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Australian Energy Market Commission

## CONSULTATION PAPER

# REVIEW OF THE OPERATION OF THE RETAILER RELIABILITY OBLIGATION

23 MARCH 2023

REVIEW

## INQUIRIES

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## ABOUT THE AEMC

The AEMC reports to the Energy Ministers' Meeting (formerly the Council of Australian Governments Energy Council). We have two functions. We make and amend the national electricity, gas and energy retail rules and conduct independent reviews for the Energy Ministers' Meeting.

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## SUMMARY

- 1 The Australian Energy Market Commission (the AEMC or Commission) is commencing a review of the operation of the Retailer Reliability Obligation (RRO). The Commission must review the RRO under Chapter 4A of the National Electricity Rules (NER) to ensure that it operates as intended and to consider any necessary amendments.
- 2 The RRO is one of several measures aimed at supporting reliability in the national electricity market (NEM). It commenced on 1 July 2019, with the aim of providing *'stronger incentives for market participants to invest in the right technologies in regions where it is needed, to support reliability in the NEM'*.
- 3 This review will consider the operational aspects of the RRO to ensure that the scheme is operating as intended. The Energy Security Board (ESB) Decision Regulation Impact Statement (RIS) for the RRO outlined that the intent of this review is not to assess the overall efficiency of the RRO.<sup>1</sup> Determining the overall impact of the scheme would likely require a longer-term horizon.
- 4 In line with the terms of reference published by the Commission, the review will consider operational aspects of the RRO including but not limited to:<sup>2</sup>
  - the processes for the T-3 and T-1 triggers
  - the Market Liquidity Obligation
  - the voluntary Book Build Mechanism
  - any relevant definitions such as qualifying contracts and thresholds, including the threshold for liable entities
  - the role of the opt-in mechanism.
- 5 Consistent with the terms of reference and given the AER has only recently made the first T-1 reliability instrument, only limited T-1 data is available to assess changes to energy market contracting or investment since it commenced. Therefore, this review will not examine the overall impact of the RRO.
- 6 Any recommendations made by the Commission will be considered against the national electricity objective (NEO).
- 7 The Commission has decided to carry out the review over a longer timeframe than required under the NER, with a final report to be released in early 2024. This will ensure that the Commission can consider the initial operational lessons learnt from the recently made South Australian T-1 trigger. The Commission will also be able to consider the AER's final recommendations from its *Retailer Reliability Obligation Compliance Procedures and Guidelines* which are due to be published in mid-2023.
- 8 We are seeking your views on the operation of the RRO and potential ways the processes under the RRO could be improved. To help you with identifying potential issues, a list of

1 Energy Security Board (2018) 'Retailer Reliability Obligation Decision Regulation Impact Statement' found [here](#).

2 AEMC, Review of the Retailer Reliability Obligation, Terms of Reference, 16 March 2023.

questions is provided below, and throughout the document. Submissions are due by 4 May 2023 and the key project milestones are highlighted in the table below:

<b>Milestone</b>	<b>Date</b>
Submissions on the consultation paper are due	4 May 2023
Draft paper	August 2023
Final paper	February 2024

## Full list of consultation questions

### QUESTION 1: PROPOSED ASSESSMENT FRAMEWORK

1. Is the proposed assessment framework appropriate?
2. Are there any other relevant considerations that should be included in the assessment framework?

### QUESTION 2: PROCESS FOR T-3 AND T-1 TRIGGERS

1. Should changes be made to the processes for the T-3 and T-1 ESOO triggers based on experience to date?
2. Should the AER have a broader scope to consider if it is appropriate in the circumstances to make or reject a reliability instrument?
3. Should there be other circumstances for AEMO or the AER to be able to review, withdraw or reopen a decision on a gap, following updates on market conditions?

### QUESTION 3: MARKET LIQUIDITY OBLIGATION

1. Should the determination of market generators and generator capacity in a region be broadened to include semi-scheduled and/or non-scheduled generation?
2. Should the 15 per cent threshold for MLO groups as established in the NER be changed to include more generators or removed to require all generators?
3. Is registered capacity appropriate to determining obligated parties or should summer or another appropriate seasonal capacity be used?
4. Does the MLO register provide sufficient information to the market and participants?

#### QUESTION 4: VOLUNTARY BOOK BUILD MECHANISM

1. Do any changes need to be made to the process for the book build mechanism?
2. Given that the book build has not been used by the market to date, should the Commission consider removing the mechanism?

#### QUESTION 5: QUALIFYING CONTRACTS

1. Should changes be made in the NER to the definitions of qualifying contracts?
2. Should changes be made to what is defined and the process for defining the firmness of a qualifying contract?

#### QUESTION 6: LIABLE ENTITIES

1. Do the thresholds for liable entities remain appropriate, or should they change?
2. Should there be a process for providing earlier or progressive advice on the exposure of all liable entities during a gap period rather than waiting until the PoLR costs calculation occurs?

#### QUESTION 7: OPT-IN MECHANISM

1. Should changes be made to the opt-in mechanism?

#### QUESTION 8: COMPLIANCE PROCESSES

1. Do stakeholders have feedback on the compliance processes they have had experience with to date?

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# 1 INTRODUCTION

The Retailer Reliability Obligation (RRO) was introduced to support the reliability framework in the national electricity market (NEM). This section provides a short overview of the reliability framework and the role of the RRO.

## 1.1 The reliability framework is designed to deliver reliability that consumers value

A reliable power system has enough capacity (generation, demand response, interconnection and energy storage capacity) to meet consumer needs. To maintain reliability, a power system needs investment in enough new capacity to meet changing demand patterns and to cover generators as they retire. No power system can be 100 per cent reliable. Unforeseen events can always occur. Building a system with sufficient capacity to meet all rare events is prohibitively expensive, as it would involve significant over capitalisation in power system assets leading to power prices much higher than consumers would be willing to pay.

The reliability standard is a critical part of the NEM's reliability framework, which seeks to balance the trade-off between reliability and the value which customers place on it.

The reliability standard establishes an expected unserved energy (USE) threshold, at which the cost of infrastructure needed to supply consumers is balanced against the value consumers place on reliability. In the NEM, the reliability standard requires sufficient generation and transmission interconnection so that no more than 0.002 per cent of annual electricity demand goes unmet in each region (0.002 per cent USE).

## 1.2 The RRO encourages investment in dispatchable energy

In 2019, Energy Ministers, on the advice of the Energy Security Board (ESB), agreed to the RRO to supplement the reliability standard in supporting reliability outcomes in the NEM, to 'encourage new investment in dispatchable energy such that the electricity system operates reliably'.<sup>3</sup>

Specifically, Energy Ministers were concerned that 'the reduction in dispatchable coal and gas generation and the greater penetration of intermittent technologies such as solar and wind generation present risks to the NEM's reliability'.<sup>4</sup>

The RRO requires retailers to obtain contracts that cover their expected demand in a potential reliability gap period. This, in turn, is intended to provide market participants with the necessary confidence to invest in firm generation technology to support a reliable electricity supply in the NEM. It was intended to be a long-term solution to ensuring reliability at the lowest cost by preparing for and eliminating forecast reliability gaps before they occur.

<sup>3</sup> ESB, *Retailer Reliability Obligation Decision Regulation Impact Statement*, 19 December 2018, p. 4. The Decision Regulation Impact Statement (RIS) for the RRO sets out the policy intent for the introduction of the RRO and that it would operate to support the broader reliability framework.

