

Australian Energy Market Commission

RULE DETERMINATION

**National Electricity Amendment (Reinstatement
of long notice Reliability and Emergency
Reserve Trader) Rule 2018**

Rule Proponent(s)

AEMO

21 June 2018

**RULE
CHANGE**

Inquiries

Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

E: aemc@aemc.gov.au

T: (02) 8296 7800

F: (02) 8296 7899

Reference: ERC0238

Citation

AEMC 2018, Reinstatement of long notice Reliability and Emergency Reserve Trader, Rule Determination, 21 June 2018, Sydney

About the AEMC

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

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Summary

The Australian Energy Market Commission (AEMC) has made a final rule which promotes reliability in the national electricity market (NEM) while making sure that the costs of doing so are efficient.

The Commission's final rule increases the lead time available for AEMO to procure out-of-market reserves through the Reliability and Emergency Reserve Trader (RERT) to **nine months** ahead of a projected reserve shortfall. This effectively reinstates what was known as the long-notice RERT, which was removed on 1 November 2017 based on a rule change decision made by the Commission in 2016.¹

What is the RERT?

Reliability in the NEM is largely driven through market participants responding to information provided about the need for resources to keep the power system in balance. If market participants fail to respond to information signals, AEMO's next step is generally to engage in informal negotiations with market participants to alleviate any expected or anticipated shortfalls.² If this fails, then AEMO may have no other choice but to intervene in the market more directly. Market participants are encouraged to respond first, since a market response is likely to be more efficient than AEMO intervening e.g. by contracting for reserves.

The RERT is one of a suite of permanent intervention mechanisms in the NEM that are available to manage reliability,³ in the event that responses from market participants are, or are likely to be, insufficient to serve the electricity needs of consumers in a manner consistent with the reliability standard. The RERT allows AEMO to contract for reserves from either generation or demand-side capacity that is not otherwise available to the market through any other arrangement. AEMO can use the RERT in the event that it projects that the reliability standard will not be met (i.e. when AEMO projects that unserved energy is expected to be greater than 0.002 per cent) and, where practicable, to maintain power system security.

AEMO can only contract for reserves under the RERT for a limited period of time ahead of when it projects a reserve shortfall or to maintain power system security – this is known as the “procurement lead time” and is specified in the National Electricity Rules (NER).

The direct costs of the RERT are recovered from market customers, such as retailers, and may ultimately be passed on to consumers meaning that the RERT can have an impact on retail price outcomes over the longer term. The RERT also has indirect costs since, in contracting for reserves, AEMO may crowd out potential market-based

¹ AEMC, *Extension of the Reliability and Emergency Reserve Trader*, Final Determination, 23 June 2016.

² Furthermore, AEMO can use network support and control ancillary services to the extent that the projected reserve shortfall is affected by a network limitation that can be addressed by such services.

³ The others being directions and clause 4.8.9 instructions.

arrangements, such as retailers seeking to engage with their customers to reduce load. If such distortions do occur, then this would also have implications for reliability and price outcomes in the NEM.

Until recently, the RERT had rarely been used. However, the rapid transformation of the generation mix is presenting growing challenges for the operation of the power system and AEMO's use of the RERT last summer highlighted the relevance of this safety net mechanism to reliability in the NEM.

The Commission's rationale

As noted above, the RERT has the potential to distort outcomes for market participants and in the wholesale market, and so is designed in such a way as to minimise these distortions.

While the potential of the mechanism to distort outcomes remains unchanged since the Commission considered similar issues in 2016, the Commission agrees with AEMO that several conditions in the market have changed since then:

- The changing generation mix - driven by the retirement of thermal generation, an influx of variable renewable generation and a tightening of the demand-supply balance, as well as the effect that these changes are having on the operation of the power system - indicates that it would likely be beneficial, consistent with the national electricity objective, to reinstate the long-notice RERT.
- Since 2016, the ARENA and AEMO RERT trial has demonstrated that there are more resources, primarily demand response, that have the capability to change their energy consumption in response to an instruction, but are not expected to respond to wholesale price signals and so are not participating in the wholesale market. For example, there are currently around 200 MW of demand-side resources participating in the trial.⁴ The trial also found that a longer lead time is required for these types of reserves.

To the extent that the RERT is required, having more resources able to participate in the RERT through a longer procurement lead time may improve the efficiency of the procurement process. This may put downward pressure on the direct costs of the RERT, if it is needed. Reinstating the long-notice RERT will also promote reliability since AEMO will be able to, if there is a shortfall, have access to a broader range of reserves than it otherwise would.

On balance, therefore, the Commission concludes that increasing the procurement lead time for the RERT to nine months will, or is likely to, contribute to the achievement of the National Electricity Objective and so promote the long-term interests of consumers.

The final rule

The key features of the final rule are:

⁴ ARENA-AEMO joint submission, *Reliability Frameworks Review - directions paper*.

- an increase in the procurement lead time available to AEMO to procure the RERT from 10 weeks to nine months ahead of a projected reserve shortfall (effectively reinstating the long-notice RERT) with effect from 13 July 2018
- a transitional rule that amends the RERT guidelines made by the Reliability Panel to reflect the reinstatement of the long-notice RERT and requires the Reliability Panel to publish the RERT guidelines amended to reflect the changes made under the rule by 13 July 2018 (the date the long-notice RERT is reinstated)
- a transitional rule that requires AEMO to amend its RERT procedures to reflect the final rule and amended guidelines by 13 July 2018. The rule requires AEMO to consult on the proposed amendments to its RERT procedures for a minimum of two weeks prior to the revised procedures taking effect.

The ability for AEMO to procure the long-notice RERT will therefore commence on 13 July 2018, the same date on which the Reliability Panel is required to publish the RERT guidelines amended under the final rule and AEMO is required to publish its amended RERT procedures.

Interactions with the *Enhancement to the RERT* rule change and the proposed National Energy Guarantee

The *Enhancement to the RERT* rule change (“enhanced RERT”) is examining broad changes to the RERT framework through the issues raised by AEMO in its rule change request and its high-level design proposal for an enhanced RERT.⁵

Potential changes being examined in that rule change process include:

- a further increase in the procurement lead time, which would effectively increase the long-notice RERT lead time to one year and beyond in some circumstances
- an assessment of the existing out-of-market provisions that seek to minimise the distortionary effects of the RERT on market participants and wholesale market outcomes
- how the RERT is triggered and the governance arrangements surrounding the trigger
- standardisation of RERT products.

Stakeholders raised a number of concerns and issues with respect to the broader RERT framework in submissions to the consultation paper published for this rule change. The Commission notes that a number of these broad concerns were out of scope of this rule change, but are issues that are being considered through the enhanced RERT rule change. This includes the procurement trigger, broad costs of the RERT and the out-of-market provisions.

⁵ See <https://www.aemc.gov.au/rule-changes/enhancement-reliability-and-emergency-reserve-trader>.

The Energy Security Board is also currently progressing the development of the proposed National Energy Guarantee (Guarantee).⁶ The proposed Procurer of Last Resort function of the reliability requirement of the Guarantee would use the RERT mechanism to provide a safety net to make sure adequate resources are committed to meet demand when there is an expected shortfall relative to the reliability requirement i.e. the Guarantee will set out the trigger for the procurer of last resort in the context of the reliability requirement of the Guarantee. The rules governing the RERT framework will provide the mechanism for the procurement of reserves through the procurer of last resort. Consultation on the RERT framework will occur through the *Enhancement to the RERT* rule change request. The AEMC is working closely with the ESB as the design of the Guarantee progresses.

⁶ A detailed design paper for the Guarantee was published for public consultation on 15 June 2018, and can be found here:
<http://coagenergycouncil.gov.au/publications/energy-security-board-%E2%80%93-draft-detailed-design-national-energy-guarantee-consultation>

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1 AEMO's rule change request

1.1 The rule change request

On 9 March, AEMO (proponent) submitted two rule change requests to the Australian Energy Market Commission (AEMC or Commission)

- the first rule change request (the **subject of this final determination**) seeks to **reinstate the long-notice Reliability and Emergency Reserve Trader (RERT)** ("long-notice RERT rule change").
- the second rule change request (subject to a separate rule change request process) proposes broader changes to the RERT framework ("enhanced RERT rule change").⁷

The Commission has progressed the two rule changes under different timeframes.

The Commission considered that the long-notice RERT rule change request should be considered an urgent⁸ rule change request and, as a result, be assessed under an expedited rule change process. This decision, set out in the consultation paper for this rule change, was informed by AEMO's views set out in the rule change request that the risk to reliability in terms of involuntary load shedding is a reasonable possibility over summer 2018-19.⁹ The Commission notes that this rule change was proposed by AEMO to address the urgent issue of procurement lead times for the RERT. Broader issues around the design of the RERT (including its costs) will be addressed *Enhancement to the RERT* rule change request. This final determination has been made under the expedited rule change process.¹⁰

The Commission commenced the second rule change request on the date of this final determination.¹¹ The second rule change request is broader in scope and is considering the broader RERT framework in a holistic manner.

The Energy Security Board is also currently progressing the development of the National Energy Guarantee (Guarantee).¹² The proposed Procurer of Last Resort

⁷ See <https://www.aemc.gov.au/rule-changes/enhancement-reliability-and-emergency-reserve-trader>.

⁸ Section 96 of the NEL

⁹ AEMO, Electricity rule change proposal - reinstatement of long notice RERT, 9 March 2018, p.7.

¹⁰ The expedited rule change process involves one round of public consultation on the rule change request and the publication of a final determination within 6 weeks of the rule change process being commenced. For the reasons noted in section 1.6, under section 107 of the National Electricity Rules the AEMC extended the time for the making of the final determination by a further two weeks

¹¹ <https://www.aemc.gov.au/rule-changes/enhancement-reliability-and-emergency-reserve-trader>

¹² A detailed design paper for the Guarantee was published for public consultation on 15 June 2018, and can be found here:

function of the reliability requirement of the Guarantee would use the RERT mechanism to provide a safety net to make sure adequate resources are committed to meet demand when there is an expected shortfall relative to the reliability requirement i.e. the Guarantee will set out the trigger for the procurer of last resort in the context of the reliability requirement of the Guarantee. The rules governing the RERT framework will provide the mechanism for the procurement of reserves through the procurer of last resort. Consultation on the RERT framework will occur through the *Enhancement to the RERT* rule change request. The AEMC is working closely with the ESB as the design of the Guarantee progresses.

1.2 Current arrangements

This section summarises the current (that is, prior to the final rule taking effect) RERT arrangements.

The RERT is an existing intervention mechanism in the NEM that allows AEMO to contract for reserves (generation or demand-side capacity that is not otherwise being traded in the market). AEMO can use the RERT in the event that it determines that market participants are not expected to meet the reliability standard (i.e. when AEMO projects that unserved energy is expected to be greater than 0.002 per cent) and, where practicable, to maintain power system security. The existing RERT can therefore be considered a "strategic reserve".

