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Mr John Pierce Chairman Australian Energy Market Commission PO Box A2449 Sydney South NSW 1235

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By online submission

Dear Mr Pierce

# ERC0283 Consultation Paper – Victorian Jurisdictional Derogation – RERT Contracting

Thank you for the opportunity to present AEMO' views on the Australian Energy Market Commission's (AEMC) consultation paper.

AEMO supports the Victorian Government's jurisdictional derogation proposal, as an interim measure, to seek amendments to the National Electricity Rules (NER), which will allow AEMO to contract emergency reserves under the Reliability and Emergency Reserve Trader (RERT) on a multi-year basis for up to three years in Victoria.

AEMO's 2019 Electricity Statement of Opportunities (ESOO) forecasts a continued elevated risk of expected unserved energy (USE) over the next 10 years. Compared to last year's ESOO forecast, and based on improved model representation of input uncertainties, AEMO observes greater risks of load shedding due to uncontrollable, but increasingly likely, high impact ('tail-risk') events such as coincident unplanned outages. The forecast reaffirms that targeted actions must be taken now to provide additional dispatchable capacity to reduce the risks of supply interruptions during peak summer periods.

AEMO considers that the proposed rule change meets the National Electricity Objective by providing the following key benefits:

- A stronger signal for more supply in Long Notice RERT (LNRERT) services; and
- The potential to reduce costs associated with the meeting the reliability standard.

The COAG Energy Council has asked the Energy Security Board (ESB) to undertake a review of the reliability standard. Without pre-empting the review findings, a new reliability standard may result in forecast unserved energy for multiple years in the next update of the Electricity Statement of Opportunities.

This rule change, if made, would allow AEMO the flexibility to procure multiple years of LNRERT if this is considered more efficient than procuring individual year-on-year reserve requirements. AEMO appreciates that there are trade-offs with locking in multiple year LNRERT with shorter dated contracting of reserves, which are informed by updated forecasts of the reserve shortfall. However, AEMO is well positioned to make this economic trade-off in a considered and transparent manner, in accordance with the RERT principles and guideline.

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AEMO believes that RERT providers that participate in the LNRERT are unlikely, for various reasons, to participate as a Market Participant in the NEM. Therefore, AEMO considers that having the flexibility to procure LNRERT over multiple years would not result in distortion to the wholesale electricity market.

AEMO's submission in response to the Commission's consultation paper is set out in Attachment 1.

We welcome the opportunity to discuss the matters raised in this submission further. Should you have any questions, please contact Kevin Ly, Group Manager Regulation on kevin.ly@aemo.com.au.

Yours sincerely

Peter Geers

**Chief Strategy and Markets Officer** 



## **ATTACHMENT 1:**

# AEMO SUBMISSION TO THE CONSULTATION PAPER, VICTORIAN JURISDICTIONAL DEROGATION – RERT CONTRACTING

#### 1. Introduction

AEMO welcomes the opportunity to provide a submission on the Commission's consultation paper on Victorian Jurisdictional Derogation – RERT Contracting. The consultation paper is in response to a jurisdictional derogation proposal from the Hon Lily D'Ambrosio MP, Minister for Energy, Environment and Climate Change, and Minister for Solar Homes (Victoria).

The proposal seeks amendments to the National Electricity Rules (NER) which would allow AEMO to contract emergency reserves under the Reliability and Emergency Reserve Trader (RERT) on a multi-year basis for up to three years in Victoria, until June 2025.

AEMO supports the Victorian Government's proposal, as an interim measure, until further assessments of the reliability standard and framework are undertaken to ensure they are 'fit-for-purpose' in a rapidly transitioning energy market.

AEMO considers that the rule change meets the National Electricity Objective by providing the following key benefits:

- A stronger signal for more supply of Long Notice RERT (LNRERT) services; and
- The potential to reduce costs associated with the meeting the reliability standard and is in the long-term interests of consumers.

