26 July 2018

Sarah-Jane Derby
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Dear Ms Derby

RE: Enhanced Reliability and Emergency Reserve Trader Rule Change consultation paper

ERM Power Limited (ERM Power) welcomes the opportunity to respond to the Australian Energy Market Commission's (AEMC) enhancement to the Reliability and Emergency Reserve Trader (RERT) consultation paper.

About ERM Power

ERM Power is an Australian energy company operating electricity sales, generation and energy solutions businesses. The Company has grown to become the second largest electricity provider to commercial businesses and industrials in Australia by load[1], with operations in every state and the Australian Capital Territory. A growing range of energy solutions products and services are being delivered, including lighting and energy efficiency software and data analytics, to the Company's existing and new customer base. ERM Power also sells electricity in several markets in the United States. The Company operates 497 megawatts of low emission, gas-fired peaking power stations in Western Australia and Queensland. www.ermpower.com.au

General comments

The decision to enact the RERT is one that can impose significant costs on energy users, with a particularly large impact on commercial and industrial businesses as large users of energy. Over the first 18 years of the NEM, the RERT was contracted for just three times, but not activated (dispatched) resulting in a combined cost to consumers of less than $5 million. This represents a prudent and low cost 'insurance' policy for the grid to manage those infrequent times where extreme demand could materialise. Yet, in summer 2017-18, RERT was dispatched twice at a cost of more than $51 million.[2] Furthermore, the data released by AEMO in its '*Summer 2017-18 Operations Review report*' indicates that the decision to dispatch RERT ultimately proved unnecessary and significant amounts of available generation remained undispatched during the RERT interventions.

As such, ERM Power firmly believes that any changes to the RERT, including the proposed enhanced RERT should focus on minimising costs for consumers. In that respect, there are aspects of the

[1] Based on ERM Power analysis of latest published financial information.
[2] AEMO, 'Summer 2017-18 Operations Review Report' May 2018, p 33

proposed rule change that if implemented appropriately should achieve this. The costly experience of the 2017-18 summer is one that cannot be repeated.

Operationalisation of the reliability standard

In our submissions to the AEMC's Reliability Frameworks Review consultation paper and Reinstatement of the long-notice RERT rule change, ERM Power reiterated that AEMO's forecasts tend to overestimate demand and have done so for some time. This leads to a perception of the greater potential for supply shortages than occurs in reality.

As noted by the AEMC in the Reliability Frameworks Review Directions Paper, AEMO's forecasts have neither worsened nor improved over time. As such, the tendency to overestimate demand by significant values is clear. In June AEMO actually further increased their demand forecasts in the Medium Term Projected Assessment of System Adequacy (MT PASA) for all regions for the period July 2018 to June 2020 by more than 400 MW in some regions which further enhances the risk of unnecessary RERT procurement.

ERM Power considers that if the enhancement to the RERT rule change is accepted, there will be an even greater risk of incurring unnecessary costs which inevitably get passed on to all consumers. ERM Power contends that as part of any RERT process, AEMO should be required to wait until more up-to-date information – on issues such as weather forecasts, demand projections and generator availability – is at hand before committing to procure RERT. This could be achieved through a staged process to RERT procurement rather than simply contracting large volumes through the Long Notice RERT procurement process.

Recent changes to the calculation of required reserve levels based on AEMO's Forecasting Uncertainty Measure (FUM) has the potential to result in increased activation of the RERT in the Short Term Projected Assessment of System Adequacy (ST PASA) and Pre-Dispatch timeframes where an actual reserve shortfall at Dispatch may not exist at additional costs to consumers. This is further compounded when RERT contracts include long activation lead time requirements. AEMO's Summer 2017/18 Operation Review indicates that had the FUM been operational during the summer period, additional activation of RERT contracts would have occurred resulting in further increased costs to consumers[3]. It is worth noting however, that during all these periods based on actual demand outcomes no threat to supply reliability actually occurred, in all instances there were only perceived threats based on AEMO's demand forecasts.

Furthermore, in the long and medium Notice RERT timeframes, the new deterministic MT PASA process whilst using 1,600 historical demand traces has all these demand traces scaled up to meet either the 10 or 50% POE forecasts which both suffer from the aforementioned over forecasting bias. This is further compounded by the weightings applied to the USE outcomes for the 10 and 50 per cent probability of exceedance (POE) forecast where POE outcomes below the 50 per cent POE forecast are effectively ignored. As such, this process is highly conservative in methodology and tends to overstate the potential for unserved energy (USE) which further overstates the need for the long-notice RERT. It is also worth noting that these 10 and 50 per cent POE forecasts are not routinely updated closer to Dispatch to take into account the most recent prevailing weather forecast information particularly in the timeframe which would be more efficiently covered by the Medium Notice RERT.

