

Australian Energy Market Commission
GPO Box 2603
Sydney NSW 2000

Submitted online.

28 September 2023

AEMC ERC0290 – Improving security frameworks for the energy transition – Directions paper

The Australian Energy Council ('AEC') welcomes the opportunity to make a submission to the AEMC ERC0290 – Improving security frameworks for the energy transition – Directions paper (Directions paper).

The Australian Energy Council is the peak industry body for electricity and downstream natural gas businesses operating in the competitive wholesale and retail energy markets. AEC members generate and sell energy to over 10 million homes and businesses and are major investors in renewable energy generation. The AEC supports reaching net-zero by 2050 as well as a 55 per cent emissions reduction target by 2035 and is committed to delivering the energy transition for the benefit of consumers.

The AEC thanks the AEMC for the level of engagement it has provided on this matter. However, we are concerned that the next step in this process is the Final determination and rules. While there have been substantive consultation iterations on the OSM, which this approach seeks to replace, this Directions paper is the only consultation stage available to stakeholders on the new approach. The AEC considers it would be good regulatory practice to add one more stage of consultation in the form of a draft determination particularly when considering the significance and proposed duration of the changes to the market.

The Final determination is planned for 21 December 2023 and it should not be too challenging to extend this to include a second round of consultation on a Draft determination as all the proposed changes commence well after this date. The AEC strongly urges the AEMC to conduct an additional round of consultation.

The AEC agrees that the NEM requires a short-term fix for the procurement of ESS and that many of the proposals in the Directions paper appear to be reasonable solutions. What the document fails to achieve is restating the original objectives for this rule change, that is, the unbundling of ESS and creating real time markets unless it is demonstrably clear that this is not feasible for a particular service. Participants would like to be reassured that the AEMC is committed to market-based solutions that are technically sound and achieve the most efficient allocation of resources in both the operational and investment timeframes. And in our view this principle is critical to satisfying the NEO to benefit the long-term interests of consumers and emissions reductions.

The AEC acknowledges that there are technical challenges for creating unbundled ESS markets whereas the solutions proposed in the Directions paper are relatively simple to implement, however in the AEC's view three years is a more than adequate timeframe as opposed to 10 years. Participants would like more prescription around market development.

A recent example, of a delayed ESS unbundling project is the AEC's inertia rule change request which was lodged on 15 December 2021.¹ A draft determination is expected on 29 February 2024. As the

¹ <https://www.aemc.gov.au/sites/default/files/2021-12/ERC0339%20Rule%20change%20request%20pending.pdf>

AEMC notes in the Directions paper, “Inertia is a global service.” (p. 32) and can be sourced from any part of the NEM unless a region has been islanded. The AEC commissioned analysis which demonstrated inertia is ideally suited for a spot market and has long been commoditised by engineers as “Megawatt-second”. Despite all this evidence, the rule change process has been delayed until next year.² In the AEC’s view the inertia rule change should have been run in parallel with this process.

It is critical that ESS markets are unbundled to ensure that investment decisions can be made to supply these services. Capital investment has long lead times, and the sooner investors receive adequate signals that an ESS market is to be unbundled, the more efficient will be their capital allocation decisions.

The AEC believes there needs to be a clearly described and prescriptive transition pathway to unbundling. It needs to be established in the rules what AEMO is required to do and when it needs to be completed. AEMO is currently under a range of pressures associated with the transition and implementing government policies and it is the AEC’s view that unless there are explicit requirements on AEMO to unbundle ESS they will be considered low priority with respect to resourcing.

Chapter 3 Inertia

QUESTION 1: INTRODUCING AN INERTIA FLOOR FOR THE MAINLAND NEM FOR INTERCONNECTED OPERATION

Do stakeholders support the Commission’s proposal to introduce an inertia floor for the mainland NEM?

Do stakeholders consider that the allocation of proportions of the floor across the NEM would promote balanced and proactive procurement?

The current inertia framework requires AEMO to identify sub regions that have a credible risk of islanding and procure inertia if there is a shortfall in these sub-regions. The AEC supports the proposal to introduce an inertia floor for the mainland NEM and that this is publicly available.

With respect to determining whether a sub-region is at risk of islanding. At present, it is relatively open as to how sub-networks are defined, and there is currently no methodology or process document setting out how AEMO defines sub-regions. The 2022 Inertia Report contains some limited information in this area but lacks detail. The AEC also suggests that where AEMO identifies the risk of sub-regional or regional islanding is warranted that the at-risk network assets should be contained in AEMO’s List of Vulnerable Transmission Lines.

There are a range of potential ways that a sub-network can be defined as being at risk of islanding, depending on the level of risk AEMO is willing to accept. A greater appetite for risk may entail lower costs to procure inertia (if any) but does increase the risk of there being insufficient levels of inertia should an islanding event occur. A more cautious approach would reduce the risks of inertia shortfalls but could increase costs. The AEC considers it would be beneficial for the market for increased transparency around how these decisions are made. This could be achieved by a requirement in the rules or require consultation with the Reliability Panel, AEMO’s technical advice and that of other independent experts.

