6 August 2025

Ms Victoria Mollard
EGM, Economics and System Security
Australian Energy Market Commission

Lodged electronically: via AEMC website

EnergyAustralia Pty Ltd
ABN 99 086 014 968

Level 19
Two Melbourne Quarter
697 Collins Street
Docklands Victoria 3008

Phone +61 3 8628 1000
Facsimile +61 3 8628 1050

enq@energyaustralia.com.au
energyaustralia.com.au

Dear Ms Mollard

Efficient Provision of Inertia – Draft Determination (ERC0339)

EnergyAustralia (EA) is one of Australia's largest energy companies with around 2.4million electricity and gas accounts in NSW, Victoria, Queensland, South Australia, and the Australian Capital Territory. We own, contract, and operate a diversified energy generation portfolio spanning coal, gas, battery storage, demand response, solar, and wind assets. Combined, these assets comprise over 5GW of generation capacity.

EA welcomes the opportunity to comment on the AEMC's Draft Determination to the Efficient Provision of Inertia rule change (Draft Determination). While we appreciate the project team's openness to discuss views and its broader level of engagement within industry, we have become increasingly concerned with the AEMC's decision making and thought processes on this matter.

Broadly, we do not support the Draft Determination and the AEMC's articulated positions, particularly noting the strong industry support towards progressing an inertia market service and unbundling of other grid services. We understand and acknowledge AEMC's position that an inertia spot market may not deliver net benefits for consumers in the near term. However, the Draft Determination fails to articulate (in both in real quantitative and qualitative terms) the clear steps, triggers and metrics in which it would revisit an inertia market over a longer view. Nor does it incentivise AEMO through a carrots and sticks approach, to develop and manage a transparent and orderly program of works to unbundle and trial innovative technologies to use new and existing ESS capability in market.

In general, EA does not consider that the AEMC has undertaken a sufficient rule assessment with full consideration of the information available[1], the willingness of market participants towards improving the status quo and the consequential impacts of its Draft Determination. Instead, we believe the AEMC have orchestrated a draft position which supports ongoing operation of the Improving Security Frameworks (ISF) rule, without shifting the dial on key outstanding issues including providing longer term direction for meaningful action and progress which:

- supports strategic ESS market design and technology innovation,
- fosters competition; and
- delivers cost efficient grid service outcomes to the benefit of consumers.

The AEMC have continued to discard industry calls to implement stronger governance measures in the transitional services framework[2] which would provide appropriate

[1] Including information relating to AEMO's current technical knowledge and gaps.
[2] Specifically on the transitional plan for system security (TPSS)

incentives, positive assurances and a robust strategic feedback process which would enable the framework to deliver its intended objectives.

We note that in its final determination to the ISF rule, the AEMC stated that:
"…. the transition plan for system security (TPSS) will outline the steps AEMO is taking to manage security through the transition, without the need for type 1 contracts. It will provide transparency on AEMO's understanding of security services, support industry-wide learning of how security will be managed in the future, and encourage efficient investment in the necessary resources needed to maintain a security system".

Critically, the timing and identified actions in the TPSS, including commencement of contract trials will set the pathway for all grid services, not just inertia. While EA acknowledges the transitional services framework is still in its relatively early days of operation, its lack of sufficient 'carrots and sticks' continues to cloud progress. For example, the ongoing absence of overarching governance and the AEMC's insistence through this Draft Determination to continue to provide AEMO with unnecessarily broad, flexible and unvetted strategic and operational control over grid security is eroding industry confidence. Without clear, targeted obligations on AEMO, EA does not consider that they are suitably incentivised to evolve grid systems in a way that promotes strategic longer term planning, innovation, price discovery and competitive provision.

Similarly, pursuing a network procurement approach without ensuring meaningful progress towards competitive essential system service (ESS) markets, including addressing key challenges with the non-network options (NNO) framework will:

- render the transitional services framework redundant;
- create an artificial and expensive market for synchronous condensers paid by consumers;
- erode any competitive provision for inertia (and other grid services);
- repeat of the status quo, utilising units commitments via a different technology, and an ongoing reliance on the directions framework; and
- ultimately not deliver outcomes in line with the NEO.

