



COAG
Energy Council
Senior Committee
of Officials

Mr John Pierce
Chairman
Australian Energy Market Commission
PO Box A2449
SYDNEY SOUTH NSW 1235

**Amendments to National Electricity Rules to extend the Reliability and Emergency
Reserve Trader**


Dear Mr Pierce

The Council of Australian Governments Energy Council has agreed to submit a rule change request to the Australian Energy Market Commission to amend the current expiry date of the Reliability and Emergency Reserve Trader contained in the National Electricity Rules.

The rule change request has been developed based on recognition that the Reliability and Emergency Reserve Trader is due to expire on 30 June 2016. The Council considers that the market still faces a number of challenges that warrant extending the Reliability and Emergency Reserve Trader in order to help manage the risks facing the reliability of electricity supply for consumers. These challenges include the ongoing risk of heatwaves and significant changes to the generation mix. An extension of the Reliability and Emergency Reserve Trader would also provide time to further unlock demand side participation in the market.

Given current market conditions, the Council believes that a further three year extension of the Reliability and Emergency Reserve Trader until 30 June 2019 should provide sufficient additional time to consider and respond to the impacts of a changing generation mix on power system reliability, as well as to complete and implement the range of demand side policies that are being progressed with the potential to help manage these risks.

On behalf of the Council, I submit the attached rule change proposal and associated draft rules for consideration.

Yours sincerely



Dr Steven Kennedy

Chair

COAG Energy Council Senior Committee of Officials

9 December 2015

Extension of the Reliability and Emergency Reserve Trader

Rule change request

December 2015

1. Name and address of rule change proponent

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2. Description of the proposed rule

The proposed rule seeks to extend the operation of the Reliability and Emergency Reserve Trader (RERT) from its current expiry of 30 June 2016 to 30 June 2019.

An extension of the RERT should provide sufficient additional time to consider and respond to the impacts of a changing generation mix on the reliability and security of the power system, as well as to complete and implement the range of demand side policies that are being progressed with the potential to help manage these risks.

Enacting the rule change will require an amendment to Section 3.20.1 of the National Energy Rules (Rules) which specifies the expiry date of the RERT.

The attached draft rule sets out the proposed amendments in the rule change request.

3. Background to the proposed rule

The RERT is a mechanism that allows the Australian Energy Market Operator (AEMO) to contract for reserves up to nine months ahead of a period where there is forecast to be inadequate generation capacity to meet periods of high demand and to dispatch these additional reserves should an actual shortfall occur.

The RERT acts as a safety net and is only ever used in emergencies where ordinary market mechanisms are unlikely to deliver adequate electricity supply to meet the demand of the market. It is able to assist with supply interruptions caused by reliability events through ensuring additional reserves are on hand and available to be dispatched in response to a lack of capacity due to power system equipment reaching operational limits.

In accordance with Section 3.20.1 of the Rules, the RERT has a defined expiry date. Over time, however, the power of AEMO to operate the RERT has been reviewed and the sunset clause extended in response to extenuating circumstances. For example, the current RERT expiry date of 30 June 2016 is a legacy of a rule change submitted by the Reliability Panel to the Australian Energy Market Commission (AEMC) on 1 July 2011. Although the Panel's rule change sought a one year extension of the (then) RERT expiry date of 30 June 2012, the AEMC made a final decision on 15 March 2012 to postpone the RERT's expiry for a period of four years. This decision was made in response to prevailing market uncertainty potentially

delaying new generation investment, and to allow sufficient time to implement a range of policy initiatives under development that were believed would have a material impact on reducing barriers to demand side participation. In particular the AEMC considered that sufficient time should be allow for demand side participation rule changes, and recommendations stemming from reviews, to be implemented and take effect in the market.

4. Nature and scope of the issues the proposed rule will address

In areas of the National Electricity Market (NEM) power system there has been a significant increase in renewable energy generation from technologies such as wind and rooftop solar photovoltaics (PV). This increase in renewable energy generation combined with a decrease in energy demand has resulted in surplus of generation in the market. In response, certain conventional generation is beginning to exit the market as downward pressure on wholesale prices has made operations increasingly uneconomic.

For example, in South Australia, wind resources have proven attractive to wind developers. At the same time, conventional generators, such as Alinta's Northern and Playford coal-fired power stations at Port Augusta, have had closure dates announced. Neither generator will operate beyond March 2017 and may close as soon as March 2016, if circumstances warrant.

Although this surplus generation has contributed to uncertainty in the generation sector, this has been offset to a degree by bipartisan agreement on the Renewable Energy Target (RET), and jurisdictional specific schemes which has boosted the investment case for renewable energy. Accordingly, going forward it is likely that the contribution which renewable energy makes to meeting customer's energy demand in the NEM will continue to rise.

This changing generation mix, as more renewable generation is installed and conventional generators exit, is likely to present challenges for the management of power system reliability.