² https://www.energycouncil.com.au/media/4irjofwn/aec-inertia-market-options-marketwise-solutions_20210831.pdf

QUESTION 2: ALIGNMENT OF THE INERTIA AND SYSTEM STRENGTH PROCUREMENT TIMEFRAMES

Do stakeholders support the Commission's proposal to require AEMO to project inertia needs for all sub-networks every 10 years?

Do stakeholders support requiring TNSPs to ensure that sufficient inertia is continuously available to meet the projection three years into the future, to align with the system strength framework?

The AEC agrees with the AEMC's proposal to project the secure operating level inertia needs over a 10-year horizon. However, the AEC believes it would be useful if this is augmented with an assessment of the most efficient way to procure inertia over the forecast period.

To be more concise and avoid interpretation issues, the AEC considers the term "sufficient" inertia could be clarified by replacing it with "minimum" inertia. The AEC supports requiring TNSPs to ensure that *minimum* inertia is continuously available to meet the projection three years into the future, to align with the system strength framework.

QUESTION 3: WIDENING THE ELIGIBILITY OF UNITS CAPABLE OF PROVIDING INERTIA

Do stakeholders agree with the Commission's proposal for TNSPs to be able to procure synthetic inertia to meet the minimum threshold level?

Do stakeholders agree with the requirement for AEMO to consult on and publish a specification of synchronous and synthetic inertia?

The AEC is fully supportive of allowing synthetic inertia to be included as an eligible source to meet the minimum threshold level. AEMO must be required to undertake a timely two stage consultation process on the specifications of synchronous and synthetic inertia. This would provide a level of assurance for stakeholders that unnecessarily onerous specification requirements are not introduced by AEMO.

QUESTION 4: REMOVING THE EXCLUSION ON INERTIA AND SYSTEM STRENGTH IN THE NSCAS FRAMEWORK

Do stakeholders agree with the Commission's proposed approach to remove the current exclusion on inertia and system strength in the NSCAS framework?

The AEC agrees with the AEMC's proposed approach to remove the current exclusion on inertia and system strength in the NSCAS framework.

QUESTION 5: RIT-T EXEMPTION

Do stakeholders think should a RIT-T exemption should apply to inertia and system strength services where a shortfall arises within 18 months?

The AEC supports this on the basis that the AER will still be required to approve the transmission investment. However, as TNSPs' revenues are set on a five-yearly basis one would expect that the capex required for an inertia shortfall would have been identified as a possibility at the time of the reset and thereby included as contingent project.

QUESTION 6: COMMENCEMENT ARRANGEMENTS FOR CHANGES TO THE INERTIA FRAMEWORK

Do stakeholders agree with the proposed commencement arrangements?

Are there extra factors that the Commission should consider in transitioning to the new inertia arrangements?

The AEC supports the commencement arrangements. However, the AEC is hopeful that its inertia rule change request will be accepted and finalised by 2025 which would be expected to reduce the need for the proposed inertia arrangements that are scheduled to be implemented on 1 December 2027 or at the very least the amount of TNSP sourced inertia.

Chapter 4 NMAS

QUESTION 7: DESIGN OF THE TRANSITIONAL SERVICES FRAMEWORK

Do stakeholders agree on the need for a transitional services framework?

What are stakeholders' thoughts on the design of the transitional services framework?

As stated previously the AEC agrees there is a need for a transitional services framework. There needs to be a clearly described and prescriptive transition pathway to unbundling. It needs to be established in the rules as to what AEMO is required to do and when it needs to be completed.

QUESTION 8: SUNSET CLAUSE

Do stakeholders agree that a sunset clause is required?

Is a 10-year expiry an appropriate timeframe?

The AEC considers the proposed 10-year timeframe (ie, to 2034) to be unnecessarily excessive. The AEC considers three years with an option to extend by up to one year to be more than adequate. It needs to be established in the rules what AEMO is required to do and when it needs to be completed subject to the three-year constraint and possible exercise of the one-year extension option. The rules should also require AEMO to provide six monthly update reports on its progress with unbundling ESS.

Chapter 5 Enablement

QUESTION 9: PLACING ENABLEMENT RESPONSIBILITY ON AEMO

Do stakeholders support the Commission's proposal to place the responsibility of enabling inertia and system strength contracts on AEMO, with an ability to enable NSCAS and transitional services if it is beneficial?

Are there any issues with split contracting and enablement responsibilities between TNSPs and AEMO that have not been outlined above?

The AEC supports the AEMC's proposal to place the responsibility of enabling inertia and system strength contracts on AEMO, with an ability to enable NSCAS and transitional services if it is beneficial. This represents a logical improvement compared to the current multi-party responsibilities.

