



Australian Energy Storage Alliance SUBMISSION: Energy Storage Registration

Attn: COAG Energy Council Secretariat

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The Australian Energy Storage Alliance (AESA) would like to provide the following comments on behalf of our group in relation to registration of energy storage systems in Australia.

BACKGROUND:

The AESA was established in 2014 as an information hub and voice for the energy storage sector in Australia. In this capacity, AESA provides industry updates and news, represents the sector, and manages a growing industry group with support from a Steering Committee.

In 2016, the AESA launched the Australian Energy Storage Database, portal to the Global Energy Storage Database. This is a voluntary system of listing commercial energy storage projects in Australia, displaying these projects on an online mapping system. The AESA assists with acquisition and verification of this data, and promotion of this database, which is freely available for planning and research purposes. The database is located at <http://www.energystorageexchange.org/AESDB/projects>

At this point in time, no data is collected or displayed for residential batteries and other energy storage systems for homeowners. Individual systems are not accepted in the database due to privacy considerations. Comprehensive data, other than from some select areas where there are subsidies, is not readily available, and has been requested by some companies seeking to enter the Australian energy storage marketplace.

INDUSTRY RESPONSE:

In response to the request for submissions relating to applications of energy storage, in particular:

- behind-the-meter storage devices, and
- grid-connected storage excluding utility-scale storage installed for the purpose of network support and/or ancillary services.

At this stage, the AESA does not address the need to register "off-grid" energy storage systems, other than those systems at commercial or utility level, which are already collected through the Australian Energy Storage Database project.

The following notes were compiled from input from AESA industry members

Craig Chambers, Market Sector Director-Power Generation at AECOM, supports the idea of a register. He adds "from a privacy perspective there may need to be some aggregation to be developed with only certain parties having access to the details."

Another contributor to this conversation was David Leitch, Principal of ITK, who also raised concerns about privacy and where this data should be held, assuming that it is collected. David did add that he saw "the AEMO as the proper place where this data, if collected, should reside."

Nishad Mendis, Senior Electrical Engineer, DNV GL added his view that a register of energy storage systems would be useful for grid planning and customer safety. He also commented that a national register would “help to develop of national level knowledge base on battery technologies,” and in addition that, “the information can be used to formulate national level regulations and policies.”

WHO WOULD BENEFIT?

Richard Barker, Director of DPA Solar, who are the importer of the Simpliphi Battery range, provided the following observation: “In my opinion the group most likely to benefit from a register of battery storage are the energy networks. Understanding the volume and location, assuming it can be deployed, maybe advantageous in reducing peak loads, it could also help in predicting future demand trends. From the retailer side it might help understand adoption trends and result in more targeted marketing.”

Jamie Allen, Business Development Manager Australia, LG Chem Ltd, commented “LG Chem in Australia are in full support” of the development of a national register for energy storage systems.

Jamie believes “this is important information for the energy regulators and networks to understand what is on their networks and how these systems can effect and be best utilised to support Australia’s electricity infrastructure. In addition to this from a Battery manufacturer’s point of view, this information is important to understand the market penetration, regions that may need more attention and what sized systems are being utilised nationally. Safety is of course a major reason why we believe this initiative is critical in the case that “unsafe ESS systems” are imported and installed and recalls are made.”

Sally Torgoman, General Counsel for Eco Energy World indicated support for a national register for on grid energy storage. Sally comment that this “would be a valuable tool for the energy industry for a number of practical reasons. The better organisations such as AEMO have visibility of behind the meter generation capability, the better the forecasting and analysis capability of the network as a whole. A lot of investment in energy hinges on the accuracy of energy forecasting, and the more visibility available to the forecasters, the better it will be for the national interest.”

Dr Penelope Crossley, Lecturer of the University of Sydney, has previously supported an energy storage register in her recent paper, which notes:

“The lack of accurate data within the sector is problematic. It affects a wide range of areas including market design, system reliability and planning, fire risk management, and product recalls. It is argued that a number of these risks could be better managed, if reliable data was publicly available, possibly through a regulated national register for stationary energy storage.”

Penelope concludes “there is a clear need for accurate and publicly available data within the sector to enable better market planning and to ensure the safety of consumers and emergency responders.”

SUMMARY

While there are concerns from within the energy storage sector in relation to privacy considerations, which would need to be appropriately managed, the majority of the AESA respondents have expressed the opinion that a register for energy storage systems has distinct benefit. This is especially important during the early growth phases of an industry, when there is need to plan for the impact of large numbers of energy storage systems being added to the existing energy networks.

The AESA sees the urgent need for a national register for energy storage systems, with first priority being the on-grid residential systems that are widely expected to have large uptake over the next few years.

The AESA is interested in aggregating the data from such a register, and adding this data by postcode to the existing Australian Energy Storage Database, for free and available use by network operators, planners, investors, researchers and other interested stakeholders.

For more details or clarification, contact Mary Hendriks, Industry Executive, mary@energystoragealliance.com.au