



Mr John Pierce  
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Australian Energy Market Commission  
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Ref: MBR038830



Dear Mr Pierce

## **ENHANCEMENT TO THE RELIABILITY AND EMERGENCY RESERVE TRADER – DRAFT RULE DETERMINATION**

Thank you for the opportunity to make a submission to the Australian Energy Market Commission (AEMC)'s Enhancement to the Reliability and Emergency Reserve Trader (RERT) draft rule determination (ERC0237). The Department of Environment, Land, Water and Planning (DELWP) is pleased to provide the following feedback to the AEMC on behalf of the Victorian Government.

The Victorian Government considers that the changing demand and supply characteristics of the National Electricity Market provide impetus to consider market frameworks and governing rules, such as the RERT mechanism, to ensure they adequately identify and address risks and meet community expectations.

The Victorian Government is concerned that the draft rule determination will directly exacerbate the risks of outages to the Victorian community by preventing key resources from participating in RERT in summer 2019-20 and beyond. In particular, we are concerned that the proposed out of market provisions, limited ability to assess tail-risks, and lack of clarity around procurement volume will directly limit available reserves in Victoria and lead to more outages, such as those experienced on 25 January 2019, in the near term while the market adjusts to the transformation that it is undergoing.

### **Victoria has recently dispatched RERT reserves but this was not enough to protect consumers from experiencing electricity outages**

Victoria's lived experience during the summer of 2018-2019 provides useful insights into the risks that the market is facing and into the adequacy of mechanisms such as RERT in addressing those risks. For the first time in nearly a decade, Victorian electricity customers experienced load-shedding due to insufficient generation.

On 25 January 2019 eight Victorian locations experienced their hottest days on record. Despite the heat, demand was not extraordinary (9,750MW): it did not reach the Australian Energy Market Operator (AEMO)'s estimate of a one in-ten-year peak (10,400MW). The load-shedding event was principally related to generation failures, as 1,480 MW of thermal generation capacity was not available on the day.

AEMO activated the emergency reserves it had contracted under RERT, but even after these reserves were exhausted, the deficit persisted.

The experience of 25 January highlights several issues that are driving risks that the AEMC might wish to more strongly reflect in the RERT:

- The likelihood of ageing thermal generation forced outages is increasing, but the rate of increase (and whether the outages are likely to be correlated) is not well understood. This is occurring at the same time as climate change is contributing to more extreme weather, particularly higher maximum temperatures.
- While Victoria agrees in principle that the market itself should provide reserves, in practice, there may be a problem in the current market transition period. Despite relatively high prices, commitments to major new investments in dispatchable capacity are slow in coming, particularly to be in place for the early 2020s. Well over a decade of policy uncertainty has contributed to this situation. This leaves Victoria exposed, and highlights the importance of a cost-effective emergency reserve mechanism, at least for the next five to ten years. (Victoria acknowledges that the Retailer Reliability Obligation will provide a positive contribution, although is not designed to provide protection for one in-ten-year demand or the unpredictable loss of existing thermal plant.)
- During this transition period, while the market is providing insufficient reserves, the RERT mechanism in its current form appears to be unlikely to deliver adequate reserves at reasonable prices. Its short-run nature and the proposed limits on participation will exacerbate this situation. Given emergency reserves appear to be highly likely to be required for the next few years, Victoria suggests that a more practical approach would be to procure these reserves as cost-effectively as possible through a multi-year contract (a standing reserve).
- When procuring reserves in advance, Victoria suggests AEMO should be explicitly given a target *probability* of meeting the reliability standard on average and in one in-ten-year demand years. This would be a clearer and more readily understandable way of connecting quantities of reserves procured to estimated unserved energy outcomes.

Victoria therefore considers that this review is an opportunity for the AEMC to provide clear, specific and sufficient guidance on the RERT framework to AEMO. This will support AEMO to more effectively augment the market and deliver enough reserves to have an acceptable chance of meeting a one in ten-year summer. The AEMC should provide a framework that establishes a minimum level of confidence, in percentage terms, that such a performance expectation on a hot summer day will be met.

### **The proposed out of market provisions will disqualify potential resources from contributing in RERT during summer 2019-20**

Prior to 25 January 2019, and as the forecast of unserved energy became increasingly certain, AEMO unsuccessfully sought to contract more RERT reserves. The draft rule determination proposes to limit an already scarce market by excluding from RERT all capacity that has participated in the market in the preceding 12 months. This is intended to strengthen the distinction between energy market reserves and emergency market reserves. However, there is no evidence or analysis provided to suggest that this will increase in-market reserves. On the contrary, as the market transitions this exclusion may rigidly exclude some providers from participating in the RERT that would otherwise be available to meet an expected supply shortfall. For example, a generator or generating unit may have been mothballed for economic reasons within the 12-month exclusion period but may otherwise be available as RERT capacity during the peak summer period. This scenario is increasingly likely as the NEM transitions and more thermal generators retire in the coming decades.