While not specifically related to this question, the Directions paper notes that:

*"AEMO has better visibility than TNSPs over real-time security needs and IBR participation in the market. This is because AEMO is responsible for operating the wholesale market and has responsibility for the integrity of the system. Therefore, AEMO would be better-placed to more precisely determine the number of contracted resources needed online at the time."*³

This acknowledgment appears to contradict the need for the proposed 10-year timeframe for the unbundling and creation of real time ESS markets as the AEMC clearly has confidence in AEMO's ability

³ Directions paper, p.76.

to develop a real time enablement tool in a timely manner as the proposed enablement arrangements are scheduled to commence on 2 December 2025.⁴

QUESTION 10: ENABLEMENT LEVELS TO SUPPORT SYSTEM SECURITY

Do stakeholders support that the Commission's proposed levels for enablement, including the enablement of system strength contracts to levels above the minimum requirement only if it would result in an overall increase in dispatched IBR?

The AEC supports increasing dispatched IBR however system strength contracts should only be enabled for this purpose if it is both practical and efficient.

QUESTION 11: ENABLEMENT PRINCIPLES

Do stakeholders consider the proposed enablement principles to be appropriate and adequate?

The AEC considers the proposed enablement principles to be appropriate and adequate.

QUESTION 12: REPORTING REQUIREMENTS FOR ENABLING SYSTEM SECURITY CONTRACTS

Do stakeholders support the Commission's proposal for AEMO to:

- publish an enablement guideline
- provide daily information about the type, frequency and cost of enabled contracts
- publish an annual enablement report?

The AEC supports the reporting guidelines.

Chapter 6 Directions

QUESTION 13: AMENDING THE BASIS OF DIRECTIONS COMPENSATION TO A BENCHMARK-BASED FRAMEWORK

Do stakeholders support the Commission's proposal to adopt the market suspension compensation framework and apply it to directions compensation?

In the AEC's view the Directions paper does not present a compelling case to justify changing the current directions framework and replacing it with the market suspension compensation framework and apply it to directions compensation. With respect to the formula, there is no compensation for:

- opportunity cost (yet the AEMC's compensation arrangements following the application of an administered price cap (APC) or administered floor price do allow for opportunity costs)⁵;
- fuel scarcity; and
- the increased wear and tear and the resultant bringing forward of either opex or capex. For example, every time an OCGT turns on or off it moves it one step closer to its next hot gas part inspection. Bringing this forward increases the cost in net present value terms.

The AEC considers the proposed compensation regime to be inadequate and merely formalises the appropriation of private property (ie, plant output) at a value lower than what the owner would voluntarily sell it for. Therefore, the AEC cannot support the AEMC's proposal to adopt the market suspension compensation framework and apply it to directions compensation.

⁴ Directions paper, p. 69.

⁵ <https://www.aemc.gov.au/sites/default/files/2022-11/Final%20compensation%20guidelines%20Dec%202022.pdf>

QUESTION 14: FREQUENCY OF BENCHMARK VALUE CALCULATION

Do stakeholders agree with the proposal to include annual updates to the schedule of benchmark values for the proposed new directions compensation framework, noting this would also apply to the market suspension framework?

As noted in our response to Question 13, the AEC does not support the AEMC's proposal to adopt the market suspension compensation framework and apply it to directions compensation. Nevertheless, if the AEMC chooses to proceed with its proposal then an annual review of the benchmarks appears reasonable. When determining fuel costs, they should be derived from the spot price in the relevant facilitated market at the time of the direction (ie, dynamic) as opposed to being determined on an annual basis. This would more accurately represent the cost a participant incurs in sourcing gas at short notice in response to a direction to run its generator.

QUESTION 15: DIRECTIONS COMPENSATION FOR ENERGY STORAGE SYSTEMS

Do stakeholders consider that an estimate of the value of storage should form part of the automatic compensation payable to directed hydro plants and batteries?

If so, should a proxy value, such as a relevant gas benchmark value based on the capacity factor of the storage system, be used? Should an alternative approach to estimating the value of storage be adopted for batteries?

As noted in the Directions paper, hydro and batteries "could incur relatively high opportunity costs". This is illustrative of the flaw in excluding opportunity costs from directions compensation. This discrepancy is only going to become magnified over time as thousands of MWs of pumped hydro and batteries are commissioned as part of the transition.

QUESTION 16: IMPROVING MARKET NOTICES AND DIRECTIONS REPORTING

Do stakeholders support the Commission's proposal to require AEMO to publish market notices when issuing directions that indicate information about the direction and why it is needed?

Do stakeholders support the Commission's proposal to replace the existing directions reporting requirements with a quarterly reporting requirement? Is the information that would be included in quarterly direction reports useful (or not) to stakeholders?

The AEC is supportive of increasing transparency through additional reporting requirements on AEMO. The AEC agrees with the approach and requirements on AEMO set out in the Directions paper. However, we believe the reporting requirements and a prescriptive level required detail need to be in the rules.

Questions about this submission should be addressed to Peter Brook, by email peter.brook@energycouncil.com.au.

Yours sincerely,



Peter Brook

Wholesale Policy Manager
Australian Energy Council