

Mr Joel Aulbury
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AEMC,
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16 September 2021

Subject: ERC0280 - Integrating energy storage systems into the NEM draft determination

Dear Joel,

BayWa r.e. Projects Australia (BayWa re.) welcomes the opportunity to provide commentary on the AEMC's draft determination for Integrating energy storage systems into the NEM (ERC0280).

BayWa r.e. is a leading global renewable energy developer, service provider, equipment distributor and energy solutions provider, with offices in more than 28 countries. Its Australian subsidiaries have developed and operate renewable projects currently in Victoria and Queensland. We are determined to support Australia's transition towards a more cleaner energy future.

We support the intent of the draft determination to assist hybrid and storage technologies to connect into the National Electricity Market (NEM) with more clarity on technical and commercial aspects. Even though we strongly support many of the changes in the NER that have been put forward by the AEMC, there are some aspects of the draft determination that may need further consideration to ensure efficient investment in energy storage is realised. In line with this, we have prepared the following commentary on the draft determination ERC0280 proposed by the AEMC.

TUOS and DUOS charges for energy storage technologies

In response to AEMC's draft determination, we query the application of TUOS and DUOS charges for energy storage technologies. BayWa re. strongly supports AEMO's initial proposal to exempt TUOS charges for energy storage technologies. TUOS comprises of locational and non-locational costs. The current pricing mechanisms for shared transmission network services impose higher locational costs associated with weak grid regions. This disincentivises investment in storage technologies at these weaker grid locations, where they may be most beneficial. In addition to this, charging TUOS for storage technologies introduce the potential to double dip, as network tariffs apply when the energy is stored, and then again when the energy is consumed by the end customer.

In principle, storage technology is a market intermediary and should not have TUOS charges imposed on it as it is not the destination for the energy but rather a stop on the way.

If storage technologies are liable for TUOS and DUOS charges, they should be excluded from locational specific costs. Time of use charges should be considered as they are essential to acknowledge storage technology's ability to manage energy consumption, and financially motivate charge/discharge behaviour which mitigates network congestion.

In summary we believe that applying TUOS to energy storage systems would unfairly impose cost on the technology. The application of TUOS does not recognise the technology as a carrier of energy and not the final consumption point of that energy. Imposing TUOS on energy storage would:

- provide a disincentive for storage to be located at weaker grid areas where it can be most effective in stabilising and re-enforcing the grid;
- over-recover TUOS charges by recovering once when electricity is stored and then again when consumed by a customer; and
- inflate bid price requirements for storage systems by adding unnecessarily to costs required to be recovered under an arbitrage operating scenario.

Recovery of non-energy costs

BayWa r.e. supports the draft rule change to make the recovery of non-energy costs consistent regardless of market participant category.

BayWa r.e. notes that the ancillary cost recovery mechanisms may not remain appropriate in today's market given that some of the cost recovery mechanisms have not significantly changed since the establishment of the FCAS markets in 2001. The NEM has evolved with large amounts of electricity consumers incorporating behind-the-meter generation, significant changes in generation technology and the emergence of energy storage systems. In a system where ancillary costs are governed by energy flows and some of these non-energy costs, namely FCAS, are a function of instantaneous power imbalance in the system, it is appropriate to review the mechanisms for these non-energy costs now.

BayWa r.e. supports the proposal for a bottom-up review of the principles associated with these non-energy costs. BayWa believes that a review into the principles and mechanisms underpinning these non-energy costs should be conducted.

Retailer reliability obligations

Making storage assets liable under the Retailer Reliability Obligations does not appear to recognise the fact that energy storage is an intermediary in the system. Energy storage systems do not consume energy as the final consumption point for that energy. The RRO intent is to provide an incentive for market participants to invest in the right technologies and to meet their share of expected peak demand. Energy storage is an active participant that is able to manage their own

demand. Therefore, obligating energy storage facilities to enter into contracts for electricity that they will never fully consume appears to complicate and add cost to energy storage projects whilst not recognising them as an intermediary of that electricity.

Thank you for the opportunity to comment on this consultation. If you would like to discuss any of the issues raised in this submission, please contact Matthew Haddad on 03 9429 5629 or at matt.haddad@baywa-re.com.

Yours sincerely,



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