



28 September 2023

Ms Anna Collyer
Chair
Australian Energy Market Commission

Submitted through www.aemc.gov.au

Dear Ms Collyer

**Stanwell Corporation Limited Response to
Directions Paper – Improving Security Frameworks for the Energy Transition**

Stanwell Corporation Limited (Stanwell) welcomes the opportunity to respond to the Australian Energy Market Commission's (AEMC) *Improving Security Frameworks for the Energy Transition - Directions Paper* (the Directions Paper).

Stanwell is a major provider of electricity to Queensland, the National Electricity Market (NEM) and large energy users throughout Australia. We own and operate two coal-fired power stations, providing reliable and affordable energy, with a pipeline of renewable generation and storage technologies to reduce our emissions intensity and create future opportunities for our people and communities. In addition, Stanwell's retail business, Stanwell Energy, services the ongoing energy requirements of some of Australia's biggest industrial and commercial customers along the eastern seaboard of Australia.

This submission contains the views of Stanwell in relation to the Directions Paper and should not be construed as being indicative or representative of Queensland Government policy.

Many of the essential system services (ESS) that support the stable and reliable operation of the NEM are presently provided free-of-charge by thermal synchronous generators as an intrinsic by-product of this generation technology. However, the provision of these services is diminishing gradually, and will do so more swiftly over time as coal-fired power stations retire and the market transitions to higher levels of inverter-based generation. This is already creating critical technical problems for the Australian Energy Market Operator (AEMO) in maintaining power system security, a challenge which will only worsen in the absence of new service providers.

Stanwell recognises the importance of ensuring appropriate levels of ESS continue to be provided in the NEM and has been consistently advocating for the creation of market-based solutions for the ongoing provision and valuing of these services. Key to this process is the requirement for the AEMO to identify and define the individual services that they require, and work closely with the AEMC and market participants to develop these markets, wherever practicable. This initial work by AEMO is becoming increasingly critical as the pace of the

transition accelerates, yet there appears to have been little progress achieved over the last few years in this space, which seems to be the impetus for progressing this revised Rule change.

Post-2025 NEM vision and the OSM

The former Energy Security Board (ESB) recognised the importance of incentivising new reliable sources of ESS ahead of their inevitable decline. It endorsed the unbundling and procurement of these services through market-based reforms, advocating particularly for the development of spot markets to co-optimize the supply of inertia and frequency control services, operating reserves and energy.¹

In principle, the transparent real-time signals of a competitive clearing price from a decentralised market for individual system services would reflect the true underlying value of those resources. In turn, this would:

- incentivise the production of system services in quantities sufficient for AEMO to avoid shortfalls and maintain system stability and security,
- ensure system services are produced at least-cost, driving affordability outcomes for energy users, and
- encourage new investment and innovation in technology to support the energy transition over the medium and longer-term.

Stanwell has consistently called for these reforms in previous submissions to the ESB² and the AEMC,³ emphasising the need for “missing markets” to be developed and implemented as a priority and in parallel with other ESS Rule changes. It is firmly of the view that the benefit of having operational markets in place prior to shortfalls occurring far outweighs the costs incurred from waiting too long and only acting upon their realisation.

Market participants and stakeholders have also generally supported the development of these market-based arrangements. In addition, the AEMC has previously championed the approach, indicating⁴ that

... the best way to achieve [an efficient, secure and reliable power system] ... is to unbundle ESS from one another so that they can be individually and explicitly valued, priced and scheduled through market-based mechanisms ...

In this context, while the Operational Security Mechanism (OSM), set out in the AEMC’s Draft Rule Determination of September 2022, was designed to price, procure and schedule unbundled system security services, it was intended as a temporary or transitional arrangement to ultimately be replaced by a collective of individual spot markets.

¹ Energy Security Board 2021, [Post-2025 Market Design: Final Advice to Energy Ministers Part A](#), p. 9.

² Stanwell Corporation Limited 2020, [Submission to Post-2025 Market Design Consultation Paper](#), and Stanwell Corporation Limited 2021, [Submission to Post-2025 Market Design Options – A Paper for Consultation](#).

³ Stanwell Corporation Limited 2022, [Submission to Essential System Services and Inertia in the NEM](#), and Stanwell Corporation Limited 2022, [Response to Draft Rule Determination – Operational Security Mechanism](#).

⁴ Energy Security Board 2021, [Post-2025 Market Design: Final Advice to Energy Ministers Part A](#), cited in Australian Energy Market Commission 2022, [Draft Rule Determination – Operational Security Mechanism](#), p. ii.

