, the draft Rules provide that obligated parties must post bids and offers using a trading facility, such as the ASX, which has been previously approved by the AER. The transitional provisions of the draft Rules deem the ASX as an approved trading facility for the purposes of the MLO.

The draft Rules set out criteria that the AER must take into account when approving a trading facility (set out in the text box below). The AER's MLO Guideline will set out other aspects of the process for approving trading facilities, including timing and consultation.

Criteria to approve a trading facility

- All MLO products can be bought and sold on the trading facility.
- The trading facility has appropriate credit and prudential arrangements.
- The costs and ease of trading on the trading facility are reasonable.
- There is healthy trading of MLO products on the trading facility.
- The operator of the trading facility is willing to provide relevant trading data to the AER when requested, for the purposes of monitoring compliance with MLO.
- Any other relevant criteria set out in the MLO Guideline.

6.5.5 MLO reporting and compliance

To monitor obligated parties' compliance with the MLO, the AER will require information on bidding behaviour and trading in respect of MLO products for the duration of the MLO period.

- Obligated parties must facilitate access to trading information from the exchange for the AER to monitor compliance with the obligation.
- The AER's MLO Guideline must set out reporting requirements of obligated parties, including, frequency, content, format and timing.

Obligated parties will be required to provide detailed information to the AER, including who are their trading right holders and the trading groups to which those trading right holders belong. In most cases, obligated parties will have this information because they are part of the same corporate group. However, there may be cases where an obligated party's trading right holder is a third party, and the obligated party will need to obtain this information from that party for compliance purposes. The ESB is seeking feedback on the practicalities of obtaining this information.

The MLO obligations are intended to operate at a group level, with bids and offers to be posted by a single entity on behalf of the corporate group. The draft Rules therefore specify that:

- Generator market participants may register a single agent (nominee) with the AER to fulfil their corporate group obligations under the MLO. The nominee agent will be allowed to post bids and offers for multiple generator market participants within a single corporate grouping as if it were a single obligated party.
- Obligated parties are responsible for any breaches of the MLO made by their nominee.

6.5.6 Safeguards

Safeguards are needed to ensure that obligated parties can reasonably meet the requirements of the MLO. The draft Rules specify that an obligated party is not required to comply with the MLO in the following circumstances:

- Trading halts called by the exchange on MLO products.
- Trading halts imposed on the company either by law or by the exchange.

6.6 Voluntary Book build

The final detailed design provided that if the reliability obligation is triggered, AEMO will invite interested parties to lodge an expression of interest to participate in a book build mechanism. This mechanism would provide an opportunity for liable entities – in particular, small retailers or large customers who choose to manage their own obligation – to secure qualifying contracts which are underpinned by new physical resources. Participation in the Book Build is voluntary.

6.6.1 Timing of the book build

The draft Rules provide that AEMO must develop and publish Book Build Procedures by 1 January 2020. Once the Book Build Procedures are in place, the draft Rules state that AEMO must conduct a T-3 book build for the reliability gap in accordance with its procedures if a T-3 Reliability Instrument is issued. AEMO will have the discretion to also conduct a T-2 book build. The ESB notes that AEMO may need to consider whether an Australian Financial Services Licence (AFSL) exemption is required in order to run the book build, and if necessary, to obtain one.

6.6.2 Book build process

The draft Rules related to the voluntary book build (voluntary for participants but mandatory for AEMO to develop and run) are high-level with much of the design and process to be set out in AEMO's Book Build Procedure.

AEMO will conduct the book build by inviting sellers who are looking to develop new capacity to make offers to sell contracts for the duration of the reliability gap, and inviting buyers to make offers to buy these contracts.

While the book build matches buyers and sellers, the matched buyer and seller still need to negotiate and enter into a contract. Therefore, AEMO requires visibility as to whether a contract is successfully concluded between the parties. The draft Rules require participants matched under the book build mechanism to inform AEMO if they have successfully entered into a contract, in accordance with AEMO's Book Build Procedures.

AEMO will not be a counterparty for any of the contracts entered into pursuant to the book build. Further, AEMO is not responsible for any risk associated with any contracts entered into through the mechanism. Therefore, each party will need to manage their counterparty risk. Risk management may be addressed through AEMO's procedures or the negotiated terms of the contract. For example, AEMO may choose to require a form of security before a party can participate in the book build.

Further details on the book-build process will be set out in AEMO's procedures.

6.6.3 Participation requirements

Market participants will need to know in advance what is required of them to be able to participate in the book build mechanism. However, eligibility criteria must be flexible and able to adjust to changing market conditions and changing technology. Eligibility criteria will therefore be set out in AEMO's Book Build Procedure, rather than the Rules.

Criteria for parties offering to sell contracts via the book build mechanism may include:

- Minimum firmness factor (for the purpose of compliance with the Obligation).
- Whether the associated project has reached a final investment decision.
- Confirmation of financing arrangements for the project.
- Verification the output of the project has not been 'over-sold'.
- Credit requirements.
- The expected timing for completion of the new project (potentially including a sufficient buffer to account for construction delays).

The eligibility criteria (and other aspects of AEMO's procedures) will need to balance the policy objective of linking the book build with new supply side resources against the market benefits of contracts that are 'fungible' and not dependent on particular projects.

6.6.4 Book-build contracts

The purpose of the book build mechanism is to incentivise the closure of the reliability gap by providing liable entities with contracts that allow them to comply with the Obligation. Therefore, the draft Rules provide that the Book Build Procedures may include requirements for book build contracts with the objective that those contracts will be qualifying contracts. It is the responsibility of the buyer to confirm that any contract entered into meets the qualifying contracts criteria. Book build contracts will need to be assessed for firmness pursuant to the liable entity's firmness methodology (Section 6.3).

