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Australian Energy Market Commission
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Enhancement to the Reliability and Emergency Reserve Trader Draft rule Determination

Snowy Hydro Limited welcomes the opportunity to comment on matters raised in the Draft rule Determination from the Australian Energy Market Commission (the Commission) on the Enhancement to the Reliability and Emergency Reserve Trader.

Snowy Hydro Limited is a producer, supplier, trader and retailer of energy in the National Electricity Market ('NEM') and a leading provider of risk management financial hedge contracts. We are an integrated energy company with more than 5,500 megawatts (MW) of generating capacity. We are one of Australia's largest renewable generators, the third largest generator by capacity and the fourth largest retailer in the NEM through our award-winning retail energy companies - Red Energy and Lumo Energy.

Executive Summary

There is only one market in the NEM and all regulatory settings should be calibrated to incentivise participation in the market. Longer duration contracts for reserves decrease market confidence in operating in the NEM. This is perverse because the ultimate goal should be to encourage participation in the NEM. If there are barriers to entry for new Participants then these should be addressed. From this perspective, Snowy Hydro strongly opposes the Long Notice RERT. Over time this mechanism should be phased out and only leave the Short Notice and Medium Notice RERTs as the NEM's reserve safety net mechanisms.

Snowy Hydro understands that the NEM has always had some form of regulatory mechanism that has allowed AEMO to contract for emergency reserves. However in recent years the Long Notice RERT has been used more frequently at a significant cost to industry and consumers. Interventionist proposals do not portend well for the future of the NEM as a deregulated, decentralised market as they reflect a misplaced desire to 'fix' perceived market shortcomings.

The materiality of potential market distortions and costs created by an increased lead time for emergency reserves are outweighed by the benefits. Inaccuracy in AEMO demand forecasting will continue to unnecessarily trigger activation of the RERT with longer procurement periods with the direct cost of the RERT being passed on to consumers. The intervention pricing in these RERT events do not fully compensate loss generation revenue and introduce other risks associated with operating in the market.

As a consequence, AEMO's RERT is impacting market participants by stifling confidence and not allowing a return on investment. This is likely to decrease future investment in new or existing plant.

RERT in the Short-Notice (SN) or Medium-Notice (MN) RERT are appropriate tools which allows AEMO to purchase reserves 7 days and 10 weeks respectively from the anticipated shortfall providing the appropriate trade-off for maintaining appropriate levels of unserved energy in the NEM. There is a recognition that there is a trade-off with cost per unit of the SNRERT and MNRERT being more expensive than LNRERT.

Should there be a need for an Enhanced RERT in the form proposed by the Commission to satisfy other objectives our preference is that it should be more transparent and should only be used as a last resort safety net with the energy-only market left to deliver the economic level of bulk supply reliability to customers. Snowy Hydro consider the following from the Draft Determination:

- The RERT should only be used as a last resort safety net and the energy-only market should be left to deliver the economic level of bulk supply reliability to customers.
- The existing reliability standard is still fit for purpose and that the USE metrics remain appropriate. We do not support the use of alternative metrics which could overstate the risk to the system.
- The costs outweigh the benefits in favour of further increasing the procurement lead time to one year from nine months. The Short-Notice RERT or the Medium-Notice RERT which allows AEMO to purchase reserves 10 weeks from the anticipated shortfall provides the appropriate trade-off for the last resort mechanism of maintaining appropriate levels of unserved energy in the NEM.
- If the Enhanced RERT is extended to 1 year, it is important that the Procurer of Last Resort for the Retailer Reliability Guarantee be aligned with the proposed 12-month proposed procurement time.
- AEMO's long term maximum demand forecasting continue to remain the biggest issue for market participants in the triggering of the RERT.
- The out-of-market provisions, preventing providers who have been in the market for 12 months prior to signing an emergency reserve contract from participating in the RERT, and preventing RERT providers from participating in the market for the duration of the contract will promote market responses.
- Increased and enhanced transparency and reporting requirements along with an improved cost recovery processes will improve significant cost issues that arise from the RERT.

It is important to note that intervention in the market should always be a last resort in the market to increase investment confidence and we appreciate the Commission's acknowledgement of that concern.