<sup>4</sup> Ibid, p. 20.

The RRO builds on existing spot and financial market arrangements in the electricity market to facilitate investment in dispatchable capacity. It obliges retailers, on behalf of their customers, to support the reliability of the power system through their contracting and investment in resources. The RRO does this by requiring electricity retailers to demonstrate they have entered sufficient contracts for dispatchable capacity (including demand response) to cover their share of demand at times identified as having a potential shortfall, or gap, of supply to meet demand.

Further detail on the operational aspects of the RRO is in appendix A.

### 1.3 We must think about reliability differently as the NEM transitions

The NEM is undergoing a significant transformation. It is shifting from a capacity-limited thermal power system to a more energy-limited power system characterised by high levels of variable renewable energy (VRE). The transformation requires careful consideration of how reliability is characterised and managed to continue to ensure the system can meet customer demand at a level they value.

In light of this, in 2019, Energy Ministers agreed to establish interim reliability measures (IRM) to improve reliability and address high-impact low probability events in the short term. The IRM introduced a temporary tighter reliability standard of 0.0006 per cent expected unserved energy (USE) which Energy Ministers considered would best meet the expectation that electricity supply remains reliable during a 1 in 10-year summer.

Alongside introducing the tighter reliability standard, Energy Ministers also agreed that the IRM would be used to trigger the RRO. Therefore, the Australian Energy Market Operator (AEMO) uses the IRM of 0.0006 per cent USE to determine if there will be a reliability gap three years out to 'trigger' the RRO.<sup>5</sup> Currently the IRM is the trigger for the RRO until 30 June 2025, after which it is replaced by the reliability standard of 0.002 per cent USE. The Commission is carrying out a separate review of the IRM. The Commission's draft recommendation is to extend the use of the IRM as a trigger for the RRO by 3 years to 30 June 2028. The Reliability Panel has commenced work to develop a new form of the reliability standard which is expected to be in place from 1 July 2028. The trigger for the RRO from 1 July 2028 may need to change subject to the outcome of the Reliability Panel's work.<sup>6</sup>

The Commission notes that there are other mechanisms proposed or under development to address the changing nature of reliability in the NEM that may overlap with the operation of the RRO. In particular, the Commonwealth's Capacity Incentive Scheme seeks to support reliability by providing incentives for dispatchable generation. The Commission will consider how the outcomes of this and other state-based processes impact the operation of the RRO in its final recommendations.

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<sup>5</sup> See clause 11.132.2 of the NER.

<sup>6</sup> See project page [here](#).



## 1.4 The AEMC must review the operation of the RRO

Under clause 11.116.18 of the National Electricity Rules (NER), the AEMC must review how the RRO operates after three years of its commencement. The Commission has released terms of reference setting out its approach to the review, including the focus on operational aspects of the RRO.

In relation to the scope of the review, the Commission is undertaking the review consistent with the 2018 Decision Regulation Impact Statement (RIS) to the RRO, which sets out that:<sup>7</sup>

*Certain aspects of the operation of the Obligation will be reviewed after three years. This review is intended to ensure specific elements of the scheme operate as intended. The review is not intended to assess the overall efficiency of the Obligation, as determining the overall impact of the scheme would likely require a longer assessment horizon.*

### 1.4.1 Only limited aspects of the RRO have been used to date

Only limited aspects of the RRO have been triggered to date. As of March 2023, the RRO has been triggered on seven occasions, four of which are still current. While this will provide the AEMC with a range of information on the operation of the RRO, the Commission has decided to review the RRO over a longer timeframe than required under the NER, with a final report to be released in early 2024.

This will ensure that the Commission can consider in its final recommendations the longer term experience of the market over the seven trigger events that are either current or have been revoked.

This longer timeframe will also enable the Commission to consider the following in its final recommendations:

- the form and function of the Commonwealth's Capacity Incentive Scheme
- the AEMC's draft recommendation to extend the application of the IRM to the RRO
- the Australian Energy Regulator's (AER's) final *Retailer Reliability Obligation Compliance Procedures and Guidelines*.

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<sup>7</sup> ESB, Retailer Reliability Obligation Decision Regulation Impact Statement, 19 December 2018, p. 15.

## 2 MAKING OUR RECOMMENDATIONS

This chapter outlines the decision-making framework the Commission will apply to determine whether the recommendations made through this review contribute to the national electricity objective (NEO).

### 2.1 Our recommendations must contribute to the achievement of the NEO

This section sets out the Commission's proposed assessment framework for this review. It first discusses the overarching objectives that guide all the Commission's work, including this review. It then outlines the criteria that we propose to use in testing whether arrangements promote these energy objectives, including how these criteria relate to objectives set out in the terms of reference.

The Commission can only recommend changes to the regulatory framework if it is satisfied change will, or is likely to, contribute to achieving the relevant energy objectives. The NEO is:

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

1. price, quality, safety, reliability and security of supply of electricity; and
2. the reliability, safety and security of the national electricity system.

### 2.2 We propose to assess this review using six criteria

To determine whether any policy recommendations identified in this review promote the NEO, the Commission has used the following assessment criteria:

1. **Efficiency:** The regulatory framework should encourage innovation and efficient investment in the supply of energy services.
2. **Appropriate allocation of risk:** Risks should be borne by parties who are best placed to manage them and have the incentives to do so.
3. **Incentives:** The framework should allow the operation of the RRO to effectively facilitate investment in dispatchable capacity and demand response.
4. **Predictability and stability:** The framework should promote confidence in the market by clearly defining roles and responsibilities and ensuring parties have sufficient information to make decisions. It should result in predictable outcomes for participants.
5. **Simplicity and transparency:** The framework should be as simple and practical as possible, avoiding excessive regulation that might impose unnecessary complexity, risks or costs.
6. **Timing and practicality:** Any recommendations should take into account the practicality of developing and implementing proposed changes, as well as whether the recommendations achieve the intended benefits in a timely, proportionate, and targeted way.

#### QUESTION 1: PROPOSED ASSESSMENT FRAMEWORK

1. Is the proposed assessment framework appropriate?
2. Are there any other relevant considerations that should be included in the assessment framework?

## 3 ISSUES FOR CONSULTATION

As outlined in the terms of reference, the aspects of the RRO that the Commission will consider are the operation of:

- the process for the T-3 and T-1 triggers
- the market liquidity obligation (MLO)
- the book build mechanism
- definitions of qualifying contracts
- the role of the opt-in mechanism
- any other matter which the Commission reasonably believes is relevant to the review.

### 3.1 Should changes be made to T-3 and T-1 trigger processes ?

The RRO is triggered when a reliability gap is identified by:

- the Electricity Statement of Opportunities (ESOO) for the T-3 and T-1 obligations
- a Ministerial trigger for the T-3 obligation only.

As of March 2023, the RRO has been triggered on seven occasions, four of which are still current. Table 3.1 lists the current and revoked RRO triggers, of which three have been initiated by AEMO for South Australia (SA) and New South Wales (NSW) with respect to the IRM.

