AUSTRALIAN ENERGY MARKET COMMISSION

REVIEW

Final report

Review of the operation of the Retailer Reliability Obligation

29 February 2024

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About the AEMC

The AEMC reports to the energy ministers. We have two functions. We make and amend the national electricity, gas and energy retail rules and conduct independent reviews for the energy ministers.

Acknowledgement of Country

The AEMC acknowledges and shows respect for the traditional custodians of the many different lands across Australia on which we all live and work. We pay respect to all Elders past and present and the continuing connection of Aboriginal and Torres Strait Islander peoples to Country. The AEMC office is located on the land traditionally owned by the Gadigal people of the Eora nation.

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Summary

1 The Australian Energy Market Commission (the AEMC or Commission) has completed its review of the operation of the Retailer Reliability Obligation (RRO). The Commission has made twelve recommendations to improve the operation of the RRO so that it can more effectively contribute to the National Electricity Objective (NEO). The recommendations are designed to improve the operational efficiency of the RRO by reducing regulatory burden for market participants and reducing costs for consumers.

2 The review of the operation of the RRO has been carried out in the context of the National Electricity Market (NEM) 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. The transformation requires careful consideration of how reliability managed to ensure the system can meet customer demand at a level they value.

3 The RRO places obligations on liable entities to contract with firmed generation to provide an incentive for investment in these assets and on market generators to improve market liquidity in periods where reliability gaps are identified in regions. It is one of several measures aimed at supporting reliability in the 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*'.[1]

4 The RRO forms part of the overall reliability framework in the NEM and is designed to complement the reliability standard and market price settings, including the market price cap (MPC), cumulative price threshold, administered price cap and market floor price.

5 The RRO has only had one T-1 Reliability Instrument (1 year before the start of a forecast reliability gap period), which was for South Australia from 8 January 2024 to 29 February 2024. The experiences from stakeholders and market bodies with this first T-1 event has informed the Commission's recommendations to improve the operation of the RRO.

We have made final recommendations to improve the operation of the RRO

6 The Commission's twelve final recommendations would improve the operation of the RRO, enabling the RRO to better support reliability as the NEM transitions and with reduced regulatory burden and cost for consumers. The final recommendations are presented below in Box 1.

Box 1: Final recommendations to improve the operation of the RRO

Recommendation 1: Move the T-1 Net Contract Position (NCP) compliance date to T (the start of a forecast reliability gap period) and continue ex-post compliance testing only if the conditions in the reliability instrument occur, to reduce the regulatory burden and costs, maintain incentives for retailers to pursue new customers and better enable newly committed project contracts to be used to comply with a reliability gap.

Recommendation 2: Change the timeframe for the Australian Energy Market Operator (AEMO) to request a reliability instrument from 3 to 9-months, to provide greater flexibility when AEMO can request a reliability instrument to allow AEMO to effectively cover forecast reliability gaps.

1 AER, Retailer Reliability Obligation, found here.

Recommendation 3: Maintain the Australian Energy Regulator's (AER's) existing role in assessing reliability instrument gap requests to ensure a clear differentiation in roles of market bodies.

Recommendation 4: Amend the market liquidity obligation (MLO) from a 15% threshold for MLO groups to 10% threshold to ensure that the MLO continues to support market liquidity in South Australia.

Recommendation 5: Remove the voluntary book build mechanism, which is not being used, to simplify the National Electricity Rules (NER).

Recommendation 6: That the AER review the eligibility of demand-side management contract types to increase the pool of eligible contracts. This would reduce costs and regulatory burden for liable entities.

Recommendation 7: That the AER review the contracts and firmness guidelines to adjust the strike price threshold for qualifying contracts to allocate a firmness factor of 1. This would increase the pool of eligible contracts and reduce costs.

Recommendation 8: That the AER review opportunities to simplify bespoke methodology and audit arrangements considering the experience of liable entities during the SA T-1 event, to reduce regulatory burden and compliance costs.

Recommendation 9: Maintain the timeframes for advice on procurer of last resort (PoLR) costs, noting that compliance will be simplified by changing the NCP compliance date from T-1 to T.

Recommendation 10: Maintain the characteristics that describe which market customers are liable entities as they remain broadly appropriate, however future changes to the role of battery energy storage systems (BESS) in the RRO may be needed.

Recommendation 11: Maintain the existing opt-in mechanism arrangements as they remain broadly appropriate, despite not being used to date.

Recommendation 12: The AER review options to simplify compliance arrangements through guidelines to reduce regulatory burden for liable entities.

7 The twelve final recommendations have been maintained from the draft report. However, the Commission is not maintaining two of our draft recommendations as final recommendations:

- Provide AEMO with a limited power to request the AER cancel a T-1 reliability instrument — the Commission considers that this power would not be critical to improving the operation of the RRO if the NCP compliance date is moved to T, as per recommendation 1.
- AEMO to review the opening of its demand side participation information portal for more of the year — this recommendation is no longer needed as AEMO has completed a review of the demand-side participant information guidelines and the portal will be open year-round.

8 The RRO is implemented through the National Electricity Law (NEL) and NER, as well as detailed guidelines developed by AEMO and the AER. This means that there are likely to be different lead times on when reforms can be implemented. Recommendations that require legislative amendments would need to be approved by the Energy Ministers Sub-Group and passed through the South Australian Parliament. Some recommendations would require AEMO or the AER to review and make changes to their guidelines.

We have considered stakeholder feedback in making its recommendations

9 The Commission has considered stakeholder feedback throughout this review to develop its final recommendations. The Commission also considered other sources of information in developing the final recommendations. This includes ASX Energy data, prices in the NEM before and after reliability instrument periods, and information provided in AEMO's 2022 Electricity Statement of Opportunity (ESOO), 2022 ESOO Update and 2023 ESOO.

10 Sixteen stakeholders made submissions to the consultation paper with suggestions to improve the RRO. The Commission then received sixteen submissions from stakeholders with feedback on the draft recommendations and some additional suggestions.

11 Stakeholders broadly supported the draft recommendations. However, at the same time, several stakeholders expressed dissatisfaction with the RRO as a whole and recommended that the Commission review the efficacy of the RRO. The Commission recognises stakeholder views and concerns on the RRO and notes that this review is focused on the operation of the RRO and "is not intended to assess the overall efficiency of the Obligation".[2]

12 Notably, in a submission to the draft report, Neoen and Tesla considered that battery energy storage systems (BESS), which can be liable entities under the RRO, are discouraged from operating as a load during gap periods. The Commission recognises these concerns, in particular the disincentives for BESS to operate as a load to provide FCAS for system security purposes during gap periods. The Commission has not made a recommendation in relation to this issue as it has not been consulted on during this review. However, the AEMC is actively working with stakeholders and market bodies to find an appropriate solution outside of this review.

13 The Commission notes that AEMO and the AER did not support the draft recommendation to move the NCP compliance date from T-1 to T. In their views, moving the NCP compliance date would remove the incentive for liable entities to contract well in advance of a reliability gap. The Commission has given careful consideration to the arguments raised by AEMO and the AER. However, we are of the view that moving the NCP compliance date will not impact incentives to contract early, will allow liable entities to contract with new builds that come on between T-1 and T, and will allow more efficient levels of contracting. This is because liable entities will have greater certainty of their expected demand as they reach closer to T and can adjust their contract positions accordingly, thereby reducing regulatory burden and costs.

The Commonwealth's review on the future design of the market may review the efficacy of the RRO

14 In the draft report, the Commission proposed it would consider a further review of the efficacy of the RRO accounting for new policy mechanisms and levers that may overlap with the RRO. These policy mechanisms include the Commonwealth Government's Capacity Investment Scheme (CIS), and jurisdictional schemes such as the NSW Electricity Infrastructure Roadmap.

15 The Energy and Climate Change Ministerial Council meeting has recently announced that the Commonwealth will work with NEM jurisdictions through 2024 on the future design of the market beyond 2030.[3]

16 In light of stakeholder views and the Commonwealth's planned work, the Commission considers that the Commonwealth should take a holistic view of the policy mechanisms that support

2 ESB, Retailer Reliability Obligation Decision Regulation Impact Statement, 19 December 2018, p.15.

3 Energy and Climate Change Ministerial Council, Meeting Communique, 24 November 2023.

reliability, including the RRO, as part of its work on the future design of the market. In the Commission's view, the Commonwealth should consider potential overlaps between the RRO and other policy mechanisms it may recommend, and evaluate the suitability of the RRO as a mechanism to support reliability in the future NEM.

The final recommendations contribute to the NEO

17 Considering the NEO[4] and the issues explored in the review, the Commission identified six assessment criteria to develop its recommendations.

18 The Commission considers that the recommendations if implemented, would contribute to achieving the NEO and meet the following assessment criteria:

- **Operational efficiency:** The recommendations would improve operational efficiency by reducing the regulatory burden for liable entities through guideline reviews and reducing the likelihood of over-contracting by moving the NCP date to T
- **Incentives:** The recommendations would more effectively facilitate investment in dispatchable capacity and demand response by moving the NCP date to T and enabling liable entities to more easily account for new investments registered between T-1 and T
- **Appropriate allocation of risk:** Maintaining key definitions including the definitions of liable entities and market liquidity obligation (MLO) groups would ensure that risks continue to be borne by entities who are best placed to contract to support firm generation
- **Predictability and stability:** The recommendations promote predictability and stability by maintaining key definitions while removing additional regulatory burden and unused elements, such as the voluntary book build mechanism
- **Simplicity and transparency:** The recommendations would simplify its operation by modifying some elements at T-1 including reviews of qualifying contracts, changes to NCP dates and changing timeframes for AEMO to request a reliability instrument
- **Timing and practicality:** The recommendations would require changes to the NEL and NER, as well as reviews of guidelines, with the aim of reducing the regulatory burden for compliance and delivering more practical compliance options including greater access to demand side management.

19 In developing the final recommendations, the Commission considered the amendments to the NEO that included emissions reductions. The Commission considers that the final recommendations promote emissions reduction by improving the operation of the RRO to support investment in firmed renewable generation, storage and demand side management as the NEM transitions to net zero and thermal generators progressively retire.

4 Section 7 of the NEL.

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1 We have made final recommendations

The Retailer Reliability Obligation (RRO) supports investment in firmed generation by requiring liable entities (largely retailers) to obtain contracts that cover their expected demand during reliability gap periods. This, in turn, is intended to provide market participants with the necessary confidence to invest in firm generation and demand-side management to support a reliable electricity supply in the National Electricity Market (NEM).

Clause 11.116.18 of the National Electricity Rules (NER) requires that the Australian Energy Market Commission (AEMC or Commission) review the operation of Chapter 4A — RRO. The terms of reference of the review note that the Energy Security Board (ESB) Decision Regulatory Impact Statement for the RRO outlined that the intent of this review is not to assess the overall efficiency of the RRO, as this would require the RRO to operate over a longer horizon.[5]

The Commission has made twelve final recommendations to improve the operation of the RRO:

1. **Move the T-1 Net Contract Position (NCP) compliance date to T** and continue ex-post compliance testing only if the conditions in the reliability instrument occur
2. **Change the timeframe for the Australian Energy Market Operator (AEMO) to request a reliability instrument** from 3 to 9-months
3. **Maintain the Australian Energy Regulator's (AER's) existing role in assessing reliability instrument gap requests** to ensure a clear differentiation in roles of market bodies
4. **Amend the market liquidity obligation (MLO) from a 15% threshold for MLO groups to 10% threshold** to ensure that the MLO continues to support market liquidity in South Australia
5. **Remove the voluntary book build mechanism** which is not being used
6. **That the AER review expanding eligible demand-side management contract types** to increase the pool of eligible contracts
7. **That the AER review the contracts and firmness guidelines to adjust the strike price threshold for qualifying contracts** to allocate a firmness factor of 1 to increase the pool of eligible contracts and reduce costs.
8. **That the AER review opportunities to simplify bespoke methodology and audit arrangements** through its guidelines
9. **Maintain the timeframes for advice on procurer of last resort (PoLR) costs**
10. **Maintain the existing role of market customers as liable entities**, noting that future changes to the role of BESS in the RRO may be appropriate
11. **Maintain the existing opt-in mechanism arrangements**
12. **The AER review options to simplify compliance arrangements** through guidelines.

The twelve final recommendations have been maintained from the draft report and were broadly supported by stakeholders. Two draft recommendations were not maintained:

- Provide AEMO with a limited power to request the AER cancel a T-1 (draft recommendation 2) — the Commission considers that this would not be critical to improving the operation of the RRO if the NCP date is moved to T
- AEMO to review extending the time the demand portal being open (draft recommendation 8) — this draft recommendation has already been implemented by AEMO's review of the demand-

5 The terms of reference for this review can be found here.

side participant information (DSPI) guidelines that were completed on 20 December 2023 and decided to open the demand portal year-round.

1.1 Our recommendations are designed to improve the operation of the RRO

The Commission considers that the RRO can be simplified to ensure it is more effectively delivering on the policy intent and to reduce regulatory burden and costs.

The RRO is implemented through a complex set of laws, rules, guidelines and procedures that amount to several hundred pages of detailed guidance for market participants, including:

- Part 2A and section 90EA of the National Electricity Law (NEL)
- Chapter 4A and Parts ZZZR and ZZZZH in Chapter 11 of the NER
- Nine guidelines released by the AER and AEMO.

