

16 September 2021 Australian Energy Market Commission Reference: ERC0280 Submitted online.

## Integrating energy storage systems into the NEM

Stanwell Corporation Limited (Stanwell) welcomes the opportunity to respond to the Australian Energy Market Commission's (the Commission) Integrating energy storage systems into the NEM Draft Rule Determination (Draft Rule Determination).

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

#### Introduction

Stanwell is a major provider of electricity to Queensland, the National Electricity Market (NEM) and large energy users throughout Australia. While providing reliable and affordable energy for today, we are exploring new generation and storage technologies that will help reduce emissions while also ensuring Queensland's electricity supply remains secure and reliable.

Stanwell appreciates the Commission's work in supporting continued integration of energy storage in the NEM and the consideration of the issues raised in the two rounds of consultation completed to date. Given the expected growth in both the capacity and contribution of energy storage, it is vital that all energy storage facilities (existing and future, stand-alone and hybrid, merchant and portfolio) have clear, consistent rules for investment certainty and efficient operation.

#### Proposed changes supported by Stanwell

Stanwell supports the following proposed actions in the Draft Rule Determination:

- The consistent approach to recovery of non-energy costs across participation categories and technology type, which aligns cost recovery with the principle of beneficiary and causer pays, stops inappropriate payments, incentivises more efficient behaviour and aligns with a servicebased approach;
- Addressing inconsistencies in ramp rates and thresholds for aggregating semi-scheduled units, to
  ensure consistency between storage and non-storage participants, load and generation units, and
  scheduled and semi-scheduled units;
- Clarifying that batteries and hybrid facilities remain liable entities under the Retailer Reliability
   Obligation (RRO), as this avoids perverse incentives to register in one category rather than

another and is unlikely to materially affect the way these facilities participate in the market during a reliability event;

- Clarifying the National Electricity Rules (NER) to reduce reliance on technology-specific, directionspecific and participant category-specific language;
- Consolidating ancillary services clauses in Chapter 2 of the NER to create a framework that is more adaptable to change and better able to facilitate innovation; and
- Streamlining the NER by fixing drafting errors and improving clarity of the provisions being amended as part of this rule change, improving the overall coherence of the NER.

# Storage paying Transmission Use of System

Stanwell does not agree that the proposed changes pertaining to participants paying Transmission Use of System (TUOS) for energy taken from the grid are "minor amendments" to the NER and does not support this proposed change. Making energy storage (and any participants moved to the Integrated Resource Provider participant category) liable for TUOS for electricity taken from the network is a significant change to the current regime and requires a commensurate level of scrutiny and justification.

While Stanwell appreciates the Commission's goal of shifting compensation from a category-based and technology-based approach to a service-based approach, Stanwell does not believe the characteristics of either the load or generation associated with energy storage should make energy storage liable for TUOS for the following reasons:

- Load is considered to receive some level of implied access to the network, so consumers pay TUOS in exchange for this access. Energy storage is an intermediate user rather than an end user, as it draws energy from the network to provide energy and non-energy services at a later time; i.e. it does not consume the energy withdrawn (ignoring round trip energy losses). Energy storage does not have firm access to the network as it can be constrained off for system security purposes; and
- Generators in the NEM do not pay any form of TUOS because they do not have firm access to the network. Energy storage time-shifts other generation rather than providing "primary" generation to the network and does not have firm access when returning time-shifted energy to the network.

Given energy storage does not have firm access while charging or generating, there does not appear to be a case for energy storage paying TOUS in exchange for access to the network.

Stanwell recommends the ambiguity within the current NER be resolved by clarifying that energy storage is not liable for TUOS, consistent with both the current policy for connected generating systems and AEMO's proposed rule change (i.e. "TUOS charges should not be charged for bidirectional assets").<sup>2</sup>

Stanwell acknowledges making this determination would require additional work to ensure hybrid facilities containing energy storage were not incentivised to route end-use consumption through

<sup>&</sup>lt;sup>1</sup> AEMC, Integration Energy Storage Systems into the NEM Draft Rule Determination, July 2021, p 30.

<sup>&</sup>lt;sup>2</sup> AEMO, Integrating Energy Storage Systems into the NEM Rule Change Proposal, August 2019, p 2.

energy storage to reduce TUOS charges, but this could be addressed through appropriate metering of the components within hybrid facilities.

### Conclusion

Stanwell appreciates the Commission's work to support the further integration of energy storage systems and agrees with some of the proposed changes. However, Stanwell does not support the proposal for energy storage to pay TUOS. This is a significant change to the market that requires further examination to ensure investor certainty and efficient energy storage locational decisions are not adversely affected.

Stanwell welcomes the opportunity to further discuss the matters outlined in this submission. Please contact Evan Jones on (07) 3228 4536.

Yours sincerely,

Ian Chapman

Manager Market Policy and Regulatory Strategy