AUSTRALIAN ENERGY COUNCIL

Australian Energy Market Commission
Level 15, 60 Castlereagh Street
Sydney NSW 2000

Submitted online.

1 February 2024

Improving Security Frameworks for the Energy Transition Transitional Services Update Paper

The Australian Energy Council ('AEC') welcomes the opportunity to make a submission to the Australian Energy Market Commission's ('AEMC') Transitional Services Update Paper ('Paper') on Improving Security Frameworks for the Energy Transition.

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 supports the need for an additional framework to address the current gap in the existing essential system services (ESS) and power system security frameworks as the energy transition accelerates. The transitional arrangements proposed seem a reasonable short-term fix as the Australian Energy Market Operator (AEMO) develops a better understanding of the system security requirements, and should go some way to reducing the current over-reliance on directions. However, consistent with our submission to the Compensation Frameworks Review Consultation Paper[1], we strongly recommend that amendments to clause 3.9.7 of the Rules be implemented to remove unnecessary directions and market intervention. Such an amendment would further support the provision of power system security services when required without the need for issue of a direction.

We are concerned that the timeline proposed by the AEMC does not keep pace with the operational reality of the power system foreshadowed by AEMO in its Integrated System Plan (ISP). The AEMC's proposed review of the framework after seven years is too late; any review should be conducted no later than three years after the framework commences.

There are significant economic efficiency benefits once ESS are valued and procured on an unbundled basis. We welcome the AEMC reaffirming the goals to individually value and procure ESS, where this is possible and economically justified.

Market based solutions that are technically sound and achieve the most efficient allocation of resources in both the operational and investment timeframes are key to satisfying the NEO. It is critical that ESS markets are unbundled to ensure that investment decisions can be made to supply these services which will generally be achieved on a marginal cost basis as part of the overall investment in new resources. 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 decision. This will flow through as lower costs overall to consumers. The AEC considers that provision of ESS via market-based solutions will result in lower costs to consumers over the long term compared to provision of regulated service provision by network service providers where over

[1] Review into electricity compensation frameworks | AEMC

Level 14, 50 Market Street
Melbourne 3000
GPO Box 1823 Melbourne Victoria 3001

P +61 3 9205 3100
E info@energycouncil.com.au
W energycouncil.com.au

ABN 92 608 495 307
©Australian Energy Council 2022
All rights reserved.

provision of services and locking in of fixed costs for extended periods, potentially up to 60 years, even if these services are ultimately not required.

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 and limited if any progress will be achieved in this important area.

To that end, we support:

- A separate report to address unbundling and transparency concerns.
- Clear definition of all ESS that will be required to service the needs of the future power system.
- Regular reviews to track AEMO's progress to unbundling on a sufficiently granular level.
- A clear description of the pathway from the transitional services framework to the provision of unbundled services.
- An explicit definition of the security needs procured through the transitional services framework.

The AEC considers that the NEO must prevail, and the provision of ESS must provide demonstrable benefits to consumers. Whilst initially what is easy for AEMO to implement may be worthy of some weighting, such consideration must be limited to a very short time period such that we don't end up with a market operator centric approach as opposed to an approach which is in the best interests of consumers.

Given the technical nature of the work required, care should be taken to ensure that AEMO's progress is tracked, and is made transparent. From a governance perspective, arrangements should be in place to avoid AEMO being a single source of truth from a technical standpoint, with independent technical advice regularly sought. The Reliability Panel should play a greater role to track the progress to unbundling services, independent assessment of AEMO's progress as well as review and reporting on independent technical advice.

Noting the ultimate goal remains to individually procure and value security services, in the interim we support security services being procured through contracts. Type 1 contracts should be procured through the transitional services framework rather than directions for managing the security of the System for the next three years. This would provide AEMO with a mechanism to help manage the system through periods of high renewable penetration and potential low levels of synchronous generation, without resorting to directions as a primary tool. These contracts must be designed as a transitional tool to meet a temporary need with efficient markets developed for longer term needs.

The AEC supports the establishment of a system operability metric for which Type 1 contracts are procured and enabled. This would be treated like any other market parameter, with the economic trade offs of the level of operational certainty considered and independently scrutinised. Such a metric would also assist in the transparency objectives as the market would attain greater understanding of the security gap which AEMO is meeting through procured services, providing a forward investment signal. Without standards or specific operability targets, the trajectory via which to reduce the dependence on these system configurations is undefined and uncertain.