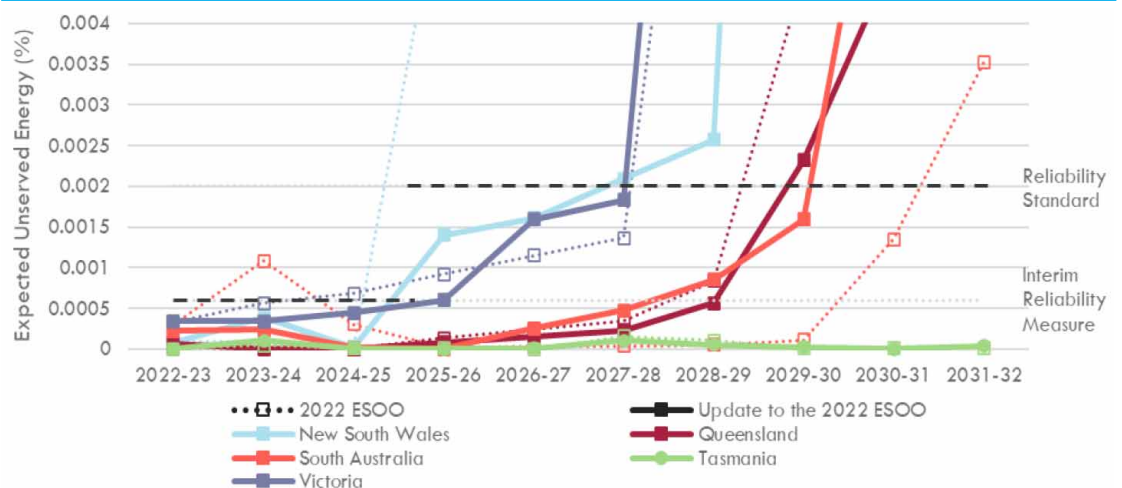
**Table 3.1:** Register of reliability instruments

Region: Gap Period	Status (stage — source)
<b>SA:</b> January–March 2026	Current (Ministerial T-3 trigger)
<b>NSW:</b> December 2025–February 2026	Current (AEMO T-3 trigger)
<b>SA:</b> January–March 2025	Current (Ministerial T-3 trigger)
<b>SA:</b> January–February 2024	Current (AEMO T-1 trigger from Ministerial T-3)
<b>SA:</b> January–February 2024	Revoked (AEMO T-3 trigger)
<b>SA:</b> January–March 2023	Revoked (Ministerial T-3 trigger)
<b>SA:</b> January–March 2022	Revoked (Ministerial T-3 trigger)

Source: Australian Energy Regulator

Figure 3.1 shows the reliability gaps in New South Wales and Victoria over the period 2025–26 to 2027–28 which sit between 0.0006 per cent USE and the reliability standard of 0.002 per cent USE, as reported in the [2022 Update to the ESOO](#). This includes the T-3 reliability instrument for NSW between December 2025 - February 2026.

**Figure 3.1: Expected unserved energy, all regions, 2022-23 to 2031-32**



Source: AEMO, *Update to the 2022 Electricity Statement of Opportunities*, February 2023.

### 3.1.1

#### The RRO is triggered at T-3 by AEMO or the SA Energy Minister

The RRO process is triggered when AEMO's ES00 forecasts a gap between supply and demand.

The ES00 provides technical and market data for the NEM over a 10-year period to inform the planning and decision-making of market participants, new investors, and jurisdictional bodies. Figure 3.1 shows how AEMO's update to the 2022 ES00 reports breaches in USE triggered by the IRM and reliability standard. When the ES00 identifies a reliability gap, the reliability framework and market settings provide incentives for the market to invest in new generation or demand response.

However, if the ES00 forecasts a reliability gap three years (T-3) from the period in question, then AEMO can apply to the AER to trigger the RRO. AEMO must make the request for the relevant T-3 instrument at least three months before the T-3 cut-off day for a forecast reliability gap.<sup>8</sup> When making a request for the reliability instrument, AEMO must provide the AER with the information set out in clauses 4A.C.2 and 4A.C.3 of the NER, and section 14I(4)(c) of the National Electricity Law (NEL), including:

- the forecast reliability gap (in MW)
- the region in which the reliability gap is forecast to occur
- the first and last days of the reliability gap period
- AEMO's one-in-two-year peak demand forecast for the reliability gap period
- clarifying that the reliability forecast published in the six months immediately preceding the T-3 cut-off day identifies the forecast reliability gap

<sup>8</sup> Under section 14G(3) of the NEL, the T-3 cut-off day is the day that is 3 years before the day the forecast reliability gap period for the forecast reliability gap starts.

- the trading intervals during the gap when liable entities may be required to hold net contract positions sufficient to meet their share of the one-in-two-year peak demand forecast.<sup>9</sup>

Under clause 4A.C.11 of the NER, when considering AEMO's request for a T-3 instrument, the AER must only have regard to the following criteria:

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

When making its decision, the AER must consult with stakeholders and publish the reliability instrument and reasons for its decision (including if it is not making an instrument) within two months of receiving the request from AEMO.<sup>10</sup>

Under the NEL, the SA Energy Minister can also trigger a T-3 reliability gap in SA.<sup>11</sup> Energy Ministers have agreed to extend the ability for any Energy Minister to trigger a T-3 reliability gap in their NEM jurisdiction, irrespective of whether AEMO's ESOO forecasts a reliability gap. A bill to enact this change has passed through the SA Parliament and is awaiting Assent.<sup>12</sup>

### 3.1.2

#### The RRO is triggered at T-1 by AEMO

Unlike the T-3 request, only AEMO can request the AER make a T-1 instrument if it forecasts a reliability gap in the ESOO. AEMO's request for a T-1 reliability instrument must be made at least three months before the T-1 cut-off day for the relevant forecast reliability gap.<sup>13</sup>

The information AEMO must provide the AER requesting a T-1 instrument is similar to the T-3 request. However, in addition to the list provided in section 3.1.1, AEMO must clarify that the forecast reliability gap in the related T-3 reliability instrument persists. If the reliability gap no longer persists in the second financial year following a T-3 instrument, AEMO must notify the AER, and the AER will publish a notice that a T-1 reliability instrument cannot be made in respect of the reliability T-3 instrument.<sup>14</sup>

### 3.1.3

#### There are limited circumstances where AEMO can withdraw its requests

AEMO may only withdraw a request for a reliability instrument under limited circumstances. Clause 4A.C.7 of the NER allows AEMO to withdraw a request if there is a material error in the reliability forecast. The withdrawal must be in writing and AEMO can only issue the

<sup>9</sup> Interim Reliability Instrument Guidelines, AER, July 2019.

<sup>10</sup> See clause 4A.C.9 of the NER.

<sup>11</sup> See NEL Part 7A 19B (1)

<sup>12</sup> More information on the final bill can be found [here](#).

<sup>13</sup> See clause 4A.C.3 of the NER. The T-1 cut-off day for a forecast reliability gap is the day that is one year before the day the forecast reliability gap period for the forecast reliability gap starts.

<sup>14</sup> See clause 4A.C.5 of the NER.

withdrawal prior to the AER making its decision on whether to make the reliability instrument.<sup>15</sup>

### 3.1.4 ESOO at T-2 and ESOO updates

In accordance with the NER, AEMO publishes an ESOO every August and may publish updates to the ESOO if market conditions change materially between their normal annual reporting schedule.<sup>16</sup> An ESOO or ESOO update may identify a future gap or shortfall but will not trigger T-3 reliability instruments if it occurs more than 42 months or less than 36 months prior to the start of a gap period.<sup>17</sup> Similarly, an ESOO or ESOO update released between T-3 and T-1 that shows that a gap has changed for instruments that have already been made does not result in changes to those instruments or initiate new instruments.<sup>18</sup>

### 3.1.5 We are seeking feedback on the processes for the T-3 and T-1

#### QUESTION 2: PROCESS FOR T-3 AND T-1 TRIGGERS

1. Should changes be made to the processes for the T-3 and T-1 ESOO triggers based on experience to date?
2. Should the AER have a broader scope to consider if it is appropriate in the circumstances to make or reject a reliability instrument?
3. Should there be other circumstances for AEMO or the AER to be able to review, withdraw or reopen a decision on a gap, following updates on market conditions?