Contracts entered into under the book build will not necessarily be standard contracts. Instead, it is expected that key terms will be specified in the book build, with detailed terms

and conditions to be finalised directly between buyers and sellers that have been matched.¹⁶ However, matched counterparties may find that they cannot conclude a contract, for example, because they cannot agree key terms or based on the outcome of a credit assessment. The draft Rules will therefore require that, if a party decides to participate in the book build mechanism, they must provide their essential minimum contract terms to AEMO. AEMO will take essential terms as given and only match with a counterparty that satisfies those minimum criteria. This is intended to minimise the number of times that parties are unable to enter into a contract and reduce the moral hazard that parties participate in the book build as a 'price discovery' exercise, without a bona fide intention to conclude a contract.

The draft Rules provide that that any contracts offered for sale as part of the book build mechanism do not serve to meet an obligated party's obligation under the MLO.

6.6.5 Other book build matters

Where AEMO is able to identify the costs associated with running the book build mechanism, it is appropriate that those that benefit from the service pay the costs associated with its operation. The draft Rules therefore provide that AEMO may collect fees for the costs it incurs in running the book build mechanism. The draft Rules provide that book build fees may be included in an updated version of the structure of participant fees.

The fees will be collected as a type of market participant fee. AEMO will consult on its approach to collecting the fees under the existing consultation regime for participant's fees.

As the book build is a new mechanism, it will be useful to undertake a review after it has been in operation for a few years, to determine if the Rules and/or AEMO's procedures need to be amended to enhance the operation of the mechanism. The draft Rules provide that AEMO must undertake a review of the book build mechanism after three years from when the book build mechanism is first run.

6.7 Net Contract Position

As set out in Section 14O(3) of the draft NEL, each liable entity must determine its net contract position and include this in the net contract position report submitted to the AER. The draft Rules prescribe that the net contract position must be determined by:

¹⁶ AEMO's procedures may also mandate certain contractual terms (for example, in relation to conditions precedent, project delay or termination and third party participation).

1. Determining the number of MW under qualifying contracts that REDUCE the liable entity's exposure to the spot price in the gap period, adjusted for firmness.

2. Subtracting the number of MW under qualifying contracts that INCREASE the liable entity's exposure to the spot price in the gap period, adjusted for firmness.

3. Adjusting for the effects of contracts that are not qualifying contracts, but which increase the liable entity's exposure to the volatility of the spot price.

6.7.1 No Requirement to Maintain Net Contract Position

Although the draft NEL provides that it may be included, the draft Rules do not provide an obligation that liable entities are required to maintain their net contract position between the Contract Position Day and the gap period. Their net contract position for the gap period, as at the Contract Position Day, must be reported to the AER (by the Reporting Day) and it is this position that compliance will be assessed against. If liable entities choose to trade out of this contract position, they are entitled to do so.

To ensure that the overall pool of firmness adjusted-qualifying contracts remains from the Contract Position Day through the gap period, any contracts as at the Contract Position Day which are not enduring through to the gap period will be adjusted and accounted for as part of the firmness methodology applied by the liable entity.

The ESB welcomes feedback on the approach to maintaining the net contract position.

6.7.2 Permitted Adjustments to Net Contract Position

The ESB recognises that a liable entity may need to adjust its net contract position that is used for compliance in circumstances where its forecast demand varies materially.

As such, the draft Rules provide for four categories of permitted adjustment to the net contract position for changes that happen between T-1 and T. If such a change occurs, a liable entity may apply to the AER for an adjustment to its net contract position, justifying the basis of the adjustment. The AER must approve or reject the application in line with criteria in the Contracts and Firmness Guidelines.

These adjustments concern the net contract position submitted to the AER in a net contract position report and against which compliance can be assessed.

The categories of permitted adjustment are outlined in the text box below.

Permitted adjustments

- **Mass market or small customers** – where a liable entity takes on or loses small customers it may apply to adjust its net contract position, but only where taking on or losing the customers causes the liable entity's load to increase by more than 15 per cent.
- **Existing large customers under 30 MW** – where a liable entity takes on or loses existing large customers below 30 MW in size, it may apply to adjust its net contract position, but only where taking on or losing the customers causes the liable entity's load to increase or decrease by more than 1 per cent.
- **New large customers** – where a liable entity takes on a customer over 30 MW that did not exist at the time of the contract position day, it may apply to adjust its net contract position, but only where taking on the new customer causes the liable entity's load to increase by more than 1 per cent.
- **Retailer of Last Resort (ROLR) customers** - where a liable entity takes on ROLR customers it may apply to adjust its net contract position.

The ESB considers it appropriate to have different threshold levels for the different categories of permitted adjustments. In particular, generally a retailer would be expected to manage some level of churn among its mass market or small customers. As such, a higher threshold for a permitted adjustment is appropriate and minimises the administrative burden associated with this process. In relation to the threshold for C&I permitted adjustments, the ESB recognises that it is important to retain flexibility to provide C&I customers with the ability to seek out and negotiate new contracts. Therefore, a lower threshold is appropriate to maintain the incentive on retailers to enter into contracts with C&I customers.

The Final Detailed Design paper did not envisage that liable entities would be able to adjust their net contract position to account for changes in mass market customer load. This reflected a view that retailers should be able to manage their contracting and account for churn in mass market customers. However, the ESB considers that there are benefits in permitting adjustments in cases where churn has materially changed the liable entity's load. Permitting adjustments should mitigate the risk of a retailer deciding not to take on new mass market customers because it cannot adjust its net contract position.