Snowy Hydro appreciates the opportunity to respond to the Draft rule Determination and any questions about this submission should be addressed to Panos Priftakis, Regulation Manager, by e-mail to panos.priftakis@snowyhydro.com.au.

Yours sincerely,



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Snowy Hydro



Detailed Submission

The reliability standard remains appropriate

Snowy Hydro welcomes the Commission's decision that the existing reliability standard is still fit for purpose and that the USE metrics remain appropriate. We do not support the use of alternative metrics proposed by AEMO which are less appropriate and would overstate the risk to the system and/or do not take into account the size and duration of interruptions.

The Commission correctly acknowledged that the nature of the system is changing and that the current framework is flexible enough in order to adapt to accommodate this. AEMO, who expressed concern, has flexibility and discretion as to how the reliability standard is incorporated in its day-to-day operations, particularly through its modelling and forecasting of the risk to the power system¹.

Snowy Hydro therefore supports the following from the Commission:

- The draft rule preserves this flexibility for AEMO, given that flexibility continues to be important to make sure that the reliability framework remains fit for purpose in the changing environment.
- The reliability framework establishes that AEMO should target zero load shedding in real-time, and gives it a number of tools to manage this, including tools to manage extreme events.
- Caution against confusing reliability and power system security events: these have different causes and are treated differently in the framework; therefore, the solutions or risk mitigation measures are very different.²

The reliability standard remains appropriate with respect to the types of events which require the RERT to be triggered. Grattan recently noted that over the past 10 years more than 97 per cent of outages were due to problems with the local poles and wires rather than system-wide blackouts³. Responding to misperceptions would only add to the cost of electricity without improving reliability.

The events on the 25th of August⁴ across the NEM, which was a non-credible contingency event, is another example where responding to misperceptions could result in significant costs to electricity providers. Non-contingency are considered to be events that are rare which occur through a combination of events occurring at the same time⁵. It is therefore vital that reviews across the NEM whether to review frequency or the RERT need to be properly reviewed and a full consultation taking into consideration the efficient market design is undertaken so that the market correctly values the services that are required through supply and demand.

Snowy Hydro concludes that the RERT should only be used as a last resort safety net and the energy-only market should be left to deliver the economic level of bulk supply reliability to customers. It is also important to note that AEMO also has numerous other intervention mechanisms besides RERT, ie. Directions and Instructions which could be utilised in cases of genuine

¹ AEMC, Enhancement to the Reliability and Emergency Reserve Trader, Draft rule determination, 7 February 2019

² AEMC, Enhancement to the Reliability and Emergency Reserve Trader, Draft rule determination, 7 February 2019, pp 106

³ Grattan Institute, 2019, "Keep calm and carry on, Managing electricity reliability", pp3

⁴ On Saturday 25 August 2018, at 13:11, the NSW-QLD interconnector (QNI) tripped, separating the Queensland region from the rest of the NEM power system. This resulted in the separation of the South Australia region from the rest of the NEM, and under-frequency load shedding (UFLS) in the New South Wales, Victoria, and Tasmania regions. All load was successfully restored by 15:28.

⁵ << <https://www.aemc.gov.au/energy-system/electricity/electricity-system/security> >>

market shortfall which remain in the NEM.

Procurement lead time and contracting duration

Snowy Hydro believe the costs outweigh the benefits in favour of further increasing the procurement lead time to one year from nine months. As noted in Snowy Hydro's response to the Enhanced RERT options paper, we continue to advocate that the Medium-Notice RERT which allows AEMO to purchase reserves 10 weeks from the anticipated shortfall provides the appropriate trade-off for the last resort mechanism of maintaining appropriate levels of unserved energy in the NEM.


AEMO's over forecasting of demand has unnecessarily triggered the activation of the RERT in the past with the direct cost of the RERT being passed on to consumers. It is for that reason that Snowy Hydro does not agree with the Commission's view that the increase, to 12 months, will unlikely *"create significant, distortionary impacts on the market; particularly because other aspects of the draft rule strengthen the out-of-market provisions to minimise distortions"*.⁶ It has been less than 1 year since the Commission increased the procurement lead time to 9 months with no consideration made at the time of increasing the procurement time to 12 months.

