

PMC-EF2a

(20102)

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



RECIPIENT: Zep Solar, Inc.

STATE: CA

**PROJECT TITLE :** Radical Reductions In Installation Labor and Materials Costs via Standards-based, Module-integrated Innovations

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000493	DE-EE0005439	GFO-0005439-001	0

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:

**A9 Information gathering, analysis, and dissemination**

Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)

**B3.6 Small-scale research and development, laboratory operations, and pilot projects**

Siting, construction, modification, operation, and decommissioning of facilities for smallscale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

**Rational for determination:**

DOE is proposing to provide federal funding to Zep Solar, Inc. to conduct research and development activities that advance solar photovoltaic (PV) technology. DOE funding would be used to develop a ground mounted PV installation system that would lower the installed cost of ground mount PV systems.

The proposed project would be conducted in three Budget Periods. This NEPA determination applies only to Budget Period 1. Budget Periods 2 and 3 will require additional NEPA review. Budget Period 1 activities would include planning, feasibility study, prototype design and data analysis.

Research and prototype fabrication would be conducted in a laboratory environment at Zep Solar's office building and adjacent 12,000 square-foot warehouse located at 161 Mitchell Boulevard, San Rafael, California 94903. The facility has completed an R&D questionnaire addressing the protocols in place for laboratory safety, risk management, chemical handling and waste disposal. Zep Solar complies with safety guidelines per OSHA 3151 Personal Protective Equipment and follows OSEIA Solar Safety guidelines. The facility complies with standard laboratory safety procedures and labs are inspected by staff and safety personnel. The facility operates under all applicable permits to conduct research. Metals left over from the machining operation are picked up and recycled by a commercial recycling facility.

Prototype testing would occur at the following two laboratories:

Underwriters Laboratories, Inc. (UL) is located at 2191 Zanker Road, San Jose, CA 95131. UL conducts compliance and performance testing on all technologies of PV modules, PV connectors, junction boxes and PV array mounting systems. A Photovoltaic Safety Standard Operating Procedure (PVSSOP) is in place. UL's Environmental Health and Safety department is responsible for all internal monitoring and enforcement of local, state and federal laws. The facility operates under all applicable permits to conduct research. Liquid effluents consisting of solvents, acids, bases, chemical reagents, and other liquid wastes will be disposed of by licensed contractors.

Rowans Williams Davies and Irwins, Inc. (RWDI) is located at 650 Woodlawn Road West, Guelph, Ontario, Canada N1K 1B8 and 10165 USA Today Way, Mariamar, Florida 33025. The Joint Health Safety Executive Committee (JHSEC) is responsible for monitoring and enforcing health and safety policies. Both facilities comply with standard laboratory safety procedures and labs are inspected by staff and safety personnel. Both facilities operate under all applicable permits to conduct research. Waste that is toxic or non-recyclable is disposed of by licensed contractors.

Based on this information, DOE has determined planning, feasibility studies, prototype design and data analysis are consistent with activities identified in categorical exclusion A9 (information gathering) and B3.6 (indoor bench-scale research and laboratory operation).

**NEPA PROVISION**

DOE has made a conditional NEPA determination for this award, and funding for certain tasks under this award is contingent upon the final NEPA determination.

Insert the following language in the award:

You are restricted from taking any action using federal funds, which would have an adverse affect on the environment or limit the choice of reasonable alternatives prior to DOE/NNSA providing either a NEPA clearance or a final NEPA decision regarding the project.

Prohibited actions include:

Budget Period 2 and 3

This restriction does not preclude you from:

Budget Period 1

If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

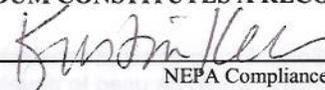
Note to Specialist :

Cristina Tyler 11.18.2011

DOE Funding: \$230,000

Cost Share: \$105,000

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

NEPA Compliance Officer Signature:  Date: 11/21/2011  
NEPA Compliance Officer

**FIELD OFFICE MANAGER DETERMINATION**

Field Office Manager review required

**NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:**

- Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
- Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

**BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :**

Field Office Manager's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Field Office Manager