For the purposes of determining whether the relevant percentage has been reached, existing large customers shall be counted together in one group, new (over 30MW) large customers shall be counted separately, small customers shall be counted together in another group and ROLR customers shall be counted in a fourth group. It is possible for a liable entity to reach the relevant percentage for a group of customers on multiple occasions between T-1 and T, and each time the liable entity may apply to the AER to adjust its net contract position.

A liable entity may only seek permitted adjustments to the net contract position to the extent necessary to accommodate the change in customers. For the purposes of determining whether the adjustment threshold has been satisfied and a net contract adjustment is permissible, a liable entity's maximum TI net contract position at T-1 will be used as a basis to determine the liable entity's forecast demand.

6.7.3 Net Contract Position Reporting

The draft NEL (Section 14P) states that liable entities are required to provide the AER with a net contract position report on the Reporting Day (or the New Entrant Reporting Day – see Section 5.3). The draft Rules provide that the net contract position report must include:

- The liable entity's overall net contract position;
- A list of qualifying contracts;
- The firmness factor applied to each contract and what firmness methodology was applied to determine this firmness factor;
- If bespoke firmness methodologies have been applied, confirmation from an independent auditor that the firmness methodology used is consistent with the firmness principles (if not pre-approved) and was used to calculate the firmness of relevant contracts;
- Any other adjustments for non-qualifying contracts that increase the exposure to the spot price; and
- Any other information specified in the AER's Contracts and Firmness Guidelines.

The net contract position report must be certified by a director of the liable entity. Other requirements relating to the net contract position report (for example, form and other certification requirements) will be set out in the AER's Contracts and Firmness Guidelines.

If the liable entity has non-qualifying contracts which have the effect of increasing the liable entity's exposure to the spot price, these contracts and their impact must also be reported to the AER. The net contract position report must state that all qualifying contracts and other non-qualifying contracts have been reported.

As noted in Section 5.2.6, if a liable entity wishes to adjust its net contract position after the Reporting Day it must apply to the AER for approval. Any application must include a revised net contract position report.

6.8 Questions for stakeholders

The ESB welcomes stakeholder feedback in relation to all aspects of the draft Rules described in this paper. Stakeholder feedback is sought in particular on the issues set out below.

Questions

- Firmness methodology: The Rules currently provide that a liable entity which uses a bespoke firmness methodology must engage an independent auditor to confirm the net contract position submitted to the AER uses a methodology which is consistent with the firmness principles (if not pre-approved) and was calculated using the bespoke methodology proposed. Liable entities can, but don't have to, submit their bespoke methodologies to the AER for approval. A potential alternative approach has been outlined in Section 6.3. The ESB is seeking feedback on these, or alternative, approaches for the purposes of determining bespoke firmness methodologies for qualifying contracts.

- MLO trigger: The ESB is seeking feedback on the proposal that the MLO only be triggered where sufficient voluntary market-making is not already occurring in the region. Further, feedback is sought on challenges with this approach other than those identified and how to overcome the identified challenges of this approach, if it were adopted.
- MLO obligated parties: The ESB is seeking feedback on the proposal that MLO obligated parties for the first two years of the RRO would be deemed in the Rules.
- Registered capacity: The ESB is seeking feedback on whether this is the appropriate measure of generation capacity and, if so, whether it needs to be defined in the Rules.
- Dispatch control: The ESB is seeking feedback on this concept for determining trading right holders and the purposes of grouping for the MLO threshold.
- Control and influence test: The ESB is seeking feedback on the appropriateness of the control and influence test in determining trading groups subject to the MLO.
- MLO information: The ESB is seeking feedback on the information obligations imposed on MLO obligated parties.
- Permitted adjustments: The ESB is seeking feedback on two elements of permitted adjustments:
 - Are there any other categories of adjustments that should be considered permitted adjustments?
 - Are the thresholds for adjustment (i.e. 1 per cent and 15 per cent) the appropriate thresholds? If not, what are the appropriate thresholds?
 - Is the net contract position the appropriate measure for permitted adjustments? Does this allow for any gaming opportunities? If so, how? Can these gaming opportunities be removed or minimised by using a different approach?

7. Compliance

Relevant provisions of the draft National Electricity Rules:

- Chapter 4A, Part A (Introduction)
- Chapter 4A, Part B (Forecasting the reliability requirements)
- Chapter 4A, Part C (Reliability instruments)
- Chapter 4A, Part D (Liable entities)
- Chapter 4A, Part F (Compliance with the Retailer Reliability Obligation)

Relevant sections of the online RRO Illustrative Example:

- Actual Demand Data
- Compliance Assessment – Trading Intervals
- Compliance Assessment – Liable Entity Demand
- Liable Entity Demand Calculation

The draft NEL (Section 14R) states that:

The Obligation applies if actual demand during a stated trading interval in the reliability gap period is more than the one-in-two year peak demand forecast for that gap period.

Liable entities must comply with the obligation that their net contract position for the trading interval is not less than their share of the one-in-two year peak demand forecast for the trading interval (this means that actual demand is scaled back to the level of the one-in-two year peak demand forecast).

These provisions of the draft Rules relate to the AER's assessment of whether liable entities have complied with their contractual obligations under the Obligation, as required by the draft NEL.

It should be noted that the AER maintains its ability to assess compliance and pursue enforcement of any requirements under the draft Rules in line with the existing powers of the AER in this regard.

7.1 Assessment of Regional Demand

If actual demand in a region during a reliability gap period exceeds the one-in-two year peak demand forecast¹⁷, the AER will assess the net contract positions submitted by liable entities to determine if the level of contract coverage was sufficient to meet their obligation (i.e., their portion of peak demand, scaled). The AER will only assess compliance for the trading intervals in which actual demand exceeds the one-in-two year peak demand forecast. An

¹⁷ As set out in the ESOO forecast on which the T-1 instrument was based.

assessment of actual regional demand is therefore needed in order to identify the trading intervals that will be subject to a compliance assessment.