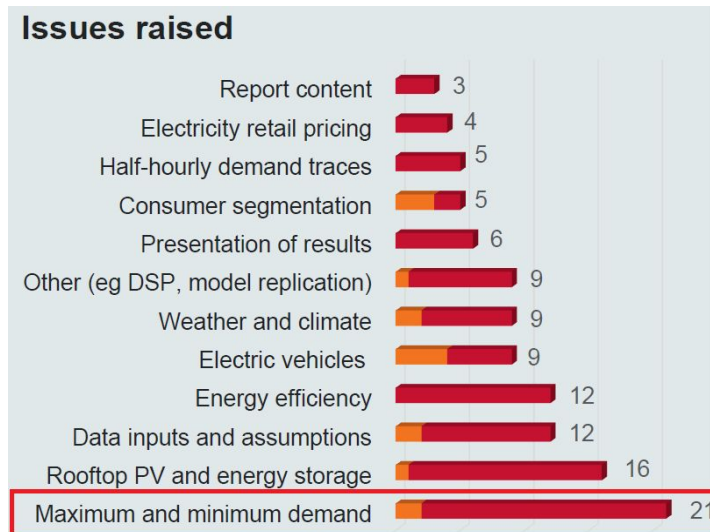
Despite the Commission's endeavour to minimise distortion, AEMO's RERT will continue to impact market participants by not allowing them to earn a return on investment thereby decreasing future investment in new or existing plant. The RERT should not deprive peaking generation from earning a return on investment. The RERT tends to be dispatched during periods of volatility, depriving peaking plant of earning scarcity pricing for making themselves available during these periods. This reduces the number of participants operating in the energy only market. Over time, the quality of the NEM's generation fleet will decline, compromising its ability to respond to future market events. In short, the system becomes less secure.

Snowy Hydro understands that the Commission's decision to increase to 12 months have been undertaken to partly create consistency with the Retailer Reliability Guarantee (RRO). We do however note that there have also continued to be issues regarding accuracy from AEMO's forecasting in recent ESB papers. The ESB's Final Detailed Design suggested changes that AEMO would be required to update reliability forecasts on an annual basis but more frequently if there was a material change to the supply demand outlook, such as an announced retirement or significant changes in demand. As noted by AEMO the biggest issue for market participants continues to remain forecasting for maximum and minimum demand which will continue to play a significant role in the triggering of the RERT⁷.

⁶ AEMC, Enhancement to the Reliability and Emergency Reserve Trader, Draft rule determination, 7 February 2019, pp 106

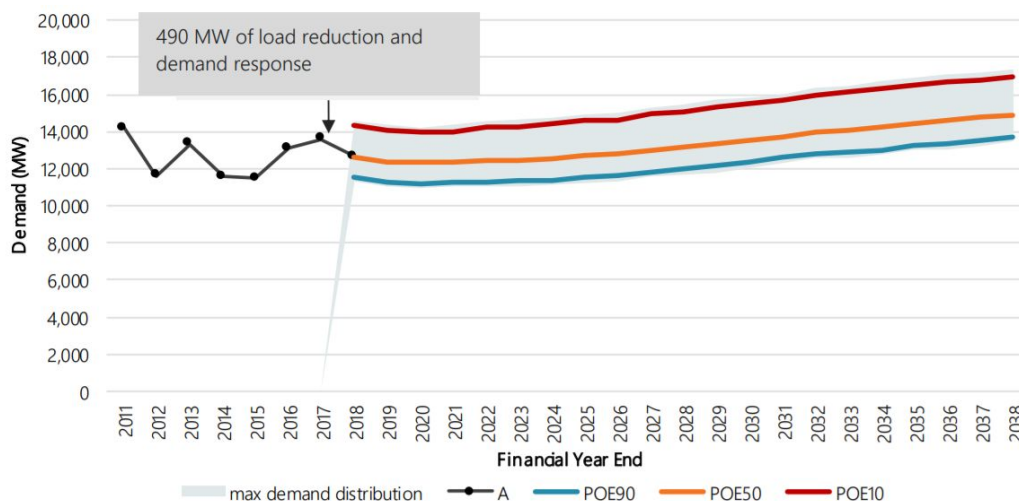
⁷ FRG Workshop Consultation on Demand Forecasting Methodology Information Paper





