

SUBMISSION

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INTRODUCTION

The Energy Users Association of Australia (EUAA) is the peak body representing Australian commercial and industrial energy users. Our membership covers a broad cross section of the Australian economy including significant retail, manufacturing and materials processing industries. Combined our members employ over 1 million Australians, pay billions in energy bills every year and are desperate to see all parts of the energy supply chain making their contribution to the National Electricity Objective.

Our members are highly exposed to movements in both gas and electricity prices and have been under increasing economic stress due to rapidly escalating energy costs. These increased costs are either absorbed by the business, making it more difficult to maintain existing levels of employment and reasonable returns to shareholders or passed through to consumers in the form of increases in the prices paid for many everyday items further adding to the cost of living pressure for the average consumer.

Our members are very concerned about both the costs of the Reliability and Emergency Reserve Trader (RERT) and the lack of transparency around how these costs are incurred and then recovered. AEMO is seeking a major change in the current arrangements to de-link the RERT procurement trigger and volume from the widely supported reliability standard. Complex analysis has been presented regarding this by AEMO with only a few weeks to assess. Governance arrangements around AEMO's preferred option are yet to be decided.

We believe the onus of proof for such a significant change rest with AEMO. Whilst AEMO have presented some detailed analysis regarding this proposed change, this has only become available in the last three weeks. We note it is built on a familiar premise – identify an area of purported market failure and propose some form of central planner intervention on the assumption that the outcome for intervention will always be better than the market outcome.

We also note that approval of AEMO's proposal may have significant implications for the wider operation of the NEM. For example, the level of the reliability settings and the relevance of an energy only market in a transition to increasing renewables. We consider that a RERT review is not the appropriate place to prosecute these matters.

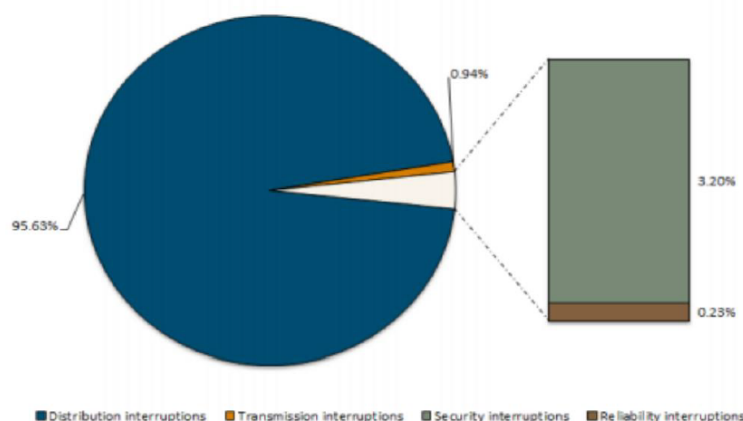
In the limited time we have had to evaluate the proposal we have concluded that the proposed change to Option 2 could have significant impact on our members' electricity costs for an improvement in reliability that is uncertain and that our members may not value. Given this level of uncertainty and the short period of consultation time available, we are unable to support AEMO's proposed option.

We strongly support Option 1 - formalising continuation of the current RERT procurement trigger and volume based on the reliability standard. With further information around how the change in the level of prescription in the current approach would work in practice - we are prepared to consider Option 3.

Some context and principles guiding our approach

- (i) The issue under consideration is seeking to address a very minor part of the total reliability experience of consumers

This was discussed at the AEMC Forum on 12th November. Consumer reliability is overwhelmingly driven by interruptions at the distribution level. Historically only about 0.23% of total supply interruptions (in terms of GWh) were the result of inadequacy of supply (reliability events). Around 95% of interruptions were due to the distribution network.



AEMO does acknowledge this but argues that the small contribution of “reliability interruptions” will potentially increase given changes in supply demand balance, higher temperatures driving increases in temperature sensitive demand and variability in renewable generation output. However, while this may be the case we are yet to be convinced by the arguments advanced regarding the materiality of them, how likely they are to occur and the timeframe in which they may occur.

We believe the approach taken by AEMO seems to overestimate the achievable accuracy in modelling rare events and the ability to deploy this model to efficiently allocate resources. Tail events (less than 1 in 100) are statistically difficult to model observationally as it is generally not possible to observe a system for long enough to derive a highly confident probabilistic description of the system (i.e. shape of the tail) and in this case the system itself is non-static (market transition).