The rationale for AEMO's support of the derogation proposal is set out below in response to the AEMC's consultation issues.

#### 2. AEMO's response to the consultation issues

### Demand and supply balance in Victoria

AEMO's 2019 Electricity Statement of Opportunities (ESOO) forecasts tightly balanced supply and demand in several National Electricity Market (NEM) regions for summer 2019-20, with all regions other than Victoria expected to meet the current reliability standard of USE not exceeding 0.002%. In Victoria, if extended into the peak summer period, the extended outages of two major power stations, Loy Yang A2 and Mortlake 2, pose a significant risk of insufficient supply that could lead to material involuntary load shedding.

While the ESOO does not identify any immediate USE risks beyond the 2019-20 summer period, the ESOO does forecast a continued elevated risk of expected USE over the next 10 years. Compared to last year's ESOO forecast, and based on improved model representation of input uncertainties, AEMO observes greater risks of load shedding due to uncontrollable, but increasingly likely, high impact ('tail risk') events such as coincident unplanned outages of aging generation assets, higher peak demand due to more extreme weather events, and uncertain output of renewable energy generation plant.

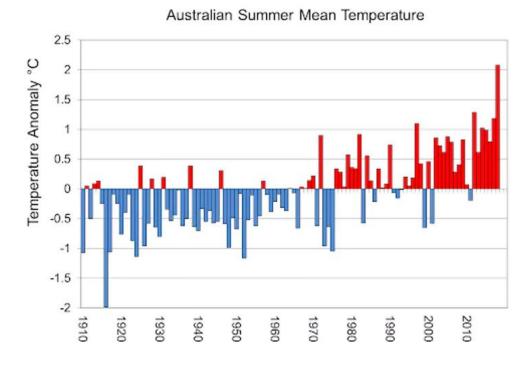
The ESOO's forecast reaffirms that targeted actions must be taken now to provide additional dispatchable capacity to reduce the risks of supply interruptions during peak summer periods.

The extent of this reliability tail risk is demonstrated by the January 2019 Victoria load shedding event, which was driven by high demand and loss of thermal generation supply due to very high temperatures, along with low output from renewable generators.



In one single heat wave that lasted for two days, the amount of electricity supply lost in Victoria (including involuntary load shedding and those avoided by RERT dispatch) was approximately equal to the 2.5 times of the region's annual reliability standard.

The graph below shows that extremes in weather is becoming the new norm. The 2018/19 summer was the hottest on record with January 2019 being the hottest month in Australia to date.



AEMO forecasts only slight improvements in reliability for peak summer periods until new transmission and dispatchable supply and demand resources become available. While AEMO has procured the RERT it needs in preparation for the coming summer period, in view of the ongoing tail-risk in Victoria, AEMO's inability to procure reserves over a three-year duration imposes unnecessary risks and costs on Victorian consumers.

For these reasons, AEMO is supportive of the proposed jurisdictional derogation as it will provide AEMO with greater flexibility to procure RERT on a multi-year basis if necessary.

## Implications of RERT contract periods for Victoria

The Victorian Government considers that required additional reserve resources, such as small-scale generation, could become available in Victoria if multi-year contracts were offered since potential supply side resources need greater certainty to recover their investment costs within the term of the contract. The Victorian Government also considers that multi-year contracting is also likely to facilitate the development of further demand response options.

AEMO agrees with these views, supported by the outcomes of AEMO's recent LNRERT procurement process.



Feedback from RERT providers suggests that multi-year contracts would encourage a more competitive and diverse supply from RERT providers for Victoria, and therefore a greater likelihood of receiving the lowest cost emergency reserve supply for future summers. This is because the potential to contract emergency reserve resource for up to three summers would provide greater investment certainty for LNRERT providers due to increased asset utilisation and reduced revenue risk, resulting in lower costs compared to shorter-term contracts.

