

Submissions Electricity Authority PO Box 10041 Wellington 6143

Email to: battery@ea.govt.nz

5 May 2021

To whom it may concern,

## Subject: Consultation Paper - Battery energy storage systems offering instantaneous reserve

Thank you for the opportunity to provide this submission to the Authority.

I am submitting on behalf of Solagri Energy Limited, a DER developer and retailer of behind the meter services based in Canterbury.

I am strongly in favour of paper's focus to include Grid Scale BESS into the instantaneous reserves market. The use of BESS to provide short-term, instantaneous reserve to support power system stability in other markets around the world, particularly South Australia, have shown to be effective and to provide significant technological, resilience and economic benefits.

The Authority recognises that further development work is required to enable a wider range of services that can be provided by BESS in addition to reserves. For example; voltage support, frequency keeping, as well as the deferral/mitigation of the upgrade cost of distribution/transmission infrastructure.

Energy storage and its benefits at the distribution and residential level in New Zealand has been well established in several industry studies. I strongly encourage the Authority to accelerate the workstream to monitise the value of BESS applications at all levels in the power system, from the grid to distribution networks, and embedded within consumer premises.

I also encourage the Authority to explore (although not necessarily implement, unless shown to be positive) the concept of a Distributed System Operator (DSO) to manage, coordinate and optimise DER throughout the distribution networks

I would propose that the Authority take a neutral stance when defining what constitutes an Energy Storage System (ESS) in general, batteries one type of energy storage. I would hope the Authority attempts to future proof the Code to make it possible to introduce new technologies as they are proven, without the requirement to re-write the Code.



I would also propose that when considering these matters, the Authority takes the aggregation of smaller, geographically separated BESS, as well as those at a single installation/utility scale. Particularly at the distribution network level.

I look forward to the timely development of suitable procurement arrangements, including the proposed roadmap and timeline to develop the required operational protocols and inverter performance standards, specific to energy storage systems that may provide instantaneous reserves and other ancillary services on an aggregated or smaller scale than contemplated in the current consultation paper.

Yours sincerely

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