

Australian Energy Market Commission

Efficient provision of inertia

Our Draft Determination proposes not to implement operational procurement of inertia at this time because there are not material net market benefits under current assumptions

The Commission has published its Draft Determination on a rule change request from the Australian Energy Council (AEC) to introduce operational procurement of inertia in the National Electricity Market (NEM). The Commission has decided not to make a draft rule. While operational procurement of inertia may offer value in the future, implementation is not justified at this time as there are not material net market benefits under current assumptions.

The Draft Determination focuses on improving the application of existing frameworks and supporting targeted technical work to ensure readiness for operational procurement of inertia should system conditions change in the future.

The expected net benefits of operational procurement of inertia are not material under current system conditions

The Commission acknowledges that operational procurement of inertia could provide benefits by improving efficiency where additional inertia may be available at low marginal cost. However, based on the Commission's analysis, there are not material net benefits for operational procurement of inertia under current assumptions.

Minimum inertia requirements are expected to be met in all regions in the short to medium term through the rollout of synchronous condensers and other solutions being delivered under the system strength framework. The marginal cost of providing additional inertia is expected to remain low during this period. At the same time, forecast system security costs, including frequency control ancillary services (FCAS), are projected to remain stable, limiting the scope for operational procurement to deliver material efficiency gains.

In addition, key technical capabilities that would support efficient operational procurement, such as real-time inertia measurement, locational visibility, and full integration into dispatch processes, are not yet sufficiently developed. Given these factors, introducing operational procurement of inertia at this stage would not promote the long-term interests of consumers.

The Commission intends to request the Reliability Panel to monitor system conditions through its Reliability and Security Report (RSA) (formerly known as the Annual Market Performance Review)

While operational procurement is not being introduced at this time, the Commission recognises that system conditions may evolve. To ensure transparent oversight of these developments, the Commission intends to amend the terms of reference for the Reliability Panel's Reliability and Security Report (RASR), previously known as the Annual Market Performance Review.

The Reliability Panel would monitor factors that may inform future reconsideration of operational procurement. These include changes in regional inertia requirements, material increases in inertia procurement costs, increases in contingency FCAS costs, the emergence of new RoCoF-related constraints, and the technical maturity of real-time inertia measurement and dispatch integration capabilities.

This monitoring approach would provide an ongoing evidence base to support the Commission's consideration of any future rule change request, should system conditions materially change.

While not proposing changes to the rules, the Commission has identified opportunities to improve the application of the existing framework

While the Commission is not proposing any changes to the National Electricity Rules (NER) at this time, it has identified targeted improvements to strengthen how the existing frameworks are applied in practice.

The Commission encourages AEMO to continue reporting on its technical development progress through its Transition Plan for System Security (TPSS). This includes progress on real-time inertia measurement, locational understanding of inertia needs, and improved integration of inertia into operational processes. AEMO is also required to report on findings from its use of Type 2 contracts through its existing ISF reporting obligations, providing further visibility of technical developments relevant to future procurement readiness.

The Commission encourages TNSPs to strengthen the transparency and consistency of their procurement decisions under the existing Regulatory Investment Test for Transmission (RIT-T) framework, supported by the AER's existing oversight and guidance functions. This includes providing clearer explanations of how non-network options and emerging technologies are assessed, how cost assumptions are justified, and how procurement decisions are documented in Project Assessment Draft Reports (PADRs) and Project Assessment Conclusions Reports (PACRs).

Collectively, these improvements would effectively enhance transparency and regulatory accountability while supporting system readiness for any future consideration of operational procurement.

Next steps and how to have your say

Submissions on the Draft Determination are invited by **7 August 2025**. The Commission welcomes stakeholder feedback on the analysis presented, the targeted improvements identified, and the proposed approach for the ongoing monitoring of system conditions.

Following consideration of submissions, the Commission expects to publish its Final Determination in September 2025.

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12 December 2024