

COAG Energy Council Secretariat
GPO Box 9839
CANBERRA ACT 2601

Lodged by email: energycouncil@industry.gov.au

20 September 2016

Energy Storage Registration Consultation Paper

The Australian Energy Council welcomes the opportunity to make a submission to the COAG Energy Council Secretariat for the consultation paper on Energy Storage Registration.

The Australian Energy Council is the industry body representing 21 electricity and downstream natural gas businesses operating in the competitive wholesale and retail energy markets. These businesses collectively generate the overwhelming majority of electricity in Australia and sell gas and electricity to over 10 million homes and businesses.

We acknowledge that a register may be useful to inform emergency services and safety authorities of the location and type of energy storage device installed.

However, we believe that it is important to get the right balance of costs and benefits when determining the parameters of a registry for energy storage devices. The sale and installation of energy storage devices behind-the-meter is a nascent market and as such could be stifled by undue regulatory reporting burdens. As a starting point, we believe that data on energy storage should only be collected where other existing data collections do not already capture this type of data. This would avoid duplicating requirements, and would reduce the reporting burden on participants. Finally, if the register was agreed to be established, we would support the proposed register to be administered by a neutral body that will be able to ensure nationally consistent data and harmonization across the regulatory and consumer protection frameworks, and emergency response procedures.

The need for an energy storage register

As stated in the consultation paper, there are a range of stakeholders that have differing interests on energy storage data, including market analysts and/or observers who are interested in further understanding how the market is developing.

In particular, the consultation paper states that Australian Energy Market Operator (AEMO) is seeking data to improve market operations and load forecasting and have indicated that there are currently no avenues to collect information on distributed energy storage devices, which they require to assess the impact of these devices on the power system.

However, the question is whether a register is either necessary or sufficient for AEMO's purposes. For example, AEMO has extensive experience of deriving demand forecasts without a registry of customer appliances or machinery. Furthermore, it is not clear that any one party in the storage services supply chain is systematically able to capture ongoing information about the way batteries are used. This is because at any given time the party controlling the use of the energy storage device varies depending on the contractual arrangements. The device could be controlled by the customer, their retailer, their NSP, or a third party service provider.

The consultation paper also states that emergency services could use the data to ensure they are properly equipped to attend to energy storage related emergencies. While we acknowledge the potential benefits of having a registry of energy storage installations in Australia for emergency purposes, we are concerned that the data that could be collected may not be the most suitable/informative for the emergency response. To the

extent that this is the case another mechanism (for example the development of a national electrical safety standard) could be more beneficial to serve this purpose.

A number of other organisations are developing similar data collection schemes to capture this type of information including: the Australian Energy Storage Alliance's Australian Energy Storage Database¹, and AEMO's Demand side participation information project². It is important that existing data sources and processes are utilised before developing additional obligations on participants. For example, AEMO already have access to data, via mechanisms in the rules, for register loads related to battery/aggregated capacity that is viable to provide market services, like ancillary services. It is recommended that these existing data sources are accessed rather than duplicating the data set.

Furthermore, some of the reasons to create an energy storage register outlined in the consultation paper are problematic. More specifically, the explanation for requiring energy storage data for load forecasting does not consider that the potential data derived from these devices vary, as the usage pattern of a given device and its effective capabilities may change over time (as happens with solar panels³), and hence the energy storage data collected is only reliable for a point in time.

Data and access

The consultation paper notes a variety of energy storage data items that AEMO believes are necessary for system security, and that energy storage installation and technical specifications are required for safety and emergency response purposes. While we acknowledge these requirements, we recommend that the following should be considered in determining the nature and scope of the energy storage register:

- Robust justification of data requirements weighed against the cost of data collection and submission.
- Reducing the reporting burden - Energy storage data collection should be developed in consideration of streamlining existing data sets to minimise the reporting and administrative burden on participants. Any additional compliance cost, related to unnecessary burdensome reporting requirements, will directly affect the cost and therefore the uptake of new battery storage devices.
- Data items, which are to be collected, should not be complicated or overly burdensome for participants to provide, and should be developed in consultation with stakeholders.
- Different levels of access reflecting the needs of different of stakeholders - Where possible, aggregated data is preferred to minimise security and privacy concerns of households and commercial businesses. While it is noted that energy storage installation and technical specifications are sufficient for the purposes of safety and emergency response, it is likely that these users will also need the address details of these energy storage devices. Whereas AEMO is likely to require aggregated information to a transmission connection point.
- Privacy and confidentiality - As mentioned, it is probable that some energy storage data will require details of household location, therefore privacy and security concerns of households and their willingness to participate needs to be considered. In addition, consumer protections regarding which

¹ Australian Energy Storage Alliance's storage database <http://energystoragealliance.com.au/australian-energy-storage-database/>

² AEMC Fact sheet: AEMO to receive better demand side participation information 26 March 2016.
<http://www.aemc.gov.au/getattachment/ed5ef0a1-39c3-4a21-88e3-fde2f6c6c6ff/Information-sheet.aspx>

³ AEMO Forecasting Methodology Information Paper – National Electricity Forecasting Report 2015, p.22,
<http://www.aemo.com.au/-/media/Files/PDF/2015-NEFR-forecasting-methodology-information-paper.ashx>

parties can access the data also need to be considered. Aggregated data may be an appropriate approach to ensure that privacy and security of these customers are considered.

- Data limitations – While there are many expectations of what the energy storage data will be used for, the actual data collected may not meet the users' expectations. For example energy storage data could be limited to the type of device installed and where and when it gets installed.
- Methodology of submitting data - We recommend that the energy storage data will need to be submitted in a consistent manner. Any methodology that is proposed should provide some flexibility to accommodate for the different business models of the participants. As some data items may be highly confidential, email submission is not preferred.
- Who the requirements are imposed upon - Only parties who intrinsically have access to the information sought should be required to collect and submit data. This in turn may inform the practical limits of the data that can be collected. For example installers will know the location of installation, the make and model. They will not necessarily know how the device may be used after installation, nor whether a device is still in use in future years. Given that there are multiple scenarios of how and by whom storage is controlled, e.g. a retailer, a customer or an energy services provider, there is no one group who will systematically be able to provide ongoing usage data.

Governance

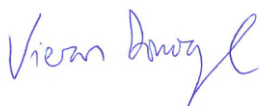
We are supportive of a proposed register being led by a body that will ensure the register is applied nationally to provide consistency across jurisdictions and reduce the risk of jurisdictions establishing individual state-based registers, which would increase the reporting burden on industry.

With respect to establishing a body to manage the register, a range of several core governance issues would need to be addressed including: how costs of establishing and maintaining the register would be applied, what legal and regulatory framework gives effect to the registry, how the register serves the interests of all relevant stakeholders, and ensuring that adequate security and privacy protections are embedded in the register.

Overall, the Australian Energy Council acknowledges that there may be value in the development of a national energy storage registry. If the COAG Energy Council decides to establish a register, it must, as a starting point set clear governance arrangements and a robust justification for any data that is proposed to be collected by the register. We encourage the COAG Energy Council to consider existing energy storage data collection sets, whether additional regulation is required, the costs these obligations pose to industry, and the impact that this will have on the development of the energy storage market, particularly at the residential level.

Any questions about our submission should be addressed to Carly Weate, Policy Adviser by email to carly.weate@energycouncil.com.au or by telephone on (03) 9205 3107.

Yours sincerely,



Kieran Donoghue
General Manager, Policy & Research
Australian Energy Council