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12 June 2023

Ms Anna Collyer
Chair and Commissioner
Australian Energy Market Commission

[By email]

Dear Ms Collyer

Rule change proposal – Extension of the IRM to the RRO

This letter informs you AEMO has submitted a proposal to amend the NER. The proposal follows the recent AEMC Review of the Interim Reliability Measure (IRM) – EPR0090

The amendment proposes to extend the application of the IRM to the Retailer Reliability Obligation (RRO). Under the current framework, the application of the IRM as the threshold trigger for a reliability gap in the RRO expires on 30 June 2025. AEMO considers this should be extended as the IRM remains an appropriate interim measure that aligns with the changing nature of power system reliability, particularly tail risk, and the increasing uncertainty of reliability outcomes. The amendment proposes to extend the IRM to the RRO by 30 June 2028 to align with the Reliability Panel's broader review of the Form of the Standard (REL0086) and at which point a new form of the standard may commence.

The proposed amendment was recommended by the AEMC in the Final Report of the Review of the IRM. Given this review including the period of stakeholder consultation, this Proposal is submitted as a Fast Track request.

If you have any questions or wish to arrange a meeting to discuss, please contact Kevin Ly, Group Manager Reform Development & Insights.

Yours sincerely,

Violette Mouchaileh

Executive General Manager – Reform Delivery

Attachments: AEMO rule change proposal

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Electricity Rule Change Proposal

Extension of the IRM to the RRO

June 2023

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New South Wales | Queensland | South Australia | Victoria | Australian Capital Territory | Tasmania | Western Australia

Australian Energy Market Operator Ltd ABN 94 072 010 327

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1. Summary

This rule change proposal has been developed by AEMO following the AEMC Review of the Interim Reliability Measure EPR0090 ('the review'). The review recommended the continued use of the interim reliability measure (IRM) as the trigger for the Retailer Reliability Obligation (RRO) to 30 June 2028. This Proposal is to amend the NER to implement this recommendation.

AEMO considers the IRM should be extended in its application as the trigger for the RRO. This is because it remains fit-for-purpose as an interim measure, given the nature of reliability risk, particularly tail risk, is increasingly uncertain as the power system transitions to zero-emissions generation. The continued use of the 0.0006% USE IRM signals the upcoming need for investment in firm generation at a level that aligns with community expectations of reliable energy supply during a one-in-ten-year summer. This aligns with the Reliability Panel's ongoing review of the form of the reliability standard which is investigating the merit of alternative forms of the Reliability Standard, to commence in 2028.

This Rule change request is limited to the application of the IRM to the RRO as it seeks to supplement the existing reliability standard, without replacing it.

The proposed amendments should take effect from when application of the IRM to the RRO is set to expire on 30 June 2025 and should be extended by three years to 30 June 2028, when a new form of the standard will hopefully commence.

This Rule change request is submitted as a Fast Track request due to the previous AEMC consultation through the review of the IRM. The AEMC published a Draft Report in March 2023 which was followed by a six-week period for consultation and submission. A Final Report, including stakeholder feedback was published on 25 May 2023. This Rule change request is limited to the same scope of the AEMC consultation.

2. Relevant Background

2.1. Current framework

Interim Reliability Measure

The IRM was introduced in 2020 at the advice of the Energy Security Board (ESB) that found maintaining reliability to meet levels of a one-in-ten-year summer aligned with community expectations of reliability[1]. At the time, forecasts showed that the reliability standard of 0.002% USE would lead to load shedding once in every three years (without interventions)[2]. The IRM was implemented to supplement the existing reliability metric over the short term.

The IRM is defined in 3.9.3C (a1) as:

> *The interim reliability measure for generation and inter-regional transmission elements in the NEM is a maximum expected unserved energy in a region of 0.006% of the total energy demanded in that region for a given financial year.*

In practice, the IRM acts as the trigger in two out-of-market mechanisms:

- Retailer Reliability Obligation (RRO) under rule 11.132
- Interim Reliability Reserves (IRR) under rule 11.128

Retailer Reliability Obligation

The RRO operates to provide stronger signals for market participants to invest in firm generation when and where required. If AEMO forecasts a *reliability gap* three years out, it must submit a request to the AER to trigger the RRO by making a deemed *reliability instrument.* When a *reliability instrument* is made liable entities must enter sufficient qualifying contracts to cover their share of one-in-two-year peak demand.

The RRO was implemented initially in 2019 with the 0.002% USE reliability standard as the trigger. A reliability gap is defined if the level of forecast annual unserved energy exceeds the trigger.

The RRO was amended in 2020 to trigger the RRO based on an exceedance of the 0.0006% IRM. Under the current framework, the application of the IRM to the RRO expires following 30 June 2025 after which the trigger will revert to the 0.002% reliability standard.