## 3.2 Should changes be made to the MLO?

The MLO is designed to address concerns about the liquidity and transparency of contract markets by imposing the MLO on large scheduled generation portfolios when the RRO is triggered at T-3.

If a T-3 reliability instrument is made and providing there is more than one MLO group in the region, MLO generators are required to commence market-making five business days after the effective date of the instrument and for each relevant liquidity period.<sup>19</sup>

The rules require that if there are two or more generation portfolios or portfolios with traced capacity with more than 15 per cent of the total regional scheduled generation capacity in a region, then those portfolios must lodge bids. The portfolios must offer MLO products in proportion to their size on an MLO exchange at a fixed price spread for a minimum number of trading windows per quarter.<sup>20</sup> This provides liable entities with the opportunity to

<sup>15</sup> See clause 4A.C.7 of the NER.

<sup>16</sup> See clause 3.13.3A of the NER.

<sup>17</sup> See clause 4A.C.2(b) of the NER.

<sup>18</sup> See clause 4A.C.3 of the NER.

<sup>19</sup> The MLO does not apply in Tasmania. See Clause 4.a.G.16(a) of the NEL

<sup>20</sup> Clause 4A.G.3, 4A.G.10 and 4A.G.17 of the NER outline the requirements for MLO generators and MLO groups.

purchase competitively priced contracts to build a portfolio of contracts sufficient to fulfil their forecast 50 per cent probability of exceedance customer demand by T-1.

In accordance with clause 4A.G.16(d) of the NER, and assuming that none of the other exceptions listed in clause 4A.G.16 of the NER occur, once the liquidity period has commenced, the MLO groups are required to perform their obligations in accordance with clause 4A.G.17 of the NER until the T-1 cut-off day for the relevant gap period.

Under the NER, only trading groups that have registered scheduled capacity (including capacity over which they have trading rights) that exceeds 15 per cent of the aggregate of the average trading group capacity of all trading groups in the relevant region can participate in the MLO.<sup>21</sup> Semi-scheduled or non-scheduled generation capacity are not currently included in this determination.

As the determination of an MLO group applies only to registered scheduled generation in a region, as that generation retires, the contract volumes expected under the MLO fall. Furthermore, as new participants invest in semi-scheduled or non-scheduled capacity in a region, the relative proportion of scheduled generation in that region over which each participant has control may fall to a point where there are too few MLO groups for the scheme to operate.<sup>22</sup> South Australia provides an example where, following the announced retirements of the Osborne and Torrens Island B power stations there may be only one MLO Group with a share of registered scheduled capacity greater than 15%. At this point the MLO will not operate in South Australia.

MLO generators and MLO groups are listed by the AER in accordance with MLO Guidelines for each RRO period.<sup>23</sup> Table 3.2 identifies the MLO participant groups and total and quarterly trading volumes as at March 2023.

**Table 3.2: MLO Period - Total Megawatts (MW) over MLO and MW per Quarter**

MLO GROUP	TOTAL MW OVER MLO / MW PER QUARTER			
	SA	NSW	VIC	QLD
AGL	104 / 13	264 / 33	305 / 38	
Origin Energy	49 / 6			
Engie	86 / 11			
Snowy Hydro		298 / 37	211 / 24	
EnergyAustralia		189 / 23	154 / 19	
CS Energy				404 / 51
Stanwell				383 / 48

Source: Queensland and Victorian values were taken from the AER's interim Market Liquidity Obligation Guidelines, August 2019.  
Note: There are only two MLO generators in QLD. The % of scheduled generation controlled by Clean Co is less than 15 per cent

<sup>21</sup> See clause 4A.G.3 of the NER

<sup>22</sup> clause is 4A.G.16 (d) (3)

<sup>23</sup> See AER MLO Guidelines [here](#).



Clause 4A.G.12 of the NER sets out the requirements for the MLO register. The AER publishes an MLO register in accordance with the MLO Guidelines setting out the information that must be published for each MLO period.<sup>24</sup>

### 3.2.1

#### The MLO Exchanges are the ASX24 and FEX Global

To satisfy the MLO, MLO generators must offer MLO products on an approved MLO exchange.<sup>25</sup> In accordance with NER clause 4A.G.23, the ASX24 was approved by the AER as the default MLO exchange at the commencement of the RRO and the AER also approved FEX Global in 2022 as a recognised MLO exchange.<sup>26</sup>

The NER requires the AER to carry out annual reviews of each MLO exchange and consider whether the exchange is meeting the criteria after approval.<sup>27</sup>

### 3.2.2

#### We are seeking feedback on the extent and application of the MLO

##### QUESTION 3: MARKET LIQUIDITY OBLIGATION

1. Should the determination of market generators and generator capacity in a region be broadened to include semi-scheduled and/or non-scheduled generation?
2. Should the 15 per cent threshold for MLO groups as established in the NER be changed to include more generators or removed to require all generators?
3. Is registered capacity appropriate to determining obligated parties or should summer or another appropriate seasonal capacity be used?
4. Does the MLO register provide sufficient information to the market and participants?

## 3.3

### Is the voluntary book build mechanism working as intended?

When the RRO is triggered, AEMO may invite interested parties<sup>28</sup> to lodge an expression of interest to participate in a voluntary 'book build' mechanism.

The voluntary book build provides a service for prospective sellers of eligible contracts (referred to as book build contracts) to have offers for those contracts listed on the voluntary book build site, and for prospective buyers to notify AEMO of their interest in any listed offer. AEMO provides the buyer's and seller's contact details to each other and records any contracts that may subsequently be entered into.

The voluntary book build puts potential buyers in contact with contract sellers, who may then negotiate the full terms of a book build contract. It does not provide a trade matching or

<sup>24</sup> This register is available [here](#).

<sup>25</sup> See clause 4A.G.1 of the NER.

<sup>26</sup> See AER *MLO Guidelines* [here](#).

<sup>27</sup> See clause 4A.G.23(f) of the NER.

<sup>28</sup> Accredited as per 4A.H.4 of the NER

contract execution facility. There is no obligation to use the book build to list or search for qualifying contracts.

The voluntary book build is not connected with the obligations of MLO generators to offer MLO products. Any qualifying contracts offered through the voluntary book build do not count towards meeting those obligations.<sup>29</sup> AEMO published two voluntary book build instruments in 2020 for South Australia. No offers were made available. There are currently no open voluntary book builds.

### 3.3.1

#### **We are seeking feedback on the operation of and the need for the book build mechanism**

##### **QUESTION 4: VOLUNTARY BOOK BUILD MECHANISM**

1. Do any changes need to be made to the process for the book build mechanism?
2. Given that the book build has not been used by the market to date, should the Commission consider removing the mechanism?