Alternative simulation-based approaches have merit but are ultimately limited by the quality of forecasts, assumptions and the computational resources deployed (typically limited simulation runs). The key demand forecasts by AEMO underpinning these simulations have been demonstrated repeatedly to have a bias toward overestimating demand (particularly in Victoria).

As the Commission seeks to make a decision that furthers the NEO in this review, we believe that it should consider:

- What are the costs imposed on consumers associated with implementation of any proposed change in RERT?
- whether these costs are best spent in preserving or improving reliability via the RERT or whether the same level of costs is more efficiently spent on achieving the same reliability outcome in other parts of the electricity supply chain
- whether consumers are prepared to pay for these improvements, irrespective of where they are spent along the electricity supply chain.

(ii) Consumers are much more concerned about reducing costs of existing level of reliability than paying for an increased level of reliability

The clear message from our members is that affordability is more important than reliability. This is not to say that reliability is not important – simply to say that current levels of reliability are generally acceptable and that consumers are looking at efficiency gains along the electricity supply chain to bring that same level of reliability at a lower cost. If there are increased costs associated with maintaining the existing level of reliability in the future, then our members need to see a thorough justification for that increased cost.

(iii) The recent review of the reliability standard provided a robust review of consumers views on the value of reliability

The Reliability Panel only completed its most recent regular review of the standard and associated market settings in April 2018. As in past reviews, this was the outcome of a comprehensive review process seeking stakeholder views and extensive market modelling. While the EUAA expressed some reservations around the final choice of reliability settings, we strongly supported the 0.002% standard and the context that underpins that standard i.e. a majority of EUAA members are prepared to accept a trade-off between reliability and cost.

Based on the views expressed by advocates for other consumer groups during the Panel’s review process, this view is widely shared across all consumer groups which all supported no change to the 0.002% standard. Other stakeholders also expressed support¹. AEMO made no submission opposing the standard and we presume, given they are a member of the Panel, they agreed with the final position. The E&Y modelling that underpinned the Reliability Panel’s conclusion²:

“...forecasts the system will provide a level of reliability significantly better than then 0.002 per cent reliability standard in all national electricity market regions, for the review period.”

The Reliability Panel when it was specifically asked to express a view in the context of this rule change request concluded in September³:

“The Panel notes that nothing has changed in relation to these factors since the Panel made its final determination, and so there is no new evidence for the Panel to consider in order to change its earlier views that the current reliability standard is still appropriate.”

So, while the reliability standard is in scope for this current review, given the recent comprehensive Panel review, we do not support the AEMC considering a change in the context of a RERT review.

AEMO are arguing not only that the reliability standard is not the best operationalisation measure for RERT. But more fundamentally⁴:

“...the existing reliability framework will not deliver an efficient reliability outcome in the NEM.”

We have a number of comments on this.

Firstly, the reliability standard is an integral part of a much wider governance structure around the operation of the NEM. As such, a review of the standard within the relatively narrow confines of a RERT review has a major risk to

¹ Apart from the EUAA, PIAC also supported the current standard.

² AEMC Reliability Panel p. 2 <https://www.aemc.gov.au/sites/default/files/2018-10/Letter%20of%20Advice%20from%20the%20Reliability%20Panel.pdf>

³ Ibid pp3-4

⁴ AEMO Submission 29 November 2018 p.4 <https://www.aemc.gov.au/sites/default/files/2018-11/AEMO.pdf>

consumers of coming to an outcome that does not consider the wider context in which the Reliability Panel reviews are undertaken.

The NEM reliability framework is a coherent whole and cannot be reviewed piecemeal. Changing the reliability standard in isolation from the reliability settings e.g. market price cap, risks serious unintended consequences that are potentially very costly to consumers.

Secondly, AEMO's approach seems to bring into question the energy only market design of the NEM. If AEMO considers that the energy only market construct is not the best approach to delivering the NEO then they should seek a major review of the NEM structure and argue their case. Such a fundamental matter should not be shadow argued in the context of a RERT review.

Finally, we would comment on the AEMO claim that⁵:

“The current form of the NEM reliability standard and the 0.002% threshold were set in 1998 and have remained virtually unchanged”

Which then added a footnote around ‘unchanged’:

“The only exception was the expected USE has changed from ‘over ten years’ to ‘a given financial year’.

Having been a member of the Reliability Panel at the time of this change, our recollection is that this change was considered a notable tightening of the standard.

