

REVIEW OF THE FORM OF THE RELIABILITY STANDARD AND ADMINISTERED PRICE CAP: REL086

18 JANUARY 2024

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, building materials and food processing industries. Combined, our members employ over 1 million Australians, pay billions in energy bills every year and in many cases are exposed to the fluctuations and challenges of international trade.

In previous submissions on this matter the EUAA¹:

- Supported the current form of the reliability standard and considered the current form is still the best option in a renewables dominant grid,
- Supported the continued use of the AER VCR values to assess what consumers are prepared to pay for reliability,
- Recommended that the Panel takes account of the impact of jurisdictional schemes designed to achieve reliability to ensure consumers are not paying twice for the same level of reliability,
- Recommended that the Panel considers the impact of the Gas Mandatory Code on the setting of the APC, and
- Supported the conclusions of the Endgame research commissioned by the AEC that the onus is on the Panel to show that consumers exhibit risk aversion, or an increasing marginal value of customer reliability, in terms of \$/kWh unserved, for larger USE events.

Our conclusion in this submission is that, while the modelling the Panel had undertaken is useful to inform the debate, its methodological approach, described in the Directions Paper (the Paper) as²:

...to take a model of the NEM based on the Australian Energy Market Operator's (AEMO's) Electricity Statement of Opportunities (ESOO) and Integrated System Plan (ISP) and to remove capacity in each financial year such that the model is more likely to produce unserved energy events. This deliberately under-resourced system model has materially less generation than is forecast in planning documents such as the ISP. This was done to create a larger data set from which to study the possible characteristics of unserved energy in the future.

creates a perception that a change is required, despite the numerous comments that it is not a forecast. The language in Section 3.3 can be reasonably interpreted as saying a change is very likely and here is what we have to do to justify it. This artificially constrained modelling environment seems an odd approach when we are observing significant Commonwealth and State Government capacity related programs that are based, explicitly (eg NSW Roadmap) or implicitly (eg Queensland QEJP), on a form and level of reliability standard that is considerably stricter

¹ <https://www.aemc.gov.au/sites/default/files/2023-05/Rule%20Change%20Submission%20-%20REL0086%20-%20Energy%20Users%20Association%20of%20Australia%20-%2020230504.PDF>

² <https://www.aemc.gov.au/sites/default/files/2023-11/REL0086%20Directions%20Paper%20FINAL.pdf>

that the current 0.002USE. We continue to believe that there is a high onus of proof on the Panel to justify making such a fundamental change in the form of the standard that would likely add significant additional costs to consumers.

We believe the existing framework has served the NEM extremely well since its introduction. The consumer supply reliability perspective (from a wholesale markets risk perspective) has been excellent, breaches of the standard have been very rare with minor impacts when they have occurred, and none have occurred in the last 5 years as the system has adjusted to a large increase in renewables.

The market suspension in June 2022 is not relevant to the discussion on the form of the standard as it was the result of a unique set of circumstances that subsequent policy changes have addressed. The major factor was the low APC value which did not cover spot gas prices for gas peakers. It was not a failure of the reliability standard, and our understanding is that there was no breach of the reliability standard as a result of the suspension. The APC is now set at \$600/MWh to remove that risk and AEMO has considerable market intervention powers if there is a shortage of gas.

Nevertheless, we do agree that new challenges may emerge as the NEM transitions to very high renewables levels over the next decade. What is clear to the EUAA from the Panel's modelling is that future wholesale reliability risks in the NEM are more clearly aligned with the level of firm dispatchable resources as opposed to simply how much VRE is installed.

Given that consumer blackouts are dominated by the distribution system (i.e. extreme weather events, accidents, maintenance), this review needs to provide confidence to consumers that the costs associated with a change in the form of the standard is justified compared to the alternative cost to consumers of improving reliability in the distribution system.

The onus is on the Panel and the AEMC to demonstrate that the consumer net benefits of reliability improvements measured in minutes from a change to a more conservative form of the NEM reliability standard (and implicitly the level) are greater than the net benefits from changes in the distribution system to both improve network reliability and facilitate greater CER that help insulate customers from tail risks in the generation and bulk transmission system. We have seen nothing to suggest that this analysis is being undertaken.

