Energy Storage Benefits and Value Propositions for the Emerging Electricity Marketplace

Part 1: The Emerging Electricity Storage Opportunity: Drivers, Challenges, Stakeholders, Benefits, and Value Propositions

The first two hours of the workshop provides a technology-agnostic introduction to key facets of the emerging opportunities for storage use in the evolving electricity marketplace. Attendees will gain knowledge needed to undertake screening, initial, or high-level assessments of the merits of storage use for specific applications and circumstances.

Primary themes addressed are storage benefits and aggregation of benefits into attractive storage value propositions. Also covered are three important factors affecting prospects for storage use in the utility realm: notable opportunity drivers, key challenges, and important stakeholders.

This two-hour session provides valuable background and context for the second half of the workshop which addresses detailed project-specific evaluations.

The intended audience includes: electric utility planners, electricity end users, non-utility electric energy and electric services providers, electric utility regulators and policymakers, intermittent renewables advocates and developers, Smart Grid advocates and developers, storage technology and project developers, and energy storage advocates.

Material presented is derived from the Energy Storage for the Electricity Grid: Benefits and Market Potential Assessment Guide developed by workshop leader Jim Eyer of Distributed Utility Associates and Garth Corey of Ktech Corporation, for Sandia National Laboratories.

Part 2: Introduction to Energy Storage Value Proposition Modeling

During the second two hours of the workshop, attendees will walk away with an introductory knowledge of the requirements, mechanics, and challenges associated with creating a project-specific value proposition for customer-sited energy storage—including integration with renewables and incentive structures. This workshop session will answer many questions about the value of energy storage, focusing on the mechanics of a value proposition model specific to distributed energy storage, an understanding of the financial requirements of key stakeholders, what is involved in optimizing the value of storage, and how end user loads, renewable generation profiles, electricity tariffs, and incentive regimes impact energy storage’s value.