The operational complexity of the RRO is designed to ensure that the policy intent is met to the greatest extent possible, with civil penalties for non-compliance.

1.1.1 Amendments to the NEL, NER, and guidelines are needed to implement our recommendations

To implement the final recommendations, there would need to be amendments to the NEL, NER, and AEMO and AER guidelines. Some recommendations, where existing arrangements are maintained, require no changes. Table 1.1 outlines possible amendments needed for each recommendation. Any actual amendments to implement recommendations would be subject to subsequent processes and decisions from relevant bodies.

Table 1.1: Potential amendments to implement our recommendations

Recommendation	Potential amendments
Move the T-1 Net Contract Position (NCP) compliance date to T and continue ex-post compliance testing only if the conditions in the reliability instrument occur	• NEL and NER changes • AER - Contract and Firmness Guidelines, Opt-in Guidelines, MLO Guidelines, Reliability Compliance Procedures and Guidelines • AEMO - Opt-in Guidelines, PoLR Cost Procedures
Change the timeframe for the Australian Energy Market Operator (AEMO) to request a reliability instrument from 3 to 9-months	• NEL and NER changes • AER - Reliability Instruments Guideline
Maintain the Australian Energy Regulator's (AER's) existing role in assessing reliability instrument gap requests	
Amend the market liquidity obligation (MLO) from a 15% threshold for MLO groups to 10% threshold	• NER changes • AER - MLO Guidelines
Remove the voluntary book build mechanism	• NER changes • AEMO - Book Build Procedures
The AER review expanding eligible demand-side	• NER changes

Recommendation	Potential amendments
management contract types	• AER - Interim Contracts and Firmness Guidelines
The AER review the contracts and firmness guidelines to adjust the strike price threshold for qualifying contracts	• AER - Interim Contracts and Firmness Guidelines
The AER review opportunities to simplify bespoke methodology and audit arrangements	• AER - Interim Contracts and Firmness Guidelines
Maintain the timeframes for advice on procurer of last resort (PoLR) costs	
Maintain the existing role of market customers as liable entities	
Maintain the existing opt-in mechanism arrangements	
The AER review options to simplify compliance arrangements	• AER - Reliability Compliance and Procedures Guidelines

Note: This is an indicative list of amendments that may be required to implement recommendations, further amendments may be required.

1.1.2 A further review may consider the efficacy of the RRO

In submissions to the consultation paper, stakeholders considered that the RRO was ineffective or redundant and argued that the review should cover the efficacy of the RRO.[6]

The Commission agrees that it may be necessary to consider the RRO mechanism in light of the potential overlap with newer policy mechanisms to support efficient investment in the NEM and to contribute to simplicity and transparency under the National Electricity Objective (NEO). These policy mechanisms include several new measures being developed by the Commonwealth and jurisdictional governments, such as the Capacity Investment Scheme (CIS) and the NSW Electricity Infrastructure Roadmap.

In the draft report, the Commission considered that there are opportunities to improve the operation of the RRO to ensure that it is better meeting its original policy intent. While this review is not evaluating the efficacy of the RRO, the Commission noted in the draft report that the AEMC may consider a self-initiated review of the overall policy efficiency of the RRO.

In considering submissions to the draft report, the Commission recognises strong support from stakeholders for a review on the efficacy of the RRO.[7] Several stakeholders expressed their preference for such a review to begin sooner rather than later.

In November 2023, the Energy and Climate Change Ministerial Council meeting announced that:[8]

> The Commonwealth will work with National Electricity Market (NEM) jurisdictions through 2024 on the future design of the market beyond 2030, to provide greater certainty and support investor confidence over the longer term, with public consultation to commence following the March 2024 ECMC.

6 Submissions to the consultation paper: AEC, p.1; AFMA, p.1; EnergyAustralia, p.2; ENGIE, p.1; Origin, p.2; PIAC, p.1; Tom Geiser, p.1.

7 Submissions to the draft report: AEC, p.3; AFMA, p.1; Delta Electricity, p.1; ENGIE, p.1; EnergyAustralia, p.1; Origin, p.1; PIAC, p.1; Stanwell, p.1.

8 Energy and Climate Change Ministerial Council, Meeting Communique, 24 November 2023.

The Commission considers that the Commonwealth take a holisitic view of the policy mechanisms that support reliability, including the RRO, as part of its review of the future design of the market. In the Commission's view, the Commonwealth should consider potential overlaps between the RRO and other policy mechanisms, and evaluate the efficacy and suitability of the RRO in the future NEM. This aligns with:

- Stakeholder preferences for the RRO to be reviewed in the near-future, as the Commonwealth is expected to commence consultation in 2024
- The Commonwealth's objectives to consider the design of the future market, which would likely include consideration of the CIS, RRO, and other reliability mechanisms.

1.2 A range of information has shaped our recommendations

In making its recommendations, the Commission considered stakeholder feedback and a number of other sources of information including ASX Energy data, prices in the NEM before and after reliability instrument periods and information provided in AEMO's 2022 Electricity statement of Opportunities (ESOO), 2022 ESOO Update and 2023 ESOO. Stakeholder feedback includes sixteen submissions to the consultation paper that proposed a range of options to change the operation of the RRO, and sixteen submissions to the draft report that broadly supported the draft recommendations and proposed some additional changes.

The Commission considered stakeholder suggestions for additional recommendations in submissions to the draft report, but has not introduced any new recommendations from the draft report. The Commission's consideration of stakeholder suggestions are outlined in chapter 3 and appendix D.

Since the publication of the consultation paper, AEMO and the AER have released three documents which address issues raised in submissions to the consultation paper around the RRO:

- In April 2023, AEMO released its final report for the reliability forecasting guidelines and methodologies consultation which extends the application of 'anticipated' projects to RRO forecasting.[9]
- In June 2023, the AER released the RRO Reliability Compliance Procedures and Guidelines — Final which sets out final decisions on compliance arrangements for liable entities under the RRO including audits and policies, systems and procedures that regulated entities must establish.[10]
- In December 2023, AEMO completed its review on the Demand Side Participation Forecasting Methodology and the DSPI Guidelines and determined to open the demand portal year-round, instead of only in April, for liable entities to register demand response contracts.[11]

The AEMC has continued to explore stakeholders' compliance experience with the South Australia T-1 gap period between 8 January 2024 to 29 February 2024. The Commission also recognises that there is more information available on the operation of the RRO at T-3 than at T-1, given that T-3 reliability instruments have been issued on numerous occasions and while a T-1 reliability instrument has only been issued once.[12]

9 AEMO, Reliability Forecasting Guidelines and Methodologies Consultation Final Report, 24 April 2023, found here.
10 AER, Reliability Compliance Procedures and Guidelines - Final Decision, June 2023, found here.
11 AEMO, 2023 DSP Information Guidelines Final Report, 20 December 2023, found here.
12 AER, Register of Reliability Instruments.

1.3 Our recommendations promote reliability in the NEM

The RRO was introduced to support the reliability framework in the NEM in order to:[13]

> Encourage new investment in dispatchable energy such that the electricity system operates reliably.

This was in the context of:[14]

> 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.

When introduced, the RRO 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.

The Commission's final recommendations are targeted at improving the operation of the RRO. The Commission considers that improving the operation of the RRO would help the RRO further promote and support reliability in the NEM. The recommendations would help simplify the RRO, reduce regulatory burden and unnecessary costs. Further information on how the recommendation improve the operation of the RRO are in chapter 3.

13 Energy Security Board, Retailer Reliability Obligation Decision Regulation Impact Statement, 19 December 2018.
14 Ibid.

2 The recommendations would contribute to the energy objectives

In conducting reviews, the Commission must have regard to the relevant energy objectives.[15] For this review, the relevant energy objective is the NEO:[16]

> to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to —
>
> (a) price, quality, safety, reliability and security of supply of electricity; and
>
> (b) the reliability, safety and security of the national electricity system; and
>
> (c) the achievement of targets set by a participating jurisdiction—
>
> (i) for reducing Australia's greenhouse gas emissions; or
>
> (ii) that are likely to contribute to reducing Australia's greenhouse gas emissions.

The targets statement, available on the AEMC website, lists the emissions reduction targets to be considered, as a minimum, in having regard to the NEO.[17]

2.1 How we have applied the NEO to our recommendations

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

1. **Operational 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 imposes 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.

Our reasons for choosing these criteria are set out in section 2 of the consultation paper.

The Commission has undertaken regulatory impact analysis to evaluate the impacts of the various policy options against the assessment criteria. Appendix A outlines the methodology of the regulatory impact analysis.

15 Section 32 of the NEL.
16 Section 7 of the NEL.
17 Section 32A(5) of the NEL.

2.2 The final recommendations contribute to the NEO

Having regard to the issues raised in the terms of reference, the Commission is satisfied that the final recommendations will, or are likely to, contribute to the achievement of the NEO. The final recommendations are consistent with the assessment framework:

- **Operational efficiency:** The recommendations would reduce the regulatory burden for liable entities complying with the T-1 reliability instrument. This would be achieved through streamlining guidelines and reducing the likelihood of over-contracting by bringing the NCP reporting date to the demand period, which should lower costs for consumers.
- **Incentives:** The recommendations would more effectively facilitate investment in dispatchable capacity and demand response by changing the NCP date to T and enabling new investments registered between T-1 and T to be accounted for in NCP reporting by liable entities.
- **Appropriate allocation of risk:** Maintaining key definitions including the definitions of liable entities and MLO groups would ensure that risks continue to be borne by entities who are best placed to contract to support firmed generation.
- **Predictability and stability:** The recommendations promote predictability and stability by maintaining key definitions including liable entity arrangements, T-1 and T-3 events, reliability gap forecasts and the MLO, while removing additional regulatory burden and unused elements including the voluntary book build mechanism.
- **Simplicity and transparency:** The recommendations would simplify its operation by modifying some elements at T-1 including reviews of qualifying contracts, changes to NCP dates, and changing timeframes for AEMO to request a reliability instrument.
- **Timing and practicality:** The recommendations require changes to the NER as well as reviews of guidelines. Some changes may require changes to the NEL, with the aim of reducing regulatory burden for compliance and delivering more practical compliance options including greater access to demand side management.

2.3 We considered the recent amendment of the NEO in making our final recommendations

In May 2023, Energy Ministers approved amendments to the energy laws to implement their previous decision to incorporate an emissions reduction component into the NEO.[18] The amendments were passed by the South Australian Parliament on 12 September 2023 and came into effect on 21 September 2023.[19]

In developing the draft recommendations, the Commission was guided by the NEO as it applied prior to the amendments.[20] The draft report was published on 28 September 2023.

In developing the final recommendations, the Commission considered the amended NEO and considers that the final recommendations remain appropriate. This is because the final recommendations will, if implemented, promote emissions reduction by improving the operation of the RRO to support investment in firmed renewable generation, storage and demand side management as the NEM transitions to net zero and thermal generators progressively retire.

18 Department of Climate Change, Energy and Environment and Water, Energy and climate change ministerial council meeting communique, 19 May 2023.

19 The Statutes Amendment (National Energy Laws) (Emissions Reduction Objectives) Act 2023.

20 The NEO as in force immediately before the recent amendments was: 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: price, quality, safety, reliability and security of supply of electricity; and the reliability, safety and security of the national electricity system.

3 How the recommendations would improve the operation of the RRO

This chapter sets out how and why final recommendations would improve the operation of the RRO, and includes how stakeholder feedback has informed the Commission's recommendations.

The Commission recognises that some recommendations may require changes to the NEL, NER and guidelines. Changes to the NEL and NER will require longer timeframes to implement than amendments to existing guidelines.

3.1 We are making recommendations to amend the T-3 and T-1 processes

The Commission has made three final recommendations to improve the process for the T-3 and T-1 triggers for the RRO:

1. Move the NCP compliance date from T-1 to T and continue ex-post compliance testing only if the conditions in the reliability instrument occur to:
   a. Reduce the regulatory burden
   b. Maintain incentives for retailers to pursue new customers
   c. Enable newly committed project contracts to be used to comply with a reliability gap
2. Change the timeline for when AEMO can request a trigger event from 3 to 9-months to provide AEMO with greater flexibility to request T-3 reliability instruments for forecast reliability gaps
3. Maintain the AER's existing role in assessing reliability instrument requests to ensure clear delineation of roles between market bodies.

All three recommendations have been maintained from the draft report.

Recommendations 1 and 2 would require amendments to the NEL and the NER, in addition to various guidelines. For example, moving the NCP compliance date would require amendments to section 14H(1)(b)(i) of the NEL and a number of clauses in the NER.

The draft report also included a draft recommendation to provide AEMO with limited power to request the AER remove a T-1 reliability instrument. The Commission has not included this as a final recommendation. We consider that it would not be critical to improving the operation of the RRO if the NCP compliance date is moved to T and ex-post testing continues only if a reliability gap occurs.

3.1.1 Recommendation to move the net contract position (NCP) compliance date from T-1 to T

Recommendation 1: Move the T-1 NCP compliance date to T

Moving the T-1 NCP compliance date to T and continuing ex-post compliance testing only if the conditions in the reliability instrument occur, will reduce the regulatory burden and costs, maintain incentives for retailers to pursue new customers and better enable newly committed project contracts to be used to comply with a reliability gap.