RESPONSES TO QUESTIONS

Chapter 3

Question 1: Further consideration of the value of customer reliability

Do stakeholders have feedback on how the value of customer reliability should be considered under the current Review, considering its intended scope?

Do stakeholders agree with how the consideration of the values of customer reliability by the Panel and AEMC can be sequenced and aligned with the existing work program under the reliability framework, including the AER's VCR and the Panel's 2026 RSSR?

Do stakeholders have any feedback on the findings from the desktop review?

We are puzzled by the Paper's argument that says the value of customer reliability is relevant to the form of the standard. As the Paper notes (p.11):

"The current reliability framework considers the value of customer reliability in defining **the level** of the reliability standard. The Panel does this through recommending a USE level that minimises the total operating and investment costs and the value customers are willing to pay for USE. The AER's VCR is an essential part of this framework. It examines the value consumers place on reliability by considering the amount they are willing to pay to avoid an incremental unit of USE in each region of the NEM." (emphasis added)

We do not see any relevance of VCR in determining the form of the reliability standard, only in the level of whatever form is chosen.

Even if we accept the Paper's contention that VCR is relevant to determining the form, why would the Review's timetable be to complete its work in mid- 2024 before the results of the forthcoming AER VCR review are published at the end of 2024? The Paper seems to have the cart before the horse in the following (p.11):

"The current Review of the form of the reliability standard aims to gain insights into the changing reliability risk as the NEM transitions. There is an opportunity for the AER to consider the key findings from this Review when examining whether the current VCR methodology remains fit-for-purpose as the NEM transitions. As such, the Panel is working closely with the AER so that it may consider whether our modelling results warrant any adjustments to the AER's VCR methodology. The outcome of the AER's 2024 VCR review and update may then help inform consideration of the efficient level of the standard to be determined in the 2026 RSSR."

So, it seems that the conclusions of this review, which uses CPI escalated 2019 VCR values, could well change the VCR methodology the AER uses for the 2024 update. If VCR is so important in the form debate, then why wouldn't it be appropriate to wait for the 2024 review results? How else can the Panel draw any conclusions on consumers risk aversion and decide if there is, indeed, an increasing marginal value of customer reliability? Making that conclusion in the absence of actual consumer engagement leaves consumers having no confidence in the Panel's conclusions. The Panel's response seems to be (p.12) that this review will highlight new reliability scenarios that can be added to the VCR questionnaire. Respondents could be asked the willingness to pay for these new scenarios that will feed into the level of the form decided in this review.

We cannot understand how the Panel can make any recommendation on the form of the standard in mid-2024. This includes a conditional type recommendation e.g. if the results of the VCR (included new reliability scenarios) say x, y and z, then this is our recommended form. The risk is that once the Panel make such a recommendation it may be hard to change if there is a debate about what the VCR results actually mean.

Our submission is that, prior to the 2024 VCR review, if the Panel argues that VCR value is relevant to the form of the standard then the Panel's July 2024 report can only recommend questions to the AER to be included in the VCR review. Once the Panel has the 2024 VCR review results it should then finalise its view on the form of the standard and then go through one more round of consultation before submitting its rule change request to the AEMC.

As for the desktop review prepared by Professor Mancarella, it is strange that the Paper asks for feedback on the findings of the desktop review when the Paper only contains a one-page summary and the full report has not published. This is poor stakeholder engagement practice that breeds distrust. All we can say is that the review seems interesting from an academic point of view but we can make no comment on its relevance to setting the form of the NEM standard.

We would add, the NEM is quite different from the UK market in many ways. An earlier report by the same author³ not surprisingly comments on the need to introduce more insurance related measures. The NEM is seeing that every day in the form of Federal and State Government policies to expand the level of dispatchable generation and storage to reliably meet renewable policy targets even with VRE droughts. While we support much of this approach (i.e. expansion of the Capacity Investment Scheme⁴) it appears to us that governments 'political' reliability standard is tighter than a standard based on consumers' VCR. The debate then becomes one of what is the share of the costs of that 'political' standard that electricity consumers are willing to pay. The Commonwealth Government's recent decision to expand the CIS (costs borne by taxpayers) and end the RET (costs borne by electricity consumers) shows its views on who should pay given community concerns on affordability.