While AEMO's 2015 Electricity Statement of Opportunities (ESOO) forecasts Low Reserve Conditions (LRC) under a medium demand outlook for South Australia in 2019-20, New South Wales in 2022-23 and Victoria in 2024-25, the withdrawal of conventional generation is increasing the risk of insufficient generation capacity being available during periods of high demand. This is particularly the case during significant heatwave events that can occur during the summer months.

Between 13 January 2014 and 17 January 2014 Victoria and South Australia experienced record temperatures and near-record demands on the power system. The level of demand had not been seen since 2009 where record operational demands were set. Although the NEM power system proved capable of meeting the high demand during this 2014 heatwave event, and AEMO did not require load

shedding, there were periods with low minimum reserve levels where the failure of any single major generator, interconnector, or transmission asset could have potentially resulted in load shedding. Across 15 January to 17 January 2014, AEMO entered into a series of reserve contracts totalling 1,950 MW (although not dispatched) as added protection against the possibility of an electricity shortfall. The low reserve levels were experienced during the heatwave due to a number of generator outages, including Basslink at the time.

AEMO has advised that the changed generation mix will modify the technical response of the power system to disruption and the adequacy of the regulatory arrangements which contribute to system reliability and security needs to be assessed in light of this changed environment. AEMO is currently considering the impacts of this change in generation mix and how best to adapt technical standards and market systems with reduced amounts of traditional generation.

In addition, a number of demand side policies that the AEMC expected would be completed (or near to) and implemented by 2016 have not progressed as quickly as was envisaged.

Such policies can contribute to facilitating and promoting an efficient demand side response in the market. This in turn will assist in managing periods of high demand thereby reducing the risk of load shedding events and lessening the need for a RERT. These policies are discussed below.

a. DRM rule change request

The Demand Response Mechanism (DRM) was a recommendation of the AEMC in the 2012 Power of Choice review. It was intended to facilitate large energy users to act as though they were non-scheduled generators in the wholesale market, and receive reimbursement for reducing energy demand in response to high price events. The Power of Choice also recommended the unbundling of ancillary services from the sale of electricity to allow third parties to register and sell ancillary services using aggregated loads independently of the retailer.

On 30 March 2015, the COAG Energy Council submitted a rule change request to the AEMC for the introduction of a DRM and changes to existing rules to allow for the unbundling of ancillary services. Work on this issue has, however, been delayed with the Rule Change process not well advanced. Once the AEMC initiates the rule change process, the AEMC will publish a consultation paper to facilitate stakeholder consultation on the request. Given the complex nature of the proposed rule change, the AEMC's final determination is unlikely to occur before the RERT expires on 1 July 2016. Depending on the final determination, it is also expected that any changes required to market systems will also take some time to implement.

Should the DRM be implemented, market participants will have an increased ability to respond to periods of high electricity demand through receiving signals that alter their energy use behaviour. This in turn may lessen the possibility of energy supply shortfalls and the associated need for the RERT mechanism.

b. Smart Meters

The COAG Energy Council's current work on smart meters responds to the AEMC's Power of Choice review of demand side participation in the National Electricity Market. Officials were tasked with ensuring governance arrangements are in place for the effective rollout of smart meters and consumer access to demand side services to help them better manage their energy bills.

Officials submitted a rule change request to the AEMC in October 2013 that would allow for expansion in competition in metering and related services to all customers, consistent with a business-led, optional approach to adoption of more advanced metering in states where a widespread rollout is not underway. A draft determination of the Rule Change was released in March 2015 with the AEMC to make a final determination on the metering rule change in November 2015. Based on its current rule change process, the AEMC is considering that the new rules would commence on 1 December 2017.

The AEMC is also developing advice on the implementation of a shared market protocol (SMP). An SMP will define a format of communication that can be used between businesses accessing the services available from smart meters. This is expected to promote competition in the market for advanced metering services. This advice is expected to be available for officials' consideration by November 2015. Should officials decide to act on the advice and to submit a rule change request to the AEMC in 2016.

The rollout of smart meters and associated market protocols is expected to facilitate the introduction of improved cost reflective tariffs and other services to assist consumers in managing their energy use. While this is likely to improve demand-side response from consumers, leading to lower demand during peak times and lessening the risk of a supply shortfall, given the timeframes noted above it will likely be sometime after 2016 before any benefits are realised.

c. Demand Management Incentive Scheme

During December 2013, the AEMC received rule change requests from the Total Environment Centre (TEC) and COAG Energy Council in relation to the

incentives for distribution businesses to pursue efficient demand management and embedded generation connections.

The TEC's rule change request seeks to make it easier for the Australian Energy Regulator (AER) to design and implement a reformed Demand Management and Embedded Generation Connection Incentive Scheme. It is envisaged this will help to incentivise distribution businesses to undertake demand management projects as an alternative to building new network infrastructure.

The COAG Energy Council's rule change request seeks to achieve an appropriate return to distribution businesses to incentivise efficient demand management projects, as well as to improve clarity and certainty around how the scheme will be developed and implemented.