The NCP compliance date is the date at which liable entities should have sufficient contracts for capacity to cover their share of peak demand when demand exceeds the 1 in 2 year peak forecast during the forecast reliability gap period. Liable entities record their NCP at the NCP compliance date, which is then reported to the AER on the NCP reporting date.

There are limitations with the current NCP compliance date

The Commission considers that are some limitations to the existing NCP date at T-1:

- Liable entities are not able to contract with certainty with newly built projects which may be commissioned between T-1 and T
- The compliance date of T-1 has incentives that lead to perverse outcomes, where liable entities can purchase contracts to cover their position at the NCP and avoid RRO penalties, then sell those contracts after the NCP compliance date and not be covered during the gap period – Box 2 provides an example of this
- Determining a liable entity's expected demand at T-1 is difficult, which may lead to over or under-contracting or may act as a disincentive to pursue new customers if the expected volume of acquisition is not sufficient to meet the renomination threshold
- Audit and compliance costs may be unnecessary if the demand conditions needed to trigger the gap do not occur; the AER faces the problematic task of assessing the adequacy of contracting levels for periods during the defined gap if the 50 per cent Probability of Exceedance (PoE) is not triggered.

Box 2: Example of perverse outcome created by the NCP compliance date at T-1

- **Retailer A** purchases firming contracts the day before the NCP date and sells them the day after the NCP date.
  - This means Retailer A is compliant with the RRO but does not have adequate contract coverage during the reliability gap.
- **Retailer B** does not enter contracts before the NCP date, but purchases contracts after the NCP date covering the gap period in the lead up to T as new capacity comes online.
  - Therefore, Retailer B has adequate coverage during the reliability gap, but is non-compliant with the RRO.
- During the reliability gap AEMO incurs PoLR costs.
- With the current arrangements, **Retailer A** would not pay any PoLR costs despite not having adequate contracts in place for the actual gap. This is because it was covered at the NCP.
- **Retailer B** would be liable for PoLR costs and civil penalties, despite having contract coverage during the gap.

Stakeholders broadly supported moving the NCP date from T-1 to T, except for AER and AEMO.

Most stakeholders supported moving the NCP date to T as it would address the limitations of the current NCP date at T-1, reducing regulatory burden and costs.[21] EnergyAustralia supported the recommendation and considered:[22]

> it will assist participants in dealing with a range of uncertainties in managing their liabilities, without any negative effect on investment signals.

From the experience with the South Australia T-1 event, Shell Energy observed that:[23]

21 Submissions to the draft report: AEC, p.1; AFMA, p.1; AGL, p,1; Delta Electricity, p.1; EnergyAustralia, p.2; ENGIE, p.2; EUAA, p.1; Origin, p.1; Shell Energy, p.2; Snowy Hydro, p.1; Stanwell, p.3.

22 EnergyAustralia, submission to the draft report, p.2.

23 Shell Energy, submission to the draft report, p.2.

- Contract prices increased leading up to T-1, followed by a sudden decline in prices after the NCP date as retailers could not use those contracts for the RRO.
- Retailers may be less likely to make offers to consumers after the NCP date at T-1, as the additional volume gained may not be sufficient to re-open their NCP, and they therefore could risk penalties and PoLR costs from the RRO if the contract cover on the NCP compliance date is insufficient.

However, AEMO and the AER opposed moving the NCP date from T-1 and considered that it would weaken the signals for retailers to contract and invest early to close a reliability gap.[24] The AER and AEMO considered that moving the NCP date would weaken retailer incentives to contract early to support the required investment in new capacity.

The AER considered that:[25]

> As this proposal [to move the NCP date to T] has the potential to impact how the framework meets its original policy intent, we consider the AEMC's draft recommendation extends beyond the scope of the current review.

The Commission considers moving the NCP will reduce the limitations of the current compliance date

The Commission has given careful consideration to the arguments raised by AEMO and the AER for not moving the NCP compliance date. However, we are of the view that moving the NCP compliance date will improve the operation of the RRO without impacting incentives or the policy intent:

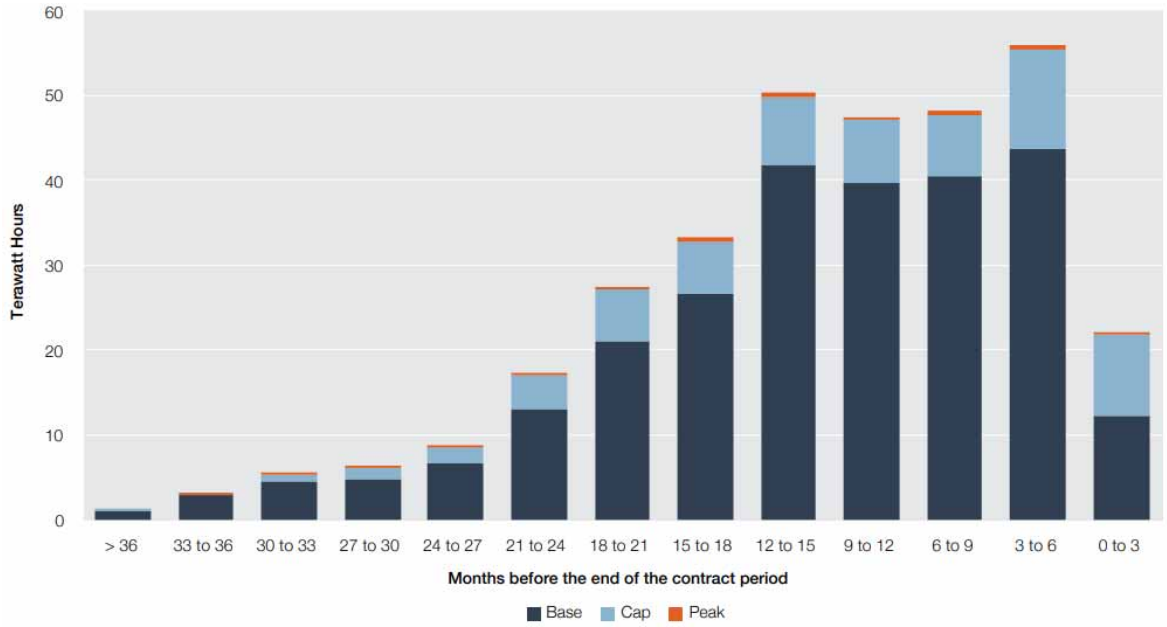
- **Liable entities will still be incentivised to contract early:** the Commission considers that moving the NCP date to T is consistent with the policy intent of the RRO and that liable entities would still be incentivised to contract early.
  - There are significant penalties attached to complying the with the RRO that provide a strong incentive for liable entities to be fully contracted at T.
  - Further, participants are incentivised to contract early because contracts will be more expensive as the market approaches T. As noted by Shell Energy, contract prices increased leading up to the South Australia T-1, followed by a sudden decline in prices after the NCP date as retailers could not use those contracts for the RRO.
  - In its Wholesale Energy Market Performance Report 2020, the AER found that the vast majority of contract trading occurs within 18 months of the close of contract. The futures contract trades in the lead up to the contract period for 2019-20 are shown in Figure 3.1.
  - The Commission considers that T-1 should be maintained as a notification date to confirm AEMO's assessment of the shortfall and confirm the need for liable entities to be appropriately contracted, given the penalties and costs of not fulfilling their obligations. The Commission also considers that ex-post testing be continued only for periods where an actual reliability gap occurs, reducing regulatory burden.
- **Liable entities will be able to contract with new capacity:** the recommendation would enable liable entities to contract with new projects built between T-1 and T that contribute to filling the reliability gap. This issue was highlighted with the South Australia T-1 instrument for January 2024 to February 2024. The timing of the ESOO update and NCP meant liable entities were not able to add newly committed projects to comply with their NCP requirements, such as the Bolivar power station and batteries at Tailem Bend and Torrens Island.

24 Submissions to the draft report: AEMO, p.2; AER, p.3.

25 AER, submission to the draft report, p.3.

- **Liable entities will be able to carry our more efficient contracting:** changing the NCP would allow more time for liable entities to adjust and improve their demand forecasts and, therefore, allow a more cost-efficient approach by contracting for their load progressively in the lead up to T.
- **The NCP date at T will also incentivise retailers to continue to compete for new large and small customers:** currently, they are disincentivised to take on new customers after their NCP is fixed at T-1 to avoid their share of demand increasing and being under-contracted at T. This will also remove the need for liable entities to apply to the AER for an adjustment to their NCP resulting from a change in the number of connection points.[26]
- **Changing the NCP will remove the current perverse incentive** and liable entities will be incentivised to have adequate contract coverage at T in order to be compliant with the RRO.

Figure 3.1: Future contract trades in the lead up to the contract period, 2019-20



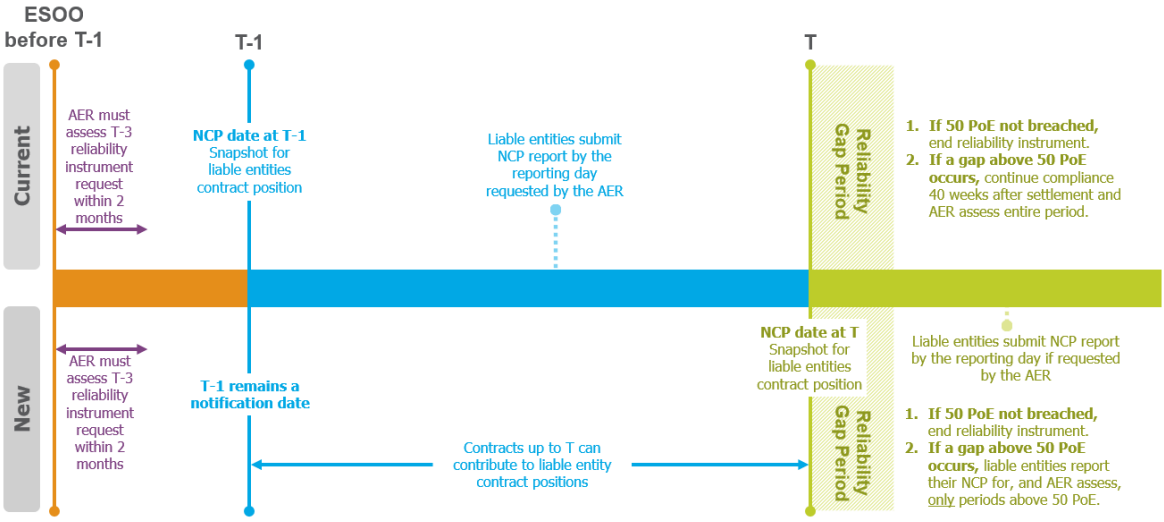
Source: AER, Wholesale electricity market performance report 2020, pg. 79.

How the Commission's recommendation to move the NCP compliance date would operate

Figure 3.2 presents a timeline with the recommended changes to the operation of the RRO by moving the NCP compliance date from T-1 to T and continuing ex-post testing only if a reliability gap occurs. This timeline is indicative and subject to a NEL and NER change process that would implement the recommendation to move the NCP date.

26 In accordance with clause 4E.7(b) of the NER.

Figure 3.2: How moving the NCP compliance date from T-1 to T would operate



3.1.2 Recommendation to increase the timeframe for AEMO to request a reliability instrument

Recommendation 2: Change the timeframe for AEMO to request a reliability instrument from 3 to 9-months

This will provide greater flexibility as to when AEMO can request a reliability instrument to allow AEMO to effectively cover forecast reliability gaps.

The Commission has made a final recommendation to expand the timeframe that AEMO can request a reliability instrument from 3 to 9-months. This recommendation has been maintained from the draft report, as the Commission considered that it would enable AEMO to effectively cover forecast reliability gaps.

In a submission to the consultation paper, AEMO considered that the timeframe for making a reliability request to the AER should be extended to 9-months to limit inefficiencies in requesting reliability instruments and better align with the changing nature of reliability risk.[27]

The timeframes for AEMO to request a reliability instrument and the AER to assess and respond are prescribed in the NEL and NER.[28] Under the existing arrangements, AEMO must:

1. Publish the reliability gap in an ESOO or ESOO Update no more than 42-months prior to the forecast gap
2. Submit a T-3 request no less than 39-months prior.

This gives AEMO three months to publish a forecast gap and submit a request for a T-3 instrument. The AER must make a determination on a reliability instrument within two months of receiving a request. This means that the timelines are effective for summer gaps that are forecast in an August ESOO, but AEMO's ability to make gap requests in other times of the year are limited and reliant on ESOO Updates.

27 Submission to consultation paper: AEMO, p.3.

28 Section 14H of the NEL; Part C of Chapter 4A of the NER.

The Commission considers that the timeframes to issue and comply with a reliability gap are complex and constrain when decisions can be made by AEMO and the AER. This also has consequential impacts on decisions by liable entities and MLO generators, and on the efficacy of the operation of the RRO.

The Commission considers that the existing timeframe for requesting a reliability instrument is too short and leaves 'dead-zones' where reliability instruments are not able to be made if a forecast reliability gap appears. These timelines do not best contribute to the NEO as they impose unnecessary complexity and can limit AEMO's ability to make reliability instrument requests as the NEM transitions.

The Commission's final recommendation to expand the timeframe from 3-months to 9-months would operate by enabling AEMO to publish the reliability gap in an ESOO or ESOO Update no more than 48 months prior to the forecast gap (corresponding to 12 months before T-3).