The draft Rules specify what data source will be used as the reference point for actual regional demand and whether any adjustments are required. Without adjustment, demand will be suppressed by any actions taken by AEMO to manage the power system – for example, activation of RERT contracts or direction of load shedding. The ESB considers that perverse incentives could be created if interventions by AEMO to maintain system reliability prevent compliance with the Obligation from being assessed. Therefore, for the purposes of the Obligation, actual demand data will need to be adjusted to reflect what demand would have been, absent AEMO's interventions.

Actual demand could also be suppressed by the actions of market participants, for example, by activating DR contracts or dispatching non-scheduled generation or other supply side resources.

If a liable entity has included qualifying demand response contracts in its net contract position, and activates this demand response during the gap period, actual demand will be adjusted to add this reduction in demand back in for the purposes of assessing compliance. This demand response will also be added back to regional demand to determine the overall level of demand for the period.

If, however, a liable entity does not include demand response in its net contract position but uses demand response to suppress its actual demand on the day, no upwards adjustment is made. This reduction in the liable entity's demand during the gap period would reduce the likelihood of a compliance assessment being triggered. This could provide liable entities with an incentive to take action to reduce their load when regional demand approaches the one-in-two year peak forecast, in order to reduce the risk of compliance with the Obligation being assessed. The ESB considers that this would be desirable to assist with managing the system in high demand conditions.¹⁸ Therefore, demand is not adjusted for these actions.

In addition to these possible incentives, different approaches to calculating actual regional demand create trade-offs in terms of timeliness and accuracy. If actual regional demand can be calculated and published in close to real time, liable entities will have the opportunity to respond by taking steps to manage their load. However, the closer to real time that the assessment of actual demand is made, the harder it is to precisely determine what demand would have been in the absence of action by AEMO. For example, while AEMO may know on a near real time basis what response it has requested from RERT contract providers, it will not know the actual response until settlement data is available (up to 30 weeks after the event). However, waiting for more accurate data would remove the opportunity for liable entities to respond and provide liable entities with limited visibility on whether their compliance will be assessed.

¹⁸ The ESB notes that liable entities will also respond to pool prices, which may provide a stronger signal to activate DR contracts in high demand conditions, compared to the Obligation. Nonetheless, not adjusting actual demand for DR may provide some additional incentives at the margin.

The ESB considers that the approach reflected in the draft Rules for calculating actual regional demand appropriately balances these considerations:

- **Data source:** The draft Rules state that the underlying data source (before adjustments) will be demand published by AEMO, as defined in the Reliability Forecast Guideline.
- **Adjustments:** The draft Rules state that, to calculate actual demand for a region, the demand data published by AEMO will be adjusted to reflect what would have occurred, had AEMO not intervened in the market through directions, RERT or load shedding. Actual demand will not be adjusted for demand response (DR) activated by liable entities, given the reasons outlined above.
- **Publication:** The draft Rules require AEMO to publish actual demand as close to real time as practicable, in order to assist liable entities in managing their demand position. This will require the adjustments to demand to be made on the basis of the amount AEMO requests, rather than the actual outcome of those requests.

The draft Rules require AEMO to set out its methodology for the adjustments to derive actual regional demand from demand in its Reliability Forecast Guidelines.

At the end of the reliability gap period AEMO must inform the AER of whether actual demand has exceeded the one-in-two year peak demand forecast for a region during the reliability gap period, and the trading intervals in which this has occurred. The draft Rules state that the form and content of this notification, and the timing for when it is provided to the AER, will be set out in the AER's Contracts and Firmness Guidelines. The Rules also require AEMO to publish this notification on its website within five business days of submission to the AER.

7.2 Assessment of Liable Entity Demand

For the relevant trading intervals, the AER will assess whether each liable entity's net contract position is sufficient to meet their liable share of the one-in-two year peak demand forecast (effectively their scaled settled demand, termed "liable load" in the Rules).

In determining the liable load, an adjustment is required for qualifying DR contracts that are activated by liable entities. This will need to be added back to both the liable entity's settled demand and the actual demand for the region. Without this adjustment, a liable entity would receive a double benefit from activating a qualifying DR contract. That is, the liable entity would benefit from having the contract count as a reduction in their scaled actual demand and a contribution to their net contract position. Therefore, the draft Rules reflect the following adjustments:

- **Liable entity's trading interval liable load:** Settled demand will be adjusted to reflect the actual volume of DR qualifying contracts they have activated in each trading interval.
- **Highest adjusted peak demand for the region:** For all trading intervals in which actual regional demand exceeded the one-in-two year forecast (see Section 7.1), AEMO will adjust actual regional demand to reflect the sum of actual demand response for all liable entities under qualifying contracts. Highest adjusted peak demand is defined as the highest demand calculated over these trading intervals.

The draft Rules state that AEMO must set out its methodology for making these adjustments in its POLR Cost Procedure. Liable entities may be required to keep records of activations of qualifying DR contracts, if this is necessary for AEMO to make the adjustment.

The draft Rules also provide for a liable entity's settled demand¹⁹ to exclude connection points associated with Large Opt-in Customers and Prescribed Opt-in Customers and to be adjusted to reflect transmission losses (i.e., grossed up to demand at the regional reference node). Market customers face pool price exposure at the node and therefore enter into contracts to manage their position at the node. For example, a perfectly hedged retailer with 400 MW of settled load and transmission losses of five per cent would best manage their position by entering into 420 MW of hedge contracts. Their net contract position submitted to the AER would reflect 420 MW of contracts. If metered demand is not adjusted for transmission losses, their compliance with the Obligation would be assessed on 400 MW of metered load.