We strongly believe that if the AEMC continue down this path, it will create a market failure and create barriers to private investment, at a time when energy and capacity producing assets (which can also provide essential system services (ESS)) should be incentivised. This is because in practical terms, AEMO and network businesses will meet their inertia (and system strength) obligations largely through long-lived regulated investments. As more of these assets (synchronous condensers) are installed, the need and market signal for more innovative, cost-efficient non-network options will be reduced.

We strongly urge the AEMC to revisit its draft position, with a focus on the development of positive steps which value innovative ESS capability and move the industry towards a market-based approach.

EA has provided further detail on our views in Appendix A.

If you would like to discuss our submission further, please contact me on 0422 399 181 or Dan.Mascarenhas@energyaustralia.com.au.

Regards

Dan Mascarenhas
Regulatory and Markets Principal

Appendix A

EnergyAustralia (EA) considers that a number of issues remain either outstanding or have been created through the Draft Determination. We strongly encourage the AEMC to investigate and address these issues through a second draft determination.

Below we outline each issue and provide a suggestion, where applicable.

A long-term market failure in the making

The NEM places value for energy, frequency and other support services provided to enable the market to function unhindered. Historically, inertia (and other grid services) have been provided without an attached financial value as a bi-product of thermal generation. However, the impending closure of these baseload assets has signalled the need to identify other sources of inertial (and other ESS) supply. The Draft Determination seeks to require TNSPs to provide sufficient inertia to meet minimal requirements set by AEMO. However, in doing so, the AEMC have placed a value on inertia supply and provided TNSPs with an additional risk-free revenue source through their Regulated Asset Base. This draft decision could set a damaging precedent in market for other ESS. It contrasts loudly against private sector calls to incentivise and value private investments which are willing to and can provide energy, capacity and ESS (including inertia) with the right market settings.

The AEMC's modelling and Draft Determination does not provide a clear rationale why locking in simple but expensive long-lived network technologies to over the short term (which may become inefficient or obsolete over its economic life) best promotes an outcome in the long term interests of consumers.

It is clear that the AEMC has sought to align the inertia and system strength frameworks, noting that the same investment can meet the requirements of both grid service. However, in isolation of other policy developments, the outcome is likely to lead to higher long term costs for consumers because the exponential installation of synchronous condensers across the NEM removes incentives for private investments (new and existing retrofits[3]) via the non-network options (NNO) framework. A continuation of the approach, without addressing a number of the other issues flagged, will create a market failure over the long term and would not deliver an outcome aligned to the NEO. In our view, this market failure would occur by virtue of the operation of the security frameworks captured by the ISF rule preventing competitive markets from eventuating – noting that the Draft Determination purposely does not seek to prevent this outcome through targeted actions.

At the moment no explicit market signal exists to incentivise private investments with ESS capability. The Draft Determination provides the appropriate reform to install signals over the medium and longer term, noting that private investment business cases take time to develop and achieve financial approvals. Providing for a mechanism which values NNO assets and its ability to provide energy, ESS and/or capacity will lower overall costs for consumers and deliver outcomes in line with national renewable targets. We note that the National Electricity Market wholesale market settings review draft report recommends that successful projects via the proposed Electricity Services Energy Mechanism should provide coordinated ESS contracts with TNSPs.[4]

[3] Such as a clutch on a GPS or a conversion of a thermal asset to a synchronous condenser

[4] National Electricity Market wholesale market settings review – recommendation 8B; pg 21

We encourage the AEMC to revisit its case for change, and further justify why its draft position meets the NEO objective. As part of this work, we request the AEMC publish its additional modelled scenarios to articulate the true net (quantitative and qualitative) benefits of a network vs non-network solution across all market services rendered, including energy, capacity and ancillary services over the short and long term horizons. This modelling should take into account expected delays and additional costs associated with the install of approved synchronous condensers and an expectation that these factors will continue or worsen over time as global demand for synchronous condensers (or its parts) grows. We note that, for example, Transgrid have acknowledged estimated costs for synchronous condensers to meet system strength requirements have increased by approximately 90% following supplier issues and additional site studies in their recent Project Assessment Conclusions Report[5].