In New South Wales, demand in AEMO forecasts can vary by 3,300 MW between the lower bound (95% POE) and the upper bound (5% POE), shown in Figure 1 below.⁸ In regards to maximum demand AEMO experiences variances up to roughly 5 per cent of maximum demand which AEMO correctly notes is extremely vital when 5 per cent can be the difference between the reliability standard being exceeded in a region or no Unreserved Energy (USE) being observed at all. This increased variability and uncertainty on the demand side make AEMO's task extremely challenging to forecast demand in the long-term. We understand the challenges AEMO faces with some of the variances being due to unobservable random consumer behaviour, unpredicted weather changes and other unintended consequences which is why Snowy Hydro's preference is for a shorter procurement lead time⁹.

Figure 1 New South Wales, maximum demand distribution forecast vs historical demand¹⁰



⁸ AEMO, 2018, "2018 Electricity Statement of Opportunities - August 2018", << https://www.aemo.com.au/-/media/Files/Electricity/NEM/Planning_and_Forecasting/NEM_ESOO/2018/2018-Electricity-Statement-of-Opportunities.pdf >>

⁹ AEMO, 2018, "2018 Electricity Statement of Opportunities - August 2018", << https://www.aemo.com.au/-/media/Files/Electricity/NEM/Planning_and_Forecasting/NEM_ESOO/2018/2018-Electricity-Statement-of-Opportunities.pdf >>

¹⁰ AEMO, 2018, "2018 Electricity Statement of Opportunities - August 2018", << https://www.aemo.com.au/-/media/Files/Electricity/NEM/Planning_and_Forecasting/NEM_ESOO/2018/2018-Electricity-Statement-of-Opportunities.pdf >>, pg82-84

Snowy Hydro agrees with AEMO that it is difficult to measure the accuracy of probabilistic forecasts, especially where they relate to the 'long tail' of distributions. The measures adopted as part of AEMO's forecasting performance monitoring system are therefore likely to require specially developed techniques.

The Commission notes that increasing the procurement time can potentially place downward pressure on the cost of delivering emergency reserves¹¹. Snowy Hydro however notes that the availability payments paid, which accounted for over 50 per cent of the RERT cost in 2017-18 were still high and would potentially making the provider favour the RERT even if they do not expect to be dispatched. While a longer lead time can increase the pool of potential providers, placing competition tension on the costs of procuring emergency reserves encouraging participants preference to providing out of market reserves therefore reducing the supply in the NEM. Reduced supply in the NEM would increase the long term costs to industry and consumers more significantly than any competitive tension could be provided in the procuring of emergency reserves.

An efficient NEM energy only market will provide long term cost reductions to all consumers which is why we welcome the Commission consideration that three years is too long a time period for RERT procurement as it would likely pre-empt a market response. We don't not want an alternative market incentivising generation out of the NEM which would increase reliability risks and increase the cost to consumers.

Minimising Market Distortions

Snowy Hydro strongly believes that reliability is most efficiently and best achieved through the market and welcomes the Commission's proposal to address concerns from market distortions by:

- strengthening out-of-market provisions
- introduction of a payment guide, and;
- the AER monitoring the impact of the RERT on investment signals¹².

It is important that resources that are not incentivised to participate in the RERT instead of the primary NEM. Distorting incentives to participate in the market will impact the entry and exit of suppliers in the NEM which the Commission has taken significant steps in addressing.

The improvements in the out-market-provisions will improve existing arrangements by clarifying how the out-of-market provisions are to be implemented, providing more transparency while reducing the likelihood of a double standard being applied and improving efficiency by only restricting providers from participating in markets whereby it would be distortionary to do so. Snowy Hydro welcome's the Commission's draft decision to strengthen the existing out-of-market provisions in order to promote a market response by:

- preventing providers who have been in the market for the 12 months prior to signing an emergency reserve contract from participating in the RERT; and;
- preventing RERT providers from participating in the market for the duration of the contract (i.e. from the time the contract is signed to the end of the contract).¹³

¹¹ AEMC, Enhancement to the Reliability and Emergency Reserve Trader, Draft rule determination, 7 February 2019, pp 106

