

29 March 2019

Mr. John Pierce Chair Australian Energy Market Commission PO Box A2449 Sydney South NSW 1235 Level 22 530 Collins Street Melbourne VIC 3000

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By online submission

Dear Mr Pierce

Submission to Australian Energy Market Commission (AEMC) consultation paper, Review of regulatory frameworks for Stand-alone power systems (SAPS) Priority 2

The Australian Energy Market Operator (AEMO) welcomes the opportunity to provide input to the Commission's consultation paper on the review of the regulatory frameworks for SAPS (priority 2).

AEMO is the independent National Electricity Market (NEM) and Western Australian Wholesale Electricity Market (WEM) market and systems operator, and the NEM National Electricity Transmission Planner.

AEMO's attached submission provides views on the level and type of regulation that may be appropriate for each to the two types of priority 2 SAPSs identified in the consultation paper. The submission also highlights other initiatives and reviews which are important in the context of a priority 2 SAPS framework.

For further information on the AEMO submission, please do not hesitate to contact myself or Lee Brown, Specialist Market Design on (03) 9609 8528.

Yours sincerely

Peter Geers

Chief Strategy and Markets Officer



ATTACHMENT - AEMO SUBMISSION ON CONSULTATION,

REGULATORY FRAMEWORKS FOR STAND-ALONE POWER SYSTEMS – PRIORITY 2 (the consultation paper)

The consultation paper considers two categories of priority 2 SAPS: a microgrid, which contains two or more connections that are isolated from the interconnected grid; and an individual power system (IPS), which only provides electricity only to the customer in question.

1. Regulation – Individual SAPS

AEMO does not consider that the National Electricity Rules framework should apply for an IPS SAPS. A customer who moves to an IPS or establishes an IPS for a new build is essentially exercising a choice in preference to a standard NEM connection. Importantly, the customer can reverse that choice at any point in the future and a market connection point and NEM standard metering can be deployed using standard NEM connection processes.

AS3000 wiring regulations will apply to any electrical installation, regardless of whether it is connected to the interconnected grid or as an IPS.

2. Regulation – Microgrid SAPS

AEMO acknowledges the added complexities highlighted in the consultation paper when considering arrangements for the establishment of microgrid SAPS. The potential incentives that could be created for parties to arbitrage across different regulatory frameworks, including the framework for embedded networks which the AEMC are also currently reviewing, should be minimised where practicable.

AEMO recommends that in addition to compliance with AS3000 wiring regulations, the AEMC considers mandating minimum requirements for metering within microgrid SAPS. A requirement to establish NEM compliant metering installations at all connection points within a microgrid SAPS, and for those metering installations to be maintained in accordance with the NEM metering framework, would ensure that there is sufficient flexibility for market mechanisms and elements of the NEM framework to be deployed within microgrid SAPS, should they be considered desirable in the future.

Establishing a requirement for NEM compliant metering would also provide an opportunity for customers connected within microgrid SAPS to have confidence in the veracity of the data being used to generate their energy charges and, in the case that it became beneficial for the microgrid to be reconnected to the interconnected grid, barriers to grid integration would be minimised.

3. Integrating distributed technology

As technology improves, making the establishment of IPS and microgrid SAPS a possibility, it is important for AEMO, the AEMC and other industry participants to continue to develop mechanisms by which customers or customer groups who have the capability to establish a SAPS are instead incentivised to be, or remain, connected to the NEM.

Initiatives including demand response mechanisms, network tariff reform and virtual power plants, as well as exploring how the existing framework can be best utilised (e.g. small generation aggregator connections), have the potential to incentivise technologies and infrastructure to remain connected to the grid, providing services to support the broader market rather than becoming isolated from it.