The text box below sets out the steps in calculating a liable entity's liable load, as reflected in the draft Rules.

¹⁹ Settled demand is adjusted gross energy, which is metered energy adjusted for distribution losses.

1. Calculate Liable Entity Actual Demand

Liable Entity Liable Load is calculated as:

Components of demand	Description
Revised settlement demand	Based on the final revised settlements data as reported by AEMO (i.e., after final revisions at 30 weeks).
<i>Less</i> adjustment for opt-in customers	A liable entity's demand will be reduced for any registered opt-in customers and this demand will be re-assigned to the opt-in customer.
<i>Plus</i> adjustment for demand response [under qualifying contracts]	Plus the liable entity's actual measured demand response for registered NMIs.
<i>Plus</i> adjustment for transmission losses	Adjusted to account for transmission losses (i.e., grossed up to the node).

2. Calculate liable entity liable share of actual demand (scaled)

Liable share is calculated as:

A liable entity's share of the one-in-two year peak demand forecast for a trading interval is calculated as follows:

$$LS = \left(\frac{LL}{HAPD} \right) \times OITPDF$$

where:

LS = the liable entity's liable share (in MW);

LL = the liable entity's liable load (in MW);

HAPD = the highest adjusted peak demand occurring in a 'compliance TI' in the relevant reliability gap period (in MW);

OITPDF = the one-in-two year peak demand forecast (in MW),

except that if $OITPDF/HAPD > one$, then it is taken to be equal to one.

7.3 AER Assessment of Net Contract Position Report

The draft Rules provide that the AER must assess each liable entity's submitted net contract position (including adjustments, if any – see Sections 6.7 to 6.7.3) against the liable share provided by AEMO to determine compliance with the reliability obligation. As described in Section 8.1, this assessment will only apply to trading intervals for which actual regional demand exceeded the one-in-two year peak demand forecast. A liable entity will have failed to comply with the Obligation if its net contract position for a trading interval is less than its liable share.

For the purpose of the compliance assessment, the draft Rules provide that if the actual demand in the relevant trading intervals during the reliability gap period exceeds the one-in-two year peak demand forecast in the T-1 ESOO then AEMO must provide the AER with:

- The liable load for each liable entity in the gap period for each of those trading intervals.
- The liable share (as defined above) for each liable entity for each of those trading intervals.

AEMO must provide this to the AER by 40 weeks after the end of the gap period and in a form set out in guidelines. In practice AEMO should be able to do this earlier than 40 weeks, such that AEMO should be able to advise market participants (and opt-in customers) of any adjustment for POLR costs by the about the 40 week mark (assuming no dispute with any of the calculations). The ESB is currently working through the detail on possible timelines for this process to assess what other timing requirements may be required.

If AEMO incurs costs to exercise its procurer of last resort function (Section 8), entities whose liable share exceeds their net contract position for a relevant trading interval will be allocated a share of these costs. Section 8.3 provides further details on how a POLR liable entity's compliance shortfall will be established for the purpose of POLR cost allocation.

7.4 AER Audits and Compliance

The draft NEL (Division 1C, sections 18Z to 18ZI) sets out a detailed compliance regime that obliges the AER to monitor the compliance of liable entities with the Obligation and also requires liable entities to establish arrangements to monitor their own compliance. Among other provisions, the regime provides that the AER may conduct compliance audits. The draft NEL also specifies that the AER must make Reliability Compliance Procedures and Guidelines, and that these guidelines may relate to:

- Compliance with the reliability obligation.
- Liable entities establishing policies, systems and procedures to monitor compliance.
- Information and data that must be provided to the AER.

7.5 Questions for Stakeholders

The ESB welcomes stakeholder feedback in relation to the compliance-related draft Rules described in this chapter.

Questions

- Liable Entity's share of one-in-two year peak demand: The ESB is seeking stakeholders view on the formula used for determining a liable entity's share of the one-in-two year peak demand forecast and in particular that a single scaling factor is used for the entire gap period rather than a scaling factor for each trading interval in the gap period.

8. Procurer of Last Resort

Relevant provisions of the draft National Electricity Rules:

- Clause 3.15.9 (Reserve settlements)
- Clause 3.15.9A (Procurer of last resort)
- Chapter 4A, Part A (Introduction)
- Chapter 4A, Part F.(Compliance with the Retailer Reliability Obligation)

(Note that these provisions are shown as amendments to the AEMC's draft determination and draft Rules associated with the RERT rule change request²⁰, rather than the current version of the National Electricity Rules.)

Relevant sections of the online RRO Illustrative Example:

- Procurer of Last Resort
- Updated Forecast of System Needs
- RERT Dispatch
- Determining POLR Costs

These provisions of the draft Rules set out the processes and requirements in relation to AEMO's role as Procurer of Last Resort (POLR). This includes how POLR interacts with the Reliability and Emergency Reserve Trader (RERT), the determination of POLR costs and the allocation of POLR costs to non-compliant liable entities.

8.1 POLR

The ESB's Final Detailed Design paper established the POLR as the 'safety net' for the Obligation, in the event that the market does not respond to a T-3 Reliability Instrument by closing the forecast reliability gap at T-1.

In practice, POLR will function as a new cost recovery mechanism for the existing RERT²¹. AEMO will use the existing RERT framework to secure resources required to address a reliability gap. Aside from cost recovery, all aspects of the existing RERT framework will apply as usual. This includes the requirement for AEMO to consult with a jurisdiction before entering into contracts under the RERT framework²² and the requirement to dispatch having regard to RERT principles, which include minimising costs and market distortions.²³

²⁰ AEMC Draft Determination: National Electricity Amendment (Enhancement to the Reliability and Emergency Reserve Trader) Rule 2019, published 7 February 2019.