The NER do not restrict the types of technologies that may participate in the RERT, i.e. it is technologically neutral. The NER only specify that reserves must be scheduled or unscheduled reserves, and that they must not be otherwise available to the market.¹³ At present, AEMO provides additional guidance to potential providers when calling for tenders for the RERT, for example, that the provider must take into account the availability of reserves over the summer period, the reserves must be in a block of at least 10 MW and whether the reserves can be activated continuously for at least 30 minutes.¹⁴

RERT providers are paid according to their contracts with AEMO. While individual contracts are confidential, the payment structure may consist of an availability payment, a pre-activation payment (e.g. to be on stand-by and ready to dispatch ahead of a shortfall) and activation or usage payment, which is paid based on the amount of energy dispatched. RERT costs from the 2017/18 financial year amounted \$51.26

<http://coagenergycouncil.gov.au/publications/energy-security-board-%E2%80%93-draft-detailed-design-national-energy-guarantee-consultation>

¹³ According to the NER, RERT capacity must not otherwise be made available to the market for the relevant trading intervals for the duration of the contract. This means that RERT capacity may not participate in the market, e.g. the spot market, for the duration of the contract but may do so when not contracted under the RERT.

¹⁴ See <https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Emergency-Management/RERT-panel-expressions-of-interest>

million.¹⁵ These costs were recovered from market customers (e.g. retailers) in Victoria and South Australia,¹⁶ and may ultimately be recovered by retailers from consumers.

Once the RERT is dispatched, spot prices are set through the application of intervention pricing, which is also known as the what-if price. Intervention pricing is meant to preserve market price signals to minimise the distortionary aspect of an intervention. From a theoretical point of view, the what-if price should be higher than the dispatch run price when the RERT is dispatched for reliability purposes. In other words, market participants are settled on the higher price - which maintains the market signal absent the intervention. Market participants and eligible persons may also be entitled to compensation if they were affected by dispatch of the RERT.

Chapter 2 of the *Enhancement to the RERT* consultation paper provides a more fulsome description of current arrangements, including the procurement trigger and how the reliability standard is operationalised.¹⁷

1.2.1 History

Some form of mechanism for the system operator to contract for reserves (i.e., a strategic reserve) such as the RERT or reserve trader provisions, has been a feature of the NEM since its commencement in December 1998. At the time, such a mechanism was deemed to be necessary due to uncertainty around how market participants would respond to price signals, but the intention was that it would be removed after a period of time and so there was a date fixed for the expiry of the provisions.

Over time, periodic reviews of the reserve trader provisions have led to various amendments, including initially postponing and then removing its expiry date, as well as changes to its scope and operation. The RERT itself (as distinct from previous versions of a strategic reserve) was developed as part of the Reliability Panel's 2007 *Comprehensive Reliability Review*. The RERT was incorporated into the NER in July 2008, and replaced the reserve trader provisions.

While the RERT was originally designed with an expiry clause, in June 2016, the Commission extended it indefinitely.¹⁸ In its decision, the Commission noted that ongoing uncertainty raised the possibility that future electricity demand may not be adequately met, and also raised the possibility that the ensuing responses by market

15 See <http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Security-and-reliability/Summer-operations-report>

16 In accordance with Clause 3.15.9 of the NER.

17 Available from <https://www.aemc.gov.au/rule-changes/enhancement-reliability-and-emergency-reserve-trader>

18 AEMC, Extension of the Reliability and Emergency Reserve Trader, Final Determination, 23 June 2016.

participants to address projected shortfalls¹⁹ may be insufficient. The Commission's decision is discussed in more detail below.

1.2.2 Framework

The NER provide the high-level framework for the RERT,²⁰ including:

- setting out the RERT principles²¹
- requiring the Reliability Panel to publish RERT guidelines²²
- requiring AEMO to publish procedures for the exercise of the RERT.²³

AEMO's discretion as to how it should procure and dispatch the RERT is limited by a number of provisions in the NER, including those relating to the application of the RERT principles. The relevant aspects of the RERT framework for this rule change are summarised next. A more detailed description of the RERT is found in appendix A of the consultation paper.²⁴

There are no specific compliance provisions with respect to the RERT. However, AEMO is required to report on a number of aspects of the RERT, including on the process that it followed to intervene.²⁵

Relevant aspects of the RERT framework

The procurement lead time refers to the amount of time AEMO has to enter into contracts (i.e. procure the RERT) prior to the date that AEMO expects the reserves under the contract may be required to ensure reliability of supply, or maintain power system security (expected reserve shortfall). For example, a procurement lead time of up to 10 weeks means that AEMO cannot enter into a reserve contract if the expected reserve shortfall is in six months' time. It can only enter into a reserve contract for a reserve shortfall expected to occur up to 10 weeks ahead.

Under the current RERT provisions in the rules, AEMO must not enter into, or renegotiate, a reserve contract more than 10 weeks ahead of when it reasonably expects

¹⁹ Projected shortfalls generally refer to AEMO's determination of a breach of the reliability standard (i.e. a projection that unserved energy is more than 0.002 per cent), noting that AEMO may also use the RERT for power system security reasons.

²⁰ Rule 3.20 of the NER.

²¹ Clause 3.20.2(b) of the NER.

²² Clause 3.20.8 of the NER.

²³ Clause 3.20.7(e) of the NER.

²⁴ See <https://www.aemc.gov.au/rule-changes/reinstatement-long-notice-reliability-and-emergency-reserve-trader>

²⁵ Clause 3.20.6(a) of the NER.

that the reserve under that contract may be required to ensure reliability of supply and, where practicable, to maintain power system security.²⁶

The contracting period refers to the duration of the reserve contract. Some contracts may last months, while others may only last for a few trading intervals. This is different from the procurement lead time which is the time window within which AEMO *may* contract for reserves to meet an expected reserve shortfall.

The NER do not prescribe a specific contract duration for reserve contracts; however, the procurement lead time specified in the NER acts as maximum limit on the duration of a reserve contract because AEMO is not permitted to enter into reserve contracts in respect of reserve shortfalls that are expected to occur outside that lead-time. As an example, if AEMO identifies shortfalls for the next two summers, it would not be able to sign a two-year reserve contract. Instead, it could only enter into reserve contracts in respect of reserve shortfalls that will occur within nine months (under this final rule but 10 weeks prior to this final rule taking effect) of the entry into the contract.

There are currently two types of RERT based on how much time AEMO has to procure the RERT prior to the reserve shortfalls occurring:²⁷

- medium-notice RERT - between ten and one week's notice of a projected shortfall
- short-notice RERT - between seven days' and three hours' notice of a projected shortfall.

Typically, AEMO sets up a RERT panel of providers for both the medium-notice and short-notice RERT and only enters into a reserve contract under the relevant notice mechanism when it has identified a projected shortfall and after seeking offers from RERT panel members.²⁸ Prior to 1 November 2017,²⁹ AEMO could contract for reserves for up to nine months ahead of projected shortfalls through the long-notice RERT. There was no panel for the long-notice RERT; rather, contracts were signed following the close of a tender process. The removal of the long-notice RERT is discussed next.

²⁶ Clause 3.20.3(d) of the NER.

²⁷ Definitions of the medium-notice situation RERT and short-notice situation RERT are set out in the Reliability Panel's RERT guidelines.

²⁸ AEMO has the discretion to use a tender process in addition to using panel members in the case of the medium-notice RERT.

²⁹ 1 November 2017 was the date that the maximum procurement lead time for the RERT was changed from nine months to 10 weeks.

1.3 Relevant background

1.3.1 Removal of long-notice RERT

On 10 December 2015, the COAG Energy Council submitted a rule change request seeking to extend the RERT from its then expiry of 30 June 2016 to 30 June 2019. On 23 June 2016, the Commission made a more preferable final rule to:³⁰

- remove the expiry date for the RERT provisions such that, subject to a further rule change, the provisions would remain in the rules.
- remove the long-notice RERT, reducing the procurement lead time from nine months to 10 weeks.

In removing the long-notice RERT, at that time, the Commission noted that reducing the lead time would minimise market distortions and costs of making the RERT a permanent feature in the reliability framework. Specifically:³¹

- It would give market participants greater time and opportunity to respond to a projected shortfall, before AEMO seeks to enter into RERT contracts. A response from market participants is a more economically efficient outcome than reserve contracting.
- It would minimise the likelihood that, in contracting for reserves, AEMO crowds out potential market-based arrangements (such as retailers seeking to engage with their customers to reduce load).
- By only being able to act closer to real time, it would allow AEMO to utilise new and more up-to-date information to inform both its assessments of capacity adequacy, and its decisions on whether to enter into reserve contract(s). This can reduce the risk that reserve contracts are unnecessarily entered into and not dispatched, with the associated costs being ultimately borne by consumers.

1.3.2 ARENA-AEMO trial

AEMO and ARENA are currently undertaking a trial to increase the amount of demand response participating in the RERT. The three-year pilot program provides up to 200 MW of reserve capacity (primarily, demand response) which AEMO can call upon when reserves are low, i.e. through the RERT. Providers participating on the trial form part of the short-notice RERT panel.

As the trial is ongoing, there has been only limited publication of the lessons learned to date. However, ARENA and AEMO have advised the Commission that a key early lesson from the trial relevant to this rule change request is that short procurement lead times have made it challenging for demand response RERT providers to set up the

³⁰ AEMC, *Extension of the Reliability and Emergency Reserve Trader*, Final Determination, 23 June 2016.

³¹ Ibid.

necessary contractual and physical system arrangement with consumers in sufficient time to be able to provide the RERT service to AEMO.³²

More detail on the latest information on the ARENA-AEMO trial may be found in Appendix B of the consultation paper³³ as well as in ARENA's and AEMO's joint submission to the *Reliability Frameworks Review* direction paper.³⁴

1.4 Rationale for the rule change request

In its rule change request, AEMO provided its rationale for the rule change request and raises two core issues. According to AEMO, the issues arising are:

- the current energy transformation in the NEM is creating operational challenges
- the current procurement lead times available under the RERT are insufficient.

These are discussed in further detail in chapter 3.

1.5 Solution proposed in the rule change request

AEMO sought to resolve the immediacy of the issues specified above by proposing a rule (the proposed rule) that seeks to increase the procurement lead time for the RERT under the NER to nine months, up from 10 weeks (in effect, reinstating the long-notice RERT).³⁵

Specifically, AEMO proposed the following change to clause 3.20.3(d) of the NER: “10 weeks” would be omitted and substituted with “nine months”.³⁶

1.6 The rule making process

On 26 April 2018, the Commission published a notice advising of its commencement of the rule making process and consultation in respect of the rule change request.³⁷ A consultation paper identifying specific issues for consultation was also published.