(iv) Our recent submissions on our member's RERT experience

The EUAA has made two previous submissions on the current RERT review. These submissions highlighted the concerns many of our members had when they unexpectedly received large bills for 2017/18 RERT costs⁶. We expressed concern about the lack of transparency around how the costs were incurred and then allocated. Transparency is essential for consumers to have confidence that the NEM is actually operating to achieve the NEO. They do not have that now regarding the RERT procurement and dispatch process.

The recent TWG discussed these matters and we look forward to further discussions with the AEMC on issues around transparency and reporting requirements, cost recovery and payment structure.

(v) AEMO has presented a complex analysis supporting their proposed change but there are gaps in the analysis and there has been insufficient time to consider it

AEMO's proposed change is very complex. The AEMO paper supporting its approach⁷ was only available on 8th November, just three weeks prior to the close of submissions. We expect that this report is something that AEMO has been working on for some time with considerably more resources than is available to consumer advocates. It unrealistic to expect that we can come to a landing on such a complex change in such a short period.

We accept the proposition that there may be increased tail risk. We accept that modelling will show based on somewhat opaque input assumptions that there are potentially very low probability/high consequence events.

⁵ AEMO “The NEM Reliability Framework” November 2018 p. 10 <https://www.aemc.gov.au/sites/default/files/2018-11/Additional%20information%20from%20AEMO%20to%20support%20its%20Enhanced%20RERT%20rule%20change%20proposal.pdf>

⁶ This is also commented on in Stanwell's submission <https://www.aemc.gov.au/sites/default/files/2018-11/Stanwell.PDF>

⁷ AEMO “The NEM Reliability Framework”

This does not mean that the NEM should be designed to take out an expensive insurance policy to address these risks. Our members make these judgements all the time in their business operations. Options they take include self-supply, back-up generation for essential demand, business interruption insurance and, consciously, “do nothing”. AEMO incorrectly seems to make the assumption these private decisions are sub-optimal and that consumers are not prepared to bear the costs of that very low probability tail risk.

AEMO travels a familiar pathway in its justification for intervention in the market – suggest there is a purported market failure in consumers’ risk decisions which is reason alone for central planner intervention based on the assumption that this intervention is going to produce if not an “optimal” (depending on the intervenors definition of “optimal”) then a “better” outcome. The issue of non-market failure is completely ignored.

So, in this case, the reliability standard does not properly address risk e.g. it⁸:

“...ignores risk aversion which is a common human behaviour, as evidenced by the prevalence of insurance products in daily life.’

and hence market intervention is required because AEMO in a central planner role can better judge the level of risk aversion than the market. While AEMO⁹:

“... acknowledge that setting an acceptable level of risk will inevitably involve a degree of subjectivity, it should not be assumed that any risk outcome delivered by a decentralised market is efficient.”

So effectively AEMO is arguing that their subjective view of risk should prevail. We do not think they have made the case for consumers to allow them to make this judgement.

Insurance i.e. arrangements that pay out on a loss, is not purely driven by ‘risk aversion’ (although it plays a role) but rather by efficient use of capital seeking different risk profiles. However, if we extend AEMO’s insurance argument then it is important to acknowledge characteristics of the insurance industry which include placing value on risk reduction measures (e.g. common standards driven by the insurance industry) and the efficient use of capital. In the private market attempts to “over insure” a risk, bring a very swift and hard push back from the industry when they see inefficient capital allocation. AEMO as a central planner able to smear costs across all consumers does not see these signals on efficient use of resources.

There is extensive literature across many subject areas where the evidence shows that the risk outcome delivered by a centralised agent can be just as, or more, inefficient than the market outcome.

AEMO recommends that AEMC seek expert risk management advice¹⁰ but needs to recognise that “expert” does not mean “right” given model limitations. We would suggest that if AEMC do so then the scope of work for those experts include the risks around a central planner intervention getting it wrong and imposing too high costs on consumers.

Consumers are currently (and will for decades in the future) pay network charges that reflect network planning standards based on AEMO demand forecasts that never eventuated but were implemented based on an AEMO central planner judgement on the level of risk.

⁸ AEMO Submission p.5

⁹ ibid

¹⁰ AEMO Submission p.6

(vi) What is the role of VCR in AEMO's analysis?

The approach that AEMO takes to the role of VCR is unclear. Is it too low and a higher value would fit the narrative for Option 2? Or is it too difficult to measure for long tail events?

AEMO's Submission claims that¹¹:

“...the average VCR used in the current standard underestimates the true cost of load shedding...”

and seeks to justify that by arguing that consumers do not appropriately consider risk – or at least individual decisions added together will not be the best decision collectively.