## 3.4

### **Do we need to change the definitions of qualifying contracts?**

If the RRO is triggered, liable entities are required to enter sufficient qualifying contracts to cover their share of system peak demand at the time of the reliability gap.<sup>30</sup>

Qualifying contracts are defined in section 140(1) of the NEL and clause 4A.E.1 of the NER. They are contracts or other arrangements entered into by a liable entity to manage its exposure to the spot price.

The AER provides guidance on the types of contracts that are qualifying contracts and the firmness factors to be applied to each contract in its *Interim Contracts and Firmness Guidelines*.<sup>31</sup>

A qualifying contract can refer to a financial agreement, a contract or agreement for the generation of electricity, or a contract or agreement for the reduction in the consumption of electricity. It must reference the wholesale spot price for electricity (including reference to the purchase or sale of electricity) and be entered into to manage the liable entity's exposure to the volatility of the spot price. A registered demand response contract/arrangement can also be a qualifying contract. For a contract or arrangement to be qualifying it must cover all or part of the forecast reliability gap period.

The AER's guidelines outline the extent to which a liable entity's qualifying contracts reduce or increase its exposure to the volatility of the spot price. All qualifying contracts are allocated a firmness factor between zero and one for each trading interval within the forecast reliability gap period. The lower the exposure for the buyer to the volatility of the spot price, the higher the firmness factor. Table 3.3 lists the AER's determination of the types of standard qualifying

<sup>29</sup> See AEMO's *Book Build Procedures for the Retailer Reliability Obligation* [here](#).

<sup>30</sup> See section 14R of the NEL.

<sup>31</sup> See AER's *Contract and Firmness Guideline* [here](#).

contracts and their firmness factors. The firmness of qualifying contracts of a more bespoke nature is assessed individually.

**Table 3.3:** Summary of default firmness methodologies for standard qualifying contracts

STANDARD CONTRACT	DESCRIPTION	DEFAULT FIRMNESS FACTOR
<b>Swaps and future</b>	Applies to swaps and futures with a fixed price and known volume (including a shaped volume) where no other contract limitations are present.	1
<b>Caps with a strike price ≤ 5% of the market price cap (MPC)</b>	Applies to caps with a strike price ≤ 5% of MPC where no other contract limitations are present.	1
<b>Caps with a strike price &gt; 5% of MPC</b>	Applies to caps with a strike price > 5% of MPC where no other contract limitations are present.	$(1/0.952) \times (1 - \text{strike price}/\text{MPC})^2$
<b>100 per cent Load following contracts (bought)</b>	A load following contract has a fixed price and a variable volume. The buyer and seller of the contract agree that the volume exactly matches the buyer's actual load at each trading interval. The buyer of a 100 per cent load following contract has no exposure to spot price volatility. This contract is fully firm unless the contract contains terms which limit the coverage of the swap.	1
<b>Grandfathered contracts</b>	Grandfathered contracts must meet the definition of grandfathered arrangement in rule 11.116.8. They only apply for large energy users who are either market customers or opt-in customers.	1
<b>MLO Products</b>	MLO parties are required to post minimum volumes of buy and sell offers, with a maximum price spread, for standard exchange-traded products in the relevant region for the gap period. These contracts are considered firm under the AER's contracts and firmness guidelines.	1

Source: *Interim Contracts and Firmness Guidelines*, AER

### 3.4.1

#### We are seeking feedback on the definitions of qualifying contract and the firmness of a qualifying contract

##### QUESTION 5: QUALIFYING CONTRACTS

1. Should changes be made in the NER to the definitions of qualifying contracts?
2. Should changes be made to what is defined and the process for defining the firmness of a qualifying contract?

## 3.5

### Should there be adjustments to requirements for liable entities?

Liable entities are defined under the NEL and NER and have specific obligations under the RRO.

### 3.5.1

#### Liable entities are market customers with loads over a certain threshold

A liable entity for a region is typically a market customer (such as a retailer or large energy user that purchase electricity directly from the wholesale market). However, a person could register as an opt-in customer for a region under certain circumstances and assume the responsibilities of a liable entity (section 14E of the NEL). Liable entities are subject to contracting and reporting requirements when the relevant reliability instruments are made.

Clause 4A.D.2(b) of the NER provides the thresholds for a market customer to be a liable entity and the point in time at which that threshold is applied. A person is a liable entity if (amongst other things) the aggregate of all loads at their connection points in a region at the end of the contract position day is equal to or more than 10 Gigawatt hours (GWh) per annum as determined in accordance with the AER *Contracts and Firmness Guidelines*.<sup>32</sup>

The RRO places specific contracting and reporting obligations on liable entities in each region when a reliability gap has been identified and a reliability instrument made. A key component of the RRO framework is the 'reliability obligations' which apply to liable entities. These provisions inform the AER's assessment of compliance following a reliability gap period and AEMO's recovery of its costs as Procurer of Last Resort (PoLR) under the Reliability and Emergency Trader (RERT) framework. There are also civil penalty provisions that may result in the AER seeking financial penalties should it decide to take enforcement action for non-compliance.

The NER establishes reliability obligations at three compliance points for MLOs and liable entities under the RRO:

- T-3 (three years before the reliability gap period)
- T-1 (one year before the reliability gap period)
- T (reliability gap period).

<sup>32</sup> Conversely, Clause 4A.D.2 (b) (2) provides that a market customer is **not** a liable entity in a region if the aggregate of all loads at their connection points in a region at the end of the contract position day is equal to or less than 10 GWh per annum as determined in accordance with the AER's *Contracts and Firmness Guidelines*.

Figure 3.2 and the sections below provide a summary of the reliability obligations for liable entities and MLOs.

### **3.5.2 At T-3 liable entities must take steps to enter qualifying contracts and the MLO is triggered**

If the RRO is triggered at T-3, liable entities are expected to take steps to enter sufficient qualifying contracts (including storage or demand response measures) to cover their share of system peak demand at the time of the gap (T).<sup>33</sup> The MLO requires the largest scheduled generation portfolios to make buy and sell contracts available through an MLO exchange for the period of the gap at particular times of day and with a fixed price spread.<sup>34</sup>

### **3.5.3 At T-1 liable entities must provide details of their contracts to the AER and the MLO requirements cease**

One year from the forecast reliability gap (T-1), if the AER confirms a gap remains, MLO trading requirements cease and AEMO may, as appropriate, procure RERT to cover any remaining shortfall. At T-1, liable entities:

1. must give the AER a report about its net contract position as of the contract position day, on or before the reporting day stated in the T-1 reliability instrument<sup>35</sup>
2. comply with the obligation that the liable entity's net contracting position for a trading interval is not less than the liable entity's share of the one-in-two-year peak demand forecast for the trading interval determined in accordance with the NER.

### **3.5.4 After the gap the AER will assess the compliance of liability entities, recover any costs and may issue penalties**

After the end of the gap period, if actual regional peak demand has exceeded the one-in-two-year forecast demand, the AER will check each liable entity's share of the peak demand against their reported contract position. The AER may then apply penalties to under-contracted liable entities. Around 40 weeks later AEMO will allocate the costs it expended to manage the power system to under-contracted liable entities on a pro-rata basis.