²¹ Under the draft amendments to the Rules pursuant to the Enhancement to the Reliability and Emergency Reserve Trader rule change request, the timeframe for AEMO to procure RERT resources has been extended by up to 12 months. This aligns with the design intention of the POLR cost recovery mechanism. However, if the enhanced RERT rules are varied to provide a timeframe other than 12 months for the procurement of reserves, the RRO final rules may need to be amended.

²² Refer to the RERT consultation obligations in existing clause 3.20.3(c).

²³ Refer to existing clause 3.20.2(b).

Under the RERT cost recovery arrangements, costs incurred by AEMO when it enters into and calls on emergency reserve contracts are shared by all market customers. The draft Rules propose that if AEMO procures resources to cover a reliability gap identified in a T-1 Reliability Instrument, the POLR mechanism will come into play for the purposes of recovering these costs (see Sections 8.1 to 8.5). The POLR mechanism will allow AEMO to recover these POLR costs from RRO non-compliant liable entities only, rather than socialising the costs between all market customers.²⁴

The draft Rules provide that the POLR cost recovery regime will only operate in the event that:

- Actual regional demand in one or more relevant trading intervals within a reliability gap period exceeds the one-in-two year peak demand forecast (as set out in the T-1 reliability instrument).
- One or more liable entities is non-compliant with its contractual obligations under the Obligation in those trading intervals.

8.2 Determining POLR costs

When AEMO procures a RERT resource, the contract will generally include fixed payments (such as an availability payment, which is a fixed payment for the resource to be available for a period of time in case it is needed) and variable payments (such as activation payments, often charged on a per MWh basis, which are based on how much the resource was actually used by AEMO).²⁵

Under the draft Rules, RERT costs (including fixed and variable components) will initially be settled on the basis of existing Rules. A portion of these costs, limited by the trading intervals and size of the reliability gap shortfall specified in the T-1 Reliability Instrument, can subsequently be reallocated under the POLR cost recovery regime.

The reallocation will be calculated on an ex-post basis, once compliance has been determined by the AER.

The draft Rules state that cost reallocation is determined on the following basis:

- **Fixed POLR costs:** The portion of fixed RERT costs which may be reallocated under POLR cost recovery will be determined by the ratio of the total reliability gap (MW) over the total RERT procured over the gap period (MW). This ratio will be capped at one.
- **Variable POLR costs:** The portion of variable RERT costs which may be reallocated under POLR cost recovery will be determined for each trading interval by the ratio of the MW size of the reliability gap in that trading interval to the total RERT MW dispatched over that trading interval. This ratio will also be capped at one.

This is illustrated in the worked example below.

²⁴ Due to the timeframes for data availability and cost recovery processes, all RERT costs will initially be shared between all market customers. AEMO will then recover the POLR portion from non-compliant entities and these costs will be redistributed to the market customers who paid the initial RERT costs.

²⁵ In practice, RERT contracts are not this simple. They do not always include both of these payments, and may include additional payments and conditions, such as pre-activation and early termination payments.

How are total POLR costs determined?

Worked example

- The AER issues a T-1 Reliability Instrument for NSW, for a 50 MW reliability gap in trading intervals occurring between 3pm and 7pm on weekdays in December.
- AEMO procures 50 MW of RERT contracts over the gap period, which have no availability payment and an activation payment of \$300/MWh.
- After T-1, AEMO's updated forecasting identifies an additional reliability shortfall, and it procures an additional 50 MW of RERT contracts. These additional contracts have a \$1 million availability payment and a \$250/MWh activation payment.
- During the gap period and trading intervals specified in the T-1 Reliability Instrument, actual NSW demand exceeds the one-in-two year peak demand forecast by 10 per cent for one hour.
- AEMO dispatches 60 MW of contracted RERT capacity during this hour. AEMO dispatches the contracts with the lowest activation cost first.
- Four liable entities are non-compliant with their RRO requirements.

POLR criteria are satisfied

Actual regional demand exceeded the T-1 Reliability Instrument one-in-two year peak demand forecast (criteria one) and liable entities were non-compliant with their contractual obligations in those trading intervals (criteria two). The POLR cost recovery regime will therefore operate.

POLR cost determination: fixed costs

The percentage of fixed RERT costs that can be allocated under POLR cost recovery is calculated as the lesser of $\left(\frac{\text{Total RRO reliability gap in MW}}{\text{Total RERT procured in MW}}\right)$ or 1.

For this example: $\left(\frac{50 \text{ MW}}{100 \text{ MW}}\right) = 0.5 = 50\%$ of fixed RERT costs can be recovered under POLR.

Total fixed RERT costs were \$1 million (this is the total availability payments for RERT contracts that cover the gap period). So, total fixed POLR costs are \$500,000 (50% x \$1,000,000).

POLR cost determination: variable costs

For each trading interval (TI), the variable costs that can be allocated under POLR cost recovery are calculated as the lesser of $\left(\frac{\text{Reliability gap in the TI in MW}}{\text{RERT dispatched in the TI in MW}}\right)$ or 1.

For this example: $\left(\frac{50 \text{ MW}}{60 \text{ MW}}\right) = 0.83 = 83\%$ of variable RERT costs in a TI can be recovered under POLR.

Total variable RERT costs were \$15,500 (50 MW over one hour at \$250/MWh plus 10 MW over one hour at \$300/MWh). So, total variable POLR costs are \$12,917 (83% x \$15,500).

POLR cost determination: sum of variable and fixed cost components

Of the total RERT costs of \$1,015,500, a maximum of \$512,917 could be allocated under the POLR cost recovery regime among the four POLR liable entities (on a proportionate basis).