Stakeholders broadly supported expanding the timeframe for AEMO to request a reliability instrument

Most stakeholders who provided feedback on this recommendation supported it, noting that it would provide greater flexibility to AEMO in addressing potential reliability gaps.[29]

Shell Energy supported the intent of the recommendation, but considered it may only be possible to extend the timeframe for AEMO to request a reliability instrument up to 7-months due to the requirements of NER clauses 4A.A.2 and 4A.B.1 and the nominated publication date of the ESOO.[30]

The Commission has considered Shell Energy's concerns and reviewed the capability to expand the timeframe for AEMO to request a reliability instrument. The Commission considers that the recommendation can be implemented to allow AEMO to use an ESOO or ESOO Update from 12-months before T-3 to request a reliability instrument, corresponding with the timeframe being expanded to 9-months.

3.1.3 No recommendation to provide AEMO with a limited power to request the removal of a T-1 reliability instrument

The Commission is not making a final recommendation to provide AEMO with a limited power to request the removal of a reliability instrument. The Commission considers that the existing arrangements remain appropriate, where AEMO is unable to request to withdraw a reliability instrument after T-1.

In the draft report, the Commission proposed a draft recommendation to provide AEMO with a limited power to request the AER remove a T-1 reliability instrument. This limited power could be exercised if an ESOO or ESOO Update between T-1 and T showed a reliability gap had closed and AEMO considered that the reliability gap would not reappear before T. By enabling AEMO to request the AER to remove a T-1 reliability instrument, this could allow a reliability instrument to be formally closed before T.

The Commission's view has shifted since the draft report and the draft recommendation has not been maintained. The Commission considers that providing AEMO with a limited power to request the removal of a T-1 reliability instrument is not critical to improving the operation of the RRO.

Further, the recommendation to move the NCP compliance date to T and continue ex-post testing only if a reliability gap occurs, which received strong stakeholder support, would mitigate the need

29 Submissions to the draft report: AEC, p.1; AEMO, p.2; AER, p.4; Delta Electricity, p.1; EnergyAustralia, p.2; ENGIE, p.2.

30 Shell Energy, submission to the draft report, p.2.

for a mechanism to revoke a T-1 reliability instrument. By moving the NCP date to T, liable entities would have better information and demand forecasts on the likelihood of a reliability gap. This would inform entities' final contract positions at T, which the AER would only assess at points in the gap period that exceed a 1 in 2 year peak forecast (if any).

Furthermore, if the draft recommendation was implemented, AEMO and the AER would need to be confident that a gap closed in a reliability forecast after T-1 would not reappear in a subsequent reliability forecast. For example, the South Australia T-1 2024 gap was closed in an ESOO Update published in February 2023 but later re-opened in the next ESOO published in August 2023. This demonstrates that closed gaps can reappear which could reduce the confidence of AEMO or the AER to remove a T-1 reliability instrument and also provide uncertainty to market participants whether the T-1 reliability instrument will be removed.

Stakeholders had mixed views on the draft recommendation

Multiple stakeholders supported the draft recommendation to provide AEMO a limited power to request the cancellation of a T-1 instrument.[31] AFMA considered that the current arrangements allow T-1 instruments to remain when AEMO's forecast indicate that the gap has closed, imposing costs on the market.[32]

Some stakeholders supported the draft recommendation in theory, but considered drafting of the NER clauses was needed before offering firm support.[33] Shell also sought clarification on whether AEMO would have discretion to, or be required to, request the removal of a T-1 reliability instrument.[34]

Some stakeholders opposed the draft recommendation as it would be against the policy intent of the RRO.[35]

Stanwell considered that there should not be:[36]

> any more scope given to review, withdraw or re-open a gap following updates on market conditions than currently exist under the Retailer Reliability Obligation (RRO).

The AER argued that the current lack of a power to revoke or alter a T-1 instrument best supports reliability and the RRO, and considered that:[37]

> The prospect of revoking an instrument may encourage liable entities to risk their position and not sufficiently contract in the hope or expectation that an instrument will be revoked.

Similar to the AER, AEMO considered that if they had a power to request that a T-1 instrument be rescinded:[38]

- Liable entities may be incentivised to delay contracting against their obligation, and therefore not contribute to closing the reliability gap prior to T
- AEMO's current practice and requirement for publishing an ESOO Update would not change nor be impacted by the draft recommendation

31 Submissions to the draft report: AFMA, p.2; Delta Electricity, p.1; EnergyAustralia, p.2; ENGIE, p2.; Origin, p.3; Snowy Hydro, p.1.
32 AFMA, submission to the draft report, p.2.
33 Submissions to the draft report: AEC, p.2; Shell Energy, p.3.
34 Shell Energy, submission to the draft report, p.3.
35 Submissions to the draft report: AEMO, p.2; AER, p.4; Stanwell, p.3.
36 Stanwell, submission to the draft report, p.3.
37 AER, submission to the draft report, p.4.
38 AEMO, submission to the draft report, p.2.

- The time between an ESOO Update and T would likely not align with the required time for AEMO to submit a request to remove a T-1 instrument and then for the AER to review and approve the request.

3.1.4 Recommendation to maintain the AER's existing role

Recommendation 3: Maintain the AER's existing role

Maintaining the AER's existing role in assessing reliability instrument gap requests ensures a clear differentiation in roles of market bodies.

The Commission has made a final recommendation to maintain the AER's existing role in assessing reliability instrument gap requests, ensuring a clear differentiation in the roles of the market bodies. This recommendation has been maintained from the draft report.

The Commission considers providing the AER with additional powers would not contribute to the NEO as it could also lead to uncertainty around market operations and the respective roles of different market bodies.

The Commission also considers that AEMO's changes to the reliability gap forecasting methodology in April 2023, the recommendation to move the NCP compliance date to T, and the recommendation to extend the timeframe for AEMO to make a reliability gap request will help ensure that reliability gap requests are made based on more up to date advice and in a timelier manner.

Stakeholders generally supported maintaining the AER's existing role

Of the submissions to the draft report that provided feedback on this recommendation, stakeholders generally supported this recommendation, on the basis that it would maintain clarity and differentiation in the roles of the market bodies.[39]

Shell Energy disagreed and noted that the AER's powers in assessing reliability instrument requests should be expanded to allow the AER to consider other issues or request AEMO to consider changing inputs in their modelling.[40]

Noting this view, the Commission considers that the existing role of the AER in assessing reliability gap requests is appropriate.

3.2 We are recommending lowering the threshold for MLO groups

Recommendation 4: Amend the MLO threshold for MLO groups from 15% to 10%

Changing the threshold from 15% to 10% will ensure that the MLO continues to support market liquidity in South Australia.

The Commission has made a final recommendation to amend the MLO threshold for MLO groups from 15% to 10%. The Commission considers this would ensure that there are two MLO groups in

39 Submissions to the draft report: AEC, p.2; AEMO, p.3; AER, p.4; Stanwell, p.4.

40 Shell Energy, submission to the draft report, p.3.

South Australia and allow the MLO to continue to support market liquidity in South Australia. This recommendation is consistent with the draft report and would require changes to the NER.

As noted in the draft report and discussed in appendix B.4, contract market liquidity in South Australia remains below other mainland NEM regions. Despite the MLO triggering annually since 2020, South Australia has fewer days in which trades of caps and futures occur compared to other mainland regions (sometimes less than two-thirds of other regions per quarter) and less total traded volumes of caps and futures as a proportion of demand compared to other regions.

The Commission considers that the final recommendation, if implemented, would go someway to address poorer market liquidity in South Australia and ensure the MLO continues in South Australia during reliability gap periods.

A generator portfolio in a region is designated to be a MLO group if the aggregate share of scheduled generation exceeds an average market share of 15% of all capacity within the region for the previous two quarters. The number of MLO groups in a region can change due to changes in generator ownership or closure of schedule generators. If there are less than two MLO groups in a region, the MLO ends.

The Commission considers that changing the 15% threshold for MLO groups to 10% would assist in keeping at least two MLO groups in all NEM regions. This would ensure the MLO continues to support market liquidity and price discovery in South Australia and other regions that may experience poorer market liquidity. Existing arrangements for the Tasmanian region would be maintained.[41]

The Commission considers that such a change would contribute to the NEO by improving price transparency in the South Australia region through improved market liquidity, which in turn may help lower costs to consumers.

The Commission proposes that the Commonwealth consider reviewing market liquidity as part of its work on the design of the future wholesale market. The review may consider whether mechanisms, such as the CIS, have improved liquidity and if alternative arrangements could improve market liquidity and reduce costs. If the Commonwealth does not address market liquidity in their future market design work, the Commission may consider a self-initiated review into the issue.

Stakeholders supported the recommendation but considered further work is needed to address market liquidity issues

Several stakeholders supported the recommendation to amend the threshold for MLO groups, noting that it would support market liquidity in SA.[42] Stanwell supported the recommendation as it aimed to keep at least two generation portfolios under the MLO in each region.[43]

Other stakeholders noted the intent of the recommendation but considered that more substantial changes are needed to improve market liquidity.[44] EnergyAustralia noted that while they appreciated that the recommendation aims to ensure that the MLO continues, a more considered solution is needed given that market liquidity issues in South Australia may arise in other regions as thermal capacity exits.[45]

41 Under clause 4A.G.2 of the NER, the MLO does not apply in Tasmania.
42 Submissions to the draft report: AEC, p.2; AER, p.4; Delta Electricity, p.1; Shell Energy, p.4; Stanwell, p.4.
43 Stanwell, submission to the draft report, p.4.
44 Submissions to the draft report: AFMA, p.2; EnergyAustralia, p.2; Snowy Hydro, p.1.
45 Submission to the draft report, EnergyAustralia, p.2.

ENGIE did not support the recommendation to amend the threshold for MLO groups and noted that:[46]

> We continue to hold the view that MLO generators should be rewarded for providing market liquidity through voluntary contract offers. Some form of positive incentive to sell additional hedging contracts is more likely to be an effective way to stimulate market liquidity than a compliance instrument alone, not least because it has the potential to attract other generators not currently covered by the MLO.

ENGIE also raised concerns around market liquidity in South Australia due to the uncertainty around the connection of Project EnergyConnect (a new interconnector between South Australia and New South Wales). As such, ENGIE considered that, if the Commission initiates a broader review on market liquidity, such a review should consider the changing dynamics in South Australia due to these developments.

The Commission broadly agrees with stakeholders that the recommendation will help ensure the MLO continues in South Australia, thereby helping support market liquidity in South Australia. The Commission also notes the support from stakeholders on further work to address market liquidity issues.

3.3 We are recommending to remove the Voluntary Book Build mechanism

Recommendation 5: Remove the Voluntary Book Build mechanism

The mechanism is not being using and removing it would simplify the NER.

The Commission has made a final recommendation to remove the Voluntary Book Build mechanism, as it is not being used and removing it would simplify the NER. This recommendation is consistent with the draft report and would require amendments to the NER.

The Voluntary Book Build Mechanism was designed to provide a service for prospective sellers of eligible contracts to have offers of those contracts listed on the Voluntary Book Build site and for prospective buyers to notify AEMO of their interest in a listed offer. Interested parties are required to pay fees to AEMO for accreditation in the Voluntary Book Build.

The Voluntary Book-Build Mechanism is not connected with the obligations of MLO generators to offer MLO products. Therefore, any qualifying contracts offered through the Voluntary Book Build do not count towards meeting those obligations.

In 2020, AEMO published two Voluntary Book Build Mechanism instruments for South Australia and no offers were made. AEMO has not published any Voluntary Book Build instruments since.

In submissions to both the consultation paper and draft report, all stakeholders who commented on the Voluntary Book Build mechanism supported its removal.[47]

The Commission agrees with stakeholders and considers that removing the Voluntary Book Build mechanism would contribute to the NEO by promoting the efficient operation of the NEM by simplifying the NER.

46 ENGIE, submission to the draft report, p.2.

47 Submissions to the consultation paper: AEC, p.3; AFMA, p.4; Delta Electricity, p.3; ENGIE, p.3; EUAA, p.3; Stanwell, p.3. Submissions to the draft report: AEMO, p.3; AER, p.4; AFMA, p.3; ENGIE, p.2; Snowy Hydro, p.1; Stanwell, p.4.

3.4 We are making recommendations to review qualifying contract arrangements

The Commission has made three final recommendations to change qualifying contract arrangements. These recommendations are that the AER review:

- The eligibility of some demand-side management contract types
- The contracts and firmness guidelines to expand eligible qualifying contracts
- Opportunities to simplify bespoke methodology and audit arrangements.

These recommendations have been maintained from the draft report, noting that they received support from most stakeholders. Stakeholder feedback included:

- The AER noted they are planning a holistic review of the guidelines in 2024 and consider that their review with be consistent with the draft recommendations[48]
- AEMO supported reviewing the eligibility of qualifying contracts, but consider that making it easier for a contract to qualify should not come at the expense of allowing contracts that have a tenuous relationship with physical dispatchable capacity to be used[49]
- Shell Energy supported the recommendations and noting their preference for a stronger commitment to change, but understanding the limitations on what the AEMC can recommend.[50]

The Commission does not need to proceed with the remaining draft recommendation related to qualifying contract arrangements – AEMO review expanding the time the AEMO demand portal is open to allow the inclusion of more demand response contracts and reduce costs. AEMO has completed a review of the DSPI Guidelines since the draft report and determined to open the demand portal year-round.[51]

3.4.1 Recommendation for the AER to review expanding eligible demand-side management contract types

> **Recommendation 6: That the AER review expanding demand-side management contract types**
>
> This is likely to increase the pool of eligible contracts, to reduce the cost and regulatory burden for liable entities.