The AEC also supports trials of type 2 contracts to manage security in a low or zero emissions system. Explicit reporting of these trials and type 2 contracts is important, but if AEMO needs to call on type 1

Level 14, 50 Market Street
Melbourne 3000
GPO Box 1823 Melbourne Victoria 3001

P +61 3 9205 3100
E info@energycouncil.com.au
W energycouncil.com.au

ABN 92 608 495 307
©Australian Energy Council 2022
All rights reserved.

synchronous generators in the event type 2 is insufficient, it should not be precluded from doing so. Reporting in this area must also provide details where provision of a type 2 trial technology contract was available to AEMO but AEMO determined not to progress the trial contract.

There is no firm requirement on AEMO to use Type 2 contracts. AEMO will understandably preference using Type 1 contracts, particularly in times of system stress. Type 2 contracts trialing the provision of other services such as synthetic inertia could be de-prioritised. The proposed transitional framework would benefit from clear targets for the trialing of new technologies, with a preference for systematic and transparent market trials. In the absence of clear targets, the timeframe for Type 1 contracts should be shortened, with the sunset period for the use of 3-year Type 1 contracts reduced to December 2028.

In supporting Type 1 and Type 2 contracts, the new rules associated with this rule change must set out which resources may be contracted under either contract type. For example, which contract type would a hydro or gas turbine generator, which can operate in synchronous condenser mode, be entitled to supply. In addition, the new rules must contain a safe harbour provision where services have been supplied in good faith to meet AEMO's stated need, however, AEMO then changes the need at a later date, such that the resource may no longer supply the need.

The AEC suggests that the proposed provisions for scheduling of the transitional contracts or the alternative network support and control ancillary services contracts (NSCAS) require further clarity and improvement to prevent the inefficient scheduling of ESS. The current decision criteria of an increase in inverter based resources (IBR) has high probability of resulting in the inefficient dispatch of ESS at increased net costs to consumers. Whilst is has been argued that an IBR requires ESS once connected, even if it is unable to generate any active energy output, it is unclear what benefit is delivered to consumers by such an outcome. The AEC's view is that dispatch of ESS must only occur where there is a clear demonstrable benefit to consumers or to power system security.

With regards to cost recovery for provision of ESS, we consider it is critical that AEMO transparently identify the beneficiaries of ESS provision. We note that beneficiaries may exists in regions other that the region in which ESS is dispatched. By way of example, provision of ESS in the South Australian region which allows increased IBR dispatch in South Australia may also benefit market customers in Victoria or other regions. New rules associated with this rule change must clearly define the process to be used by AEMO in determining the beneficiaries of ESS dispatch. We consider AEMO's current process for cost recovery for directions to be significantly flawed in this regard and unsuitable for ESS provision cost recovery.

The AEC welcomes the AEMC position that the proposed transitional services framework does not preclude continued consideration of alternate procurement approaches, such as the inertia spot market the AEC has advocated for through the Efficient Provision of Inertia rule change request. We continue to believe that an inertia spot market is the most efficient inertia procurement tool, with lower costs as against TNSP procurement.

It is this rule change that highlights starkly the benefit the AEMC could get from seeking independent technical advice to overcome the apparent reluctance of AEMO to move towards unbundled provision of ESS via a market despite it already calculating and monitoring operational inertia provision and required needs. We also note the Reliability Panel introduced a rate of change of frequency (RoCoF) limits in the frequency operating standards (FOS) that could be referenced when setting inertia needs – again highlighting a potentially enlarged role for the Reliability Panel in this space as an independent arbiter.

Level 14, 50 Market Street
Melbourne 3000
GPO Box 1823 Melbourne Victoria 3001

P +61 3 9205 3100
E info@energycouncil.com.au
W energycouncil.com.au

ABN 92 608 495 307
©Australian Energy Council 2022
All rights reserved.

The AEC remains concerned that AEMO's resistance to unbundling of ESS may be in part to a reluctance to transparently indicate the components in an ESS bundle. We refer to AEMO reporting around components of the ESS bundle for the South Australian minimum synchronous generators operational requirements post the commissioning of the four new synchronous condensers in South Australia where the bundled components included services such as energy ramping as well as energy and frequency control ancillary services reserves. The new rules in the final determination associated with this rule change must contain clear provisions that AEMO must not include in any ESS bundle any service, or proposed alternative, which can already be provided by an existing market service.

Questions about this submission should be addressed to David Feeney, by email David.Feeney@energycouncil.com.au.

Yours sincerely,

David Feeney
General Manager, Wholesale and Environment
Australian Energy Council

Level 14, 50 Market Street
Melbourne 3000
GPO Box 1823 Melbourne Victoria 3001

P +61 3 9205 3100
E info@energycouncil.com.au
W energycouncil.com.au

ABN 92 608 495 307
©Australian Energy Council 2022
All rights reserved.