The Commission considered that the long-notice RERT rule change request should be considered an urgent³⁸ rule change request and, as a result, be assessed under an

³² See, for example, ARENA, submission to AEMC's *Reliability Frameworks Review* - interim report; and ARENA-AEMO joint submission to the *Reliability Frameworks Review* - directions paper.

³³ See <https://www.aemc.gov.au/rule-changes/reinstatement-long-notice-reliability-and-emergency-reserve-trader>

³⁴ See <https://www.aemc.gov.au/markets-reviews-advice/reliability-frameworks-review>

³⁵ AEMO, *Electricity rule change proposal - reinstatement of long notice RERT*, 9 March 2018, p.7.

³⁶ Ibid, p.7

³⁷ This notice was published under s. 95 of the National Electricity Law (NEL).

³⁸ Section 96 of the NEL

expedited rule change process. This decision, set out in the consultation paper for this rule change, was informed by AEMO's views set out in the rule change request that the risk to reliability in terms of involuntary load shedding is a reasonable possibility over summer 2018-19.³⁹ For more information on the Commission's decision to expedite this rule change, please see chapter 6 of the consultation paper.⁴⁰

Accordingly, the Commission commenced an expedited rule change process, subject to any written requests not to do so. The closing date for receipt of written requests was 10 May 2018.

No requests to not carry out an expedited rule change process were received. However, the Commission received submissions from both AGL and Stanwell seeking more information to inform their submissions on the proposed rule change. The Commission was made aware that AEMO intended to publish information that could be relevant to the rule change in late May.⁴¹ The Commission, therefore, decided to extend the time for a making a final determination for this rule change by two weeks, to 21 June 2018. The Commission also extended the closing date for submissions from 24 May 2018 to 31 May 2018 to give stakeholders time to consider the information released by AEMO which were published on 23 May 2018.

The Commission also held a stakeholder workshop following the publication of the consultation paper and prior to consultation closing, which gave stakeholders the opportunity to hear from AEMO about the issues that it was seeking to address through this rule change request, as well as an opportunity to ask questions.

The Commission received 19 submissions, including the two submissions received regarding the expedited process. Issues raised by stakeholders that are not discussed in the body of this document have been summarised and responded to in appendix A.

1.7 Structure of the final rule determination

This final determination is structured as follows:

- chapter 2 summarises the Commission's final rule determination, including its assessment framework and summary of reasons for making the final rule
- chapter 3 sets out the views of AEMO and stakeholders, as well as the Commission's analysis and conclusions with respect to reinstating the long-notice RERT

³⁹ AEMO, Electricity rule change proposal - reinstatement of long notice RERT, 9 March 2018, p.7.

⁴⁰ Available here
https://www.aemc.gov.au/sites/default/files/2018-04/Consultation%20paper_2.pdf

⁴¹ This information included AEMO's summer operations report for 2017/18 summer which has two annexures about RERT events on 30 November 2017 in Victoria and 19 January 2018 in Victoria and South Australia. See:
<https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Security-and-reliability/Summer-operations-report>

- chapter 4 examines the views of AEMO and stakeholders, as well as the Commission's analysis and conclusions with respect to a temporary reinstatement of the long-notice RERT
- chapter 5 sets out the views of AEMO and stakeholders, as well as the Commission's analysis and conclusions with respect to the RERT guidelines and procedure
- chapter 6 summarises stakeholders' and the Commission's views on the interactions between related work programs
- appendix A summarises all other issues raised in submissions that are not explicitly discussed in this final determination
- appendix B sets out the legal requirements under the NEL.

2 Final Rule Determination

The Commission's final rule determination is to make a final rule. The final rule increases the lead time for procurement under the RERT from 10 weeks to nine months (effectively reinstating the long-notice RERT that was removed on 1 November 2017 as described in section 1.3.1). The final rule also includes a number of transitional rules to address the need for guidelines and procedures to change as a result of the final rule.

The Commission's reasons for making this final rule determination are set out in section 2.3.

This chapter outlines:

- the rule making test for changes to the NER
- the assessment framework for considering the rule change request, and
- the Commission's consideration of the final rule against the national electricity objective

Further information on the legal requirements for making this final rule determination is set in appendix B.

2.1 Rule making test

2.1.1 Achieving the national electricity objective

Under the national electricity law (NEL) the Commission may only make a rule if it is satisfied that the rule will, or is likely to, contribute to the achievement of the national electricity objective (NEO).⁴² This is the decision making framework that the Commission must apply.

The NEO is:⁴³

“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.”

⁴² Section 88 of the NEL.

⁴³ Section 7 of the NEL.

2.2 Assessment framework

This section sets out how the Commission assessed whether the proposed rule will, or is likely to, contribute to the achievement of the NEO.

The Commission considers that the relevant aspects of the NEO are the efficient investment in, and efficient operation and use of electricity services with respect to the price and reliability of supply of electricity, and reliability of the national electricity system because:

- The RERT is one of the intervention mechanisms available to AEMO primarily to manage reliability of the power system in the event that the power system is not expected to meet the reliability standard.
- The direct costs of the RERT are passed on to market customers (e.g. retailers) in the region where the RERT was used, and ultimately recovered from consumers. This means that the RERT has an impact on prices, while the indirect costs such as market distortions also have implications for reliability and prices.

In assessing the rule change request, the Commission considered whether or not the rule change improves the efficiency of the RERT process, and the management of the reliability of the power system. In particular, it considered the following principles:

- **Minimising market distortions:** Minimising distortions on market participants (i.e. market distortions) is important in order to minimise indirect costs, which could be substantial. The Commission had regard to the distortionary impact of the proposed solution, i.e. increasing the procurement lead time to nine months, against the status quo, that is, keeping a procurement lead time of 10 weeks. The potential distortionary effects of the RERT is discussed in more detail in section 1.3.1,
- **Minimising direct costs:** Procurement efficiency is an important aspect of the RERT and helps to minimise direct costs and improves AEMO's ability to manage reliability. The Commission has considered what the potential effects of changes to the procurement lead time would be.
- **Promoting reliability of the power system:** A reliable power system is a crucial part of the energy market and the long-term interest of consumers. The Commission had regard to the potential benefits to reliability brought about by the proposed rule change, weighed against the likely costs, including market distortions.

Of those that commented on the assessment framework, the majority expressing general support for the Commission's approach.⁴⁴

The Victorian Government also recommended that the Commission considers an additional criterion, namely the impact on emissions in the electricity sector.⁴⁵ This is

⁴⁴ Victorian Government, Meridian, Infigen: submission to consultation paper.

not in scope of the NEO – this is explained further in the Commission’s guide to applying the NEO.⁴⁶

Further, the National Energy Guarantee is seeking to integrate energy and emissions reduction policy in a way that will result in a specified emissions target being met, while allowing the electricity system to continue to operate reliably.

Major Energy Users (MEU) stated that the Commission's assessment framework only focuses on the costs of market distortions and does not take into account the cost of involuntary load shedding.⁴⁷ Similarly, Infigen noted that the costs of the RERT should be considered against the counterfactual of unserved energy which has an economic cost.⁴⁸ Infigen did however note that the assessment framework as set out in the consultation paper was appropriate.⁴⁹

The Commission agrees with the MEU and Infigen that the cost of involuntary load shedding is an important consideration for this rule change request. To be clear, the Commission considers that the cost of load shedding (and the benefits of avoided load shedding) are included as part of the aforementioned principle of promoting reliability of the power system.

However, the Commission notes that broader costs and consideration of the trade-offs between higher reliability and the cost of involuntary load shedding in relation to the framework more generally are outside of the scope of this rule change. Such trade-offs are generally considered by the Reliability Panel as part of its review of the *Reliability Standard and Settings*, in particular, when it reviews the reliability standard but will also be considered in the Commission’s consideration of the *Enhancement to the RERT* rule change request.

Given the overall support for the assessment framework, the Commission has proceeded with the framework set out above.

2.3 Summary of reasons

The final rule made by the Commission is attached to and published with this final rule determination. The key features of the final rule are:

- an increase in the procurement lead time available to AEMO to procure the RERT from 10 weeks to nine months ahead of a projected shortfall (effectively reinstating the long-notice RERT) with effect from 13 July 2018

⁴⁵ Victorian Government, submission to consultation paper, p.1.

⁴⁶ See <https://www.aemc.gov.au/sites/default/files/content/Applying-the-energy-market-objectives-for-publication.pdf>

⁴⁷ Major Energy Users, submission to consultation paper, p.2.

⁴⁸ Infigen, submission to consultation paper, pp. 1-2.

⁴⁹ Ibid. p.2

- a transitional rule that amends the RERT guidelines made by the Reliability Panel to reflect the reinstatement of the long-notice RERT and requires the Reliability Panel to publish the RERT guidelines amended to reflect the changes made under the rule by 13 July 2018 (the date the long-notice RERT is reinstated)
- a transitional rule that requires AEMO to amend its RERT procedures to reflect the final rule by 13 July 2018. The rule requires AEMO to consult on the proposed amendments to its RERT procedures for a minimum of two weeks.

Having regard to the issues raised in the rule change request and during consultation, the Commission is satisfied that the final rule will, or is likely to, contribute to the achievement of the NEO for the following reasons:

- The Commission is satisfied that there a number of factors showing that there are resources that, if given sufficient notice, may be willing and able to participate in the long-notice RERT, should the RERT be needed. These factors include, the ARENA-AEMO trial and AEMO's experience with the RERT last summer, bolstered by broader trends in the industry, such as changes in the way in which consumers interact with the sector and improvements in technology. These resources were not as prevalent in 2016 when the Commission made its decision to remove the long-notice RERT. There are now more of these resources, that have the capability to change their energy in response to an instruction, but do not otherwise respond to wholesale price signals and so are not participating in the wholesale market.
- Having concluded that there are more parties that could provide RERT services if needed, the Commission also concludes, based on stakeholder feedback, that these types of services currently require a longer lead time than 10 weeks e.g. in order for potential providers to sign up customers and install relevant equipment to engage in demand response. The Commission is satisfied that a longer lead time is required in order to reduce the barriers to participation for these types of reserves. To the extent that the RERT is required, having more resources able to participate in the RERT would improve procurement efficiency and may put downward pressure on the direct costs of the RERT.
- The Commission is also satisfied that the final rule will promote reliability since AEMO will, if there is a projected shortfall, have access to a broader range of reserves than it otherwise would. This is particularly important given that changes in the generation mix and tightening of the demand and supply balance means that it is having an impact on the operation of the power system, which AEMO has been identifying and highlighting.