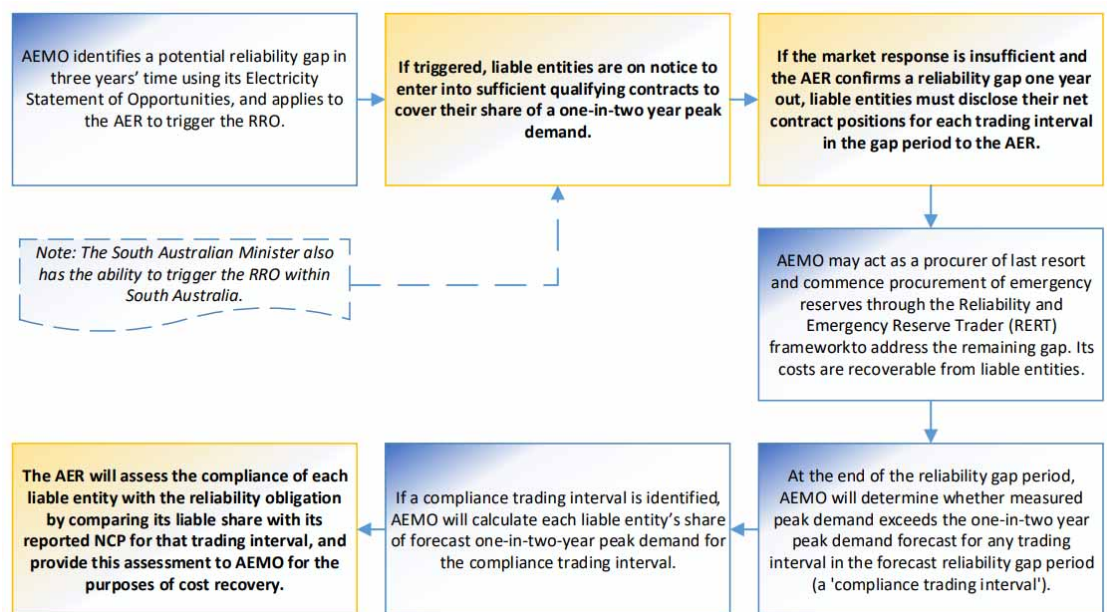
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<sup>33</sup> See clause 4A.F.3 of the NER.

<sup>34</sup> See clause 4A.G.18 of the NER.

<sup>35</sup> See section 14P of the NEL.

Figure 3.2: RRO obligations – flowchart



Source: AER, *Reliability compliance procedures and guidelines — Retailer reliability obligation — Issues paper and notice of consultation*, November 2022, p. 6.

### 3.5.5

### We are seeking feedback on the thresholds for liability entities

#### QUESTION 6: LIABLE ENTITIES

1. Do the thresholds for liable entities remain appropriate, or should they change?
2. Should there be a process for providing earlier or progressive advice on the exposure of all liable entities during a gap period rather than waiting until the PoLR costs calculation occurs?

## 3.6

### Do we need to make changes to the opt-in mechanism?

In establishing the RRO, the Energy Security Board (ESB) recognised that while most large customers prefer that liability under the RRO rests with the retailer by default, some large customers may seek to opt into the obligation rather than relying on a retailer managing the obligation on their behalf.<sup>36</sup>

<sup>36</sup> ESB, *Retailer Reliability Obligation Decision Regulation Impact Statement*, 19 December 2018, p. 47.

Under section 14E of the NEL, eligible large customers that are not automatically liable can apply to the AER for approval to opt-in to the RRO depending on their circumstances.<sup>37</sup> Under the NER, there are two types of opt-in customers:

- **Large opt-in customers** that purchase electricity from a market customer, have consumption in excess of a consumption threshold of 50 GWh per annum in the relevant region and have been approved by the AER to register as a large opt-in customer. They must opt-in for the entire load at a connection point.
- **Prescribed opt-in customers** that do not meet the eligibility criteria to register as a large opt-in customer, but satisfy the prescribed customer opt-in thresholds and have been approved by the AER to register as a prescribed opt-in customer based on eligibility criteria. They may opt-in for all or part of the load at a connection point.

The AER has released guidelines for opt-in customers.<sup>38</sup> To date, no entities have registered for the opt-in mechanism.

### 3.6.1

#### We are seeking feedback on the opt-in mechanism

#### QUESTION 7: OPT-IN MECHANISM

1. Should changes be made to the opt-in mechanism?

## 3.7

### The AEMC will consider the AER's recommendations on compliance processes

As outlined in appendix A, the RRO framework in the NEL and NER is supported by a suite of AER guidelines, each providing detail on how the various stages of the RRO will operate.

In addition to the AER's existing compliance and enforcement powers under the NEL, Part 3, Division 1C of the NEL introduced several tools the AER can use to monitor and investigate compliance by regulated entities with the RRO.<sup>39</sup> These include new information-gathering powers and provisions for compliance audits. They also require regulated entities to establish arrangements to monitor and keep records of their own compliance.

The AER's *Reliability Compliance Procedures and Guidelines* will support the operation of the AER's compliance role for the RRO.

The AER has released its *Draft Reliability Compliance Procedures and Guidelines Retailer Reliability Obligation Guidelines* in March 2023 which will help inform final recommendations for establishing guidelines for compliance with the RRO.<sup>40</sup> The AER plans to release final guidelines in mid-2023 and the AEMC will consider any changes to compliance processes that the AER recommends in its final guidelines.

37 AER, *Retailer Reliability Obligation — Opt-in Guidelines*, AER, June 2020.

38 See AER guidelines [here](#).

39 AER, *AER Compliance and enforcement policy*, July 2021.

40 See AER Guidelines [here](#) and [here](#).

The draft Guidelines include, guidance for regulated entities about compliance with the ‘reliability obligations’, including:<sup>41</sup>

- the process and timeframes for notifying liable entities and the AEMO about compliance assessments at the conclusion of a reliability gap period<sup>42</sup>
- the information the AER will include in the AER PoLR Report to AEMO at the conclusion of a reliability gap period<sup>43</sup>
- for regulated entities about the policies, systems and procedures that they must establish and observe under section 18ZB of the NEL to monitor their own compliance with the RRO
- on the information and data liable entities are required to provide to the AER about compliance under section 18ZD of the NEL
- on carrying out compliance audits under sections 18ZE and 18ZF of the NEL, including the costs payable by regulated entities for an audit carried out by or on behalf of the AER.

### 3.7.1

#### We are seeking feedback on experience with compliance processes

##### QUESTION 8: COMPLIANCE PROCESSES

1. Do stakeholders have feedback on the compliance processes they have had experience with to date?

<sup>41</sup> See section 18ZI(2) of the NEL. The reliability obligations are in sections 14P(1) and (3) and 14R(2) of the NEL

<sup>42</sup> See clause 4A.F.7(c)(1) and (2), 4A.F.7(a), 4A.F.8(a) of the NEL.

<sup>43</sup> See section 18ZI(2)(c) of the NEL and clause 4A.F.7(a) of the NEL.



## 4 HOW TO MAKE A SUBMISSION

Stakeholders can help shape the recommendations by participating in the review process. Engaging with stakeholders helps us understand the potential impacts of our recommendations and, in so doing, contributes to well-informed, high-quality review recommendations.

### 4.1 How to make a written submission

**Due date:** Written submissions responding to this consultation paper must be lodged with Commission by 4 May 2023.

**How to make a submission:** Go to the Commission's website, [www.aemc.gov.au](http://www.aemc.gov.au), find the 'lodge a submission' function under the 'Contact Us' tab, and select the project reference code EPR0091.<sup>44</sup>

Tips for making submissions are available on our website.<sup>45</sup>

**Publication:** The Commission publishes submissions on its website. However, we will not publish parts of a submission that we agree are confidential, or that we consider inappropriate (for example offensive or defamatory content, or content that is likely to infringe intellectual property rights).<sup>46</sup>

Please contact the project leader with questions or feedback at any stage.