Interim Reliability Reserve

The IRR is an out-of-market reserve procurement mechanism triggered by the IRM under rule 11.128. If AEMO forecasts a reliability gap based on the IRM, AEMO may enter contracts for reserve capacity up to the forecast level of the reliability gap. IRR contracts may be entered into no less than 10 weeks and no more than 12 months prior to a reliability gap occurring.

The IRM is applied as the trigger for IRR contracts under 11.128 which has an expiry date of 31 March 2025.

[1] National Electricity Amendment (Interim Reliability Measure) Rule 2019
[2] ESB, Reliability Standard Review, 2020, page 4 - https://webarchive.nla.gov.au/awa/20210603103935/https://energyministers.gov.au/node/1026

2.2. Narrative of issue

In 2019, AEMO proposed an improvement to the reliability standard in 2019 Electricity Statement of Opportunities (ESOO) that ultimately feed into the development and level of the IRM. AEMO highlighted the limitation of current reliability standard that using 'expected' values of USE masks high impact low probability ('tail risk') events because USE is average across all possible outcomes. At the time, AEMO proposed the following change to the reliability component of the National Electricity Objective"

> "*Ensure there are sufficient dispatchable reserves (MW) available in each region such that USE is forecast to be less than 0.002% of total energy demanded in the region in 9 out of 10 years."*

Following ESB advice and subsequent rule change found that maintaining reliability to meet levels of a one-in-ten-year summer provided net benefits to consumers and that the development of an IRM of 0.0006% USE would provide net positive benefits and was equivalent to AEMO's original position.

AEMO considers that the likelihood of tail risk outcomes and their impact on maintaining reliability continues to increase as the power system transitions. This was supported and a key recommendation from the 2022 Reliability Standards and Settings Review (RSSR). The Panel has since commenced a review of the form of the standard (REL0086) that specifically considers the inclusion of a metric that describes the extent and impact of tail risk.

The application of the IRM as the trigger for the RRO expires on 30 June 2025. AEMO considers that the 0.0006% USE IRM as the trigger for the RRO continues to supplement the reliability standard at a level that delivers net positive benefits to consumers and commensurate with the increased uncertainty of reliability outcomes. Reverting to the 0.002% USE reliability standard for the period 2025-2028 and then potentially implementing a new form of the standard to account for tail risk would be confusing for all stakeholders particularly when the original reason for implementing the IRM has not changed.

3. Statement of Issue

3.1. Current Rules

The NER clauses that are relevant to this proposal are outlined in Table 1 below.

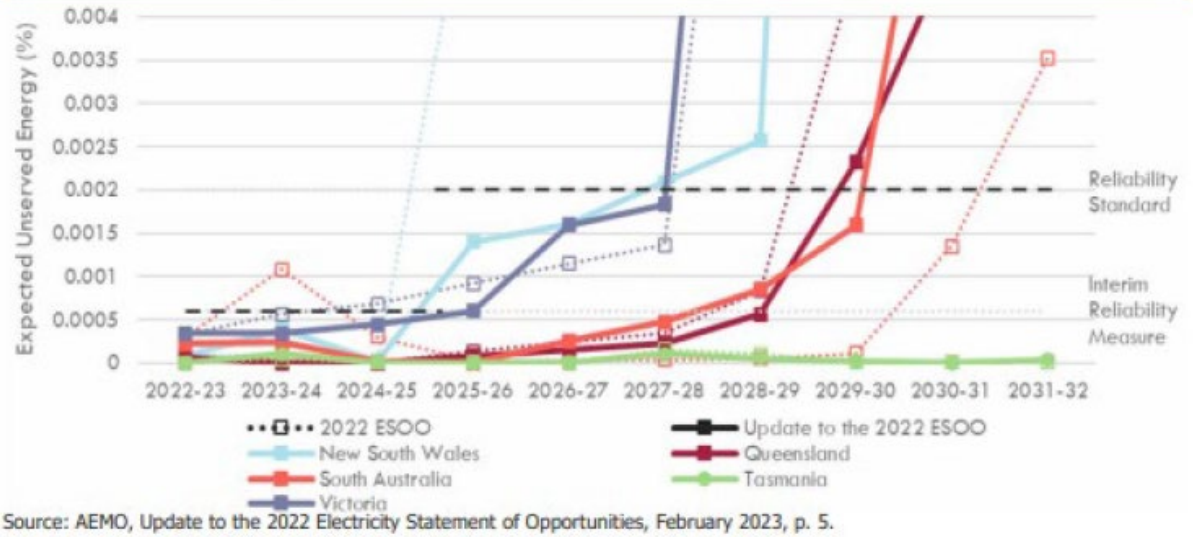
Rule	Summary
3.9.3C (a1)	Defines the interim reliability measure as 0.0006% of total energy demanded.
11.132	Allocates the IRM as the trigger for the RRO requirements set out in the NER and NEL. Sets the expiry date for the application of the IRM to the RRO as 30 June 2025.
4A.A.2	Detailed the operational and process requirements for the RRO, including the process for forecasting and identifying a reliability gap and triggering the RRO through the issuance of a reliability instrument.
11.128	Outlines the function and application of the IRR, including the use of the IRM as the trigger for contracting under the IRR. AEMO may enter interim reliability reserve contracts if there is a forecast breach of the IRM less than 12 months from identified reliability gap.