This is particularly important for Victoria in summer 2019-2020 as this rule will be introduced less than 12 months ahead of the expected need, therefore not giving potential participants enough time to consider their participation in the market.

This proposed exclusion is very concerning for Victoria as it would effectively disqualify some of the most significant potential RERT contributions and could in effect reduce the amount of reserves available for procurement in summer 2019-2020 by more than half (based on the nature of the 2018-2019 RERT resources procured).

We therefore do not support this exclusion which is likely to expose Victorian customers to more unserved energy in the coming years. If a general exclusion is provided, an ability to provide some flexibility in certain circumstances would be desirable.

### **Forecasting should provide the market with more information on tail risk events**

As the final insurance mechanism at AEMO's disposal to manage supply shortfalls, RERT is likely to play an increasingly important role during the market transformation. During this period, there will be increased uncertainty in forecasting risk due to increasingly unreliable thermal generation and more extreme weather events. Market frameworks need to account for this increased uncertainty and work to reduce the consequences. The RERT framework therefore should work in unison with other market reforms to deliver a reliable electricity network in the most efficient way possible in both the short and long term.

There is a need for a transparent and timely assessment of forecast uncertainty so that the spread of risk can be better determined and mitigated. Specifically, we recommend that more information is provided to the market on tail-risks through a supplement to the Electricity Statement of Opportunities (ESOO). This could present unweighted demand forecasts such as at 10POE and provide more insight into AEMO's assessment of risks and how these risks are incorporated into forecasts.

### **To manage higher risk more economically multi-year contracting of reserves should be facilitated**

The existing and proposed RERT frameworks will not allow for procurement to provide adequate protection in a cost-effective way because of the restriction on the duration of contracts and the short-term nature of the process. We consider that, as a practical matter and to get value for money, the RERT mechanism should allow multi-year contracting to create standing reserves. This approach could, for example, build on the three-year demand response trial jointly run by AEMO and the Australian Renewable Energy Agency (ARENA) that is underway. By offering a longer contract period, there is a greater prospect of obtaining a sufficient level of reserves (because some investment could potentially occur, including in unlocking more difficult to obtain demand response). For the next three to five years, this approach would appear to be prudent, given the current demand and supply outlook, and the high degree of uncertainty over ageing plant availability.

More time will also allow better consideration of cost and to having regard to prudent insurance concepts to ensure that the amount paid for emergency resources is commensurate with the risks avoided.

### **More transparency should be provided on the amount of reserves procured and the level of risk mitigation achieved**

In the Energy Adequacy Assessment Projection of November 2018, AEMO predicted a heightened risk of unserved energy in Victoria in 2018-2019, particularly under peak demand conditions. Victoria's summer 2018-2019 weather forecast indicated that Victoria would experience warmer than average conditions, with short intense heatwaves lasting one to two days, low rainfall and heightened risk of bushfire across the state. AEMO predicted reserve shortfalls of between 120 MW under expected conditions and 525 MW under extreme conditions. To fill this gap between supply and demand, AEMO sought to contract additional reserves which could be made available through RERT and reported securing up to 930 MW of reserve capacity.

As events transpired, however, there were not enough reserves to address the shortfall and interruption of supply to consumers was ultimately required to maintain system security. Although it appeared that enough reserves had been procured, specifications around duration and availability of those reserves meant that in effect there were less reserves available for dispatch at the time they were needed.

More transparency is required on the level of cover provided by RERT reserves and on the likelihood and quantum of supply interruptions. There should, therefore, be a clearer and more direct link between the quantum of reserves procured under RERT and the risk of unserved energy. This could be achieved through clearer instruction for AEMO in relation to the volume of RERT reserves to procure to achieve a target reduction in the risk of unserved energy. Additionally, when publishing information on the outcomes of the RERT tender process, AEMO should provide a revised risk of unserved energy that considers the reserves procured under RERT.

I trust this submission is of assistance. If you have any questions about the points raised here please contact me by email [paul.murfitt@delwp.vic.gov.au](mailto:paul.murfitt@delwp.vic.gov.au) or on (03) 9637 8235.

Yours sincerely

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