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4 December 2018

Ms Taryn Maroney Principal Regulatory Analyst Australian Energy Market Operator Level 22, 530 Collins Street Melbourne, VIC 3000

Lodged by e-mail: eges@aemo.com.au

Dear Ms Maroney,

Response to AEMO's - Emerging Generation and Energy Storage in the NEM -Stakeholder Paper (November 2018)

The Clean Energy Council (CEC) is the peak body for the clean energy industry in Australia. We represent and work with hundreds of leading businesses operating in solar, wind, hydro, bioenergy, marine and geothermal energy, energy storage and energy efficiency along with more than 5,800 solar installers. We are committed to accelerating the transformation of Australia's energy system to one that is smarter and cleaner.

The CEC welcomes the opportunity to provide feedback on the Australian Energy Market Operator's (AEMO) 'Emerging Generation and Energy Storage in the NEM – Stakeholder Paper'. The CEC is generally supportive of the proposed AEMO objectives in progressing this important issue for the National Electricity Market (NEM). We also welcome AEMO's approach of allowing stakeholders the opportunity to air and prioritise their most important issues, noting the broad range of sub-issues examined to improve how Energy Storage Systems (ESS) are treated under both the National Electricity Rules (NER) and relevant AEMO procedures.

Defining and integrating grid-scale energy storage systems in the NEM

The CEC would like to make the following high-level comments:

- In defining ESS, the definition should be generic and fundamentally consistent with overseas definitions. Any applicable definitions must consider any existing NER definitions.
- We welcome AEMO's recognition that batteries (and hydro pumped storage) are bi-directional devices that can assist in wholesale market bidding purposes. However, there is a need to clarify whether this will be on a nameplate or additional ratings basis.
- Stakeholders would benefit from more worked examples that outline how participation would work in practice (particularly from a bidding perspective) in order to avoid negative commercial impacts or burdensome compliance requirements. It would also be useful for the industry to understand AEMO's limitations with price bands.

- In general, AEMO's proposal for new information requirements (as outlined in Table 7 of the Stakeholder Paper) appear practical to improve AEMO's visibility on system operations. However, this information should be confidential for AEMO's use only and not be made publicly available.
- AEMO should be fully cognisant of any 'institutional' or responsibility over-reach into the behind-the-meter sphere, *viz a viz* its current capability and future resourcing to effectively manage such an outcome.
- If AEMO continues to explore the hybrid model, this should not result in a
 mandated approach where all ESS systems must register as a hybrid. To do so
 could greatly complicate participants' ability to bid co-located assets. Participants
 should be allowed some degree of discretion as to how it registers an ESS.
- Given AEMO's consultation has a focus on registration categories, the status of < 5MW batteries (or ESS) will remain ambiguous unless these parties proactively want to register and be on market.
- We agree that a permanent approach to the network charging arrangements applicable to ESS is needed and this warrants a more holistic review of how network costs are recovered.
- On a principles basis, we suggest a facility that converts electricity into something
 else (i.e. a load) is not able to register under the new category to avoid network
 charges, given that it consumes electricity and should be charged.
- Clarity should be provided as to whether some of the proposed NEM fees categories and whether all the suggested Market Customer elements are relevant for ESS purposes.

The application of performance standards to a generating system or load in an exempt network

Further clarity is required as to how ESS developments will impact on stakeholder requirements to meet the new generator technical performance standards that came into effect from 5 October 2018. These performance standards currently apply to generators so their application to the load side of the asset needs careful consideration.

AEMO should also review and clarify the arrangements for retrofitting ESS to an existing generator to ensure an easy process to transfer and not reopen a standing asset's GPS within a new connection point arrangement when introducing an ESS.

Providing NEM information to project developers

The CEC considers the proposal to extend the Intending Participant category to developers could have merit but requires further work before a final decision is made. AEMO registration requirements are considerable and at the project development stage there is a natural lack of detail and certainty around issues such as finance and land acquisition. Extending the Intending Participant category recognises the inherent uncertainty in the development process and would assist developers to work towards a connection application and determine project viability more easily and efficiently.

The concern with this proposal, however, is around breach of privacy. AEMO should provide more detail on how it will assess requests for information and what information it will provide to these participants. It should also consider how it can legally ensure information it provides to developers is not misused.

Separation of operational and financial responsibility

The CEC supports the general direction being taken by AEMO.

Logical metering arrangements

The logical metering arrangements proposal requires further examination and understanding. The concepts are relatively immature and CEC members have raised concerns that the likely costs of such an arrangement could outweigh the perceived benefits. Unless specifically addressed, there is likely to be free-riding opportunities, potentially inaccurate readings and the need to fully consider impacts on the administration of Large-Scale Generation Certificates (LGCs). If renewable energy assets co-locate with an ESS under some form of hybrid registration model, they should not lose their ability to claim for LGCs, relative to operating as stand-alone assets.

We would also caution against a blanket exemption approach without the need for special arrangements assessed by AEMO on a case-by-case basis with relevant criteria.

Going forward

The CEC notes AEMO's timing considerations of progress/milestones and suggest that its timing needs to balance the pipeline of ESS currently being developed and connected with the need for robust stakeholder discussion, and also include any findings or views from the Australian Energy Market Commission's concurrent review into the coordination of generation and transmission investment.

Thank you for considering our submission. If you would like to discuss any of the issues raised in this submission, please contact me on the details below.

Sincerely,

Norman Jip Policy Officer njip@cleanenergycouncil.org.au (03) 9929 4107