The Directions Paper – a change of vision?

During the consultation on the OSM, stakeholders acknowledged the potential adverse impact of diminishing ESS supply, but highlighted material concerns with the proposed approach. The AEMC recognised many of these shortcomings, finding the mechanism to be too costly and complex to develop and implement. It also considered the OSM unlikely to deliver on its intended outcomes.⁵

Having rejected the OSM, the AEMC is now proposing to augment existing regulatory frameworks to address system security issues through the energy transition. It contends that this collective alternative is simpler, can be implemented more quickly and provides more effective investment incentives.

Stanwell is extremely concerned with the approach that the AEMC is proposing.

The adoption of vaguely defined and long-tenured ‘transitional arrangements’ has the very real potential to diminish the motivation for further regulatory reform to address the efficient provision of ESS in the future. While the Directions Paper does not specify the length of time over which these arrangements are to remain in place, it implies a lengthy period of at least ten years. This unnecessarily long ‘transitional period’ will likely delay the development of more efficient unbundled spot markets, and may even result in those reforms being abandoned.

Moreover, Stanwell notes that the Directions Paper remains largely silent on the AEMC’s previous medium-term vision for efficient market-based delivery of ESS. In the absence of even a high-level indicative timeframe for their development, it now appears that the AEMC is walking away from this objective.

The proposed approach also glosses over the reality that the "transitional arrangement" will need to determine what outcomes AEMO desires and how they can be met by market resources individually or collectively - the very task required for the creation of an unbundled market and addressed in the next section.

Stanwell recognises the serious power system security challenges facing the NEM and believes that the problem warrants a robust and cost-effective solution for the energy transition and beyond. However, given the litany of historical statements of intent on the one hand and the lack of progress on the other, Stanwell is not prepared to endorse the AEMC’s proposal as presented in the Directions Paper.

While fast-tracking the adoption of synthetic inertia and aligning the timing of inertia and system strength procurement are simple ‘no-regrets’ measures that can and should be taken independently of broader reform, Stanwell is strongly of the view that:

- AEMO should urgently undertake the work required to define those ESS necessary to maintain power system security, and identify which of those services can be effectively unbundled,

⁵ Australian Energy Market Commission 2023, [Directions Paper – Improving Security Frameworks for the Energy Transition](#), p. iii.

- the Rule change process should transparently consider all options for reform collectively at this time, including the long-standing Rule change proposal to establish an inertia market, and
- as part of this regulatory process, the AEMC should issue a new Draft Determination which unequivocally commits to the timely development of ESS markets.

Commitment to unbundling

Stanwell is aware that, through the *Engineering Roadmap to 100% Renewables* project and its predecessors, AEMO has been advancing its understanding of those particular system services required to maintain the power system technical operating envelope under high-VRE generation scenarios. To the extent that the constituents of system stability, the relationships among them, and the specification of the services to be valued and procured are central to any power system security solution, it is reasonable to expect that this work stream should have been a priority for the system operator.

However, despite AEMO having worked on these matters for some time, it is only able to report limited progress. Many significant questions about the nature of security services, including their definitions and characteristics, still remain unanswered. It is Stanwell's view that the market operator has either not sufficiently prioritised this vital work programme or has been unwilling to share and discuss this work openly with market participants and other stakeholders. Neither of these scenarios are ideal, and regardless of which is the actual case, has eroded Stanwell's confidence in the market bodies' commitment to identifying and creating the missing ESS markets.

Stanwell recognises that there are challenges in unbundling ESS products. However, it is concerned that this lack of progress will delay implementing market-based reforms. Moreover, it will impede investment decision-making as prospective asset owners need clarity as to which services they can obtain a revenue stream from to justify their investment in new technologies.

Inertia – a potential solution already at hand

In December 2021, the Australian Energy Council (AEC) with the support of its members, proposed a Rule change to enable inertia to be procured from the lowest-cost available sources and co-optimised with other NEM markets to minimise dispatch costs.⁶ Through this Rule change request, market participants have provided a potential framework for the development of a market for inertia, setting a value for current providers and a price signal to incentivise investment in new sources as traditional providers exit the market.

However, the AEMC and AEMO have both been resistant to proactively advance the development of this proposal. In their subsequent joint paper *Essential System Services and Inertia in the NEM*,⁷ the market bodies advocated for a “wait-and-see” approach, increasing

⁶ Australian Energy Council 2021, [Inertia Spot Market Rule Change Request](#).

