

Department of Energy

Washington, DC 20585

MEMORANDUM TO THE DEPARTMENT OF ENERGY ELECTRICITY ADVISORY COMMITTEE

FROM:

Bruce Walker, Assistant Secretary Office of Electricity

SUBJECT:DOE Response to Electricity Advisory Committee Recommendations on
A Review of Emerging Energy Storage Technologies

I want to thank all members of the Department of Energy's (DOE) Electricity Advisory Committee (EAC) for your efforts developing recommendations pertaining to Emerging Energy Storage Technologies.

I look forward to continued discussions on the path of our programs and am committed to ensuring a strong and fruitful working relationship between the Committee and this office. If you wish to discuss this matter further, my staff is available to meet with the Committee, as needed.

Thank you.



Recommendation #1: The DOE should encourage the use of a screening tool

This recommendation aligns with DOE's ongoing work. Recently, OE held a Workshop on Energy Storage and Responsive Loads for Grid Resiliency during the Energy Storage Systems Safety and Reliability Forum. The purpose of the workshop was to better classify the roles of these technologies and to identify the opportunities for energy storage and alternative technologies to work together to improve grid resiliency. Future efforts from this workshop should lead to better planning and evaluation tools like those suggested by the EAC.

Recommendation #2: The DOE should update guidance documents

DOE has ongoing efforts to update and improve guidance documents on energy storage technology applications. For example, the DOE OE Energy Storage Program has taken an active role in defining performance protocols for energy storage with industry stakeholders (<u>https://energystorage.pnnl.gov/pdf/PNNL-22010Rev2.pdf</u>). Several OE Energy Storage Program led protocols and resource guides have become the basis for upcoming IEEE Recommended Practice Guides, which are widely used as industry standards. Several stakeholders representing thermal storage systems have actively participated in the protocol development and as these protocols are intended to be a dynamic and updated yearly, future efforts will look to incorporate the technologies outlined by the EAC where appropriate.

Recommendation #3: The DOE should ensure consistent definitions across agencies

DOE OE understands the importance for consistent definitions of energy storage which may help reduce challenges to their treatment from policy, regulatory and market organizations. DOE OE is coordinating among DOE offices to develop common definitions of storage which can be used to evaluate the attributes of energy storage across a wide variety of technologies and uses.

Recommendation #4: The DOE should revise efficiency guidelines and metrics

DOE's Office of Energy Efficiency and Renewable Energy (EERE) is responsible for many of the efficiency guidelines identified by the EAC in this recommendation. EERE has and will continue to examine the value of energy efficiency within the context of federal energy efficiency programs and activities. Overall, DOE will explore relevant data and metrics needed to determine the economic and environmental impact of energy efficiency at different times and will consider the potential application of this time sensitive valuation, with an eye toward energy storage.