To facilitate the POLR cost calculations, the draft Rules state that AEMO must assign all RERT contracts a nominal MW value for the period that they cover.

In certain circumstances, AEMO may dispatch RERT contracts in one region to address a reliability problem in another region. The draft Rules do not alter the existing RERT cost sharing arrangements set out in clause 3.20.3 of the Rules. This means that the pool of POLR costs that may be allocated on a differential basis among non-compliant liable entities in a region is the RERT costs allocated to the region under agreed cost sharing arrangements, capped at the reliability gap of the region.

It is important to note that the amount of RERT procured by AEMO could differ from the reliability gap identified at T-1 for a variety of reasons.

8.3 Apportioning POLR costs

Once total POLR costs have been determined, these costs will be recovered from non-compliant liable entities, proportionate to the extent of their non-compliance and capped at \$100 million per liable entity.

Compliance will be assessed in every trading interval over the gap period for which actual regional demand exceeds the one-in-two year peak demand forecast (a 'POLR TI'). A liable entity's share of total POLR costs will be linked to its compliance shortfall, measured in MW. The draft Rules define the approach to calculating a liable entity's costs as follows:

- For fixed POLR costs: the liable entity's maximum MW shortfall in any POLR TI over the reliability gap period.
- For variable POLR costs: the *sum* of the liable entity's MW shortfall in each POLR TI in which variable costs were incurred.

This approach reflects the impact of non-compliance on the costs incurred by AEMO to secure and dispatch RERT contracts. Fixed costs are apportioned on the basis of maximum non-compliance, as AEMO will likely procure RERT capacity based on the trading interval with the largest shortfall over the gap period. For variable costs, a clear link can be established to compliance shortfalls in particular trading intervals.

The draft Rules establish that the share of fixed and variable POLR costs allocated to a liable entity will be proportionate to its compliance shortfall, as described in the box below.

How are POLR costs shared between POLR liable entities?

Calculating a liable entity's share of fixed POLR costs

The amount payable by a POLR liable entity will be the lesser of:

- a) The ratio of its compliance shortfall to the sum of the maximum compliance shortfalls of all POLR liable entities; or
- b) The ratio of its compliance shortfall to the reliability gap specified in the T-1 Instrument;

multiplied by the total fixed POLR costs for the reliability gap period.

Calculating a liable entity's share of variable POLR costs

The amount payable by a POLR liable entity for each POLR TI will be the lesser of:

- a) The ratio of its compliance shortfall in the POLR TI in which variable costs were incurred to the sum of the compliance shortfalls of all POLR liable entities in that POLR TI; or
- b) The ratio of its compliance shortfall in the POLR TI in which variable costs were incurred to the reliability gap specified in the T-1 Reliability Instrument;

multiplied by the total variable POLR costs for that POLR TI.

When aggregated, a liable entity's share of total fixed and variable POLR costs is capped at \$100 million, consistent with the draft NEL (Section 14T).

The time required to determine non-compliance costs create some potential cost-recovery issues for retailers and their C&I customers. Depending on their contract provisions, C&I customers can be billed for RERT costs incurred by their retailer. Initially, the RERT costs would be allocated to retailers in the usual fashion²⁶ and retailers could pass these through to their C&I customers at this time. If the AER finds that there has been non-compliance, the non-compliant parties will be charged for the additional costs and the recovered amounts will be refunded to the original market customers who paid the RERT costs. This means that some retailers of C&I customers may receive a refund and some could receive an additional charge.

An issue has also been raised relating to whether there should be a further POLR adjustment if, after the recovery of POLR costs described above, the AER identifies a different compliance shortfall than what was previously reported to AEMO (for instance, through its compliance activities, such as an audit). This might happen for example if the AER identifies that a liable entity's actual net contract position was different from what was reported.

²⁶ Note that the existing RERT cost recovery mechanism may be changed through the AEMC's RERT draft determination.

Whilst mechanically it is not difficult for AEMO to do a new POLR calculation and redistribute costs accordingly, this will extend the timeframe over which RERT costs are finalised. While this may impact certainty of recovery of POLR costs for all market participants and opt-in customers, having a further POLR adjustment possible should reduce the incentives for a liable entity to report a net contract position that is higher than its actual position. Therefore, the ESB is considering whether amendments to the draft Rules are required to allow for further POLR adjustments.

8.4 Collection and distribution of fees

The draft Rules set out when and how AEMO may collect and distribute costs from POLR liable entities under the POLR cost recovery regime. The draft Rules require AEMO to publish a POLR Cost Procedure to detail how it will calculate and collect POLR fees from non-compliant liable entities and rebate these to market participants that paid the initial settlement of RERT costs.

8.4.1 Collection of costs

Compliance outcomes will not be finalised until final revised metering data becomes available (after 30 weeks). Therefore, all RERT costs would initially be socialised across market customers in accordance with current procedures in the Rules (clause 3.15.9). Once compliance has been assessed, additional funds will then be collected from POLR liable entities to cover RERT costs attributable to POLR. The draft Rules provide that AEMO may only collect POLR costs from POLR entities where the AER has advised that the POLR cost recovery regime is operative (i.e., the trigger set out in Section 8.1 has been satisfied). The AER will also publish a list of non-compliant liable entities for each reliability gap period.

Collection of POLR costs from market customers will follow existing market settlement processes. The draft Rules provide that for POLR liable entities who are not market customers (i.e., opt-in customers), POLR costs will be recovered as a debt. To support this, the draft Rules establish that non-market customers who wish to opt-in to the Obligation may be required to establish financial guarantees as part of the opt-in process.

