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DOE/EPRI 2013 Electricity Storage Handbook in Collaboration with NRECA

Abbas A. Akhil, Georgianne Huff, Aileen B. Currier, Benjamin C. Kaun, Dan M. Rastler, Stella Bingqin Chen, Andrew L. Cotter, Dale T. Bradshaw, and William D. Gauntlett

Prepared by
Sandia National Laboratories
Albuquerque, New Mexico 87185 and Livermore, California 94550

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Hands-on approach and how-to guide:

- Storage benefits and services
- Storage technologies, cost, performance and maturity
- System and component cost details
- Methods and computational tools for evaluating storage
- Storage system procurement and installation
- Sample procurement documents
- Typical interconnection schematics
- Publicly available resource

Handbook ~ 170 pages; Appendices ~ 170 pages

DOE Global Energy Storage Database

<http://www.energystorageexchange.org>

- Shows 185 GW installed storage systems worldwide
- Representing 50 different types of storage technologies
- Lists 860+ storage projects in 54 countries
- Database is accessed more than 5000 times monthly
- Global resource - 62% of traffic is from outside of US
- Publicly available resource

With grateful acknowledgment of the support of Dr. Imre Gyuk and the Department of Energy's Office of Electricity Delivery & Energy Reliability for supporting analysis of energy storage technologies.

SNL Energy Storage System Analysis Laboratory

Testing Capabilities Include:

- Expertise to design test plans to fit technologies and their potential applications
- OE supported testing
- Cooperative Research and Development Agreements
- Work for Others (WFO) contract arrangements



Energy Storage Test Pad (ESTP)

System Testing

- Up to 1 MW, 480 VAC, 3φ
- 1 MW/1 MVAR load bank



Cell, Battery and Module Testing

- 14 channels from 36V, 25A to 72V, 1000A: battery to module-scale
- 125+ channels; 0V to 10V, 3A to 100+ A: cell tests

<http://www.sandia.gov/batterytesting/>

Contacts:
Dr. Summer Ferreira
sferreira@sandia.gov; 505.844.4864
Or
David M. Rose
dmrose@sandia.gov; 505.844.3722

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Georgianne Huff, PE, PMP
ghuff@sandia.gov



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