The Commission has made a final recommendation for the AER to review expanding demand-side management contract types, which could increase the pool of eligible qualifying contracts and reduce regulatory burden and costs for liable entities. This recommendation has been maintained from the draft report.

In a submission to the consultation paper, SA Water outlined that some types of eligible demand-side management contracts that are not registered on the demand portal could be included as qualifying contracts for the RRO.[52] The Commission notes that this suggestion would need to be

48 AER, submission to the draft report, p.5.
49 AEMO, submission to the draft report, p.4.
50 Shell Energy, submission to the draft report, p.4.
51 AEMO, 2023 DSP Information Guidelines Final Report, 20 December 2023, p.11.
52 SA Water, submission to the consultation paper, p.2.

carefully considered so as not to add an additional level of complexity to the AER's assessment process and to protect against double counting.

Submissions to the draft report supported this recommendation, including the AER who noted their planned review of guidelines would be consistent with the intent of the draft recommendation.[53]

3.4.2 Recommendation for the AER to review the contracts and firmness guidelines

Recommendation 7: That the AER review the contracts and firmness guidelines to expand eligible qualifying contracts

The AER review the contracts and firmness guidelines to adjust the strike price threshold for qualifying contracts to allocate a firmness factor of 1 to increase the pool of eligible contracts and reduce costs.

The Commission recommends that the AER consider revisions to whether cap contracts with a strike price above 5% of the market price cap (MPC) should have firmness factor of 1. Since the draft report, the Commission has made a final rule to amend the MPC, which should be taken into consideration by the AER in determining the firmness of caps based on the strike price relative to the MPC.[54]

The Commission also considers that the AER might examine whether other contract types, such as demand-linked swaptions that are consistent with the definition of a qualifying contract, could be standard contracts. This could reduce regulatory burden and costs for liable entities, but would require the development of a default firmness factor for each contract type that is consistent with the RRO.

The AER's Contracts and Firmness Guidelines outline the firmness of standard qualifying contracts

The AER's Contracts and Firmness Guidelines provide guidance on firmness ratings for qualifying contracts. The 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 0 and 1 for each trading interval in the gap period. A higher firmness factor corresponds to lower exposure for the buyer to the volatility of the spot price. Figure 3.3 indicates the current firmness ratings for different contract types.

53 Submissions to the draft report: AEC, p.2; AER, p.5; EnergyAustralia, p.3; EUAA, p.1; Shell Energy, p.4.

54 For more information on the final rule to amend the market price settings, see here.

Figure 3.3: Summary of default firmness methodologies for standard qualifying contracts

STANDARD CONTRACT	DESCRIPTION	DEFAULT FIRMNESS FACTOR
Swaps and futures	Applies to swaps and futures with a fixed price and known volume (including a shaped volume) where no other contract limitations are present.	1
Caps with a strike price ≤5% of MPC	Applies to caps with a strike price ≤5% of MPC where no other contract limitations are present	1
Caps with a strike price >5% of MPC	Applies to caps with a strike price >5% of MPC where no other contract limitations are present	$\left(\frac{1}{0.952}\right) \times \left(1 - \frac{strike\ price}{MPC}\right)^2$
100 per cent load following contracts (bought)	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 voltatility. This contract is fully firm unless the contract contains terms which limit the coverage of the swap.	1
Grandfathered contracts	Grandfathered contracts must meet the definition of grandfathered arrangements in rule 11.116.8. They only apply for large energy users who are either market customers or opt-in customers.	1
MLO products	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

Stakeholders supported reviewing the contracts and firmness guidelines and proposed additional contract types to be considered

Stakeholders broadly supported the recommendation for the AER to review the Contracts and Firmness Guidelines.[55]

Several stakeholders reiterated their preference expressed in submissions to the consultation paper that caps with strike prices above 10% of the MPC should have a firmness of 1.[56] Stanwell considered that:[57]

> The initial selection of 5% for caps to have an automatic firmness of 1 was somewhat arbitrary, being high enough to include standardised cap contracts ($300/MWh) but low enough to strongly encourage physical backing of the financial contracts.
>
> As the MPC increases, the level of cap products considered fully firm will also increase.

In the AER's submission to the draft report, it noted that their planned review of the guidelines is consistent with the intent of the AEMC's draft recommendations.[58] The AER also noted that they would consult on whether the firmness methodology for caps is appropriate or requires amendment.[59]

Some stakeholders made additional suggestions for the AER to consider in their review of the Contracts and Firmness Guidelines:

- Demand-linked swaptions (where a swap is performed when a demand threshold is exceeded) should have a firmness of 1 when the demand threshold is at or below the 1 in 2-year peak demand forecast.[60]

55 Submissions to the draft report: AEC, p.2; AEMO, p4; AER, p.5; AFMA, p.1; EnergyAustralia, p.3; EUAA, p.1; Shell Energy, p.4.
56 Submissions to the draft report: AEC, p.3; AFMA, p.1; Shell Energy, p.4.
57 Stanwell, submission to the draft report, p.4.
58 AER, submission to the draft report, p.5.
59 Ibid, p.6.
60 Submissions to the draft report: AEC, p.3; AFMA, p.2; Shell Energy, p.4.

- A standardised approach for power purchase agreements (PPA) and Settlement Residue Auction (SRA) units that are sufficiently 'off the shelf'.[61]

The Commission considers that a review of the Contracts and Firmness Guidelines remains appropriate and would contribute to the NEO by reducing regulatory burden and costs.

3.4.3 Recommendation for the AER to review simplifying arrangements for bespoke methodologies and audit arrangements

> **Recommendation 8: That the AER review opportunities to simplify bespoke methodology and audit arrangements**
>
> This could be done through the AER reviewing guidelines and accounting for the experience of liable entities with the South Australia T-1 event to reduce regulatory burden and compliance costs.

Clause 4A.E.5 of the NER stipulates that a bespoke firmness methodology may be applied for a non-standard qualifying contract. The bespoke methodologies and audit arrangements are set out in AER Contract and Firmness Guidelines. The Commission has made a final recommendation that the AER review opportunities to simplify bespoke methodology and audit arrangements. This recommendation has been maintained from the draft report and could be done by the AER reviewing guidelines to reduce compliance costs, taking into account the experience of liable entities with the South Australia T-1 event.

Submissions to the consultation paper argued that these guidelines could be simplified to reduce costs. Submissions to the draft report supported the draft recommendation.[62] While supporting the recommendation for a review, ENGIE considered that the recommendation:[63]

> does not in itself provide any impetus to the AER to actually simplify arrangements and ENGIE presumes that the current complexity reflects the AER's view that this is the only robust way to ensure compliance with the rules as they stand.

The Commission agrees with stakeholders and considers the AER should review opportunities to simplify the guidelines following the South Australia T-1 event. However, the Commission also considers that any simplifications must be balanced against the importance of ensuring that contracts are firm.

3.4.4 No recommendation is necessary for AEMO to consult on expanding timeframes for the demand portal being open

In the draft report, the Commission proposed a draft recommendation for AEMO to consult on expanding the timeframes for the demand portal being open, to expand the pool of eligible demand response contracts and reduce costs.

Stakeholders supported the draft recommendation as it would increase opportunities for liable entities to register and use demand response contracts as RRO qualifying contracts.[64]

61 Submissions to the draft report: AFMA, p.2; EnergyAustralia, p.3.
62 Submissions to the draft report: AEC, p.2; AEMO, p4; AER, p.5; EnergyAustralia, p.3; ENGIE, p.2; EUAA, p.1; Shell Energy, p.4; Stanwell, p.5.
63 ENGIE, submission to the draft report, p.3.
64 Submissions to the draft report: AEC, p.2; AER, p.6; EnergyAustralia, p.2; EUAA, p.1; Shell Energy, p.4; Snowy Hydro, p.2; Stanwell, p.4.

AEMO noted in their submission to the draft report that they were consulting on the Demand Side Participation Forecasting Methodology and the DSPI Guidelines.[65] AEMO had requested stakeholder feedback on the timing of the demand portal and was recommending that it be open year-round in their draft report.

AEMO's consultation and review on the DSPI Guidelines was completed on 20 December 2023 and AEMO made a final decision for the demand portal to be open year-round.[66] This decision was supported by stakeholders who provided feedback to AEMO's review.[67]

The DSPI Guidelines now read:[68]

> The web portal for submissions will remain open throughout the year, and Registered Participants can update DSP program information, should major changes happen outside the window for mandatory submissions noted above. Examples of such changes are:
>
> - a significant DSP program being discontinued; or
> - to declare new programs established to be part of a qualifying contract under the Retailer Reliability Obligation (RRO), as noted in NER clause 4A.E.1(c).

As the demand portal is now open year-round, the Commission has not included the recommendation for AEMO to review expanding timeframes for the demand portal being open in the final report.

3.5 We are not making recommendations to change liable entity arrangements

Recommendation 9: Maintain the timeframes for advice on procurer of last resort (PoLR) costs

Compliance processes will be simplified by changing the NCP compliance date from T-1 to T.

Recommendation 10: Maintain the characteristics that define which market customers as liable entities

The existing liable entity definitions and roles remain broadly appropriate, however future changes to the role of battery energy storage systems (BESS) in the RRO may be needed.

The Commission has made final recommendations to maintain the:

- Timeframes for advice of PoLR costs
- Existing characteristics that describe which market customers are liable entities.

The Commission considers that changes to liable entity definitions may be complex to implement. It would deliver marginal benefits compared to the change to the NCP date from T-1 to T, which

65 AEMO, submission to the draft report, p.3.
66 AEMO, 2023 DSP Information Guidelines Final Report, 20 December 2023, p.11.
67 Ibid.
68 AEMO, Demand side participation information guidelines, 20 December 2023, p.8.

will simplify compliance arrangements and ensure that ex-post costs are advised as soon as possible post a 50 PoE event.

These recommendations have been maintained from the draft report and have received support from stakeholders.[69]

3.5.1 The Commission is aware of impacts on large-scale battery energy storage systems

In a joint submission to the draft report, Neoen and Tesla raised concerns about negative impacts arising from large-scale battery energy storage system (BESS) being considered liable entities under the RRO. They noted that BESS:[70]

- Would be unlikely to buy energy during an actual reliability gap, but would likely be selling energy and FCAS during these periods when prices are generally high.
- Are discouraged from operating as load (both for energy and system security purposes) during gap periods to avoid RRO contracting obligations and penalties from breaching the RRO.

Neoen and Tesla proposed that BESS be exempted from the RRO, or at least for security purposes such as FCAS or system integrity protection schemes, given that the RRO provides incentives to be risk-averse and not charge during gap periods.

The Commission notes that because this issue has not been consulted on as part of this review, the Commission has not made any final recommendations in relation to this issue. However, the Commission recognises Neoen and Tesla's concerns and the implications of BESS not charging during gap periods, such as a reduction in system security providers. The Commission supports the development of a solution that enables BESS to appropriately operate as load during gap periods. The AEMC will continue to work with the AER, AEMO and other relevant stakeholders to identify potential solutions, which may include a rule change.

3.6 We are not making recommendations to amend opt-in mechanism arrangements

Recommendation 11: Maintain the existing opt-in mechanism arrangements

The existing arrangements for market customer to opt-in to liabilities, rather than through retailers, remain broadly appropriate.

The Commission has made a final recommendation to maintain the existing opt-in mechanism arrangements. This recommendation has been maintained from the draft report.

Opt-in arrangements are designed to enable market customers to opt-in to liabilities rather than through retailers. These arrangements are set out in section 14E of the NEL and clause 4A.D.2 of the NER. To date, there have not been any opt-in customers for any RRO instruments.

The AEC expressed support for the draft recommendation to maintain the existing arrangements.[71]

69 Submissions to the draft report: AEC, p.2; AER, p.6.
70 Neoen & Tesla, joint submission to the draft report, p.1.
71 AEC, submission to the draft report, p.2.

The AER and Origin submitted that the opt-in cut-off date should move in parallel with an NCP date change.[72] This would mean that, if the NCP date is moved from T-1 to T, the opt-in date should also move to remain 6 months before the NCP date. The Commission notes the suggestion to move the opt-in cut-off date with the NCP date and considers this could be implemented as part of the process to move the NCP date to T, if this is pursued.

3.6.1 The Commission considers that third-party hedging arrangements held by customers should not contribute to their retailer's NCP

Under the current arrangements, third-party hedging agreements held by customers cannot be included in their retailer's NCP report if the retailer is not a party to the agreement.

Among other suggestions considered in the draft report, Origin Energy offered that the opt-in mechanism could be repurposed to allow third-party hedging arrangements held by customers to contribute to the NCP of their retailer.[73]

In their submission to the draft report, EnergyAustralia sought clarity on why contracts held by customers should not be counted towards a retailer's liability as part of the opt-in mechanism.[74] Origin Energy reiterated their suggestion from their previous submission, noting that:[75]

> Origin offers a market-settled product which provides large customers with spot price exposure, along with the ability to fix a nominated MW volume of their load at a market rate, or use their own hedging arrangements, to manage their risk. The current RRO framework creates complexity / uncertainty for retailers in managing their liability for customers that utilise these types of products.