3.2. Issues with the current Rule

The use of the IRM as the trigger for the RRO expires on 30 June 2025. Under the current framework this reverts the definition of a *reliability gap* to be based on forecast USE levels to the 0.002% reliability standard.

This does not align with the changing nature of reliability risk and the increasing variability of unserved energy driven by generator retirements, variable renewable energy and the uptake of battery and energy-limited resources.

Figure 2.1: Reliability and indicative reliability forecast, all regions, 2022-23 to 2031-32



Source: AEMO, Update to the 2022 Electricity Statement of Opportunities, February 2023, p. 5.

Current ESOO forecasts (shown above) identify reliability gaps over in 2025-26 and 2027-28, in New South Wales and Victoria which sit between the 0.0006% USE IRM trigger and the 0.002% USE reliability standard. If the IRM is not extended as the trigger to the RRO, these

gaps would not create RRO obligations. AEMO considers this would increase reliability risk and create uncertainty regarding the industry response and consumer expectations of reliability.

4. How the Proposal will address the issues

4.1. How the proposal will address the issues

AEMO proposes the NER be amended to extend the expiry date of the IRM as the trigger to the RRO to 1 July 2028. This extends the existing processes and trigger for the RRO and aligns with the identified need to consider tail risk and the changing nature of power system reliability.

The application of 0.0006% USE IRM as the trigger for the RRO sets the level of forecast unserved energy that is commensurate with the increasing uncertainty of reliability outcomes. The IRM as the trigger for the RRO does not replace the 0.002% reliability standard, instead supplementing the reliability standard to protect consumers against increased uncertainty of reliability outcomes.

The impact of IRR

The proposed extension of the IRM to the RRO does not extend the application of the IRM to the IRR (NER 11.128). Under the current Rules, the purchase of reserve contracts triggered by a 0.0006% USE reliability gap will expire on 31 March 2025 and the procurement of reserves will revert to the long-notice RERT process triggered by the reliability standard.

AEMO is of the view that the expiry of the IRR framework, may create a gap in the reliability framework and limit the AEMO's ability to contract for reserves less than 12 months out from the reliability gap. The continued application of the IRM to the RRO to 2028 may not directly cover this gap, given compliance under the RRO is not to the level of the IRM, but it does preserve a mechanism for participants and regulators to assess reliability.

Consistent interim solution

The extension of the IRM as the trigger to the RRO aligns with broader industry recommendations and reforms that focus on characterising and mitigating reliability tail risk.

The 2022 RSSR recommended the need to consider tail risk more comprehensively with detailed analysis and consideration of the need for a new form of the reliability standard. The Panel subsequently commenced the Review of the Form of the Reliability Standard and APC (REL0086) with an Issues Paper and initial round of consultation.

The RRO is also subject to ongoing AEMC review of its operational and functional aspects.

This proposal has been considered for alignment to the Panel's recommendations and ongoing reviews. As such, AEMO does not consider that the application of the IRM to the RRO should be extended post 30 June 2028 to align with the recommendations and potential new form of the reliability standard.

4.2. Stakeholder engagement

The AEMC has undertaken significant stakeholder consultation and consideration of extension of the IRM to the RRO as part of the recent review of the IRM. Eight stakeholder responses to the Draft Report were received, including AEMOs. The Commission published a Final Report, including response to stakeholder feedback and final recommendation to extend the application of the IRM to the RRO on 25 March 2023.

5. Proposed Rule

5.1. Description of the proposed Rule

Proposed Rule amendments are limited to the extension of the date of expiry for the IRM as the trigger for the RRO. Given the ongoing work characterising reliability risk and a new form of the standard, the application of the IRM to the RRO should only be extended to 30 June 2028 to align with the commencement of the new form of the standard. From 2028 a new form of the standard may commence, replacing the existing form with commensurate adjustment to the reliability settings - there should be no need to extend the IRM beyond 2028.