This rule change, if made, would allow AEMO the flexibility to procure multiple years of LNRERT if this is considered more efficient than procuring individual year-on-year reserve requirements. AEMO appreciates that there are trade-offs with locking in multiple year LNRERT with shorter dated contracting of reserves, which are informed by updated forecasts of the reserve shortfall. However, AEMO is well positioned to make this trade-off in a considered and transparent manner, in accordance with the RERT principles and guideline.

AEMO believes that resource providers that participate in the LNRERT are unlikely, for various reasons, to participate as a Market Participant in the NEM. Therefore, AEMO considers that having the flexibility to procure LNRERT over multiple years would not result in distortion to the wholesale electricity market.

## Length of derogation

AEMO supports the derogation, as an interim measure, to increase competition and diversity of supply of RERT resources in Victoria for five years to 30 June 2025. While AEMO utilises the RERT as a last resort intervention mechanism as part of the NEM's broader reliability framework, this five-year derogation would provide AEMO with the flexibility it needs to address tail risk in Victoria as required for upcoming summers, while the Retailer Reliability Obligation is embedded, and the reliability standard is reviewed (refer below).

### 3. The reliability standard and framework

AEMO considers that the jurisdictional derogation for RERT contracting in Victoria is needed as an interim measure with the NEM's regulatory institutions assessing whether the reliability standard and framework remains 'fit for purpose' given increased tail risks in a rapidly transitioning NEM.

AEMO is of the view that the current approach does not provide AEMO with enough flexibility as the procurement decision is linked to the reliability standard. The current reliability standard is based on an average 0.002% USE metrics where equal weights are given to scenarios with no load shedding and those with a large amount of USE.

As stated in our submission to the AEMC's Enhancement to the RERT draft determination, AEMO considers that the current average metric is not an appropriate measure, as the average USE metrics conveys no information about the extent of tail risks.

When the market just meets the reliability standard, the amount of load shedding could in fact be multiple times of the 0.002% metrics given plausible combinations of demand and supply circumstances. As these are likely to coincide at times when people need electricity the most (e.g. during summer heat waves) these tail-end events could have significant adverse impacts on consumers. An explicit risk metric is needed to protect consumers if they are risk averse against reliability load shedding.



The AEMC concluded in the final determination that the current reliability standard remains appropriate, and there is no need to incorporate any additional risk metric. AEMO does not share this conclusion and remains of the view that there is a need to amend the reliability standard metric to better cater for tail risks.

The COAG Energy Council has requested the ESB to undertake a review of the reliability standard metric and report back in March 2020 with recommendations on a reliability standard that accurately reflects the NEM's current and future energy needs.

Without pre-empting the outcome of this review, it may result in a new reliability standard which is more conservative than the current application of the standard. This may in turn result in updated reliability forecasts of multiple successive years in Victoria breaching 0.002% USE. The flexibility to procure LNRERT over multiple years should result in reduce costs to consumers.

### 4. Conclusion

As forecast in AEMO's 2019 ESOO, all regions other than Victoria are expected to meet the reliability standard of expected USE not exceeding 0.002%. While AEMO has procured the RERT it needs in preparation for the coming summer period, ongoing tail risks in Victoria, and AEMO's inability to procure reserves over a multi-year duration, may impose unnecessary risks and costs on Victorian consumers.

Beyond 2020, AEMO forecasts only slight improvements in reliability for peak summer periods until new transmission and dispatchable supply and demand response resources become available.

AEMO therefore supports the Victorian Government's proposal, which would allow AEMO to contract emergency reserves under the RERT on a multi-year basis for up to three years in Victoria, until June 2025.

AEMO considers this is an appropriate interim measure, while the Energy Security Board reviews the reliability standard. AEMO remains of the view that there is a need to amend the reliability standard metric to better cater for tail risks.

In the meantime, AEMO will continue to support implementation of the Retailer Reliability Obligation (RRO), and work with the ESB on the post 2025 market design, which includes further consideration of the investment signals and market mechanisms needed to ensure cost-effective and flexible dispatchable and firming capacity for reliable supply under a range of conditions into the future.