In the additional information provided in early November to AEMC it says¹²:

“Whilst determining the cost of load shedding can be a useful input in determining the tolerance for load-shedding, survey-based results should be used with caution when considering tail events, as people tend to anchor their views on recent experience. As USE is a very rare occurrence, respondents would likely find these events difficult to contemplate and hence may underestimate their impact.

Another way of approaching this is to seek input on the tolerance for load shedding in terms of the maximum acceptable duration and scale of an event. For example, the tolerance for being without air conditioning during a heatwave may be acceptable for a few hours but not beyond 6-8 hours. Similarly, a local event may be tolerated more than an event which blacks out the whole state.

Therefore, AEMO recommends that the AER's work on reviewing VCR also considers seeking consumer, business and government views on the maximum duration or scale of an event they would be willing to accept.

The AER is beginning a process to update the VCR but AEMO considers that additional stakeholder views should be sought on non-cost inputs such as the maximum acceptable limits for how long people can be without power during extreme heat.”

We have concerns around the VCR review asking about maximum duration. This is because it is very difficult to get usable data on maximum length of event and then doubly difficult to then translate that to a meaningful willingness to pay value. A more appropriate approach might be to get information on the most likely outcome for a NEM reliability event e.g. a short duration (30 to 60 minutes) rolling outages impacting a small subsection of consumer demand at any given time rather than lengthy delays associated with the more common failures in the distribution network where faults must be located and repaired before consumer load can be restored.

In its submission AEMO describes how the RERT assessment framework would work saying it would utilise a range of inputs including¹³:

“Cost of USE: The cost of USE would be informed by VCR based on the relevant characteristics such as time, duration, magnitude and (if possible) customer segment. The AER has recently initiated its VCR study and it is expected that VCR values reflecting these characteristics will be available in late 2019.”

It is not clear what “inform” means here.

¹¹ AEMO Submission 29 November 2018 p.3

¹² AEMO “The NEM Reliability Framework” p. 25

¹³ AEMO Submission p.9

(vii) Caution is required to ensure interpretation of the political context

The politics around increased renewables, has unfortunately, clouded the issue of VCR. The political expectation, given increasing renewables penetration, appears to be that consumers will not tolerate any blackouts. Yet the reliability setting process very clearly indicates that consumers are willing to put up with a certain amount of load shedding.

AEMO seems to be responding to political pressure to ensure there are no blackouts – or at least that the risk is considerably lower than is currently the case. We are concerned that their approach is driven more by “political VCR” than actual “consumer VCR”. We see pressure to undertake ISP projects and an approach that seems to sideline the rigors of RiT-T. As the AEMC notes¹⁴:

“AEMO does not have financial incentives to make trade-offs to determine the appropriate level of reserves to procure, and indeed may have reputational incentives as system operator to procure more reserves than may be necessary, with the costs borne by consumers.”

AEMO’s application for the rule change noted¹⁵:

“Jurisdictions have demonstrated an unwillingness to tolerate load shedding in their regions, even at levels that do not breach the reliability standard. This has resulted in the South Australia government investing in new battery storage peaking generation³ and New South Wales funding the procurement of reserves through the ARENA/AEMO tender process.

Political VCR is inconsistent with the strong view that affordability is more important. If politicians wish to have higher reliability standards than consumers are prepared to pay for that is fine by our members. We just recommend that the additional costs be met from sources other than directly increasing consumers’ electricity bills. This was the case in both the examples cited by AEMO.

Responses to Options discussion

(i) We strongly prefer Option 1

Given our comments above the EUAA strongly supports Option 1, for long or medium notice RERT procurement decisions – this option formalises continuation of the explicit linking of RERT procurement to the reliability standard. We believe that this approach:

- Provide a very clear process to the market around the volume of RERT to be sought
- Has the required transparency
- Would allow AEMO to procure short notice RERT where there might be emergency conditions e.g. multiple unit failures
- Would still allow AEMO to set up a RERT panel
- Is based on the widely supported reliability standard as set by the NEM’s independent Reliability Panel following a detailed consultation process

¹⁴ AEMC Options Paper p.50

¹⁵ AEMO “Proposal for an enhanced Reliability and Reserve Trader (RERT)” March 2018 p. 6
<https://www.aemc.gov.au/sites/default/files/2018-10/Options%20paper.pdf>

As the AEMC notes (p.3):

“The current framework, with the RERT procurement trigger being based on the reliability standard, is designed to balance the benefits to consumers of having reliable electricity supply against the costs associated with increasing levels of reliability in the NEM.”