3 Reinstating the long-notice RERT

This chapter sets out the Commission's overall rationale for reinstating the long-notice RERT, as well as its analysis of the views of two key issues that AEMO raised in its rule change request to reinstate the long-notice RERT, namely that:

- the current energy transformation in the NEM is creating operational challenges suggesting that there is a need to reinstate the long-notice RERT
- the current procurement lead time available under the RERT is insufficient.

3.1 Energy transformation suggests there is a need to reinstate the long-notice RERT

3.1.1 AEMO's views

As rule proponent, AEMO is in favour of reinstating the long-notice RERT.

In its rule change request, AEMO provided examples of what has changed since 2016 when the Commission made the decision to allow the long-notice RERT to expire. In particular, AEMO stated the following: "a number of conditions in the market have changed, including tighter supply/demand conditions and current and impending withdrawal of plant. These changes highlight how rapidly conditions can change in the current NEM, placing greater need for AEMO, as system operator, to have stronger mechanisms to manage the grid to minimise breaches of the reliability standard." ⁵⁰

AEMO stated that the current energy transformation, in which the broader range of energy resources creates variability in the supply and demand balance, places greater challenges on operating the system in real-time.⁵¹ Even in regions where the projected unserved energy averaged over a broad range of scenarios does not breach the reliability standard on a long-term planning basis, AEMO is projecting that the risk of some unserved energy is high compared with recent levels.⁵²

AEMO is concerned that in the absence of adequate reserve procurement, there is a risk that the reliability standard may not be met, particularly during a particularly 'peaky' demand year (e.g. under a scenario with extremely high demand) even if, averaged over all scenarios, the projected unserved energy is less than 0.002 per cent (that is, the reliability standard is determined to be met).⁵³

50 AEMO, *Electricity rule change proposal - reinstatement of long notice RERT*, 9 March 2018, p.7.

51 Ibid. p.5

52 Ibid. p.5

53 Ibid. p.5

3.1.2 Stakeholders' views

Views on reinstating the long-notice RERT

There were mixed views among stakeholders on reinstating the long-notice RERT, although, on balance, the majority of stakeholders supported reinstating the long-notice RERT in principle or with some caveats, generally around exercising caution around the costs of the RERT.⁵⁴

A number of stakeholders which provided submissions did not comment either way, including because there are other processes currently under way on similar topics, such as the enhanced RERT rule change and the National Energy Guarantee. For example, the view was that the assessment of the procurement lead time was best left to the enhanced RERT rule change where it can be assessed with the Guarantee in mind.⁵⁵

Views on 2016 removal of long-notice RERT

A number of stakeholders commented specifically on the Commission's decision to remove the long-notice RERT in 2016.

The Australian Energy Council re-stated the Commission's rationale for making its decision in 2016 and noted that it was known at the time that a shorter lead time would make procurement more difficult but that it was a good trade-off given the distortionary aspects of longer lead times.⁵⁶ Snowy Hydro also noted the Commission's 2016 rationale and stated that the Commission made the rule to increase the time the market has to respond to possible reserve shortfalls.⁵⁷ Origin argued that conditions noted by the AEMC in the 2016 final determination for the removal of the long-notice RERT are still relevant.⁵⁸

Operational challenges

Meridian noted that there has been significant market transformation occurring that has the potential to make meeting the reliability standard more challenging, which is also exacerbated by regulatory uncertainty.⁵⁹ The Victorian Government also noted the rapid changes occurring in the market.⁶⁰

54 See, for example, Infigen, submission to consultation paper

55 See, for example, St Vincent de Paul and SACOSS, submission to consultation paper

56 Australian Energy Council, submission to consultation paper, p.1

57 Snowy Hydro, submission to consultation paper, p.3

58 Origin, submission to consultation paper, p.1

59 Meridian, submission to consultation paper, p.2

60 Victorian Government, submission to consultation paper, p.1

On the other hand, ERM Power stated that nothing has changed that would justify reinstating the long-notice RERT,⁶¹ a sentiment echoed by Origin.⁶² The Australian Energy Council disagreed that energy market transformation was a relevant point and noted that market participants and AEMO must adapt to changes in the market.⁶³ Infigen also stated that the market has incentives to respond to the changes occurring, and noted that that it was not clear that conditions are now fundamentally more difficult for participants to manage.⁶⁴

New products and technologies

Meridian stated that the AEMO-ARENA process has identified a number of new technologies which would help with reliability, but which require a longer procurement lead time.⁶⁵ The Victorian Government noted its support for demand response products participating in the RERT, stating that in the early stages of product development, longer procurement timeframes may help with building demand response capability.⁶⁶

3.1.3 Commission's analysis and conclusions

The Commission made a final rule in June 2016 which retained the RERT as a part of the NEM on an enduring basis but removed the long-notice RERT (i.e. reduced the procurement lead time from nine months to 10 weeks).

The Commission agrees with AEMO that a number of conditions in the market have changed since then; this is discussed in more detail below. This energy transformation – and the effects that it is having on the operation of the power system – suggests that it would likely be beneficial, consistent with the NEO, to reinstate the long-notice RERT. The Commission has therefore made a final rule to change clause 3.20.3(d) of the NER by omitting “10 weeks” and substituting this with “nine months”.⁶⁷ This will have the effect of increasing the procurement lead-time to the RERT and so effectively reinstating long-notice RERT.

The Commission notes that the RERT has the potential to be distortionary and has been designed in such a way as to minimise these distortions, e.g. pre-empting a response from market participants to an expected reserve shortfall.⁶⁸ The risks of these distortions have not changed since the Commission’s decision in 2016.

61 ERM Power, submission to consultation paper, p.4

62 Origin, submission to consultation paper, p.1

63 Australian Energy Council, submission to consultation paper, p.5

64 Infigen, submission to consultation paper, p.4.

65 Meridian, submission to consultation paper, p.2

66 Victorian Government, submission to consultation paper, p. 2

67 The final rule also includes transitional rules consequential to the reinstatement of the long notice RERT. These transitional rules are described in section 2.3.

68 These are discussed further in section 1.3.1.

However, Australia's energy system is undergoing a transformation - driven by changing consumer choices and rapidly evolving technology. The generation mix is moving from a centralised system supported mostly by synchronous generation to a more decentralised system, with greater volumes of variable renewable generation, customer-connected distributed energy resources as well as demand response and storage capability. Specifically:

- Consumers are better-equipped than ever to manage and control their energy use and contribute to reliability through use of distributed energy resources and demand response. This will continue in the future. For example, AEMO estimates that by 2036-37, nearly 20,000 MW of roof-top solar PV will have been installed, together with more than 5,500 MW of residential and commercial battery storage.⁶⁹
- Variable, weather dependent renewable generation in the NEM, including residential solar PV, has increased substantially since 2001; while there has been a strong trend of thermal (coal-fired) generation exiting.⁷⁰

This transformation also includes changing electricity demand patterns and the impact of weather events, as well as the fact that the supply-demand balance is tighter today than it was in 2016.⁷¹

The confluence of the factors described above has been creating operational challenges for AEMO, such as those documented in its submission to the Commission's *Reliability Frameworks Review*. In addition, until recently, the RERT had never been dispatched.⁷² In December 2017 AEMO procured and activated the RERT, which was the first time the RERT had been dispatched in the NEM. AEMO also procured and activated the RERT in January 2018. Both the long-notice and short-notice RERT were activated in these events.

While the Commission acknowledges that market participants have incentives to respond to the transformation occurring, the changes described above also demonstrate the relevance of the RERT as a safety net feature in the NEM and support the Commission's decision to reinstate the long-notice RERT.

A number of stakeholders have noted in submissions that based on medium-term PASA results available at the time,⁷³ AEMO was identifying a minor breach of the

⁶⁹ AEMO, *Electricity forecasting for the National Electricity Market*, June 2017 - AEMO has not updated this forecast since.

⁷⁰ Northern Power Station in South Australia (520MW closed in May 2016, shortly before the Commission made its decision to remove the long-notice RERT), and Hazelwood Power Station in Victoria (1,600MW) closed in March 2017). Moreover, the Liddell Power Station in New South Wales (2,000MW) is expected to close in 2022.

⁷¹ For example, AEMO issues lack of reserve (LOR) notices when it projects that reserve levels are low (i.e. the demand and supply balance is tight). In 2016/17, there were 22 LOR notices issued. This is the highest number of lack of reserve notices since 2009/10.

⁷² It had previously only been procured in anticipation of potential shortfalls that did not eventuate.

⁷³ In May 2018.

reliability standard in South Australia in 2018/19, with the reliability standard being met in all regions in 2019/20. The Commission notes that the latest medium-term PASA results have now been updated and are showing that the reliability standard is met in all regions over the next two years.⁷⁴ The Commission also understands that AEMO is currently assessing the need to procure reserves for summer 2018-19 and will release 2018-19 procurement projections mid this year.

The Commission notes that while a number of stakeholders⁷⁵ have commented on AEMO's current unserved energy and other reliability forecasts and the lack of a firm identification of a breach of the reliability standard for the 2018/19 summer, whether or not AEMO will trigger the RERT itself is outside of the scope of this rule change. Instead, the scope of the rule change is limited to increasing the procurement lead time. It is worth noting that currently AEMO may only procure the RERT when AEMO projects that unserved energy is expected to be greater than 0.002 per cent, and, where practicable, to maintain power system security. The appropriateness of this existing procurement trigger is being considered through the enhancement to the RERT rule change request.⁷⁶

3.2 Demand response products require a longer lead time

3.2.1 AEMO's views

The current procurement lead time under the RERT framework in the NER is up to 10 weeks ahead of a projected shortfall, i.e. the identification of a breach of the reliability standard. In its rule change request, AEMO stated that the current 10-week period does not provide a sufficient lead time for the procurement of reserve capacity in the most competitive and cost-effective way when it is most required by the market.⁷⁷ It stated that the length of the procurement period places limits on the range of reserves AEMO can access, "acting as a barrier to entry".⁷⁸

AEMO stated that a longer lead time for procurement of reserves would better enable market participants to deliver additional capacity, which could include a broader range of resources including demand response. According to AEMO, this should therefore lead to "enhanced competition and lower costs for consumers".⁷⁹

For example, AEMO stated that diesel generation and demand response options generally require a longer commitment period, as evidenced through its experience with the ARENA-AEMO RERT trial, discussed in appendix B, and the long-notice

⁷⁴ Based on the latest medium-term PASA results published on 19 June 2018.

⁷⁵ Origin, Snowy Hydro, ERM Power, Stanwell (supplementary), Australian Energy Council: submission to consultation paper

⁷⁶ See: <https://www.aemc.gov.au/rule-changes/enhancement-reliability-and-emergency-reserve-trader>

⁷⁷ AEMO, *Electricity rule change proposal - reinstatement of long notice RERT*, 9 March 2018, p.5.