The Commission notes stakeholder concerns around the complexity for retailers managing certain products to comply with the RRO. However, the Commission maintains its position from the draft report that hedging arrangements held by customers should not be allowed to contribute to the NCP of their retailer.

Complex changes to the NEL and NER would be needed to ensure that customer hedging arrangements are appropriately contributing to a retailer's NCP. For example, there would be complexities and difficulties in correctly determining the firmness of customer hedging arrangements where the retailer is not a party. The Commission considers that the current arrangements ensure customer loads are appropriately covered in line with the intent of the RRO.

3.7 We are recommending that the AER review options to simplify compliance arrangements

Recommendation 12: The AER review options to simplify compliance arrangements through guidelines

The Commission has made a final recommendation for the AER to review options to simplify compliance arrangements through its guidelines. This recommendation has been maintained from the draft report.

72 Submissions to the draft report: AER, p.6; Origin, p.2.
73 Origin Energy, submission to the consultation paper, p.5.
74 EnergyAustralia, submission to the draft report, p.2.
75 Origin Energy, submission to the draft report, p.1.

Compliance arrangements for the RRO are set out under Part 2A of the NEL. Section 18ZI of the NEL requires the AER to make Reliability Compliance Procedures and Guidelines. The guidelines include guidance:

- For regulated entities about compliance with the reliability obligations under Part 2A of the NEL
- For regulated entities about the policies, systems and procedures that they must establish and observe to monitor their own compliance with the RRO
- On the information and data liable entities are required to provide to the AER about compliance
- On carrying out compliance audits, including the costs payable by regulated entities for an audit carried out by or on behalf of the AER.

Stakeholders broadly support this recommendation

The AEC and Shell Energy supported this recommendation, with Shell Energy suggesting a default firmness methodology should be available for wind and solar projects in each state.[76]

Stanwell noted that four of the AER's RRO guidelines are still marked as interim, and encouraged the AER to finalise them as soon as practical to reduce uncertainty for participants.[77]

In their submission to the draft report, the AER noted:[78]

> We acknowledge the AEMC's draft recommendation that the AER review options to simplify compliance arrangements through guidelines. We will consider how to efficiently consult with stakeholders on these arrangements.

3.7.1 Some stakeholders considered that related entities should have their compliance assessed in aggregate

In the draft report, the Commission did not recommend the assessment of liable entities at a group level. In submissions to the draft report, EnergyAustralia and Origin Energy argued that related liable entities should be allowed to have their compliance assessed together.

EnergyAustralia considered that moving the NCP date to T would not resolve issues for related entities, and argued that:[79]

> This issue goes beyond dealing with uncertainties in forecasting that would be assisted by moving compliance to year T, and relates to the scaling of liable load that occurs where there is a higher than forecast peak demand. Liable shares of the one-in-two peak demand forecast load are calculated for each liable entity. The lack of diversity across customer segments served by each liable entity, as well as some segments being more sensitive than system wide demand in greater than one-in-two year conditions, results in a need to overhedge in aggregate relative to what would normally be required when managing the risk of an aggregated portfolio.

Origin Energy similarly argued that:[80]

76 Submissions to the draft report: AEC, p.2; Shell Energy, p.5.
77 Stanwell, submission to the draft report, p.5.
78 AER, submission to the draft report, p.7.
79 EnergyAustralia, submission to the draft report, p.3.
80 Origin, submission to the draft report, p.2.

A single corporate group with two registered participants is required to assign hedge contracts between them using inter-entity arrangements to match their expected peak load. This does not reflect how related entities approach contracting where risk is assessed in aggregate. It would be unreasonable to impose civil penalties on an individual liable entity that has not satisfied its RRO obligation where the related entities have complied in aggregate.

The Commission acknowledges the concerns raised by EnergyAustralia and Origin Energy that they may need to over-hedge in aggregate in order for each liable entity to individually comply with the RRO, thereby potentially increasing costs.

The Commission considers that moving the NCP date to T and continuing ex-post testing only for periods where an actual reliability gap occurs would help mitigate the need for related liable entities to over-hedge. This is because liable entities could better assess their required NCP to comply with the RRO and the need to over-hedge on aggregate could be reduced.

The Commission also considers that maintaining a separation of liable entities would deliver higher levels of contracting to incentivise new dispatchable capacity to meet the higher than forecast peak demand. The Commission considers that, on balance, this outcome would deliver long-term benefits by supporting reliability where and when it is most needed.

A Regulatory impact analysis

The Commission has undertaken regulatory impact analysis to make its final recommendations. Our regulatory impact analysis has been informed by stakeholder submissions to the consultation paper and the draft report, in additional to other information and data. The Commission developed and designed the final recommendations with the aim of improving the operation of the RRO.

If implemented, the final recommendations would:

- Reduce regulatory burden for market participants through a simplified and more operationally efficient RRO
- Reduce costs for consumers by promoting system reliability and improving the efficiency of the RRO, and
- Support system reliability and emissions reductions as the NEM transitions and thermal generators retire by supporting investment in new clean dispatchable capacity to fill reliability gaps when and where they occur.

The Commission also notes that a range of actions would be required to implement the final recommendations, including changes to the NEL, the NER and AER guidelines. These changes would require resources from the market bodies and governments to assess, process, and implement these changes.

The Commission notes that multiple stakeholders expressed opposition to the RRO policy as a whole and argued that the RRO is ineffective. The Commission considers that the RRO may overlap with policy mechanisms such as the CIS and the NSW Energy Infrastructure Roadmap. This could decrease the effectiveness of the RRO and lead to unnecessary costs to market participants and consumers. However, this review of the RRO was focused on the operation of the RRO and did not evaluate the policy effectiveness of the RRO. This is consistent with the 2018 Decision Regulation Impact Statement to the RRO:[81]

> 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.

81 ESB, Retailer Reliability Obligation Decision Regulation Impact Statement, 19 December 2018, p.15.

B Additional background and context

In making the final recommendations, the Commission has considered the background to the development of the RRO and submissions, as well as recent information on the experience of liable entities and market bodies with the South Australia T-1 compliance processes and market liquidity arrangements.

B.1 The reliability framework is designed to deliver reliability that consumers value

The RRO is part of the overall reliability framework in the NEM to support a reliable power system.

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 any new capacity needed to meet changing demand patterns and cover retiring generators. No power system can be 100 per cent reliable, as 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 that would lead 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).

B.2 The RRO encourages investment in dispatchable energy

In 2019, Energy Ministers, on the advice of the ESB, agreed to the RRO to supplement the reliability standard in supporting reliability outcomes in the NEM and 'encourage new investment in dispatchable energy such that the electricity system operates reliably'.[82]

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'.[83]

The RRO requires liable entities (typically electricity retailers) to demonstrate they have entered sufficient contracts for dispatchable capacity (including demand response) to cover their share of peak demand where it exceeds the 1-in-2- year peak demand forecast at periods identified as having a potential shortfall, or gap, of supply to meet demand.[84] This, in turn, is intended to provide market participants with the necessary confidence to invest in firm generation technology or demand side management 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.

82 ESB, Retailer Reliability Obligation - Decision Regulation Impact Statement, p.4.
83 Ibid.
84 Section 14R of the NEL.

The RRO builds on existing spot and financial market arrangements to facilitate investment in dispatchable capacity in the NEM. It obliges retailers, on behalf of their customers, to support the reliability of the power system through their contracting and investment in resources.

B.2.1 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'.[85]

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.

Since the RRO was introduced the South Australian Minister for Energy has had the ability to trigger a RRO within South Australia. Since April 2023, all Ministers in NEM regions also have the ability to trigger a T-3 RRO within their respective jurisdictions.

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. Links to the detailed guidelines are provided here:

- Contracts and Firmness Guidelines
- Forecasting Best Practice Guidelines
- Market Liquidity Obligation Guidelines
- Opt-in Guidelines
- Reliability Compliance Procedures and Guidelines

85 AER, Retailer reliability obligation, available here.

- Reliability Instrument Guidelines

The NCP date is fundamental to the operation of the RRO

The NCP compliance date is the date at which liable entity's snapshot their net contract position for eligible contracts for a future gap period.

NCP arrangements at T-1 are defined in section 14O of the NEL, including the requirement for a reliability instrument to include the NCP date at T-1 and the reporting date. Section 14O of the NEL establishes that a liable entity's NCP during a particular period is:

- The number of MW of electricity to which the liable entity's qualifying contracts relate for the period; and
- Adjusted in accordance with the NER to account for the likelihood that, despite the qualifying contracts, the liable entity retains exposure in relation to the volatility of the spot price during the period.

The NCP is further defined in clause 4A.E.2 of the NER, with dates established in specific reliability instruments.

The NCP compliance date is the date at which liable entities should have sufficient contracts for capacity to cover their share of peak demand when demand exceeds the 1 in 2 year peak forecast during the forecast reliability gap period. Liable entities record a snapshot of their NCP at the NCP compliance date, which is then reported to the AER on the NCP reporting date.

The RRO's decision Regulatory Impact Statement established that the NCP compliance date was set at T-1 to ensure liable entities had contracted well in advance of a reliability gap.

Qualifying contract arrangements are defined in the NEL, NER and guidelines

Section 14O of the NEL defines qualifying contracts and clause 4A.E.1 of the NER provides details on how the AER will determine qualifying contract arrangements through 'Contract and Firmness Guidelines'.

The AER Contract and Firmness Guidelines set out the contract firmness methodology, the treatment of non-qualifying contracts, the approval process for non-standard qualifying contracts, the establishment and maintenance of an Auditors Panel, the submission of NCP reports and certain information requirements of liable entities.

The NER requires that the AER must have regard to the principle that the contract or other arrangements should support (directly or indirectly) investment in plant or other arrangements that can supply energy that may be dispatched; or can reduce demand for energy that may be activated.[86]

Section 14O of the NEL establishes the meaning of qualifying contracts as:

1. A qualifying contract of a liable entity is a contract or other arrangement to which the liable entity is a party —
   a. that —
      i. 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
      ii. the liable entity entered into to manage its exposure in relation to the volatility of the spot price; or

86 Clause 4A.E.1(b).

b. of another type prescribed by the Rules to be a qualifying contract.

2. However, a qualifying contract does not include a contract or arrangement mentioned in subsection (1)(a) that is prescribed by the Rules to be an excluded contract for the reliability obligations

B.2.2 Obligations on entities

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

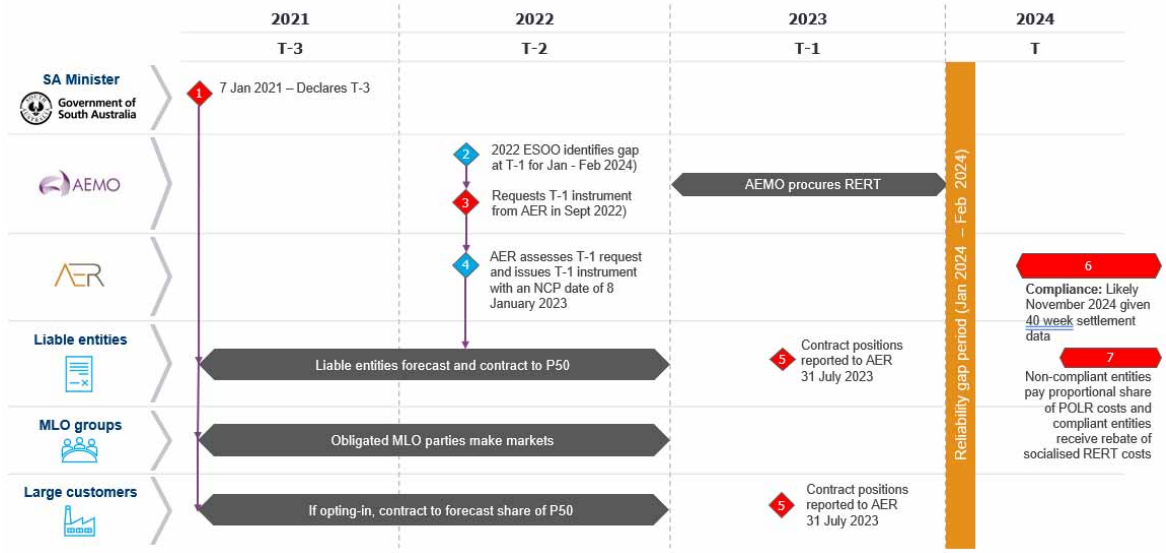
- AEMO's role is to identify forecast reliability gaps in each NEM region in its ESOO forecast, and if a forecast reliability gap arises, also request the AER to issue a reliability instrument.
- The AER's role is to assess and determine:
  - AEMO's forecast reliability gap and trigger the RRO by issuing 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 PoE.

