## U.S. DEPARTMENT OF ENERGY EERE PROJECT MANAGEMENT CENTER NEPA DETERMINATION



**RECIPIENT:WA Dept. of Commerce** 

PROJECT TITLE:

SEP ARRA SIRTI - Demand Energy - Energy Storage System Tied to Solar on Commercial Facility

**Funding Opportunity Announcement Number** DE-FOA-0000052

DE-EE0000139

Procurement Instrument Number NEPA Control Number CID Number GFO-0000139-031

STATE: WA

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

## CX, EA, EIS APPENDIX AND NUMBER:

Description:

- Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.
- B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.
- B1.7 Acquisition, installation, operation, and removal of communication systems, data processing equipment, and similar electronic equipment.

## Rational for determination:

Demand Energy is proposing to use \$350,000 in SEP ARRA funding through DOE to install and evaluate a 30kW energy storage system and network management software combined and integrated with solar PV systems which will be installed by the building proprietor as part of a separate project.

The project will build, deploy, demonstrate and commercialize a large scale storage unit (30kW) and software on the Meadowwood Technology Center, a commercial facility in Liberty Lake, WA. This project will integrate the storage system with solar PV energy resources. The energy storage solution will be charged using the solar installation during peak solar production periods and then discharge or generate the stored solar energy back into the building during peak demand and periods of low solar production. The project will also include modifying and implementing hardware and software that integrate the storage solution with solar panels that allow power generated by solar PV systems to be directed to and utilized by the facility at time of solar production or to be directed to store the solar energy and time shift its use. The software installed will detect and direct the solar power to directly power the facility or be stored in the energy storage device for later use.

The energy storage device will be in a concrete pad and includes a large motor assembly within an enclosure, a large controller board and batteries. The storage unit will be integrated not only with the existing solar devices but also to the electrical grid.

No historical buildings will be adversely affected because the facility is a relatively new development.

Tasks to be performed under this project involve data analysis and monitoring of use, reporting of project activities, and installation/integration of energy storage systems. The project comprises demonstrations of potential energy conservation and energy-efficiency activities along with data analysis and information gathering techniques; therefore it qualifies as a CX under A9 "information gathering, analysis, and documentation," B1.7 "Acquisition and installation of data processing equipment and similar electronic equipment," and B5.1 "actions to conserve energy," from further NEPA review.

## **NEPA PROVISION**

DOE has made a final NEPA determination for this award

Insert the following language in the award:
Note to Specialist:
EF2a completed by Lizelle Espinosa
SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.  NEPA Compliance Officer Signature:  NEPA Compliance Officer  Date: 2/16///
FIELD OFFICE MANAGER DETERMINATION
☐ Field Office Manager review required
NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:
<ul> <li>□ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.</li> <li>□ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.</li> </ul>
BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO:
Field Office Manager's Signature: Date:
Field Office Manager