¹² AEMC, Enhancement to the Reliability and Emergency Reserve Trader, Draft rule determination, 7 February 2019, pp 127

¹³ AEMC, Enhancement to the Reliability and Emergency Reserve Trader, Draft rule determination, 7 February 2019, pp 127

These proposals have correctly acknowledged that the RERT is an emergency reserve that should only be used as a last resort mechanism in cases of genuine market failure insuring that it does not undermine the market it is actually trying to protect. Inappropriate use of the RERT imposes significant costs on consumers as it carries both direct and indirect costs in the NEM and by encouraging the reserve providers to move from the RERT into the market, the Commission has correctly highlighted that reliability is delivered at a lower cost to consumers.

Benefits for the long-term interests of consumers

The direct and indirect costs imposed on market participants, and ultimately end consumers, have been high. Using the RERT more frequently has been associated with higher costs. Grattan Institute¹⁴ only recently noted that the 2017-18 summer costs were fairly modest in aggregate, at about \$6 per household per unit, however of expected consumption not supplied it cost about \$57,000 per megawatt-hour. This as noted by the Grattan paper is more than 60 per cent higher than AEMO's estimate of the value of customer reliability, and four times the market price cap in that year. Snowy Hydro therefore commends the Commission's consideration to address affordability concerns as a key issue for all consumers. Increased and enhanced transparency and reporting requirements and improved cost recovery processes will improve significant cost issues that have risen from the RERT.

It is important that retailers are able to manage the risk associated with RERT costs. Snowy Hydro therefore understands the Commission's note that retailers should be free to pass on the costs associated with emergency reserves in any manner consistent with their contracts with end consumers. The competitive market retailers will be incentivised to manage the risks and costs associated with emergency reserves.

It is important that the cost recovery approach by the ESB's Procurer of Last Resort remains consistent with the Commission's proposed approach. The ESB is currently proposing market participants rebate POLR funds to the market which would increase the complexity for market participants and lead to unintended consequences. Snowy supports the Commission's clear cost recovery processes.

Costs over time can only be reduced by allowing the market to work as intended and only using the RERT in market failures along with greater clarity in the likely costs to be recovered from market participants will further mitigate issues. In recent years the absence of transparency and clarity over the likely costs to be recovered from market participants has made it more difficult for market participants to manage the risk of RERT related costs in the past.

Greater transparency, as noted by the Commission¹⁵, will improve the ability of retailers, consumer groups, governments and policy makers to explain the costs and benefits of emergency reserves to consumers and the industry more broadly, allows efficient investment and operational decisions in response and improves general market confidence in the RERT process because the market would have greater understanding of the reasons and conditions that required the procurement of the RERT. Snowy Hydro therefore supports the Commission's proposal to enhance information by providing quarterly RERT reporting with forward and backward looking elements, reporting shortly after RERT dispatch and methodology reporting. The changes will increase the frequency of information and provide timely information for market participants to prepare for costs associated with the RERT.

¹⁴ Grattan Institute, 2019, "*Keep calm and carry on Managing electricity reliability*"

¹⁵ AEMC, Enhancement to the Reliability and Emergency Reserve Trader, Draft rule determination, 7 February 2019, pp 169

Interaction with the Retailer Reliability Obligation

The Commission should continue to work closely with the Energy Security Board (ESB), the Australian Energy Regulator (AER), AEMO and stakeholders to identify issues and targeted, least cost solutions for any upcoming challenges. Snowy Hydro welcomes the Commission's note that the Retailer Reliability Obligation (RRO) will require companies to hold contracts or invest directly in dispatchable energy to meet peak demand reducing the reliance on the RERT to be materially reduced.

It is important that the Procurer of Last Resort should be aligned with the proposed 12-month proposed Enhanced RERT should it proceed. There is no justification to duplicate multiple mechanisms targeted at the same market issues. The Enhanced RERT should be rebadged to be the Procurer of Last Resort and triggered at T-1. The trigger period should not increase following this Enhanced RERT consultation as it would cause further uncertainty in the NEM. The market should allow the Procurer of Last Resort (ie. Enhanced RERT) to work as intended without the need for further urgent rule changes.