AEMO has certain roles in the operation of the RRO outside of advice on T-1 and T-3 triggers under the ESOO, links to these detailed guidelines are provided here:

- PoLR Cost Procedures (4A.F.10)
- Reliability Forecast Guidelines (4A.B.4)
- Voluntary Book Build Mechanism

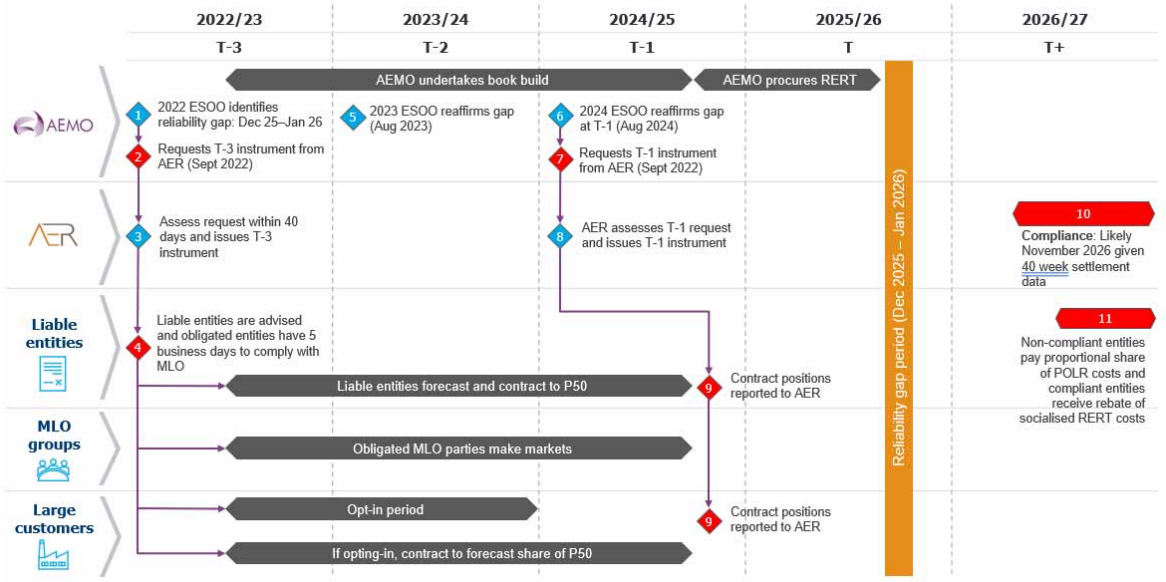
Figure B.1 and Figure B.2 provide further information on the process for establishing and compliance with a Reliability Gap under the RRO in respect of the recent NSW (T-3) and SA (T-1) triggers.

Figure B.1: Example - 2023-24 South Australia T-1 event



Source: AEMC

Figure B.2: Example - 2025-26 NSW T-3 event



Source: AEMC

B.3 New operational experience is available on the RRO

When the consultation paper was released in March 2023, only limited aspects of the RRO had been triggered – the RRO had been triggered on seven occasions. While this provided some information on the operation of the RRO, the Commission decided to review the RRO over a longer timeframe than required under the NER, with this final report published on 29 February 2024. This has ensured that, in its final recommendations, the Commission has considered the longer term

experience of the market over the seven trigger events that are either current or have been revoked.

In the consultation paper, the Commission outlined that 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 AER's final Retailer Reliability Obligation Compliance Procedures and Guidelines.

Following the release of the consultation paper, new information has become available to support the Commission's consideration of the operation of the RRO:

- The AER released its final Retailer Reliability Obligation Compliance Procedures and Guidelines in June 2023[87]
- AEMO released its ESOO and Reliability Forecasts Methodology Document in April 2023 which includes 'anticipated' projects in reliability forecasts from the 2023 ESOO[88]
- The South Australia T-1 NCP reporting dates passed on 31 July 2023 providing new information on compliance experience by liable entities with the South Australia T-1 event
- The Commission released final rules to extend the IRM to 30 June 2028 to align with the commencement of a potential new form of the reliability standard[89]
- The Ministerial T-3 trigger was extended to all NEM jurisdictions
- The South Australia forecast reliability gap period from 8 January 2024 to 29 February 2024, coinciding with the publication of this final report.

The Commission notes that the Commonwealth is expanding CIS 'from the current pilot stage to 9 GW of dispatchable capacity and 23 GW of variable capacity nationally – for a total of 32 GW nationally'.[90] Six projects in NSW successfully bid for the CIS and bids for the South Australian and Victorian tender currently being evaluated.

The AEMC has also received information showing compliance with MLO obligations at T-3 events and analysed market liquidity and price changes pre and post reliability gap events.

B.4 Contract market liquidity in South Australia continues to be below other regions

The MLO was included in the RRO following reviews by the ACCC and ESB which found South Australia market liquidity was low:

- **ACCC (2018)** – *'The AEMC should introduce market-making obligations in South Australia… and then review to see if it should be continued, amended or removed in South Australia and, potentially, extended to other NEM regions.'*[91]
- **ESB (2018)** – Recommended the RRO *'as a measure responding to the ACCC recommendation in addressing market power in supply-constrained conditions.'*[92]

87 AER, Reliability Compliance Procedures and Guidelines - Final Decision, June 2023.

88 AEMO, ESOO and Reliability Forecast Methodology Document, April 2023.

89 AEMC, Extension of the application of the IRM to the RRO, Draft rule determination, 13 July 2023.

90 The Hon Chris Bowen MP (Minister for Climate Change and Energy), Delivering more reliable energy for all Australians [media release], 23 November 2023.

91 ACCC, Retail Electricity Pricing Inquiry—Final Report, June 2018, p.xviii.

92 ESB consultation paper: Market Making Requirements in the NEM, September 2018.

- **AEMC (2019)** – The AEMC considered a separate rule change request by ENGIE for an alternative market-making arrangement for low liquidity regions (South Australia). The AEMC found that *'market making arrangements additional to the ASX and RRO/MLO schemes are not likely to be efficient."*[93]

The Review of the RRO consultation paper sought feedback on the operation of the MLO under the RRO and specifically whether changes should be made to the MLO to improve market liquidity and transparency of contract markets.

A majority of stakeholders did not recommend changes to the MLO and did not indicate that the MLO was creating significant regulatory burden or higher costs.

The AER has indicated that market generators have complied with the MLO requirements at T-3.

The ASX indicated to the AEMC that the MLO plays a useful role in supporting price discovery in markets with low liquidity, which was helpful to market participants.

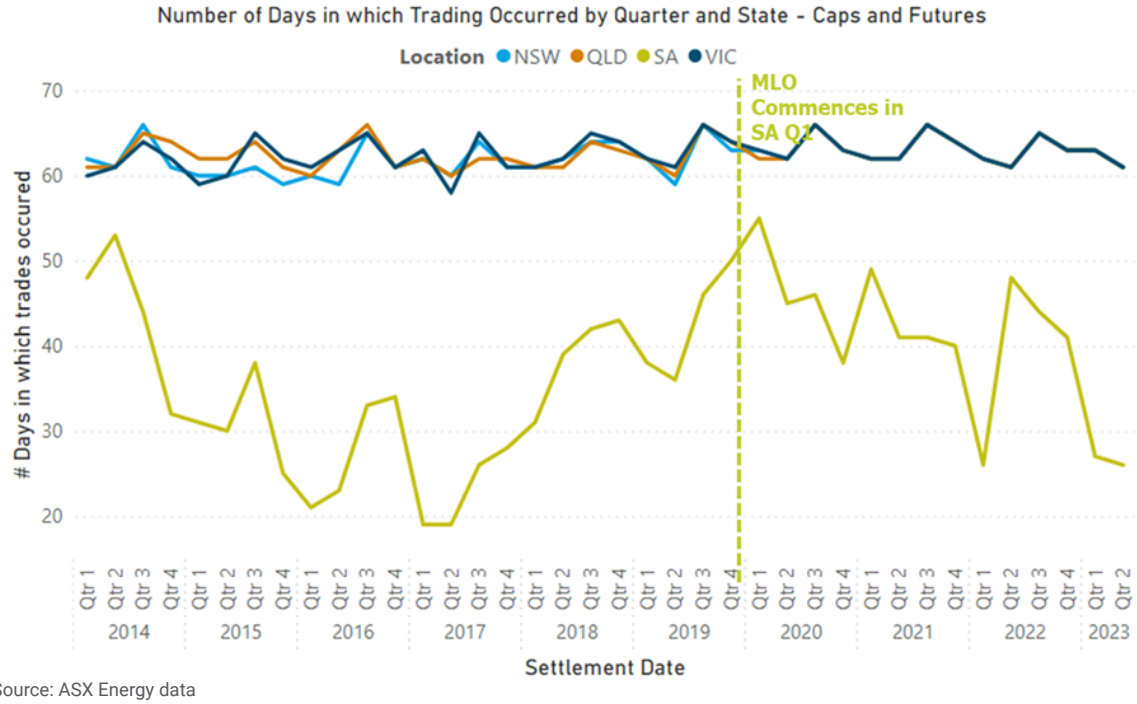
However, there was broad recognition amongst stakeholders, supported by ASX Energy data, that the MLO in its current form is not making a significant difference to market liquidity in South Australia outside of the specific reliability instrument windows.

The AEMC has assessed overall market liquidity trends in South Australia and other NEM regions since the introduction of the MLO using ASX Energy data. This data shows that market liquidity has remained steady across the NEM since the RRO was introduced but has fallen in SA.

ASX Energy data (see Figure B.3) shows that, despite the South Australia T-3 being triggered annually since 2020 for the January to February/March periods, South Australia continues to experience significantly fewer days in which trades of caps and futures occur compared with other NEM regions (sometimes two-thirds less). There is also significant variation in the number of days per quarter in which trades occurred in South Australia (ranging between 20 to 55 days per quarter) compared with other NEM regions which typically trade each day that the ASX is open (61 to 66 days per quarter).

93 AEMC, Market making arrangements in the NEM, 19 September 2019, p.iii.

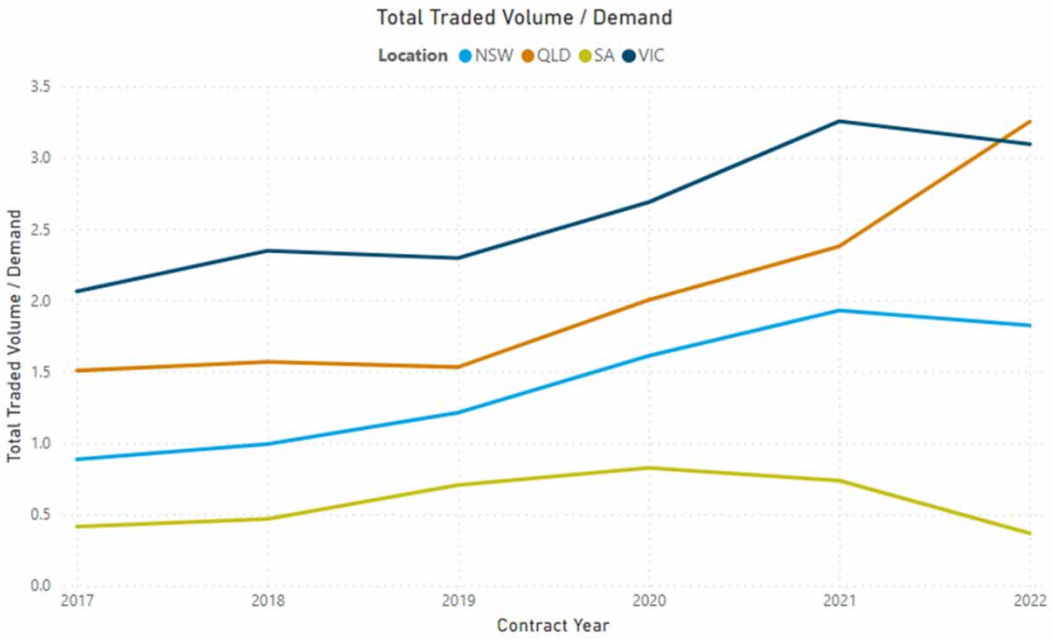
Figure B.3: Number of days in which trading occurred by quarter and region – caps and futures



Source: ASX Energy data

ASX Energy data (see Figure B.4) also shows that the gap between South Australia and other NEM regions, in terms of total traded volumes of Q1-4 caps and futures as a proportion of total demand, continued to widen between 2019 and 2023. Traded volumes in NSW, QLD and Victoria have risen to 2.5 to 4.5 times total demand between 2019 and 2023, whereas traded volumes in South Australia have fallen from around 1 to less than 0.5 times total demand in 2023.

Figure B.4: Total traded volume by demand



Source: ASX Energy data

Some stakeholders noted that there may be alternative mechanisms to support market liquidity including the ASX voluntary market making scheme for exchange-traded electricity futures contracts.

B.5 The SA T-1 event provided evidence of the RRO not operating to deliver best outcomes

Many industry stakeholders framed their submissions to the consultation paper around the compliance costs and regulatory burden associated with compliance with the South Australia T-1 trigger event for the period 8 January 2024 – 29 February 2024. These stakeholders argued that a range of overlapping issues around the operation of the RRO under the NER and NEL led to the South Australia T-1 event being triggered unnecessarily and that this will lead to higher costs for consumers and additional costs which are not able to be reclaimed by market participants.

Industry and representative submissions broadly argued that the way the RRO was applied to trigger the South Australia T-1 event led to additional and unnecessary costs, borne by consumers, above what was considered needed to meet the IRM. Lower cost opportunities to close gaps were also available to be accessed by liable entities, such as projects registered between T-1 and T but were unable to be sufficiently accessed based on the rules and guidelines.