[3] AEMO, 'Summer 2017-18 Operations Review Report' May 2018, p 34

AEMO argues that the enhancement to the RERT could better enable the market to deliver additional capacity and enhance competition in the provision of RERT services, thereby lowering individual MW costs for consumers. We agree that expanding the potential pool of RERT suppliers and increasing the window for AEMO to seek RERT providers may help to secure lower-cost RERT suppliers. But this may still lock in unnecessary and higher total overall costs particularly in the case of longer term contracts.

According to AEMO's '*Summer 2017-18 Operations Review report*', the availability payments for the RERT in 2017-18 totalled $26.29 million.[4] We would be cautious about any mechanism that would lock in these costs without waiting for more up to date data to determine if they are genuinely needed. We note that as part of the proposed Enhanced RERT design, AEMO proposes a procurement strategy that minimises availability payments but offers higher dispatch payments to compensate.

Such an approach, if it were to actually eventuate, could help to ensure costs are kept low, but it equally could lead to negative impacts for the NEM over the longer term by disincentivising generation or demand response from participating in the market. Given that the NEM is an energy-only market, high wholesale prices act as the incentive for peaking generators to remain available in the market for those few times a year when prices are high and they may be valuable. Yet, if some new entrants or even existing participants believed they may be able to access a source of revenue higher than the market price cap if dispatched, they may be more willing to remain off-market and participate in the RERT even with low or no availability payments in exchange for the higher reward if dispatched.

ERM Power strongly supports retaining the existing reliability standard of USE of 0.002 per cent as the metric to use when assessing the need for RERT. The existing standard is well-understood by industry and represents a prudent measure for assessing the risks of supply shortages.

We also consider that AEMO should only be able to procure Long Notice RERT where USE exceeds the reliability standard and only to the extent necessary to ensure that the reliability standard is met. These requirements will provide industry and AEMO with a transparent metric to indicate whether RERT procurement may be necessary.

Sections 5.2 and 5.3 of the Consultation Paper discuss a number of perceived issues with regards to the Reliability Standard, procurement trigger and procurement volumes for the RERT. ERM Power is concerned that the discussion fails to consider that the RERT is not a 'one shot' procurement process, but in fact allows AEMO to procure RERT under different timeframes as the need for procurement is determined. To allow procurement of large amounts of Long Notice RERT on the basis that USE may occur in some months under extreme demand forecasts would be inefficient; this would particularly be the case where AEMO's forecast indicates the Reliability Standard has been met.

The RERT process allows AEMO to not only contract for Long Notice RERT, but also to contract for both Medium and Short Notice RERT. We note that in the period 5 to 8 June 2018 where extensions to planned network outages and an unusually high number of simultaneous generator forced outages occurred in NSW, AEMO were able to recruit large volumes of Short Notice RERT during the afternoon period on each day to remove the potential for post-contingent involuntary load shedding. ERM Power believes to date too much emphasis has been placed on Long Notice RERT procurement at the expense of focusing on the potential of Medium and Short Notice RERT procurement. We believe this is leading to inefficient outcomes for consumers.

[4] AEMO, 'Summer 2017-18 Operations Review Report' May 2018, p 33

ERM Power opposes the proposal to consider alternative metrics for determining the need for RERT on the basis that it is unnecessary and we believe is not in the interests of consumers. The use the reliability standard at present is a well understood and is an easily operationalised metric which fits in with the short- and medium-term PASA processes and also allows for the staged application of Long, Medium and Short Notice RERT procurement. A shift to other metrics such as Loss of Load Probability would likely lead to more occasions where RERT would be unnecessarily procured or dispatched, resulting in higher costs to consumers. Specifically, ERM Power consider AEMO's current Loss of Load Probability methodology to be an entirely inappropriate metric given it does not appropriately factor in reliability support via interconnector flows and takes conservative approaches to both supply availability and demand.

Improving transparency

ERM Power believes that in order to support confidence in the RERT, more transparency and greater accountability is required. At present, detail on the decision to procure and dispatch RERT occurs too late.

If this rule change is made, it should include requirements on AEMO to report on projected and actual costs as well as providing improved and timelier analysis of the supply-demand balance at the time RERT is dispatched. Given that AEMO is seeking to extend the long-notice RERT period to 12 months before a projected shortfall, ERM Power consider that AEMO must be obligated to provide information about availability costs in advance of relevant period where RERT may be dispatched, as well as projections of activation costs based on realistic dispatch volumes and occurrences. AEMO's proposed standardised contracts would seem to provide AEMO with a greater ability to provide this level of detail in advance.

Similarly the proposed changes to AEMO's forecasting arrangements as part of the National Energy Guarantee should also help to improve AEMO's forecasts and lead to better outcomes for the NEM and energy users.

