

PMC-EF2a

(2.04.02)

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



RECIPIENT: Fraunhofer USA, Inc. Center for Sustainable Energy

STATE: MA

PROJECT TITLE : Plug & Play Solar PV for American Homes

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000653	DE-EE0006035	GFO-0006035-002	GO6035

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.
B5.16 Solar photovoltaic systems	The installation, modification, operation, and removal of commercially available solar photovoltaic systems located on a building or other structure (such as rooftop, parking lot or facility, and mounted to signage, lighting, gates, or fences), or if located on land, generally comprising less than 10 acres within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

Rational for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to the Fraunhofer USA Inc., Center for Sustainable Energy Systems (Fraunhofer) to research, develop and design ways to reduce the installed cost of residential solar photovoltaic (PV) systems by developing a residential "Plug and Play" solar PV system.

A previous NEPA determination (GFO-0006035-001 CX A9, B3.6. 1/28/2013) was made for budget period 1 activities including information gathering, analysis, computer modeling, materials testing, preliminary prototype "Plug and Play" solar PV system design, and prototype "Plug and Play" solar PV system fabrication and testing. To accomplish the proposed activities, Fraunhofer partnered with Lumeta Solar; Petra Solar; Schletter Inc.; the City of Boston, Massachusetts; the Town of Rutland, Vermont; Green Mountain Power; the Center for Environmental Innovation in Roofing; Vermont Law School; Tufts University; and Sandia National Laboratories.

This NEPA determination applies the addition of a new partner and the demonstration of solar PV at a solar test facility in Albuquerque, New Mexico. This NEPA determination does not apply to any residential solar PV installation activities or tasks in Budget Periods 2-5 as they are not defined to the extent DOE can make a NEPA Determination.

Fraunhofer proposes to add 3L Power as a partner. 3L Power would perform electrical bench testing at 24 Crescent Street STE 405, Waltham, Massachusetts 02453. 3L Power has completed an R&D questionnaire addressing the protocols for laboratory, facility and site safety, risk management and waste disposal.

Fraunhofer proposes to install a 3 kW solar PV system at an existing solar testing facility located at 5600 A University Blvd. SE, Albuquerque, New Mexico 87106. The system would be installed in a fenced in, previously disturbed area on a rooftop mockup adjacent to the building.

The U.S. Fish and Wildlife Service (USFWS) Endangered Species Program website lists five species in Bernalillo County as threatened or endangered: Yellow-billed Cuckoo, Mexican spotted owl, Southwestern willow flycatcher,

Sprague's pipit, and the New Mexico meadow jumping mouse. The proposed project site is not near any bodies of water or forested areas, there are no riparian habitats within the vicinity and no wet meadows exist. The proposed project site is not suitable habitat for any of the listed species; therefore the proposed project would not have any adverse effect to threatened or endangered species. The proposed scope of work would not have any adverse impacts to floodplains or wetlands, as these resources are not known to occur at the proposed site.

Based on review of the project information and the above analysis, DOE has determined the proposed research, development and deployment activities would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined the proposed project is consistent with actions contained in DOE categorical exclusion A9 "information gathering, analysis and dissemination," B3.6 "small-scale research and development projects" and B5.16 "solar photovoltaic systems" and is categorically excluded from further NEPA review.

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:

Any installation activities under Task 7 involving residential buildings, Budget Periods 2-5

This restriction does not preclude you from:

Installation activities at the solar testing facility in Albuquerque, NM and Budget Period 1 activities

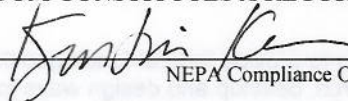
If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

Note to Specialist :

Kelly Daigle 6/5/2013

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:


NEPA Compliance Officer

Date: 6/10/2013

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:

Field Office Manager

Date: _____