Project leader: Alex Caroly  
Email: [Alex.Caroly@aemc.gov.au](mailto:Alex.Caroly@aemc.gov.au)  
Telephone: (02) 8296 0632

<sup>44</sup> If you are not able to lodge a submission online, please contact us and we will provide instructions for alternative methods to lodge the submission.

<sup>45</sup> See: <https://www.aemc.gov.au/our-work/changing-energy-rules-unique-process/making-rule-change-request/our-work-3>

<sup>46</sup> Further information is available here: <https://www.aemc.gov.au/contact-us/lodge-submission>

## ABBREVIATIONS

AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
Commission	See AEMC
ESB	Energy Security Board
GWh	Gigawatt hours
IRM	Interim Reliability Measure
Liable entity	has the meaning given in the NEL and as determined in accordance with clause 4A.D
Market customers	has the meaning given in clause 2.3.4 of the NER
MLO	Market Liquidity Obligation
MW	Megawatts
NEL	National Electricity Law
NEM	National Electricity Market
NEO	National Electricity Objective
NER	National Electricity Rules
NSW	New South Wales
PoLR	Procurer of Last Resort
Qualifying contracts	has the meaning given in the NER
Reliability Instrument	has the meaning given in the NEL
RERT	Reliability and Emergency Reserve Trader
RRO	Retailer Reliability Obligation
SA	South Australia
T-1 Reliability Instrument	has the meaning given in the NEL
T-3 Reliability Instrument	has the meaning given in the NEL
VRE	Variable Renewable Energy

## A

### A.1

## ATTACHMENT A

### Overview of the RRO

The RRO commenced on 1 July 2019, with the aim of providing 'stronger incentives for market participants to invest in the right technologies in regions where it is needed, to support reliability in the NEM'.<sup>47</sup>

The RRO operates as an obligation on retailers to engage in forward contracting.

The ESOO includes a reliability forecast identifying any forecast reliability gaps in the coming five years, defined according to the RRO, and an indicative projection of any forecast reliability gaps in the second five years of the forecast. If AEMO identifies a material gap three years and three months out, it will apply to the AER to start the RRO by making a reliability instrument.

The South Australian Minister also has the ability to trigger a T-3 RRO within South Australia. A bill before the South Australian Parliament seeks to extend this trigger to all regions in the NEM.<sup>48</sup>

Where a reliability instrument is made, liable entities are on notice to enter into sufficient qualifying contracts to cover their share of a one-in-two year peak demand. An MLO placed on the largest scheduled generator portfolios requires them to make competitively priced contracts available on the exchanges at known times facilitating access by all liable entities or market customers. AEMO can also run a Voluntary Book Build mechanism to help liable entities secure contracts.

If AEMO assesses, and the AER confirms, that the reliability gap remains, one year out (T-1), liable entities must report their contract positions for the reliability gap period to the AER. If actual system peak demand exceeds an expected one-in-two year peak demand, the AER will assess the compliance of liable entities and determine whether their share of load for the reliability gap period was covered by qualifying contracts.

If not already done so, AEMO may commence procurement of emergency reserves at this point 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 (POLR) cost recovery mechanism.

Entities whose required share of load is not covered by qualifying contracts for the specified period will be required to pay a pro-rata portion of the costs expended by AEMO to manage the market during those periods through the POLR and may face fines for having insufficient contract as required in the NER, up to an individual maximum of \$100 million per region.

The RRO is supported by detailed AER guidelines, which provide detail on how the various stages of the RRO operate.<sup>49</sup> Table A.1 provided links to the detailed guidelines.

<sup>47</sup> AER, Retailer reliability obligation, available [here](#).

<sup>48</sup> *South Australia, National Electricity (South Australia) (Ministerial Reliability Instrument) Amendment Bill 2022*, available [here](#).

<sup>49</sup> See RRO guidelines [here](#).

## A.2 Obligations on entities

The RRO places specific obligations on entities under the NEL and NER.

- **AEMO's** role is to identify forecast reliability gaps in each NEM region in its ESOO forecast, and if a forecast reliability gap arises, also request the AER to issue a reliability instrument.
- **The AER's** role is to assess and determine:
  - AEMO's forecast reliability gap and trigger the RRO by issuing a reliability instrument
  - Compliance with the MLO following the triggering of the T-3 reliability instrument
  - Liable Entities' reporting and delivery by contract reporting day compliance with the contracts and firmness guidelines following the trigger of the T-1 reliability instrument
  - Liable Entities' compliance with the RRO should a reliability gap period eventuate.
- **Liable Entities and MLOs generators and groups** must provide certain information to AEMO and AER to meet their obligations under the NEL and NER. When the RRO is triggered, liable entities must enter into sufficient qualifying contracts to meet their share of expected system peak electricity demand reported on a 50 per cent Probability of Exceedance.

Table A.1: AER Guidelines

<b>GUIDELINE</b>	<b>INTERIM GUIDE- LINE PUBLISHED</b>	<b>FINAL GUIDE- LINE PUB- LISHED</b>
Opt-in Guidelines	N/A	<a href="#">30 June 2020</a>
Forecasting Best Practice Guidelines	<a href="#">20 September 2019</a>	<a href="#">August 2020</a>
Reliability Instrument Guidelines	<a href="#">31 July 2019</a>	TBC
Market Liquidity Obligation Guidelines	<a href="#">30 August 2019</a>	TBC
Contracts and Firmness Guidelines	<a href="#">30 August 2019</a>	TBC
Reliability Compliance Procedures and Guidelines	<a href="#">3 March 2023</a>	TBC [June 2023]

Source: AER

AEMO has certain roles in the operation of the RRO outside of advice on T-1 and T-3 triggers under the ESOO. Table A.2 provides links to these detailed guidelines.