ERM Power also calls on any rule change to require AEMO to report on its rationale for deciding to commence the RERT procurement process. On 23 July, AEMO announced that it was seeking tenders for Long Notice RERT in Victoria and South Australia and expressions of interest for Short and Medium Notice RERT Panel members in all regions for the 2018-19 summer. This is despite the fact that AEMO's Medium Term Projected Assessment of System Adequacy (MT PASA) forecasts show the reliability standard is not projected to be breached in 2018-19 in any region and no USE is forecast in Queensland and Tasmania. ERM Power believes that AEMO should be required to report on this decision and similar decisions in order to give industry transparent information about the drivers for procuring RERT and potentially incurring substantial costs to energy users.

The AEMC's consultation paper asks whether the National Electricity Rules ('the Rules') should be more prescriptive with regards to procurement volumes as part of the enhancement to the RERT. ERM Power considers that should the National Energy Guarantee be implemented, the definition of any reliability 'gap' should be used as a proxy for RERT volumes required. This will help to ensure that no more RERT is secured than necessary in order to minimise costs for consumers and ensure that the market is given the opportunity to manage the supply-demand balance.

Increasing the availability of demand response for RERT

In our submissions to the AEMC's Reliability Frameworks Review and reinstatement of the long-notice RERT rule change, ERM Power proposed a modification of the existing RERT rules that could enable additional demand response to be quickly and efficiently made available for the RERT if required. We believe that this modification would be very well suited to the enhanced RERT and should be considered as part of this rule change.

At present, demand response may only participate in the RERT if it is not already participating in the market through existing arrangements. The rationale for this requirement is to ensure that RERT contracting is associated with genuinely new supply that would not otherwise be provided through the market in response to high spot prices. However because of the competing aims of AEMO and retailers or third parties in dispatching demand response, there may be more demand response available at very short notice able to assist AEMO in the event of a potential reliability issue under the right conditions.

This is because retailers dispatch demand response in response to projection of wholesale prices, whereas demand response will be dispatched for the RERT in response to a forecast of possible lack of supply. While it should be expected that at times of lower system reserves, where Lack of Reserve notices have been issued by the market operator there would be high wholesale market prices, this has historically not always been the case and was not primarily the case in the 2017-18 summer when AEMO twice dispatched relatively small amounts of demand response for system reliability purposes. At these times wholesale prices generally did not approach the market price cap which would be expected at times of a tight supply-demand balance. As such, there may have been low cost and short notice retailer-led demand response available at these times that were unable to participate as part of the RERT because it is classified as on-market.

Consequently, we consider that there is a strong 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. One such way to achieve this could be to allow retailers and third party aggregators with contracted demand response the opportunity to on-sell their demand response to AEMO as part of the RERT. This may be particularly effective in the Short Notice RERT timeframe. This would provide AEMO with an option to access significant volumes of additional demand response at a time closer to dispatch when the uncertainty of its actual need is reduced and at lower costs than typical RERT contracts. In situations where the retailer or third party is not dispatching, or intending to dispatch the demand response, AEMO could dispatch this for the RERT.

Replacement of the term 'forecast reserve shortfall'

In a number of sections of AEMO's Procedure for Exercise of the RERT, AEMO uses the term 'forecast reserve shortfall' or similar terms. This terminology is not defined terminology under the Rules and ERM Power suggests that the term 'forecast reserve shortfall' be defined under the Rules to provide greater clarity with respect to AEMO's Rules obligations. We offer the following suggestion for defining the term 'forecast reserve shortfall'.

'Forecast Reserve Shortfall' - a *Low reserve* condition or *Lack of reserve* (LOR) condition in accordance with Rule 4.8.4 declared in one or more regions

Also, AEMO is permitted by section 8 of the RERT guidelines to call for reserve offers for reserve in regions, or combined regions where there is a forecast reserve shortfall.

We believe that either the Rules or RERT Guidelines should contain provisions that regions to be combined under section 6 of AEMO's Procedure for the Exercise of the RERT should be adjacent to one another as from an operational perspective it is unclear how AEMO would combine non-adjacent regions with regards to exercising a RERT contract.

Conclusion

ERM Power understands the AEMO's rationale for making the rule change request and there may be potential benefits to making this rule change. Nonetheless, this cannot be done without increasing the transparency and accountability on AEMO to ensure that costs of the RERT are kept to a minimum. Energy users, and commercial and industrial users in particular, cannot be subjected to sudden and unpredictable costs for procuring the RERT. ERM Power has made a number of suggestions for changes that would complement the enhancement of the RERT and help to keep costs down.

Please contact me if you would like to discuss this submission further.

Yours sincerely,

[signed]

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