



Comments by the Energy Storage Association  
to the  
Department of Energy Electricity Advisory Council

March 13, 2014

Good afternoon. My name is Katherine Hamilton and I serve as Policy Director for the Energy Storage Association, an international trade association that was established over 20 years ago to foster the development of energy storage technologies. Since then our mission has been the promotion, development and commercialization of competitive and reliable energy storage delivery systems for use by electricity suppliers and their customers.

ESA members represent a diverse group of entities, including electric utilities, energy service companies, independent power producers, and technology developers involved with advanced batteries, flywheels, compressed air energy storage, thermal energy storage, pumped hydropower, supercapacitors and component suppliers, such as power conversion systems. ESA's members also include researchers who are committed to advancing the state-of-the-art in energy storage solutions. Many of these members have, in fact, served on this body. We will submit the full list of ESA members for the record.

Before I begin our formal comments, I would like to thank the EAC, on behalf of the ESA's Board of Directors and our members, for acknowledging the contributions of

former ESA Executive Director Bradford P. Roberts in the EAC Energy Storage Subcommittee's *Energy Storage National Strategy Report* released in January of this year. The energy storage community lost a pioneer and champion when Mr. Roberts passed away in October. We all strive to build upon his legacy.

The ESA has been watching with great interest as the Department of Energy has developed and released its "Grid Energy Storage" report in December of 2013. The basic challenges identified in the report—delivering cost competitive technologies, validated reliability and safety, equitable regulatory environment, and industry acceptance—are all paramount to the industry and ESA has been focused on finding solutions to those challenges as well.

For example, in 2012, ESA undertook a survey of state regulators and legislators to gain a baseline of their understanding of energy storage; a key finding was that policymakers trust information from the Department of Energy and the national laboratories. ESA has been focused on a state policy project to help state policymakers develop smart public policy solutions that include energy storage. Resources—case studies, analyses, research results—from the DOE and laboratories will be foundational to making the case to regulators for these policies.

To that end, we recommend that the DOE-funded efforts should be actionable by states and utilities in policy, planning and procurement. One such focus could be on systemwide benefit analyses in key states—like California, Texas, New York, Hawaii—where aggressive energy storage policies are being instituted that will significantly impact the deployment of these technologies. The energy storage industry understands the cost to deploy certain technologies in specific applications; what we need, however, is

assistance with identifying and quantifying the benefits, especially non-market benefits, that are most effectively done by those (like the national labs) who have access to sophisticated modeling tools. One such analysis was completed by the National Renewable Energy Laboratory<sup>1</sup> for two balancing authorities in Colorado; replication for additional regions would be enormously helpful. By modeling the systemwide benefits of energy storage--and using actual data from projects that are in the ground and operational—state regulators and utilities will be far more able to justify and build those asset investments into the overall rate base.

Also key to the success of the DOE energy storage effort will be ensuring a more coordinated approach between offices within the agency. The Quadrennial Energy Review effort being led by the Energy Policy and Systems Analysis shop will be an opportunity to demonstrate cross-cutting efforts in research, development and demonstration. Their focus on infrastructure is all the more reason for a multi-disciplinary effort on energy storage.

As the energy storage industry and its market potential grow exponentially, we believe DOE has been a critical early investor in these technologies and, with the national laboratories, continues to play an important role as a trusted resource for research, testing, demonstration, verification, and analysis. The ESA requests that the EAC in turn look to the industry association as a resource as the committee considers and develops recommendations for the DOE energy storage program. Thank you for your time and attention.

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<sup>1</sup> “The Value of Energy Storage for Grid Applications”, National Renewable Energy Laboratory, NREL/TP-6A20-58465, May 2013





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