



LO3 Energy  
573 Sackett,  
Brooklyn, NY 11217

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Australian Energy Market Operator  
Level 22, 530 Collins Street  
Melbourne, VIC 3001

By email: [VPP@AEMO.com.au](mailto:VPP@AEMO.com.au)

**RE: Virtual Power Plant Demonstrations Program Consultation Paper**

LO3 Energy welcomes the opportunity to make a submission in response to the Australian Energy Market Operator's (AEMO) consultation paper.

We are a fast-growing company, headquartered in New York, with deep roots in energy, finance and technology. We are building a blockchain based platform to enable decentralised markets and innovative business models to support new energy products and services.

Deployments of distributed energy resources (DERs) in aggregated fashion are beginning to accelerate around the world, as their potential capabilities for generating multiple value streams across wholesale and ancillary services markets are increasingly being recognised. Aggregations of residential batteries in particular provide great potential to be deployed in ways that competitive wholesale markets and a more reliable and stable grid.

Currently, the National Electricity Rules (NER) only allow DERs to participate in either the wholesale market or ancillary services markets, not both. This limits available revenue streams for DERs. AEMO's proposed trials therefore provide an important opportunity to test how DER services can effectively operate in both markets in a co-optimised fashion so that DER service providers can maximise the value of those services.

Recent changes to the small generator aggregator (SGA) rules mean that aggregations of batteries, as well as small generation units, can now participate directly in wholesale markets. It is more complex for DERs to participate in the ancillary services markets however, in large part due to restrictive NER requirements for the measurement and verification of their performance (the requirement for ancillary services providers to have expensive 'high speed' metering for example).

The proposed trials will provide value in particular for assessing the potential role and technical requirements for DERs to participate in ancillary services markets. One innovative new technology worth considering in this regard is blockchain. We consider blockchain could play a useful role in integrating DERs into ancillary services markets by creating a secure



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software platform for AEMO to track, measure and verify the performance of DERs and assisting with management of cyber security issues. If this was something AEMO was open to explore in the trials then LO3 Energy would be happy to assist.

Finally, the learnings from the trials will be of great value to the market. We would appreciate AEMO setting out a clear framework and timeline for regularly updating participants on progress of the trials and various implications and issues as they come to light.

If you have any questions please do not hesitate to give me a call on +61 439399943

Thank You,

*Con Van Kemenade*

Con Van Kemenade  
**Director Public Policy**  
**LO3 Energy**