

U.S. DEPARTMENT OF ENERGY

American Made Solar Prize Round One Utility-Owned Battery, LLC Set! Submission

Technical Assistance Request

To get widespread electric utility adoption of the utility-owned capital asset that is installed, operated and maintained by the electric utility will require a monitoring and control system that is compatible with electric utilities' existing automatic metering infrastructure (AMI), and meets the utilities' safety, security and reliability requirements. To this end, Utility-Owned Battery, LLC requests the technical assistance of a national research laboratory that has extensive experience communicating and controlling distributed battery storage and inverter systems that are installed at customer premises.

Utility-Owned Battery, LLC intends to work with researchers that are familiar with the communication and control of the distributed battery systems that were installed at Green Mountain Energy in Vermont. Utility-Owned Battery, LLC would specifically like to work with Sandia National Laboratories because of their knowledge of the various utility communication standards (Distributed Network Protocol DNP3, Modbus, Smart Energy Protocol SEP2 and SunSpec).

Another advantage of working with Sandia National Laboratories is that they have the same inverter at their test facility in New Mexico that is installed in the working prototype installed at a test home in Wenatchee, Washington. Having the ability to operate two solar PV systems with batteries and inverters that are separated across two states will confirm the capability of this concept, and speed utility adoption of this concept across the country.

Utility-Owned Battery, LLC has been in contact with scientists Jay Johnson and Birk Christian at Sandia National Laboratories to confirm that they have the experience, equipment and expertise necessary to do this project. They are uniquely qualified to do this work.

Sandia National Laboratories, New Mexico P.O. Box 5800 Albuquerque, NM 87185