While this option might lead to increased probability of the reliability standard being breached, we are prepared to take that risk until more information is provided that justifies a change in approach. We are happy to take the advice of the Reliability Panel.

(ii) Why we do not support Option 2

AEMO’s basic argument seems to be that Option 2 allows AEMO to provide an insurance policy to address the tail risk the market is unable to efficiently manage:

- the market cannot get it right partly because of misaligned perception of risk and partly because consumers cannot properly assess risk
- AEMO can assess this risk much better than the market and so should be given the ability, subject no explicit oversight, to procure the level of RERT it decides is appropriate using its “RERT procurement economic assessment framework”
- Approve the concept and then we will work with you
- Consumers should accept the costs of this RERT because AEMO knows what is best for them

As they say in their submission¹⁶:

“Under this option, RERT will be procured to minimise the combined load shedding and RERT resource cost, subject to containing USE risk within a tolerable threshold. This proposal follows from our discussion in Section 2.2 (and detailed in our Additional Information Document), as AEMO believes that the efficient level of reliability should also incorporate some risk metrics. Currently the exact form and level of these metrics is still unclear, but AEMO considers they should capture the size, likelihood and shape of tail risks. Therefore, the examples used are for illustration purpose only. AEMO is willing to engage with the AMEC and stakeholders on the design of the appropriate risk metrics.

So, we are being asked to accept Option 2:

- without an understanding of what “tolerable threshold” means – only the knowledge that AEMO does not think the current reliability standard is strict enough and consumers do not know what is in their best interests because they misunderstand risk (unlike AEMO)
- without an understanding of what “efficient level of reliability” is
- without an understanding of the “exact form and level of these (risk) metrics” will be

with AEMO promising to work with stakeholders to work them out.

We are to believe that there will be an efficient outcome when the market is incentivised to achieve 0.002% USE reliability and RERT will be aimed to produce a different, unspecified but higher level of reliability.

AEMO presents examples that are more constrained optimisations around a given threshold without an assessment of whether the threshold is one that consumers are willing to pay for. So¹⁷:

¹⁶ AEMO Submission 29 November 2019 p. 9

¹⁷ AEMO Submission p.11

“While some cost will be incurred for RERT procurement, it will result in a lower USE cost and risk”

But we do not know if consumers are willing to pay for that. We just have to accept AEMO’s judgement. What we do know is that Ernst & Young analysis concluded that to achieve close to zero USE in Victoria would require a further 1,000MW of capacity at an annual cost of \$200m. Our members have no interest in paying any more than what they pay now¹⁸.

We are also concerned around the risk that an expanded RERT will distort the spot market with the incentive it gives providers of generation and demand response to only sell into the RERT market. Consider one of our members who has the ability to offer demand response and has the choice between:

- offering to the market with no certainty on value
- negotiating with their retailer to get a firm lower power price in return for the retailer being able to offer it to the market (history suggests this reduced price is generally not large), or
- selling it into a 3-year RERT contract with guaranteed availability payments and then the option of additional pre-activation and activation payments at prices up to the value of VCR (\$34,000), well above the current market price cap

If RERT is meant to be a “last resort” insurance policy then under AEMO proposed changes it risks becoming the second and third last resort with consumers bearing both the increased spot prices from the reduction in market supply and the higher RERT costs from the increased volume procured. Further, if the retailer reliability obligation is implemented then it seems inefficient to have AEMO entering into 3-year RERT contracts when the retailer reliability mechanism includes a T-3 trigger to give a signal to the market to provide more generation/demand response capacity outside of RERT.

Finally, there is little detail on the governance structure around the procurement trigger, reliability standard and procurement volume. It seems to be all up to AEMO with no external ex ante or ex post review. The AEMO proposal contains no mention of the role that the AER would have under the Retailer Reliability Obligation to review the AEMO RERT procurement before it is implemented. Perhaps there is a continuing role for the jurisdictions, but that is unclear.

In summary, we are unable to accept Option 2. We have had insufficient time to assess the AEMO case, it lacks crucial details, we have concerns about the potential cost impact on our members and it lacks a credible governance structure.

(iii) We are willing to consider Option 3 with more information

Given it is a variation on Option 1, we are willing to consider this option if more detail is provided.



Andrew Richards
CEO
29 November 2019

¹⁸ AEMC Consultation Paper 21 June 2018 p.33 https://www.aemc.gov.au/sites/default/files/2018-06/Consultation%20paper_0.pdf