⁷⁸ Ibid. p.5

⁷⁹ Ibid. p.6

RERT procurement process in 2017.⁸⁰ Specifically, AEMO considers that these experiences demonstrated that significant demand response capacity can be procured at a low cost if providers are given sufficient notice and the certainty to negotiate with their customers.⁸¹

AEMO also noted in its rule change request that the risk of indirect costs in terms of market distortions that may arise through reinstatement of the long-notice RERT could be managed in a number of ways, including through limitations on resources transitioning from the energy market to RERT and capping the availability payments that can be offered to reserves.⁸²

In its submission to the consultation paper, AEMO provided additional views on the direct costs the RERT⁸³. It stated that regardless of the procurement timeframe, AEMO "remains of the view that the 'direct costs' of [the] procurement decision are reflective of the market offering and commensurate with the risks for which AEMO is aware of at a point in time and for which [it is] obligated to manage."⁸⁴ AEMO also commented on forecasting uncertainty, noting that this uncertainty goes both ways, i.e. there is potential for forecasting uncertainty to lead to under-procurement or lack of procurement.⁸⁵

3.2.2 Stakeholders' views

Stakeholders had mixed views on the arguments around the benefits of a longer procurement lead time in terms of procurement efficiency, although on balance, there was agreement that a longer lead time would improve the procurement process, particularly in terms of demand response providers. This is discussed next.

EnerNOC noted that it would unlikely be able to participate in the RERT if the procurement lead time is kept at 10 weeks.⁸⁶ The experience of demand response providers is further reflected in Major Energy Users' submission which stated that its members have noted that the long-notice RERT would enable them to participate more readily in providing RERT thereby increasing competition.⁸⁷ The Energy Efficiency Council was also of the view that a 10-week lead time is too short for a competitive tender process and would lead to higher costs.⁸⁸

Similarly, the Victorian Government agreed with AEMO's premise that an increase in the procurement lead time could lead to improved efficiency of the procurement

80 Ibid. p.5

81 Ibid. p.5

82 Ibid. p.6

83 AEMO, submission to consultation paper, p.2.

84 Ibid. p.2

85 Ibid. p.2

86 EnerNOC, submission to consultation paper, p.1

87 Major Energy Users, submission to consultation paper, p.2

88 Energy Efficiency Council, submission to consultation paper, p.2

process and lower costs for consumers.⁸⁹ Meridian agreed but cautioned that potential efficiency gains are contingent on the appropriate operationalisation of the RERT in accordance with the NER and RERT guidelines.⁹⁰

Infigen agreed with AEMO's premise that a longer lead time may provide additional low-cost reserves and greater confidence that the reliability standard will be met, but noted that consumers would continue to bear the risks of over-procurement.⁹¹

The risk of over-procurement, and costs associated with this is echoed in ERM Power's submission, whereby they noted that this risk is greater with the long-notice RERT due to forecasting errors, a point also made by St Vincent de Paul and SACOSS. Other stakeholders have also raised general forecasting concerns in relation to exercising the RERT.⁹²

In addition, ERM Power⁹³ and Origin⁹⁴ noted that AEMO could discuss arrangements with potential providers nine months ahead of a shortfall, even if AEMO is not able to officially procure 10 weeks ahead of the projected shortfall.

3.2.3 Commission's analysis and conclusions

On balance, the Commission concludes that increasing the procurement lead time for the RERT from 10 weeks to nine months will, or is likely to, contribute to the achievement of the National Electricity Objective and so promote the long-term interests of consumers. This change would have a net positive impact on the procurement process and the costs associated with procuring reserves, leading to AEMO being able to access more reserves, and more reserves efficiently, should they be needed.

Benefit: procurement efficiency

The Commission understands that from submissions and informal conversations that providers need a longer time lead in order for them to be able to provide reserves through the RERT. This time is required in order to sign-up customers and install any relevant equipment that may be required e.g. to provide demand response. In the absence of a longer lead time, the Commission considers that the number of reserve providers may be limited.

In the event that the RERT is needed, reinstating the long-notice RERT reduces the barriers to participation for reserve providers to participate in the process, which may thereby encourage participation, promote the efficiency of the procurement process

⁸⁹ Victorian Government, submission to consultation paper, p.1

⁹⁰ Meridian, submission to consultation paper, p.1

⁹¹ Infigen, submission to consultation paper, p.3

⁹² Snowy Hydro, Stanwell (supplementary), Australian Energy Council, Origin, ERM Power: submission to consultation paper.

⁹³ ERM Power, submission to consultation paper, p.2

⁹⁴ Origin, submission to consultation paper, p.3

and put downward pressure on reserve costs. In other words, the final rule promotes AEMO's ability to minimise RERT costs through a more efficient procurement process.⁹⁵

An increase in procurement lead time will give AEMO a wider range of reserve providers which may put downward pressure on the cost of providing reserves if they are needed - this is because demand response providers have advised that they require a longer lead time, as discussed above, and would otherwise be less likely to participate in the medium- and short-notice RERT given the shorter lead time.⁹⁶

Some stakeholders⁹⁷ have correctly noted that the Commission was aware in 2016 that a shorter procurement lead time would lead to a smaller pool of providers.⁹⁸ What has changed, however, is that the Commission is now aware, through the ARENA-AEMO demand response RERT trial, of the potential for more types of reserves (e.g. demand response) to be participating in the RERT - and that these potential reserve providers required a longer lead time, as highlighted by a number of stakeholders in submissions.

In terms of negotiating ahead of signing contracts, AEMO has also stated that the certainty that comes with signing a contract is important - so while it is able to negotiate at any point in time after it identifies a potential shortfall, this would still limit the number of reserve providers because they would not be able to enter into a contract until 10 weeks prior.⁹⁹ The Commission understands that this is particularly true during the early stages of product cycle development of demand response products offering emergency reserves.

Benefit: additional resources

The Commission notes that, in recent years, with technological development and consumers becoming more sophisticated, it has become clearer that there may be capacity, primarily demand response, which sits outside of the market and so could participate in the RERT. This group of demand response providers can be considered

⁹⁵ The Commission notes that this rule change was proposed by AEMO to address the urgent issue of procurement lead-times for the RERT - broader issues around the design of the RERT (including its costs) will be addressed enhanced RERT rule change request, which was initiated on the date this final determination was made. In terms of assessing the potential costs of reinstating the long-notice RERT against the benefits, the Commission had regard to the impact of increasing the lead time against the counterfactual - procuring the RERT under the existing rule, i.e. a procurement lead time of up to ten weeks. The Commission's view is that a longer lead time will promote a more efficient procurement process and therefore promote the minimisation of RERT costs.

⁹⁶ A number of short-notice demand response RERT providers are participating in the RERT through the ARENA-AEMO trial.

⁹⁷ e.g. Australian Energy Council, submission to consultation paper, p.1

⁹⁸ The Commission noted this in its final determination for the Extension of the Reliability and Emergency Reserve Trader at that point in time.

⁹⁹ See AEMO, *Electricity rule change proposal - enhancement to the RERT*, 9 March 2018, p.8.

distinct from in-market demand response, which is often called wholesale demand response, with this distinction illustrated further in the example below.¹⁰⁰

These potential reserve providers were not necessarily available in 2016 when the Commission made the decision to remove the long-notice RERT. In particular, the ARENA-AEMO trial over the 2017/18 summer¹⁰¹ has demonstrated that there are a number of demand response providers that would be willing and able to participate in the RERT. The trial has provided increased understanding of the potential for demand response products to offer reserves into the RERT. These new types of products (e.g. out-of-market or emergency demand response) typically require a longer lead time.

For these demand response providers their value of customer reliability is higher than the market price cap i.e. their marginal benefit of consuming is above the market price cap (\$14,200/MWh) and so they will not actively participate in the wholesale market. However, if their marginal benefit of consuming is less than the cost of load shedding then it is efficient to participate in the RERT.¹⁰²

Box 3.1 provides an illustrative example of the different types of demand response that can be provided given an individual consumer's value of reliability.

Box 3.1 Illustrative example of the different types of demand response

As discussed in our *Reliability Frameworks Review*, there are four different types of demand response, based on the underlying rationale for why it is being used. Of relevance to this discussion is:¹⁰³

- **Wholesale demand response** – Market-driven demand response, i.e. used to change the quantity of electricity bought in the wholesale market in response to wholesale spot prices, or to help market participants manage their positions in the contract market. Wholesale demand response can be "firm" i.e. centrally dispatched; or "non-firm" where participants change their consumption in response to signals.
- **Emergency demand response** – Demand response employed as an emergency lever by the system operator during supply emergencies. This service can be considered "firm" since it needs to be centrally dispatched or controlled in order to be used to avoid involuntary load shedding.

In order to consider the difference between these two types of demand response,

¹⁰⁰ This is being considered through the Commission's *Reliability Frameworks Review*.

¹⁰¹ The trial is in place for three years.

¹⁰² Because the alternative to the RERT is generally involuntary load shedding.

¹⁰³ The other two types are: ancillary service demand response which is employed for providing ancillary services e.g. responding quickly to brief, unexpected imbalances in supply and demand by participating in the frequency control ancillary service (FCAS) markets; and network demand response which is employed to help a network business to provide network services to consumers.

consider two consumers with different values of customer reliability:

- Consumer A is a large industrial energy user with a value of customer reliability of \$20,000/MWh.
- Consumer B is a spot-exposed small business with a value of customer reliability of \$6,000/MWh.

Also recall that the market price cap is \$14,200/MWh; and assume that the value of customer reliability for those customers that would be load shed is \$30,000/MWh i.e. the cost of involuntary load shedding.

Consumer A has no incentive to provide demand response in the wholesale market since its value of reliability (\$20,000/MWh) is higher than the market price cap of \$14,200/MWh. He is willing to pay the associated costs of consuming at the market price cap. But, his value of reliability is less than the cost of involuntary load shedding (\$30,000/MWh).¹⁰⁴ Therefore, in the event that involuntary load shedding would occur without dispatching the RERT, AEMO should enter into a reserve contract with Consumer A so that he could provide emergency demand response through the RERT. This would be more efficient compared to AEMO instructing the local network service provider to shed residential customers, who have a higher value of reliability.

In other words, Consumer A would be happy to switch off to reduce load, provided he was getting compensated accordingly i.e. a payment above his value of reliability. But, AEMO, in procuring the RERT would want to spend less than the cost of involuntary load shedding. So, the efficient price for RERT in this instance, would be anywhere between \$20,000/MWh (the marginal benefit of consumption for Consumer A) and \$30,000/MWh (the cost of involuntary load shedding).

Using Consumer A to provide emergency demand response (at a price of \$25,000/MWh, say) is a better outcome for everyone. The alternative would have been involuntary load shedding at an estimated cost of \$30,000/MWh. Here, consumers have paid \$25,000/MWh for the use of Consumer A providing emergency demand response; but have avoided a cost of \$30,000/MWh. This outcome is also in Consumer A's interest since he has incurred a cost of \$20,000/MWh by not consuming, but has received \$25,000/MWh for providing emergency demand response, more than offsetting this cost.