Chapters 4 and 5

The modelling results seems intuitive – a system primarily reliant on variable renewable generation and storage, where storage is also reliant on the same renewable generation for its energy input, will inevitably have increased USE risks in a 'dunkelflaute' situation. However, we question if this is a reasonable representation of the future NEM, particularly given the significantly increased role for back-up gas generation set out in the Draft 2024 ISP.

The EUAA has had the benefit of reviewing the AEC and Shell Energy submissions on these chapters and supports the AEC and Shell Energy's responses. In particular the EUAA supports the inclusion of the 2024 Draft ISP results, especially the significant increase in gas generation capacity from the mid-2030s compared with the 2022 ISP. This has a significant impact on reducing the level and extent of VRE droughts.

We conclude based on the current range of modelling undertaken by the Panel that ultimately the level of firm dispatchable generation in the NEM is more critical than the level of VRE with regards to potential USE outcomes. We note that extended very low wind and solar output 'dunkelflaute' events may be only of concern in an inadequately resourced NEM with insufficient dispatchable capacity. In an adequately resourced NEM, which is what the reliability standard and settings are designed to incentivise, as well as explicit Federal and State Government generation and storage build policies, the modelling indicates that wholesale market reliability risk will be similar to current outcomes. Based on this we see no justification for further consideration of a change to the form of the standard.

We see two related areas where modelling should be expanded to given consumers comfort around the costs of any change in the form of the standard.

(i) *To ensure consumers are not going to pay twice for the same level of reliability*

³ <https://www.aemc.gov.au/sites/default/files/2022-08/Pierlugi%20Mancarella%20-%20Briefing%20note%20-%20form%20of%20the%20reliability%20standard.pdf>

⁴ <https://euaa.com.au/euaa-welcomes-federal-government-expansion-of-capacity-investment-scheme/>

A change in the form of the reliability standard will increase costs to consumers. But consumers are already paying the costs of State based reliability standards that are stricter than the current NEM standard.

In our earlier submission on this matter, we highlighted the impact of jurisdictional reliability measures in NSW and Queensland. More recently there is the proposal from South Australia⁵ that is likely to lead to their own State based reliability standard. NSW distribution connected consumers are paying Roadmap costs for LTESAs and network build reflecting the deterministic Roadmap reliability standard with a reserve margin of the two largest units that is arguably much stricter than the current NEM standard⁶. Given the Queensland Government's ability to influence the closure date of its coal and gas plants and effectively determine a Queensland reliability standard that is implicitly much stricter than the current NEM standard, why would Queensland consumers be willing to pay twice for a change to a more conservative form of the NEM reliability standard?

Victorian taxpayers are paying for confidential agreements with the owners of Yallourn and Loy Yang that we assume are based on the interim reliability standard of 0.0006% USE given the Victorian Government has been a prime mover in its initial introduction and then extension. The IRM is equivalent to a 10% chance of the 0.002 USE standard will be breached – so it already incorporates significant tail risk.

How is the Panel and the AEMC going to assure consumers that they are not paying twice for the same or similar level of reliability?

- (ii) The relative net benefits of a change in the form of the NEM reliability standard vs improved distribution network reliability

The current reliability standard equates to 10.5 minutes of lost supply to a region per year. The IRM equates to 3.1 minutes. There are many ways to address increasing reliability risks – changing the form of the NEM reliability standard is one. Another is the improving the reliability of the distribution network where the vast majority of blackouts and supply interruptions occur. This can be done in two ways:

- Improving network resilience to increasing climate risk
- Increasing the CER hosting capacity of the distribution network so that interruptions the NEM reliability standard is meant to address are minimised

We look forward to the modelling giving consumers' confidence that the net benefits of any change in the form of the standard exceed the net benefits of improvements in distribution network reliability.

Chapter 6

We agree with the proposed two shortlisted options.

Do not hesitate to be in contact should you have any questions.

⁵ <https://yoursay.sa.gov.au/regulations-for-planning-and-forecast-functions>

⁶ See Part 3 of the Electricity Infrastructure Investment Act 2020 No 44



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