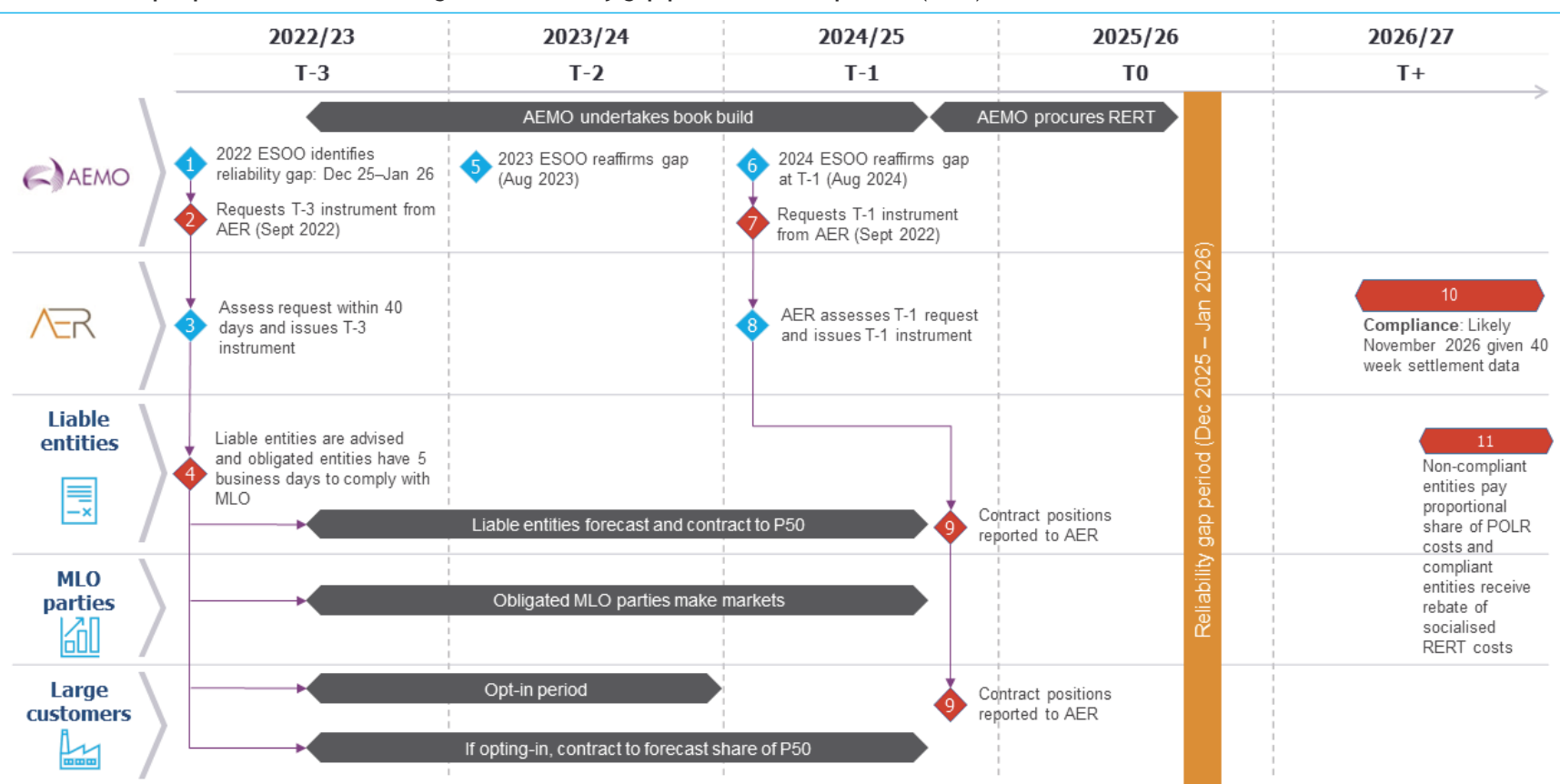
**Table A.2: AEMO Guidelines**

<b>GUIDELINE</b>	<b>FINAL GUIDELINE PUBLISHED</b>
PoLR Cost Procedures (4A.F.10)	<a href="#">20 November 2020</a>
Reliability Forecast Guidelines (4A.B.4)	<a href="#">26 February 2021</a>
Voluntary Book Build Mechanism	13 February 2020

Source: AEMO

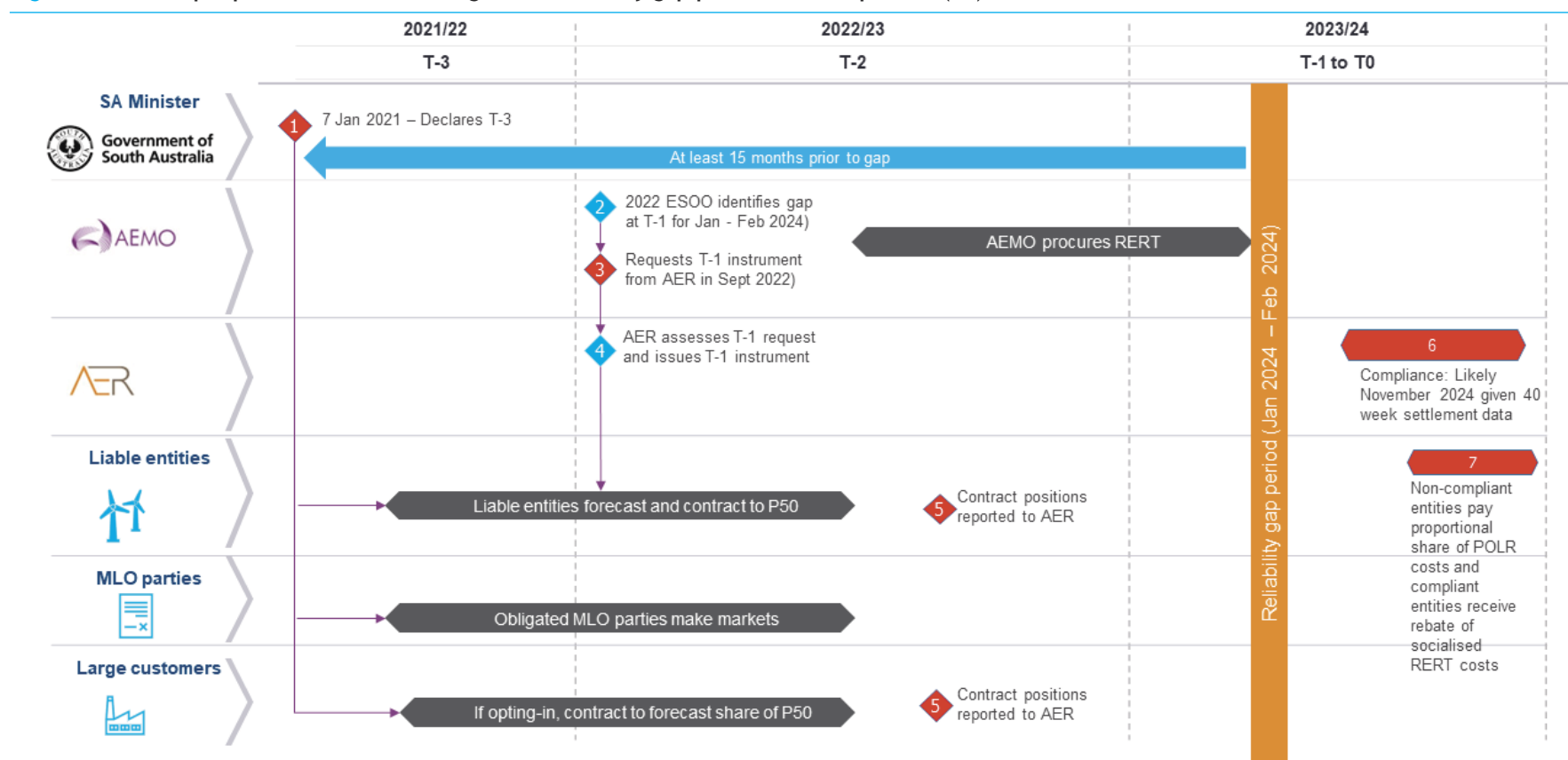
Figure A.1 and Figure A.2 provide further information on the process for establishing and compliance with a Reliability Gap under the RRO in respect of the recent NSW (T-3) and SA (T-1) triggers. These processes will be updated for the AER's Final *Retailer Reliability Obligation Compliance Procedures and Guidelines* which are due to be published in mid-2023.

Figure A.1: Example process for establishing a T-3 reliability gap period and compliance (NSW)



Source: AER

**Figure A.2:** Example process for establishing a T-1 reliability gap period and compliance (SA)



Source: AER