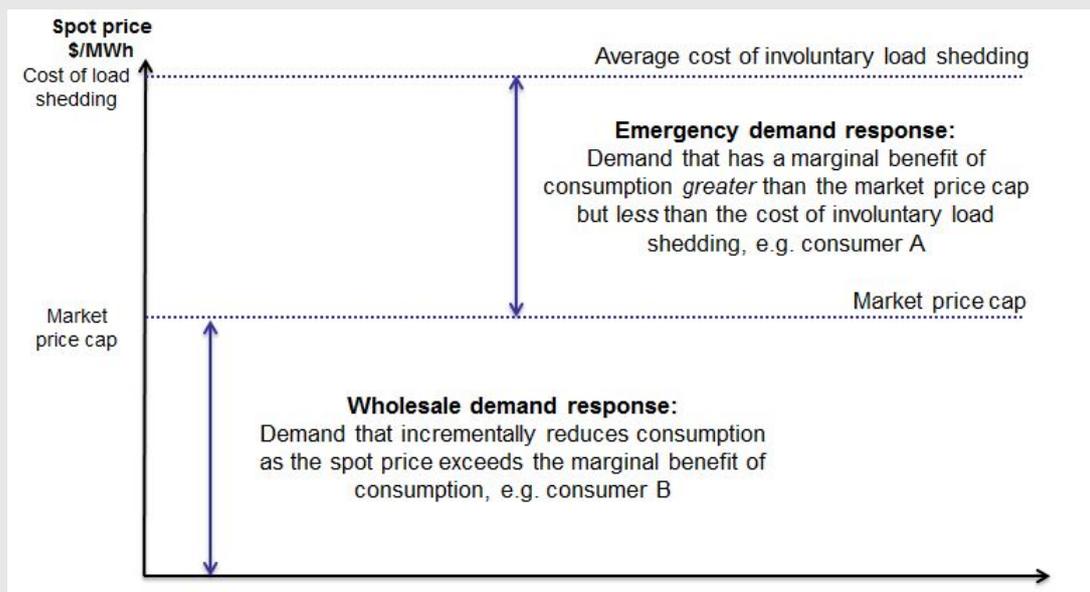
Using demand response providers to participate in the RERT is therefore helpful in driving efficient outcomes for interventions since involuntary load shedding

¹⁰⁴ Consumer A's value of customer reliability takes into its production costs and the opportunity cost of providing demand response - it will only curtail if it has a financial incentive to do so, which is reflected in its value of customer reliability. The Commission is currently considering a rule change request from the COAG Energy Council to make the AER responsible for calculating and updating values of customer reliability. The consultation paper for this rule change has proposed that the AER would be required to publish the first VCRs by no later than 31 December 2019.

does not, in general, take into account each individual's value of customer reliability, i.e. it would not differentiate between someone with a value of \$15,000/MWh and someone with a value of \$30,000/MWh.¹⁰⁵ The RERT allows these customers to reveal values of reliability.

Conversely, consider **Consumer B** who is willing to consume electricity up to \$6,000/MWh. If the spot price rises above \$6,000/MWh in the wholesale market then, Consumer B will turn off her load in order to avoid that price, given that it is above her value of customer reliability. Consumer B is therefore participating in wholesale demand response, as shown in Figure 3.1.¹⁰⁶ It is economically efficient for this consumer to provide demand response within the wholesale market, rather than through the RERT. She would rather reduce her load, compared to paying for electricity at the higher spot price. Those customers that engage in wholesale demand response can reveal their actual value of reliability based on what wholesale spot price is a trigger for them to reduce their consumption.

Figure 3.1 Types of demand response



Consumers such as Consumer A do not have an incentive to reduce demand in response to spot prices because they will only avoid costs equal to, at most, the market price cap, which is less than the value they place on reliability, as illustrated in Figure 3.1. This means that these types of consumers are better suited to participating in the RERT, and that their participation in the RERT should have minimal distortionary effects on the market.

In conclusion, it is efficient for the RERT contracts to be entered into, and the

¹⁰⁵ There is, however, a list of "sensitive loads" when it comes to involuntary load shedding. For example, hospitals are not shed.

¹⁰⁶ Wholesale demand response is being progressed as part of the Commission's *Reliability Frameworks Review*. See <https://www.aemc.gov.au/markets-reviews-advice/reliability-frameworks-review>.

RERT dispatched, if the cost (or "price" of the RERT) is *greater* than the market price cap, but *lower* than the alternative to dispatching the RERT i.e. involuntary load shedding. This is the case for Consumer A, where the cost of the RERT (\$25,000/MWh) is between the market price cap (\$14,200/MWh) and the cost of involuntary load shedding (\$30,000/MWh) – but not the case for Consumer B.

Inefficiencies may arise if consumers with a value of consumer reliability of less than the market price cap perceive that they might profit more from participating in the RERT (or from participating at some times in the market and at other times out of the market).

The payment structure and prices offered within the RERT may therefore have an effect on the incentives that participants have on whether or not to participate in the market or in the RERT. The Commission is considering the delineation between what is in-market and out-of-market including the interaction between wholesale and emergency demand response, as well as RERT payment structures, in the *Enhancement to the RERT* rule change request.

Costs of a longer procurement lead time

As discussed, the Commission's views around the risk of market distortions remain unchanged. What has instead changed is the market transformation that is currently occurring, meaning that the benefits of extending the procurement lead time (discussed above) have increased.

The Commission notes that AEMO has proposed a number of ways it could minimise market distortions.¹⁰⁷

The Commission supports AEMO exploring ways to do so. The Commission also notes that there are provisions in the NER aimed at minimising distortions by limiting the RERT to out-of-market reserves.¹⁰⁸ The effectiveness of these provisions will be examined through the enhanced RERT rule change.

With respect to forecasting uncertainty and the risk of over-procuring or procuring too early which would lead to higher costs to consumers, the Commission notes that it is examining forecast uncertainty through its *Reliability Frameworks Review*.¹⁰⁹ As noted by stakeholders,¹¹⁰ the Commission has found that forecasts have not worsened recently but the impacts of forecast inaccuracy are greater given the tighter

¹⁰⁷ For example, putting restrictions on resources that had operated in the energy market in the preceding 12 months; asking proponents to demonstrate why they could not participate in the energy market; and capping availability payments which would encourage providers to focus on usage costs as their primary revenue stream. See: AEMO, *Reinstatement of long notice RERT*, rule change request, p. 6

¹⁰⁸ Clause 3.20.3(h) of the NER.

¹⁰⁹ See <https://www.aemc.gov.au/markets-reviews-advice/reliability-frameworks-review>

¹¹⁰ e.g. ERM Power, submission to consultation paper, p.2

demand-supply balance. This workstream will be further progressed in the next report for that review. AEMO also has a number of work programs in place to improve forecasting, as detailed in its submission to the review.¹¹¹

¹¹¹ See https://www.aemc.gov.au/sites/default/files/2018-05/AEMO_0.pdf

4 Option for temporary reinstatement

In the consultation paper, the Commission sought stakeholder feedback on a potential expiry clause for the long notice RERT, noting on the one hand that there was uncertainty about future market design changes that could be relevant to reliability while on the other hand, an expiry clause itself may exacerbate regulatory uncertainty.

4.1 AEMO's views

In its rule change request, AEMO states that its modelling shows an increased risk of load shedding in 2018-19 and 2019-20 in Victoria and, potentially, South Australia. It further notes that even when the reliability standard is projected to be met, the probability of *some* unserved energy is increasing; for example, in Victoria in 2018-19, under AEMO's "neutral" demand growth scenario, the probability of not meeting the reliability standard is projected to be about nine per cent, while the risk of some unserved energy is approximately 25 per cent.¹¹²

AEMO is requesting that the changes to extend the procurement lead time from 10 weeks to nine months be reinstated by June 2018 so that it can be used for summer 2018-19, while the Commission considers the enhanced RERT rule change.

AEMO did not request a temporary reinstatement.

In its submission to the consultation paper, AEMO did not support a temporary reinstatement, stating that the benefits of increased competition brought about by a longer procurement lead time would be diminished in the absence of other market design changes (such as the National Energy Guarantee or the enhanced RERT).¹¹³ It noted that it is good regulatory practice to avoid assumptions about other market design changes that have yet to be decided upon.¹¹⁴ It stated that an expiry clause would create uncertainty, including for potential long-notice RERT providers, which would increase the cost of providing reserves.¹¹⁵

4.2 Stakeholders' views

The Victorian Government supported a temporary reinstatement, i.e. reinstating the RERT as a short-term measure until an enduring framework for a "strategic reserve" can be established.¹¹⁶ TransGrid also supported a temporary reinstatement, stating that a sunset clause would provide impetus to reconsider the merit of the long-notice RERT as part of the enhancement to the RERT rule change.¹¹⁷ Infigen was also of the

¹¹² AEMO, *Electricity rule change proposal - reinstatement of long notice RERT*, 9 March 2018, p.7

¹¹³ AEMO, submission to consultation paper, p.3

¹¹⁴ Ibid. p.3

¹¹⁵ Ibid. p.3

¹¹⁶ Victorian Government, submission to consultation paper, p.3

¹¹⁷ TransGrid, submission to consultation paper, p.1

view that a temporary reinstatement is appropriate given the complementary rule changes being considered.¹¹⁸

On the other hand, Meridian stated that not introducing an expiry clause would provide greater market certainty and noted that future changes could still be made through new change requests should they be required.¹¹⁹ Major Energy Users also noted that the reinstatement should not have an expiry clause as there is no certainty that there will not be a need for the long-notice RERT beyond two years.¹²⁰

4.3 Commission's analysis and conclusions

The Commission has weighed up whether or not to increase the procurement lead time on a temporary basis or not. The Commission recognises both perspectives.

On balance, the Commission considers that increasing the procurement lead time on a temporary basis would create uncertainty in the market to an extent that would outweigh the potential benefits.

While there were mixed views on the expiry clause, some stakeholders opposed it because it would create more uncertainty about the operation of the RERT.

AEMO also noted that having an expiry clause would create uncertainty for potential long-notice RERT providers which could lead to higher costs of providing reserves in the event that they are needed. In other words, the benefits of a longer lead time would be reduced.

The Commission notes that, in any case, the RERT will be reviewed holistically in the enhanced RERT rule change process.

The Commission concludes that the introduction of an expiry clause creates unnecessary regulatory uncertainty and reduces market certainty and confidence in the framework. As a result, the Commission has decided to not introduce an expiry clause.