The current NNO framework creates a barrier to entry

The AEMC has pointed to the NNO framework as an alternative avenue to enable private investments delivering inertial support and other grid services. However, in its current form, the NNO framework features a number of policy and operational challenges which make it unappealing. Specifically, its non-standardised application across TNSPs, its methodology and assessment complexity, opaqueness, and the comparative difficulty in understanding how fair decision-making takes place when network options are considered against an NNO, has meant that it is rarely utilised successfully. In addition, even where a NNO option is pursued by the TNSP, there are clear commercial negotiation issues associated with the network support contract (which again is not standardised across the NEM –), including around operational fairness and balancing responsibility across contract terms and conditions – all which impact a proponent's willingness to engage. We point to the ongoing negotiations process for system strength contracts as an example of the issues faced by contract counterparties. These challenges, if left unaddressed make it difficult to navigate with confidence and creates and environment akin to a barrier to entry.

We encourage the AEMC to dive deeper into the regulatory and commercial operations of the NNO framework and build in the appropriate levels of transparency, rigour, fairness and clarity to make the framework workable. Without an overhaul, in our view the NNO framework it will continue to stifle innovation, price discovery and competition.

Additional clarity is required to enable the Reliability Panel to monitor system conditions

While we consider the AEMC's intention in the Draft Determination to request the Reliability Panel to monitor system conditions and determine when operational procurement of inertia would be more likely to deliver net benefits, the articulation of its request is too simple and broad.

We support the specific metrics identified, however believe that the AEMC should provide further clearer and detailed guidance to the Reliability Panel on, for example:

- how it would assess the metrics,
- whether it could analyse and report on other metrics,
- the standard which each metric is assessed against,
- the volume of data it must utilise in making an assessment,
- whether there is an end date or periodic review windows,
- whether it should (or must) take on board external advice in developing a view,
- the process for regular public reporting and consultation; and

[5] Meeting system strength requirements in NSW Pg.45

- how it would instigate a formal review for a realtime inertia market etc.

Further, we note that the design of appropriate market settings takes time to develop and implement, and that NNO projects require a longer lead time to finance and build suitable ESS capabilities. Should an emerging market shortfall be identified by the Reliability Panel, a market and suitable participation is unlikely to eventuate quickly enough to address this risk. The natural default therefore would likely be utilisation of the directions framework in operational timeframes. To combat this risk, the Reliability Panel's role in the Transitional Services Framework should be elevated – refer below.

The Transitional Services Framework lacks 'carrots and sticks'

EA has previously called for governance enhancements to the Transitional Services Framework and the Transitional Plan for System Security (TPSS). We remain concerned that AEMO has sole responsibility for the strategic and operational development of system services in the NEM and is not suitably incentivised to explore market developments and innovative technology trials.

While we acknowledge that the Transitional Services Framework requires AEMO via the TPSS to outline the steps it is taking to manage the transition of ESS and to consider the use of type 1 and 2 contracts, no incentives or obligations are placed on them. As such, the framework does not place consequences on inaction either. It is therefore permissible to foreshadow that AEMO may continue to seek management of the NEM in a way that enables flexibility and grid security at efficient cost (not lowest cost). That is replacing the status quo of unit commitments via thermal generation with synchronous condensers.

While this outcome will deliver grid stability and enable AEMO to continue to meet its market operational objectives in a consistent way with a defined set of infrastructure, it does not incentivise them to fully consider the long term cost impacts to consumers. Nor does it require them to seek innovative alternative approaches. Without meaningful progress towards market outcomes, we do not consider the Transitional Services Framework will have delivered its purpose or the NEO.

To address this risk, EA suggests a broader role for the Reliability Panel in the development of the TPSS. We consider the TPSS comparable to the Integrated System Plan, requiring a similar level of rigour, oversight and accountability. We note that the Reliability Panel currently has an advisory role at the TPSS draft report stage, however to ensure that the Transitional Services Framework incorporates the strategic vision and expertise from a broader group of stakeholders, we strongly suggest that the Reliability Panel's role be expanded to all critical annual TPSS milestones, including project commencement, draft report and a final report preview. All advice and AEMO correspondence should be made transparent to ensure accountability and responsibility for the strategic vision is maintained.

In addition, enhanced governance requirements should obligate AEMO to establish a transparent register to trial technical and economic unbundling of ESS, including for at least, inertia and voltage control services. This obligation should also require AEMO to identify and progress at least one type 2 contract trial each year, and aligns it with the existing requirement to publicly reported on its trial findings in the final annual TPSS report in the year they were identified and actioned.