8.4.2 Distribution of payments

As a result of the cost recovery mechanism outlined above, AEMO may receive funds in excess of total RERT costs (as these have already been recovered under the RERT cost recovery mechanism). Therefore, an approach for rebating these funds to the market is required. The draft Rules state that AEMO must reallocate any POLR costs recovered from POLR liable entities to the market customers who contributed to RERT cost recovery. The reallocation will be based on each market customer's share of energy consumption during the reliability gap period.

8.5 Questions for Stakeholders

The ESB welcomes stakeholder feedback in relation to the draft Rules related to POLR which are described in this paper.

Questions

- Apportioning POLR Costs: the ESB is interested in stakeholders' views around how retailers that receive a refund should be incentivised to pass-through the refund to their C&I customers.
- Pass-through for non-compliant retailers: The ESB would like to hear whether non-compliant retailers should be able to pass-through their additional charges through to their customers.
- Incentive related to C&I customers: The ESB is interested in views on whether the POLR cost recovery mechanism, together with the ability of retailers to pass-through to C&I customers these types of costs, reduce the incentive for retailers to contract at T-1 for their C&I peak demand forecast.
- Should a POLR adjustment be possible if an AER audit identifies a different compliance shortfall for a liable entity than what had been initially reported to AEMO?

9. Transitional Arrangements

Relevant provisions of the draft National Electricity Rules:

- Chapter 11, Part ZZZP (Retailer Reliability Obligation)

The Obligation is intended to commence on 1 July 2019. Therefore, AEMO could potentially make a T-3 reliability instrument request as soon as September 2019, based on the ESOO to be published in August 2019. Transitional arrangements are required to accommodate:

- The time taken to develop, consult on and finalise the guidelines, procedures and processes needed to implement the Obligation.
- The five minute settlement rule change, which will be implemented from 1 July 2021, and will change the definition of ‘trading interval’ in the Rules.

9.1 Transitional arrangements – guidelines

The draft Rules provide for a number of transitional arrangements in relation to the guidelines and processes associated with the Obligation, as set out in the table below. Final guidelines will be developed in accordance with the Rules consultation procedures. It will not be necessary for the full Rules consultation procedures to be followed for interim guidelines, given the limited time available for development, however some extent of consultation will still be undertaken. Market participants will be required to follow the processes and requirements of the interim guidelines until they are superseded by a final guideline.

Guideline	Purpose	Interim Guideline	Final Guideline
AER Reliability Instrument Guidelines	Assessment of a reliability instrument request issued by AEMO (see Section 4.4)	31 July 2019	31 July 2020
AER Forecasting Best Practice Guidelines	Informs AEMO’s ESOO forecasting (see Section 2.4). <i>Note: AEMO is not required to follow this Guideline for the 2019 ESOO.</i>	30 September 2019	30 November 2020
AEMO Reliability Forecast Guidelines	Sets out AEMO’s ESOO forecasting process (see Section 2.4). <i>Note: AEMO is not required to follow this Guideline for the 2019 ESOO.</i>	31 December 2019	28 February 2021
AER Opt-in	Processes for customers to opt-in to manage	NA	30 June

Guidelines	their obligation directly and for the AER to maintain the opt-in register (see Section 5.2).		2020
AER Contracts and Firmness Guidelines	AER process for assessing qualifying contracts, the firmness methodology that will be applied by a liable entity (see Section 6.3), and the net contract position. <i>Note: Qualifying contracts entered into during the period of the interim guideline will continue to be treated based on the interim guideline, even if the final guideline takes a different approach.</i>	31 August 2019	31 December 2020
AER MLO Guideline	Processes associated with the MLO and requirements on MLO entities (see Section 6.5). <i>Note:</i> <ul style="list-style-type: none"> <i>The AER will require information from generators by 1 September 2019, so that the AER is able to identify and publish a register of obligated parties in advance of the MLO potentially commencing in Q4 2019. An interim template to gather this information will be produced by 31 July 2019. The AER will publish its register of obligated parties by 1 November 2019.</i> <i>The AER will publish details of the approved MLO contracts by 1 October 2019.</i> 	31 August 2019	31 December 2020.

9.2 Transitional arrangements – Five-minute settlement

When a reliability gap is defined in a T-3 reliability instrument request issued by AEMO for assessment by the AER, it will specify the trading intervals to which the instrument applies. As part of the five minute settlement period rule change, the definition of trading interval in the NER will change from a 30 minute period to a five minute period, from 1 July 2021.

The draft Rules clarify that for a reliability instrument requested or issued prior to 1 July 2021, the trading intervals specified in that reliability instrument will, from 1 July 2021 onwards, be directly translated to the corresponding five minute trading intervals which cover the same period of time. When considering whether a T-1 reliability instrument relates to a T-3 reliability instrument, the translation of 30 minute trading intervals to five minute trading intervals should be used.

The ESB welcomes stakeholder feedback in relation to the transitional arrangements of the draft Rules.

10. Consultation timetable

The ESB invites comments from interested parties on the draft Rules set out in this paper by close of business 5 April 2019. Feedback received will inform the ESB's final draft Rules to be presented to the COAG Energy Council in early May 2019. If the submission contains confidential information (or a confidential attachment) please make clear in writing what should or should not be published.

Submission close date	COB 5 April 2019
Lodgement details	Email to : info@esb.org.au
Naming of submission document	[Company name] Response to National Electricity Rules Amendments – Retailer Reliability Obligation
Late submissions	Late submissions will not be accepted
Publication	Submissions will be published on the COAG Energy Council's website following a review for claims of confidentiality.

The ESB intends to host a number of public workshops and/or forums during the consultation period. The dates of these events will be confirmed the week of 11 March 2019.

Contact details:
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