Proposed amendments:

- 11.132.2 (a) – Replace “30 June 2025” with “30 June 2028”
- 4A.A.2 Note – Replace “Under rule 11.132, the reference to the *reliability standard* is replaced with the *interim reliability measure* until 30 June 2025” with “Under rule 11.132, the reference to the *reliability standard* is replaced with the *interim reliability measure* until 30 June 2028”

A fast-tracked rule change process is requested due to the completion of the AEMC review of the IRM, including stakeholder consultation. Further AEMO considers it a priority to ensure that forecasts published in the 2023 ESOO can identify *reliability gaps* and trigger the RRO post 2025 based on the IRM if forecast.

6. How the Proposed Rule Contributes to the National Electricity Objective (NEO)

AEMO considers the Proposed rule aligns with the NEO, as well as the original design and implementation objective of the IRM as the trigger for the RRO.[3] Specially:

- Consistent approach to reliability – The proposed rule retains current out-of-market signals for the level of investment in firm generation. A consistent approach to reliability frameworks provides clear signals to the market and signals the importance of considering the impact of increasing tail risk outcomes.
- Minimise price impact on consumers – AEMO considers reliability at the IRM level of 0.0006% USE aligns with customer expectations and appropriately reflects the changing nature of reliability risk[4]. The application of the IRM to the RRO is an important temporary measure that provides this signal to market, without imposing significant costs on customers as this retains the existing framework and processes.

[3] ESB, Interim Reliability Measure (RRO Trigger) 2020 - https://web.archive.org.au/awa/20210603165504mp_/https://energyministers.gov.au/sites/prod.energycouncil/files/publications/documents/Draft%20National%20Electricity%20Amendment%20%28Retailer%20Reliability%20Obligation%20trigger%29%20Rule%202020%20%289%20September%29.pdf

[4] ESB, Interim Reliability Measures – RRO Trigger 2020 - https://web.archive.org.au/awa/20210603165453mp_/https://energyministers.gov.au/sites/prod.energycouncil/files/publications/documents/ESB%20Consultation%20Paper%20on%20Draft%20Rules%20Interim%20Reliabity%20Measures%20-%20RRO%20Trigger%209%20September%202020.pdf

- Effective risk allocation and management –The 0.0006% USE interim standard supplements the reliability standard through the RRO by assigning risk management and contractual obligations only when reliability risks are identified.

7. Expected Benefits and Costs of the Proposed Rule

AEMO considers the benefits of extending the application of the IRM to the RRO is in its function to support the reliability framework. Its removal would likely increase uncertainty in how reliability and tail risk outcomes are being managed in the short term.

As acknowledged by the ongoing work in reviewing the form of the reliability standard, the likelihood of tail risk outcomes and resulting uncertainty of reliability risk will continue to increase as the system transitions. Prior to this work being completed and a potential new form of the standard implemented by 1 July 2028, the continued use of the IRM as the trigger for the RRO will act as an interim way to monitor tail risk based on 0.0006% USE.

As the Proposed Rule is limited to extending the 0.0006% USE IRM as the trigger for the RRO as a supplementary measure to protect consumers, AEMO considers there will be limited cost impacts from this extension. This aligns with the IRM Review finding that whilst additional cost may result from the RRO being triggered more often, "the risks of additional cost associated with an extension are low"[5].

AEMO agrees that additional costs may be incurred by liable entities if the RRO is triggered more often due to reliability gaps emerging between 0.0006% USE and the 0.002% USE to 2028. The IRM Review Final Report noted these potentially higher costs are likely to comprise Procurer of Last Resort (POLR) costs, contracting costs and potentially penalties for non-compliance. AEMO considers that contracting costs incurred by liable entities should not be considered as significant or additional expenses incurred purely for the purpose of compliance with the RRO. Contracts for firm generation sit within liable entities broader supply portfolio from which they can optimise and receive value regardless of their RRO obligation. Further, liable entities are only required to contract to the level of one-in-two-year peak demand – AEMO does not consider costs associated with contracting to this level imprudent and would generally expect the opposite: that participants contract beyond this level.

8. Draft Rule

11.132.2 Reliability standard

From the commencement date until ~~30 June 2025~~ 30 June 2028, for the purposes of section 14G(1) and 14G(5) of the NEL

4A.A.2 Forecast reliability gap materiality

Note

Under rule 11.132, the reference to the *reliability standard* is replaced with the *interim reliability measure* until ~~30 June 2025~~ 30 June 2028.

[5] AEMC, Final Report – Review of IRM, page 9 - https://www.aemc.gov.au/sites/default/files/2023-05/Review%20of%20the%20IRM%20-%20EPR0090%20-%20Final%20report_for%20publication.pdf