The timeline for the South Australia T-1 trigger event and key additional information are presented in Table B.1.

Table B.1: Timeline of South Australia T-1 trigger events

Date	Event
31 August 2022	The 2022 ESOO released on 31 August 2022 showed a reliability gap (at T) was likely in South Australia for the period 8 January 2024 and 29 February

Date	Event
	2024.
1-14 September 2022	The AER followed the processes required under the NER and consulted with stakeholders on a proposed reliability instrument. Submissions argued that AEMO's methodology for estimating the gap was flawed as it did not consider 'anticipated' projects. AGL raised that *'AEMO has classified both Iberdrola's 123MW Bolivar Power Station and AGL's 250MW Torrens Island Battery as 'anticipated' when both are on track to be operational before the forecast reliability gap period starts in January 2024.'* (AGL, 14 September 2022).
24 October 2022	The AER released a Reliability Instrument with a contract position date of 6 January 2023. Clause 4A.C.11 of the NER requires the AER to assess AEMO's methodology only for material errors or incorrect assumptions. However, industry submissions to the review argued that the AER should be given additional powers to reject or over-ride a decision based on new information.
26 October 2022	AEMO commences consultation on a new NEM Reliability Forecasting Guidelines and Methodology Consultation, including proposing that *'anticipated projects should be included in the reliability forecast… after the T-1 year for RRO purposes'*.
Early January 2023	Cap contracts for the South Australia T-1 gap period increased (EUAA, April 2023).
6 January 2023	Net Contract Position (NCP) date: liable entities were required to record their NCP for each trading interval between 5 pm and 9 pm, for each working weekday during the period 8 January to 29 February 2024 inclusive.
8 February 2023	Bolivar Power station registered with AEMO.
16 February 2023	Osborne Power Station closure delayed from December 2023 to December 2026.
21 February 2023	AEMO releases an 'Update to the 2022 ESOO' showing the IRM would not be breached between 8 January to 29 February 2024. This resulted from Bolivar Power Station and Tailem Bend Battery being committed projects and the delayed closure of the Osbourne Power Station.
24 April 2023	AEMO releases its ESOO and Reliability Forecast Methodology Document to include 'anticipated' projects in forecasts from the 2023 ESOO.
9 June 2023	The AER releases its final RRO reliability compliance procedures and guidelines for liable entities.
31 July 2023	NCP reporting date for liable entities (except for new entrants, which is 30 April 2024).
31 August 2023	AEMO releases its 2023 ESOO showing the South Australia T-1 period reliability gap forecast again breaches the IRM as a result of changes in demand forecasts and generation assumptions.
8 January - 29 February 2024	Reliability gap period.
1 March 2024	Reliability Instrument closes.
November 2024	Compliance date (40 weeks after settlement date) for gaps above 50 PoE.

The Commission agrees that, while the South Australia T-1 event was applied by the AER and AEMO under the NER and NEL, the way the RRO is operationalised through the NEL, NER and associated guidelines is likely to have led to additional regulatory burden and unnecessary costs for consumers for contracting that may not have been needed to address reliability gap.

Examples of issues that appeared include:

- Market bodies were not able to take into account new generation information prior to establishing the reliability instrument due to the way the T-1 trigger is established under the NER.
- When new advice became available (including new forecasting methodologies) showing the gap may close in the 2022 ESOO Update, the way the T-1 trigger is established under the NER meant market bodies were unable to take this new information into account.
- Liable entities required to contract to close the gap were unable to sufficiently provide evidence of newly built, committed or extended firmed generation up to the T-1 NCP date.
- The NER establishes complex requirements for liable entities. AER guidelines could be updated on an earlier basis to better support auditing arrangements and provided greater certainty over qualifying contract arrangements.

The Commission also notes that forecasting reliability gaps is subject to some uncertainty due to changes in generation and demand. While the 2022 ESOO Update showed that the South Australia T-1 reliability gap was no longer below the IRM threshold, the 2023 ESOO subsequently re-established the gap as above the IRM.

Costs for a T-1 trigger include administration, contracting and possible PoLR costs.

There are some early indications that the South Australia T-1 has led to higher costs to consumers. While it is difficult to know with certainty if the increased contracting costs result from the operation of the South Australia T-1 or specific decisions by retailers, in their submissions to the IRM Review, Shell and EUAA noted changes in contract markets in South Australia around the NCP date.

EUAA provided evidence in their submission to the consultation paper (presented below in Figure B.5) to the review of the IRM of a *'significant rise in Q1, 2024 forward cap prices that occurred subsequent to the AER's decision. It also shows the significant separation from prices in Victoria'*.[94]

Figure B.5: Victorian and South Australian Cap Prices

	Victoria Cap Price $/MWh			South Australia Cap Price $/MWH		
	Peak	Off-peak	Flat	Peak	Off-peak	Flat
1 July	69.00	4.46	31.50	95.00	5.94	43.25
1 August	64.00	4.62	29.50	97.50	7.15	45.00
30 September	72.50	5.38	33.50	121.50	8.77	56.00
1 November	72.00	4.88	33.00	192.50	9.21	86.00
15 November	62.50	7.00	30.25	226.00	20.77	106.75
1 December	65.50	6.98	31.50	233.00	21.31	110.00
3 January	38.50	4.51	18.75	150.00	12.32	70.00
1 February	41.50	4.50	20.00	112.00	7.88	51.50

Source: EUAA, Submission to Review of the Interim Reliability Measure, 13 April 2023, p.3.

94 EUAA, Submission to Review of the Interim Reliability Measure, 13 April 2023, p.3.

While it is likely that the South Australia T-1 has triggered higher costs, the full costs of the South Australia T-1 event may not ever be known. Liable entities are required to report their NCP report to the AER by 31 July 2023. The NCP report does not report how much liable entities paid for their contracts and contract settlement may not be known until the contracts end at T and settled (and even then, it will only be the counter-parties that know the full costs). PoLR costs may not be known until after 40 weeks after T (November 2024).

C Changes from draft to final

There have been two changes to recommendations from the draft report to the final report. Both changes were to remove draft recommendations These are:

- Draft recommendation 2 — Provide AEMO with a limited power to request the AER cancel a T-1 reliability instrument following an Electricity Statement of Opportunity (ESOO) or ESOO Update between T-1 and T which shows a reliability gap has closed.
- Draft recommendation 8 — AEMO review expanding timeframes for the AEMO demand portal being open to expand the pool of eligible demand response contracts and reduce costs.

Draft recommendation 2 was not maintained in the final report

The Commission determined to remove draft recommendation 2 as it was not critical to improving the operation of the RRO if recommendation 1 (moving the NCP date to T) is implemented. The Commission also considered submissions from AEMO and the AER provided feedback that the draft recommendation could introduce risks that undermine the policy intent of the RRO[95] See section 3.1.3 for more information on why draft recommendation 2 was not maintained by the Commission.

Draft recommendation 8 was not maintained in the final report

The Commission determined to remove draft recommendation 8 as AEMO has already reviewed expanding the timeframe for the AEMO demand portal being open. On 20 December 2023, AEMO completed their consultation and review on the Demand Side Participation Guidelines, and determined to keep the demand portal open throughout the year. Therefore, the Commission considers that AEMO has already completed the review recommended in our draft report, in addition to expanding the timeframe for the demand portal being open. The Commission considers that this change will expand the pool of eligible demand response contracts for the RRO and reduce costs. As such, the Commission considered that draft recommendation 8 was no longer required and removed it from the final recommendations. See section 3.4.4 for more information on why draft recommendation 8 was not maintained by the Commission.

95 Submissions to the draft report: AEMO, p.2; AER, p.4.

D Summary of other issues raised in submissions

Table D.1: Summary of other issues raised in submissions

Stakeholder(s)	Issue	Response
AGL	AGL, submission to the draft report, p.2: *AGL consider additional discretion should be provided to AEMO or the AER where the breach of the [Interim Reliability Measure] is marginal. Using this discretion, AEMO or the AER could consider some qualitative factors that may impact the likelihood of the reliability gap occurring and allow for further investigation of input assumptions. This change could reduce unnecessary costs to consumers.*	The Commission does not recommend providing additional discretion to AEMO or the AER to not make an instrument where the breach of the IRM is marginal. This would introduce a number of complexities and uncertainty to the RRO, as well as undermine the determination of the IRM.
AGL	AGL, submission to the draft report, p.2: *The requirement for MLO generators to bid creates a negative outcome for the market as it introduces an incentive for speculative sellers to access the MLO bids to take advantage of the heightened regulatory-induced trading period. This causes churn in the market that is not representative of retailer-generator trading activity. In effect, the MLO bidding requirement forces MLO generators to buy contracts that do not facilitate retailer activity to meet the RRO contract requirement during this critical period.*	The Commission considers that the requirement for MLO generators to both bid and offer is needed to: • Prevent contracts from being traded at inflated prices - as noted by AGL • Ensure the MLO stimulates market liquidity. The Commission considers the requirement for MLO generators to bid in the MLO remains appropriate.
AGL	AGL, submission to the draft report, p.2: *Given the regulatory implications of the reliability gap forecast, material input assumptions must be proactively tested and verified by AEMO or the AER. While the AER is required to enforce requirements that obligate market participants to provide AEMO with accurate information, this does not necessarily cover the accuracy of information provided by developers and new generators seeking connection. Furthermore, the MTPASA forecasts which inform some of the reliability assessments rely on participants making 'best*	The Commission considers that additional verification of information from developers, new generators, and participants to better inform forecasts would place additional burden on AEMO and is unlikely to materially improve forecasts. The Commission also notes that AEMO is implementing measures to improve forecasting.

Stakeholder(s)	Issue	Response
	endeavours' to provide accurate information. While this is appropriate for the MTPASA process, introducing an additional level of verification where a limited number of inputs are material to a forecast reliability gap may be beneficial to the market and consumers.	Further, the Commission considers that the AER would not be the appropriate market body to undertake this task.
AGL	AGL, submission to the draft report, p.2: *AGL recommends the minimum size of market making contracts volumes under the MLO reduce from 5MW to 2MW. Given recent market trends, there has been relatively low trade of lots greater than 2MW, particularly for periods far out in the curve. Amending the minimum trading parcels to 2MW would thereby improve liquidity of trades and support the more efficient operation of the market, without creating any significant issues for participants seeking contracts.*	The minimum size of market making contracts volumes is currently: • 2MW in South Australia • 5MW in other mainland NEM regions. The Commission does not consider that a global minimum volume size of 2MW would improve liquidity or change the minimum volume size in South Australia where market liquidity is worst. The Commission considers that the minimum volume sizes are appropriately proportional to the capacity of MLO generators in each region.
Origin	Origin, submission to the draft report, p.3: *If the recommended change to the contract position date is made, liable entities will be finalising their bespoke methodologies after the reliability gap period has ended. The current wording of the firmness principles in the NER will need to be reviewed to retain alignment with how the RRO is intended to operate in this context (i.e. to provide a forward contracting signal).*	The Commission agrees that the firmness principles may need to be revised to ensure bespoke methodologies developed after T by liable entities are consistent with the intended operation of the RRO. The Commission considers that this should be addressed as part of the process to move the NCP date.
Origin	Origin, submission to the draft report, p.3: *The MLO market making requirements currently end at the T-1 cut-off date, aligning with the contract position date. If the contract position date is moved to T there is an opportunity to extend the MLO window beyond T-1 in cases where a T-1 instrument is made. However, given liquidity generally increases as*	The Commission considers that there could be benefits to extending the MLO period to some point after T-1 and stimulating additional market liquidity. However, the Commission also recognises the potential additional costs on MLO providers.

Stakeholder(s)	Issue	Response
	the period approaches and MLO providers will need to manage their own positions, we do not consider it necessary / appropriate to materially extend the MLO period. At a minimum, MLO obligations should not extend to within six months of the contract position date.	The Commission considers that this should be considered as part of the process to move the NCP date.
Stanwell	Stanwell, submission to the draft report, p.2: *Stanwell supports a process whereby liable entities are provided early or progressive advice during a reliability gap period. "The current process of having each liable entity separately estimate what hedges are required" is inefficient and not aligned with the National Electricity Objective (NEO). Stanwell further proposes that forecasts underpinning the declaration of a "gap" should be available to participants at the highest level of granularity in advance of having to commit to a compliance position, and to regulators when evaluating those compliance positions.*	The Commission considers that a process to provide liable entities with early or progressive advice during a gap period would not be efficient or consistent with the RRO. Furthermore, moving the NCP date to T will allow liable entities to better estimate and contract for their expected load cover during the gap period. This will improve the information liable entities have to make decisions.

Abbreviations and defined terms

AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
BESS	Battery energy storage system
CIS	Capacity Investment Scheme
Commission	See AEMC
ESB	Energy Security Board
ESOO	Electricity Statement of Opportunity
IRM	Interim reliability measure
MLO	Market liquidity obligation
NCP	Net contract position
NEL	National Electricity Law
NEM	National Electricity Market
NEO	National Electricity Objective
NER	National Electricity Rules
PoLR	Procurer of Last Report
RRO	Retailer Reliability Obligation
T	The start of a forecast reliability gap period
T-1	1 year before the start of a forecast reliability gap period
T-3	3 years before the start of a forecast reliability gap period