The AEMC released a consolidated final rule determination on 20 August 2015. The final rule amends and strengthens existing Demand Management and Embedded Generation Connection Incentive Scheme arrangements that are set out in Chapter 6 of the National Electricity Rules. It establishes a new two part framework requiring the AER to develop a demand management incentive scheme and a demand management innovation allowance.

When applied by the AER, these measures have the potential to encourage more efficient expenditure decisions by distribution businesses which may reduce costs to consumers over time. Through incentivising the uptake of demand management projects, these measures would also have the effect of helping to lower demand peaks which would help to reduce those occasions of tight energy supply. This in turn would lessen the need for the RERT as a safety net.

The final rule requires that the AER develop and publish the incentive scheme and innovation allowance in accordance with the distribution consultation procedures by 1 December 2016. Any impact the rule may have on assisting with demand management is therefore unlikely to be felt until after the current RERT expiry date occurs.

With the RERT's expiry date fast approaching, considerable change and uncertainty in the market and a number of demand side measures having not progressed as far as expected, the COAG Energy Council's Senior Committee of Officials consider that market conditions have not developed as expected when the AEMC previously decided to extend the RERT in 2012 and removed the requirement for any further review. Therefore, the RERT is still considered an important tool to help provide sufficient reserve capacity into the market to prevent shortfalls and maintain the reliability and security of the electricity system.

Extending the RERT by a further three years till 30 June 2019 should allow sufficient time to better understand and develop appropriate mechanisms to address the challenges associated with a changing generation mix. This would also provide additional time to implement those demand side policies which currently remain works in progress.

Accordingly, the AEMC is requested to strongly consider the merits of extending the operation of the RERT for a further three years.

A draft of the proposed rule change is attached for consideration by the AEMC.

5. How the proposed rule will or is likely to contribute to the achievement of the national energy objective

Under section 7 of the National Electricity Law (NEL), the National Energy Objective (NEO) states:

“The objective of this Law is to promote efficient investment in, and efficient operation and use of, energy services for the long term interests of consumers of electricity with respect to

- (a) price, quality, safety, reliability and security of supply of energy.
- (b) The reliability, safety and security of the national electricity system.

The relevant aspects of the NEO are the promotion of the efficient use of electricity services for the long term interests of consumers with respect to reliability and security of supply.

The rule as made will, or is likely to, contribute to the achievement of the reliable and secure supply of electricity where, in light of a changing generation mix and the delay in implementing demand side response policies, there is a risk that current system standards and mechanisms may not be adequate to respond to power system events such as contingencies and changes in demand.

Maintaining the RERT during this period of change provides a safety net for consumers if availability of generation capacity is not sufficient to meet forecast maximum demand in some NEM regions, consistent with the reliability standard.

6. Australian Energy Market Operator’s declared network functions

This proposed rule has no impact on rules relating to AEMO’s declared network functions.

7. Expected costs, benefit and impacts of the proposed rule

While some issues, such as changes to the generation mix, may be occurring more rapidly in particular jurisdictions, extending the RERT mechanism nationally is appropriate given the interconnectedness of the system and the ability to manage events that impact on the reliability of the system in adjacent jurisdictions.

Maintaining the RERT for an extended period, to provide time to address issues associated with the changing generation mix and finalise the suite of demand side policies, is likely to provide a relatively low-cost option that will benefit consumers in terms of the reliable and secure supply of electricity. The presence of the RERT during this period will therefore provide a useful mechanism to ensure that the risk of load shedding events is minimised and should give a greater degree of confidence to consumers that they are able to access a reliable and secure supply of electricity, consistent with the reliability standard.

Extending the RERT is likely to raise some of the concerns that are associated with its existence, such as its potential to distort the market by allowing participants to contract for reserves above the Market Price Cap or by marginalising demand side participants into a reserve market and away from contracting with retailers.

It is unlikely that the continuation of the RERT will create a material market distortion. Given the very infrequent use of the reserve trader provision, it is very unlikely that participants would avoid the primary market for reserves in preference to potentially contracting with AEMO.

This issue of the RERT and its potential for market distortions was considered by the AEMC as part of the rule change proposal previously submitted by the Reliability Panel in 2011. In its assessment of the matter, the AEMC agreed that while the RERT may create some potential market distortion the impact of these market distortions are minor and are outweighed by the benefits of maintaining the RERT for a period of time.

On balance, any minimal market distortions created by extending the RERT until 30 June 2019 are likely to be outweighed by the benefits of maintaining reliability of supply of electricity to consumers and ensuring that the risk of load shedding events are minimised.

8. Stakeholder consultation

NEM jurisdictional Governments and the Commonwealth Government have been consulted in the development of this Rule change proposal.

Proposed Draft Rules – Extension of the RERT

3.20 Reliability and Emergency Reserve Trader

3.20.1 Expiry of reliability and emergency reserve trader

This rule 3.20 expires on 30 June 2016-2019.