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Consultation Paper – Integrating Energy Storage Systems into the NEM – ERC0280

Essential Energy welcomes the opportunity to provide a submission to the Australian Energy Market Commission (the Commission) on its *Integrating Energy Storage Systems into the NEM* Consultation Paper (the consultation paper). Energy Networks Australia has also made a submission to the consultation paper, which Essential Energy supports.

Energy storage is set to play an increasingly important role in the operation of the national electricity market (NEM), a role that is forecast to grow strongly in the coming years as the costs of storage decline. For this reason, Essential Energy considers it appropriate to confirm whether the current regulatory framework remains fit for purpose and continues to deliver outcomes that meet the national electricity objective.

Essential Energy is supportive of the technology agnostic principles of the NEM, whereby wherever possible generators and load are treated in the same manner when utilising the network. Whilst noting the issues raised by the rule proponent, the Australian Energy Market Operator (AEMO), in relation to their registration and classification framework as well as in relation operational dispatch, Essential Energy is not convinced that the National Electricity Rules (NER) need to be changed to accommodate energy storage systems.

Specifically, Essential Energy does not support the proposal to clarify Transmission Use of System (TUOS) and Distribution Use of System (DUOS) charging arrangements, so that they do not apply to energy storage systems. Over time, such a reform would act to give specific technology types an advantage relative to other network connected users and would likely contribute to equity issues through cross subsidies between network users. We would encourage greater consideration of alternative options for dealing with the issues raised, particularly those within AEMO's procedural remit.

If you have any questions in relation to this submission, please contact Anders Sangkuhl, Regulatory Strategy Manager via anders.sangkuhl@essentialenergy.com.au or via phone 0409 968 326.

Yours sincerely,

A handwritten signature in black ink that reads "Chantelle Bramley".

Chantelle Bramley
General Manager, Strategy, Regulation and Corporate Affairs

Essential Energy Submission to Integrating Energy Storage Systems into the NEM

General comments

At present, the NER does not specifically define energy storage systems, with storage assets typically being registered as both load and generation. As such, AEMO recommend that storage and hybrid facilities become specifically defined under the rules as a unique storage and connection point class.

AEMO further contend that under existing arrangements, it is unclear as to how TUOS and DUOS charges should be recovered from energy storage systems and this ambiguity could potentially result in network businesses incorrectly interpreting the rules and applying charging and other arrangements inconsistently.

In a practical sense, an energy storage system does both consume and send out electricity, and as such Essential Energy is supportive of the technology agnostic principles of the NEM, whereby wherever possible all generators and load are treated in an equal manner when utilising the network.

In Essential Energy's view, the NER's existing regulatory charging arrangements do not contain material ambiguity. Network businesses have clearly defined obligations to follow the rules and processes regarding charging arrangements as outlined in chapter 6 of the NER, in which storage and batteries are treated the same as any other generation or load service. Where infrequently "grey" areas may arise requiring clarification, participants seek guidance from the Australian Energy Regulator (AER) through published guidance documentation and/or direct engagement. To date, this regulatory framework and approach appears to be functioning appropriately.

Essential Energy is not convinced that at present the NER does not appropriately accommodate energy storage systems.

Proposal to exempt energy storage systems from TUOS and DUOS charges

AEMO proposes to clarify the application of TUOS and DUOS charging arrangements to affect the following outcomes:

- TUOS charges would not apply to energy storage systems;
- DOUS would not apply to sent out electricity from energy storage systems; and
- DUOS charges would apply for consumed or imported energy

Essential Energy does not support the above proposal of not applying network charges to energy storage system network users for the following reasons:

- The potential exemption of the application of TOUS and DUOS charges would over time act to give specific technology types an advantage relative to other network connected users. In practice, such an advantage would act as a subsidy for specific technology types, contrary to the technology agnostic principles of the NEM.
- Over time, the exemption of the application of TOUS and DUOS charging would likely contribute to equity issues arising where those network users, without energy storage systems, are paying a higher proportion of the costs of the grid that all network users depend on, creating a cross-subsidy.
- Where energy storage systems do act as a load on the system, it is appropriate that TUOS and DUOS charges would apply which are reflective of the costs associated with its' consumption of energy and corresponding impact on the network. This is especially true given the increasingly frequent occurrence of reverse power flows from the distribution network to the transmission network primarily due to DER penetration at select times of the day.
- The charging proposal does not align, and is in some cases is directly contradictory, with other reform processes currently being considered, including the AEMC's *Integrating DER*

workstream which is considering charging of export pricing as well as the Energy Security Board's (ESB's) two-sided market reforms.

For these reasons, Essential Energy does not support AEMO's proposed amendments to the application of TUOS and DUOS charges.

Registration and operational issues

AEMO highlight a number of secondary issues in relation to their registration and classification framework, which has some impacts on how energy storage participants are first registered as market participants, and subsequently how their market fees are recovered. In addition, there are operational impacts for how battery storage systems participate in AEMO's central dispatch process whilst operating under multiple dispatchable unit identifiers (DUIDs).

Whilst energy storage participants and other registered generators are better placed to comment on the specifics of these issues, Essential Energy would make the point that issues relating to AEMO's registration and classification framework are areas currently within AEMO's procedural remit and control. Where AEMO is of the view that certain registration categories and central dispatch systems are creating confusion for participants, AEMO can reform such processes absent any formalised rule process.

Essential Energy would therefore encourage a greater consideration of alternative options for addressing the issues raised by AEMO, which may be more fit for purpose. For example, a strong focus of the ESB's 2025 two-sided market design reforms, is the consideration of a move away from defining any specific technologies or assets types under the rules, towards an approach where obligations instead fall to services delivered.