

16 September 2021

Ms Anna Collyer
Chair
Australian Energy Market Commission
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Reference code: ERC0280

Dear Ms Collyer,

Response to Integrating Energy Storage systems draft rule determination

AusNet is pleased to have the opportunity to make a submission to the Australian Energy Market Commission's (**AEMC**) draft rule determination. Changes were proposed by the Australian Energy Market Operator (**AEMO**) to remove barriers for the use of batteries and business models that incorporate a mix of technology types, and addresses identified issues with integrating batteries in the National Electricity Market (**NEM**).

We agree the draft rule determination will significantly improve the framework for integrating energy storage systems, creating greater certainty for investment in energy storage and hybrid facilities. The draft rule determination complements other major reforms, including the access, pricing and incentive arrangements for distributed energy resources and wholesale demand response mechanism rule changes.

The draft rule proposes to create new terms and new Market Participant registration categories for batteries. For example, it introduces Integrated Resource Providers (**IRPs**) and Integrated Resource Units (**IRUs**) for scheduled, semi-scheduled, non-scheduled and non-registered market participation. Excluding non-registered IRPs, this change is necessary for the market to properly identify batteries and adapt to the rapid growth of energy storage technologies.

We note that the new registrations will require changes in the IT systems of distribution businesses (**DBs**) that transact information with AEMO and retailers. Changes to DBs connections contracts will also be required prior to the rules effective date. While these changes are unavoidable to properly integrate energy storage systems into the NEM, the implementation of these changes will be costly for DBs.

In relation to network service provider charging, we support in principle, the draft rules treatment of Transmission Use of System (**TUOS**) and Distribution Use of System (**DUOS**) charges. Technological neutrality is paramount for battery and hybrid unit connections to both the distribution and transmission networks. Batteries and hybrid facilities that consume energy from the network should be provided no preferential treatment relative to other customers and generators.

TUOS charges for batteries and hybrid systems

By providing the flexibility to treat batteries and other hybrid facilities on the transmission network as negotiated services, transmission network service providers (**TNSPs**) can agree to waive TUOS if they are operating as scheduled or semi-scheduled loads or operated to the net benefit of network customers. In addition to the drafted rules, we suggest the inclusion of a requirement for the network to undertake an assessment of whether the batteries strengthen the transmission network to the net benefit of other network customers and other principles on avoiding cross subsidies. A principles-based approach to assessing whether TUOS should be waived for IRUs

that are beneficial to other network customers, would reduce the risk of unforeseen costs for new battery projects.

The AER is currently assessing AEMO's 2022-27 proposed pricing methodology (for Victoria), that makes it clear in what circumstances transmission charging may be exempt. This proposed arrangement would provide transparency and consistency across TNSP connected customers, generators and IRPs. Our suggested a principle-based assessment in the Rules would guide the application of this pricing methodology and be complementary to it. We support arrangements that provide a level playing field between registration categories.

Network Use of System (NUOS) charges for batteries on the distribution network

Our revised EDPR Tariff Structure Statement proposed arrangements to exempt batteries from all NUOS in our revised electricity distribution proposal if:

- There is no load at the site other than load associated with the generation facility or battery; and
- The connecting party provides us with assurance that the generator or battery will be operated to the net benefit of our network customers.¹

However, the AER's final decision provided only an exemption to batteries not engaged in any competitive market activities. It also determined that a partial rebate of NUOS may apply for the charging a battery used to provide network support services. The partial rebate of NUOS would not apply to energy used to charge the battery where the discharge is for contestable services. In making this decision, the AER final decision identified a lack of clarity in the Rules as to the appropriate charging arrangements for energy storage systems.² In effect, IRUs that do not bring forward network augmentation are still charged NUOS if used to provide a range of services to the wholesale and FCAS markets. This may unnecessarily create a disincentive for new IRUs on the distribution network, if agreed network support payments are less than the NUOS charges.

Therefore, it would be better if the Rules provided support for tariff structures that allow batteries on the distribution network to be fully exempt from NUOS charges, where the battery is operated to the net benefit of network customers. AusNet recommends that Rule amendments are made to provide further guidance on the application of the pricing principles at the distribution level

Subject to the above alteration, we support the draft rules approach to NUOS charges for storage, deferring to the *pricing principles for direct control services* and the focus on cost reflective charges. The Rules have long established principles for setting network charges that the AER uses to propose and approve cost reflective tariffs to recover the efficient costs of operating and maintain electricity networks. The alternative of not allowing DBs to charge NUOS for batteries would risk creating a cross subsidy if their placement or operations brings forward network augmentation.

Drafting issues with the draft rules

As raised in the Energy Networks Australia (**ENA**) submission, and explained in their legal advice, draft rule clause 5.2A.3(b1) appears to be inconsistent with the current definitions of a prescribed *transmission service* and *negotiated transmission service*. The new clause 5.2A.3(b1) is not required to give the connection applicant for an IRU the right to request a *shared transmission service* that is classified as *prescribed transmission service* or as a *negotiated transmission service*. Clause 5.2A.3(b) of the Rules already provides the right to request service. Therefore, we recommend the removal of draft rule clause 5.2A.3(b1).

Improving batteries access to provide regulation Frequency Control Ancillary Services (FCAS)

The proposed rules represent an important step forward in enabling battery and hybrid units to support system security through the provision of regulation FCAS services. IRPs are well placed to offer a range of services, while operating within minimum access standards and other applicable standards and conditions.

¹ Section 4.8, AusNet's Revised Tariff Structure Statement 2022-26

² Section 19.4.3, AER's final decision on Vic DBs Tariff structure statement 2021-26, p19-16

Suitably aggregated IRUs should be permitted to operate in such a way as to the maximum number of market services and benefit from value stacking. We support allowing small resource aggregators to provide all market services, including regulation FCAS ancillary services into the market. Small batteries are equally important as grid scale batteries in providing the necessary range of services required for the transition to higher levels of renewable energy while maintaining system security.

Other matters

We support the AEMC's decision in the draft rule determination to not make battery specific changes to Marginal Loss Factors that would allow separate loss factors for the generation and load components of bi-directional units.

We note the inclusion of non-registered IRPs may not be necessary, as non-registered IRPs cannot operate without changes to retail rules to allow a party other than a retailer to sell electricity to a customer. Without further changes to establish new type of energy retailer for non-registered IRUs, the addition of non-registered IRPs there will have no effect in the market other than to confuse customers. To avoid this outcome, we suggest either excluding non-registered IRPs from rule change or extending the scope of rule changes to include customer protections for this new type of energy retailing.

If you have any queries on our submission, please do not hesitate to contact Justin Betlehem on 03 9695 6288.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Tom Hallam".

Tom Hallam
General Manager, Regulation