118 Infigen, submission to consultation paper, p.4

119 Meridian, submission to consultation paper, p.3

120 Major Energy Users, submission to consultation paper, p.3

5 Implications for guidelines and procedures

The Reliability Panel develops and publishes the RERT guidelines. Further, AEMO is also required to publish a procedure for the exercise of the RERT under clause 3.20.7(e) of the NER (“RERT procedure”). Given the fact that this rule change has been progressed under an expedited process, and that AEMO has requested that the rule be operational by June 2018, it would not be possible for either the Reliability Panel or AEMO to undertake the consultation process that would generally be required for changes to the relevant guidelines and procedures under the NER.

Therefore, the commission explored a number of potential options from shortening the consultation periods to introducing specific amendments to the documents through the final rule in the consultation paper.

The Reliability Panel’s RERT guidelines options

In the consultation paper, the Commission’s position to modify the RERT guidelines was to have a transitional rule which gives effect to specific amendments to the RERT guidelines, with those amendments taking effect on the date the long-notice RERT is reinstated.¹²¹ It noted that this would mean that the Reliability Panel would not need to determine the nature of changes to the guidelines. To assist with consultation on this option, the Commission provided indicative amendments to the RERT guidelines as an attachment to the consultation paper.

AEMO’s RERT procedure options

In the consultation paper, the Commission presented three options available to update the RERT procedure to reflect the RERT framework under a final rule if a final rule were made:

- Have a transitional rule requiring AEMO to update the procedure before the substantive aspects of the rule commence in accordance with a shortened consultation process (e.g. a consultation period of 2 or 3 weeks). Given that the RERT procedure can only be updated following changes to the RERT guidelines being finalised, the length of the consultation period would depend on the timing of the revised RERT guidelines.
- Have a transitional rule requiring AEMO to update the procedure before the substantive aspects of the final rule commence, but with no accompanying consultation requirement.
- Have a transitional rule reinstating the old (pre-expiry of the long-notice RERT) RERT procedure (without any accompanying consultation requirements).

¹²¹ It should be noted that the Reliability Panel's governance of the RERT guidelines is unchanged - the Reliability Panel will continue to be able to review and amend the guidelines as required.

The Commission's preliminary position to implement changes to AEMO's procedures was to have a transitional rule requiring AEMO to:

- amend and publish the RERT procedures to take into account the final rule and changes to the RERT guidelines by 1 July 2018
- consult on the amendments in accordance with a shortened consultation period of two to three weeks.

5.1 AEMO's views

AEMO did not put forward any views on the RERT guidelines and its procedure in the rule change request.

However, in its submission to the consultation paper, it noted its support for having a transitional rule reinstating the old (pre-expiry of the long-notice RERT) RERT procedure without any accompanying consultation requirements.¹²²

AEMO noted that this option would only require minor administrative changes to the former version 3.1 of the RERT procedure (i.e. the version that was in place prior to the long-notice RERT expiry).¹²³ These administrative changes would remove redundant references to the superseded version of the Reliability Panel's RERT Guidelines; and transitional rules made in response to historical rule changes which are no longer applicable.¹²⁴

5.2 Stakeholders' views

Meridian supported all of the Commission's proposals put forward in the consultation paper, including the proposed changes to the RERT guidelines that were attached to the consultation paper.¹²⁵ Energy Networks Australia supported the transitional rule approach to dealing with the RERT guidelines.¹²⁶

ERM Power, on the other hand, stated that the RERT guidelines and AEMO's RERT procedure should mirror what was in place prior to the removal of the long-notice RERT, which would negate the need for consultation.¹²⁷

By contrast, Infigen stated that it would not support a framework that does not include consultation on AEMO's procedure (with three weeks of consultation as a minimum if comprehensive changes are proposed).¹²⁸

122 AEMO, submission to consultation paper, p.2

123 Ibid. p.2

124 Ibid, p.2

125 Meridian, submission to consultation paper, p.3

126 Energy Networks Australia, submission to consultation paper, p.2

127 ERM Power, submission to consultation paper, p.5

128 Infigen, submission to consultation paper, p.4

A number of stakeholders also suggested additional changes to the RERT guidelines and/or AEMO's RERT procedure. For example, the Victorian Government noted that the AEMC should give careful consideration to the method for determining the most economically efficient amount of reserves.¹²⁹ ERM Power also suggested an additional provision to the RERT guidelines to only allow the procurement of the long-notice RERT contracts to meet 50 per cent POE (probability of exceedance) demand forecasts, which ERM Power states would reduce costs.¹³⁰

5.3 Commission's analysis and conclusions

5.3.1 Reliability Panel's RERT guidelines

There were no objections to the Commission's proposed approach, although ERM Power noted that the Reliability Panel could simply revert to the version that was in place prior to the RERT expiring. The Commission notes that this option was not preferable as the post-expiry RERT guidelines that were in place at the time of the consultation paper publication also had amendments to reflect changes beyond the expiry of the long-notice RERT. As a result, the indicative amendments reinstated the expired clauses in relation to the long-notice RERT into the latest version of the RERT guidelines (that is, the RERT guidelines that were in place after the expiry of the long-notice RERT).

The final rule reflects this approach. The transitional rule includes changes to the RERT guidelines as proposed in the consultation paper. The transitional rule comes into effect on the date of this final determination and the Reliability Panel must publish revised guidelines that reflect the changes specified in the transitional rule by 13 July 2018 when the reinstatement of the long notice RERT takes effect.

The Commission acknowledges stakeholders' suggestions regarding more comprehensive changes to the RERT guidelines. The Commission notes that these relate to elements of the RERT framework which are outside of the scope of this rule change but which may be within the scope of the enhancement to the RERT rule change. Once the enhanced RERT rule change is further progressed the Commission intends to issue the Panel with a terms of reference to comprehensively review these guidelines.

5.3.2 AEMO's RERT procedure

Stakeholders' views on the three options put forward by the Commission were mixed as noted above.

While AEMO stated its support for option three, it also proposed changes to the old (i.e. pre-expiry of the long-notice RERT) procedure to reflect the most up-to-date procedure and information. Indeed, AEMO's procedure must be amended in

¹²⁹ Victorian Government, submission to consultation paper, p.2

¹³⁰ ERM Power, submission to consultation paper, p.5

accordance with the latest version of the RERT guidelines, which means that AEMO's pre-expiry procedure would likely be inconsistent with the RERT guidelines without any changes.

Given that AEMO's procedure would require changes regardless of the option taken, the Commission has made a transitional rule requiring AEMO to amend and publish the RERT procedure to take into account the final rule and changes to the RERT guidelines by 13 July 2018, the date the long notice RERT is reinstated.

Furthermore, the final rule requires AEMO to consult on the amendments for a minimum of two weeks. This is because the Commission considers that it is good governance to consult on changes to procedures, even though the Commission notes that the intent of required amendments to the procedures is to reflect the final rule (i.e. an increase in the procurement lead time) and changes made to the RERT guidelines as part of this final rule, including the reintroduction of the long-notice RERT.

Abbreviations

AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
Guarantee	See NEG
NEL	National Electricity Law
NEG	National Energy Guarantee
NEO	National Electricity Objective
RERT	Reliability and Emergency Reserve Trader

A Summary of other issues raised in submissions

This appendix sets out the issues raised in consultation on this rule change request and the AEMC's response to each issue. If an issue raised in a submission has been discussed in the main body of this document, it has not been included in this table.

Stakeholder	Issue	AEMC response
Procurement trigger, including comments on the reliability standard and assessment of need for reserves		
<p>ERM Power pp. 2-3, p.5</p>	<p>ERM Power had a number of concerns with AEMO's current medium-term PASA forecasts, which it states calls into question whether there is a genuine risk to reliability.</p> <p>In terms of the assessment of the need for reserves, ERM Power was concerned about the impact of the forecasting uncertainty measure (FUM) and its potential to result in higher activation of the RERT.</p> <p>ERM Power would also like changes to AEMO's discretion, in the RERT guidelines to take into account any other relevant information when assessing the need for reserves.</p>	<p>The Commission is examining these issues through the <i>Enhancement to the RERT</i> rule change.</p> <p>The enhanced RERT rule change is assessing broad potential changes to the entire framework including:</p> <ul style="list-style-type: none"> • a further increase in the procurement lead time (which would effectively increase the long-notice RERT lead time to one year and beyond in some circumstances) • an assessment of the existing out-of-market provisions that seek to minimise the distortionary effects of the RERT • how the RERT is triggered and the governance arrangements surrounding the trigger • standardisation of reserve products. <p>The consultation paper was published on the date of this final determination and is available on the Commission's website. The Commission welcomes further engagement with stakeholders on this.</p>

Stakeholder	Issue	AEMC response
Infigen, p. 3	<p>In terms of the methodology for assessing the reliability standard, Infigen noted that while AEMO’s modelling shows that 9 per cent of iterations whereby unserved energy exceeds 0.002 per cent, this is distinct from the definition reliability standard.</p> <p>Infigen noted that this is inconsistent with the Reliability Standard Implementation Guidelines, where AEMO outlines how it will operationalise the reliability standard as the guidelines state that: “if the expected annual USE, averaged across the simulations, exceeds the maximum level specified by the reliability standard, a LRC is identified.”</p>	The Commission is examining these issues through the <i>Enhancement to the RERT</i> rule change. See above for more details.
Australian Energy Council, p. 4	<p>The Australian Energy Council also commented on the interpretation of the reliability standard. It stated that the standard is expressed as a maximum expected 0.002 per cent unserved energy (USE) in any region. This expression recognises and accepts that in some years the target USE may be exceeded. By design, the reliability standard allows for unserved energy to exceed 0.002 per cent during an exceptionally “peaky” simulated year and/or one with multiple simultaneous forced outages.</p> <p>It notes that the statement “the risk of breaching the reliability standard is nine per cent” is incorrect – either the standard is forecast to be met or not met.</p>	The Commission is examining these issues through the <i>Enhancement to the RERT</i> rule change. See above for more details.
Procurement volume		
Victorian Government, p. 2	The Victorian Government suggested that AEMO and the AEMC give careful consideration to the method for determining the most economically efficient amount of reserves to contract.	The Commission is examining these issues through the <i>Enhancement to the RERT</i> rule change. See above for more details.