⁷ Australian Energy Market Commission 2022, [Essential System Services and Inertia in the NEM](#).

the risk that market participants would have an out-of-market provision imposed upon them, similar to that which occurred with the mandatory primary frequency response requirements.

Notwithstanding stakeholder responses to that Joint Paper generally being in favour of initiating the Rule change as soon as possible, the AEMC offered no compelling reason to support its decision not to proceed at that time. Moreover, in releasing the Directions Paper, the AEMC has indicated further consideration on the AEC Rule change proposal has been deferred until such time that the *Improving Security Frameworks for the Energy Transition* Rule change process has concluded.

Given that they offer alternative solutions to the same problem, Stanwell is strongly of the view that there is merit in both Rule change proposals being considered concurrently, rather than sequentially. In the absence of AEMO demonstrably establishing otherwise, the AEC and stakeholders have argued that technical barriers to an inertia market are not insurmountable, and that a functioning inertia market could provide a model for other ESS markets.

By deferring consideration of potential market-based solutions at this point, the AEMC is failing to consider all available options, and is likely to commit to a less efficient regulatory response for the procurement and valuing of inertia. Moreover, with an alternative rigid contracts-based framework in place, there is a risk that the AEMC will prematurely foreclose on the future development of an inertia market (and markets for other ESS), increasing the likelihood that the so-called 'transitional arrangements' will become enduring.

The need for a new Draft Determination

The AEMC is proposing to issue a Final Determination immediately following its assessment of stakeholder responses to the Directions Paper. Stanwell is of the view that this intended approach is not consistent with good regulatory practice, and that an interim step involving the production of, and consultation on, another Draft Determination is warranted.

The proposals in the Directions Paper represent a material change to the positions set out in the Draft Determination⁸ of September 2022. Having abandoned the OSM, the AEMC is now proposing to take a very different approach to resolve the issues surrounding future power security. Arguably, given the extent of these changes, the AEMC should commence an entirely new Rule change review, rather than merely change the name, content and recommendations of an existing regulatory process.

The Directions Paper affords stakeholders their first opportunity to assess and express views on a raft of new matters, many of which raise policy questions which need to be more comprehensively addressed before finalising a new Rule for adoption. It is neither practical nor appropriate for the AEMC to resolve and communicate these matters as part of a Final Determination.

⁸ Australian Energy Market Commission 2022, [Draft Rule Determination – Operational Security Mechanism](#).

Accordingly, a new Draft Determination will allow the AEMC the opportunity to:

- unequivocally commit to, and indicate a timetable for, the development of unbundled ESS markets,
- transparently assess the relative merits of developing an inertia market in the first instance,
- consider and address stakeholder comments from the consultation on the Directions Paper, some of which may give reason to pause and prompt a revision to proposed approaches, and
- expand on and refine high level policy positions.

Conclusion

Electricity market stakeholders generally recognise the inherent advantages of market forces in the efficient and effective delivery of system security, decentralising operational and investment decision-making to commercial entities that are best placed to bear the costs and manage the risks of those decisions. This competitive framework has characterised the delivery of wholesale market energy services in the NEM since its inception.

It is Stanwell's position that the technical ground-work required of AEMO under the proposed reform is equivalent to that required to create unbundled markets, namely:

- properly define the ESS that are required to maintain system security and stability, and
- identify which of those could be unbundled and procured through market-based mechanisms.

Only once this work is complete should there be consideration of the need for a transitional mechanism for those services that aren't able to be unbundled from other services in the short-to-medium term.

In addition, any transitional mechanism that is potentially found to be necessary should only be in place for the shortest period practicable while markets are developed. The currently-proposed transitional period of 10 years (or longer) is inappropriately long and, as we have stated earlier, increases the risk that market solutions will ultimately never be developed or implemented.

In this context, Stanwell strongly urges the AEMC to reconsider its approach and grasp this crucial opportunity to progress the ESB's vision for the provision of ESS in a market with fewer traditional system service providers and greater inverter-based resources, and act upon the aspirations of market participants. To do otherwise is likely to entrench a less efficient and more-costly solution to the problem of diminishing system security services.

Stanwell welcomes the opportunity to further discuss the matters outlined in this submission. Please refer any questions to me on 0400651302, or at Ian.Chapman@stanwell.com.

Yours sincerely

A handwritten signature in blue ink, appearing to be 'I. Chapman', with a long horizontal flourish extending to the right.

Ian Chapman
Manager Market Policy and Regulatory Strategy