Stakeholder	Issue	AEMC response
	It recommended a clear framework for setting the capacity target for reserves, informed by an assessment of the reserves requirement over each hour of the peak demand event based on weather and demand forecasts that are as accurate as possible.	
Infigen, p. 4	Infigen noted that it may be helpful if the RERT guidelines or AEMO's RERT procedure provided clearer guidance as to the volume of RERT to procure.	The Commission is examining these issues through the <i>Enhancement to the RERT</i> rule change. See above for more details.
Transparency, governance arrangements and reporting requirements		
Meridian, p.2	Meridian recommended that the AEMC might consider requiring greater certainty around reliability forecasts, clearer reporting of RERT outcomes, and assessments of the accuracy of past forecasts and outcomes.	The Commission is examining these issues through the <i>Enhancement to the RERT</i> rule change. See above for more details.
Victorian Government, p. 2	The Victorian Government noted that it must be consulted on the cost of reserve contracts. The government's ability to act in the interests of Victorian consumers requires accurate information not only on risks and contract costs, but importantly on the level of reliability that should be targeted in order to prevent outages at a reasonable cost.	The Commission is examining these issues through the <i>Enhancement to the RERT</i> rule change. See above for more details.
St Vincent de Paul and SACOSS, p. 1	<p>St Vincent de Paul and SACOSS stated that timely information provided by the operator to market participants about future shortfalls would provide the signals to optimise existing generation resources to ensure they are available and this would shore up and optimise firm capacity availability if there was a shortfall in future.</p> <p>They also noted that consumers who ultimately pay for the RERT need to know details of payments made to participants</p>	The Commission is examining these issues through the <i>Enhancement to the RERT</i> rule change. See above for more details.

Stakeholder	Issue	AEMC response
	for availability and payments made to participants if and when resources were dispatched – transparency is critical for consumer confidence.	
Energy Networks Australia, pp.1-2	Energy Networks Australia considered that there would be benefit in improving the transparency and governance arrangements of the contracting process.	The Commission is examining these issues through the <i>Enhancement to the RERT</i> rule change. See above for more details.
Infigen, p.1	Infigen stated that it is critical that any procurement under RERT is transparent (e.g., publishing indicative costs and updated unserved energy estimates).	The Commission is examining these issues through the <i>Enhancement to the RERT</i> rule change. See above for more details.
Payment structure		
TransGrid, p. 2	TransGrid supported consideration of a cap on the availability payments that can be offered to reserves.	The Commission is examining these issues through the <i>Enhancement to the RERT</i> rule change. See above for more details.
Energy Networks Australia, pp.1-2	Energy Networks Australia considered that there would be benefit in improving the availability of price caps.	The Commission is examining these issues through the <i>Enhancement to the RERT</i> rule change. See above for more details.
Energy Efficiency Council. p.2	Energy Efficiency Council noted that market distortions concerns are best dealt with by ensuring that AEMO's processes are sensible and transparent, in particular ensuring that the size of payments for RERT are appropriate and the balance of payment for availability and dispatch are correct.	The Commission is examining these issues through the <i>Enhancement to the RERT</i> rule change. See above for more details.
Origin, p. 3	Origin recommended a proper evaluation of the need for long notice RERT, especially where ongoing availability payments may be made where reserves were not utilised.	The Commission is examining these issues through the <i>Enhancement to the RERT</i> rule change. See above for more details.
Out-of-market provisions and market distortions		

Stakeholder	Issue	AEMC response
ERM Power, p. 5	ERM Power considered that there is a case to change the RERT rules to allow for on-market demand response to be used for the RERT if it would not otherwise be dispatched. It noted that one such way to achieve this could be to allow retailers and third party aggregators with demand response the opportunity to on-sell their demand response to AEMO as part of the RERT	The Commission is examining these issues through the <i>Enhancement to the RERT</i> rule change. See above for more details.
Infigen, p.3	Infigen noted that depending on the terms offered through AEMO's RERT procurement, there is also risk that some resources (e.g., demand response) may prefer to contract for RERT with AEMO, rather than with a market retailer. Infigen further noted that drawing resources out of the energy market could negatively affect the ability of retailers to manage reliability, leading to a "self-fulfilling prophecy" of the need to activate RERT.	The Commission is examining these issues through the <i>Enhancement to the RERT</i> rule change. See above for more details.
Australian Energy Council, p. 2	The Australia Energy Council expressed concerns that the unprecedented scale of AEMO's contracting of long-notice RERT during 2017 pre-empted market action. It noted that they had not been engaged by AEMO, many of these options would very likely have operated within the market and therefore this reinforces the rationale for the 2016 rule change.	The Commission is examining these issues through the <i>Enhancement to the RERT</i> rule change. See above for more details.
Current out-of-market reserves		
ERM Power, p. 2	ERM Power noted that there are a number of reserves available, including 250 MW of emergency diesel generation and 70 MW reserved Hornsdale battery response available in South Australia which is currently not bid in the Projected Assessment of System Adequacy (PASA) timeframes and therefore not included in AEMO's reliability assessment.	The Commission acknowledges this comment and notes that out-of-market considerations are within the scope of the enhanced RERT rule change. See above for more details.

Stakeholder	Issue	AEMC response
Australian Energy Council, p. 5	The Australian Energy Council stated that ARENA-AEMO demand-side trial has guaranteed that 200MW of new reserves will be available to the Panel for three years. It also noted that the 276MW of emergency peaking generation and 70MW of reserved Hornsdale battery capacity installed as a result of the South Australian Energy Plan have been made available for emergency use in a manner consistent with the provision of reserve via the RERT. It stated that this should be considered as 346MW of reserves effectively available to short-term RERT.	The Commission acknowledges this comment and notes that out-of-market considerations are within the scope of the enhanced RERT rule change. See above for more details.
Stanwell (supplementary submission), p. 5	Stanwell noted that the SA Government's 'peakers' are not offered to the market but were included in AEMO's 2017-18 summer readiness plan. It recommended that the South Australian Government, as owner, could make the generators available to the market using PASA availability.	The Commission acknowledges this comment and notes that out-of-market considerations are within the scope of the enhanced RERT rule change. See above for more details.
Interactions with other projects		
St Vincent de Paul and SACOSS, p. 1	St Vincent de Paul and SACOSS considered that the appropriate place to consider the long-notice RERT is in the enhanced RERT rule change, where it can be considered in the context of its interaction with the Guarantee.	The enhanced RERT rule change is assessing broad proposed changes to the RERT framework, including the procurement lead time. See above for more details.
Infigen, p. 1	Infigen noted that several competing processes are underway – the enhanced RERT rule change and the Guarantee's Procurer of Last Resort.	See section 1.1.
Snowy Hydro, p. 1	Snowy Hydro stated that the mechanics of the Guarantee's Procurer of Last Resort appear to be identical to those of the RERT, except that it is to be triggered only on the reliability standard and that AEMO forecasts will receive independent oversight.	See section 1.1.

Stakeholder	Issue	AEMC response
Australian Energy Council, p. 5	Australian Energy Council stated that if triggered, the Guarantee's Procurer of Last Resort would be available from July 2022 and that there appears to be no need for a long-term RERT before then.	See section 1.1.
ERM Power, p. 5	ERM Power considered that reinstatement of the long-notice RERT may be necessary as part of the Procurer of Last Resort mechanism under the Guarantee.	See section 1.1.
Other issues raised		
TransGrid, p. 2	TransGrid supported consideration of other options such as the development and use of a 'pre-qualification' panel of reserve providers ahead of time, which could avoid the use of costly contracts a long way in advance, while giving potential reserve providers an indication of the likely need for their services.	The Commission notes that the existing RERT Panel which performs this function remains unchanged.
TransGrid, p. 2	TransGrid expressed concern that AEMO's contracting practices under the existing RERT can result in valuable demand response resources being 'quarantined' even if they do not get utilised by AEMO. This reduces the supply and increases the cost of demand management resources available for network management, for example projects such as Powering Sydney's Future. Exclusive contracts lock away resources that could be efficiently used elsewhere without threatening their benefits for reliability.	The Commission is examining contracting process issues through the <i>Enhancement to the RERT</i> rule change.
CS Energy submission	CS Energy made a submission to a number of the Commission's processes.	The Commission notes that it is considering CS Energy's submission through the <i>Reliability Frameworks Review</i> and the <i>Enhancement to the RERT</i> rule change.

B Legal requirements under the NEL

This appendix sets out the relevant legal requirements under the NEL for the AEMC to make this final rule determination.

B.1 Final rule determination

In accordance with s. 102 of the NEL the Commission has made this final rule determination in relation to the rule proposed by AEMO.

The National Electricity Amendment (Reinstatement of long notice Reliability and Emergency Reserve Trader) Rule 2018 No. 7 is published with this final rule determination.

The Commission's reasons for making this final rule determination and the final rule are set out in section 2.3. The key features of the final rule are also described in section 2.3.

B.2 Power to make the rule

The Commission is satisfied that the final rule falls within the subject matter about which the Commission may make rules. The final rule falls within section 34 of the NEL as it relates to the regulation of the operation of the national electricity system for the purposes of safety, security and reliability of the system.¹³¹

B.3 Commission's considerations

In assessing the rule change request, the Commission considered:

- its powers under the NEL to make the rule
- the rule change request
- submissions received during consultation
- the Commission's analysis as to the ways in which the proposed rule will or is likely to, contribute to the NEO.

There is no relevant Ministerial Council on Energy (MCE) statement of policy principles for this rule change request.¹³²

¹³¹ Section 34(1)(a)(ii) of the NEL

¹³² Under s. 33 of the NEL the AEMC must have regard to any relevant MCE statement of policy principles in making a rule. The MCE is referenced in the AEMC's governing legislation and is a legally enduring body comprising the Federal, State and Territory Ministers responsible for Energy. On 1 July 2011 the MCE was amalgamated with the Ministerial Council on Mineral and Petroleum Resources. The amalgamated council is now called the COAG Energy Council.

The Commission may only make a rule that has effect with respect to an adoptive jurisdiction if satisfied that the proposed rule is compatible with the proper performance of AEMO's declared system functions.¹³³ The final rule is compatible with AEMO's declared system functions because the final rule is consistent with those functions.

B.4 Northern Territory requirements

From 1 July 2016, the NER, as amended from time to time, apply in the Northern Territory, subject to derogations set out in Regulations made under the Northern Territory legislation adopting the National Electricity Law (NEL).¹³⁴ Under those Regulations, only certain parts of the NER have been adopted in the NT. As the proposed rule relates to Chapter 3 and transitional rules consequential to those changes to Chapter 3, the Commission has not assessed the proposed rule against additional elements required by the National Electricity (Northern Territory) (National Uniform Legislation) Act 2015.

B.5 Civil penalties

The final rule does not amend any clauses that are currently classified as civil penalty provisions under the NEL or National Electricity (South Australia) Regulations. The Commission does not intend to recommend to the COAG Energy Council that any of the proposed amendments made by the final rule be classified as civil penalty provisions.

B.6 Conduct provisions

The final rule does not amend any clauses that are currently classified as conduct provisions under the NEL or the National Electricity (South Australia) Regulations. The Commission does not propose to recommend to the COAG Energy Council that any of the proposed amendments made by the final rule be classified as conduct provisions.

¹³³ Section 91(8) of the NEL

¹³⁴ National Electricity (Northern Territory) (National Uniform Legislation) (Modifications) Regulations.