

PMC-ND
(1.08.09.13)

**U.S. DEPARTMENT OF ENERGY
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY
NEPA DETERMINATION**



RECIPIENT: BRITTMORE GROUP LLC

STATE: CA

PROJECT TITLE : UTILITY-SCALE PV COST REDUCTION: PANELIZATION FOR USE WITH AUTOMATIC PANEL INSTALLATION SYSTEM

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000838	DE-EE0006378	GFO-0006378-002	

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.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide funding to Brittmore Group, LLC. to develop a field deployable panelization factory for solar PV panels (referred to as a "Panel Assembly Cell" or PAC) that enables frameless panelization at factory efficiencies using low cost steel back rails bonded to modules with fast-curing silicone construction adhesive.

DOE has completed two previous NEPA determinations under this award. GFO-0000838-FOA8 (CX B5.1, 8/29/2013) reviewed Tasks 1-5 and Subtasks 6.1 and 6.2 which included project management, PAC system design and engineering, equipment and parts procurement, PAC system assembly and fabrication, develop and building PAC support equipment, and laboratory and field demonstration testing activities. GGFO-0000838-FOA8-002 (CX B5.15, 11/20/2013) reviewed a change to the location of Subtask 6.2 - Baseline Demonstration of Automated PV Installation System. This NEPA determination reviews the full-scale demonstration of the PAC technology at the sites described below.

The proposed project activities would consist of transporting the PAC equipment to a local agricultural warehouse in Linden, CA where it would be assembled. The equipment would be used to assemble photovoltaic (PV) modules into panels which would then be installed via automated equipment at two sites in Stockton, CA. The two sites chosen for the solar PV systems are located approximately two miles apart on a currently active agricultural operation with the property at both sites under a single owner. The solar PV installations would be ground-mounted and consist of 207 kilowatts at 14251 E. Mariposa Rd and 116 kilowatts at 16998 E Gawne Rd covering an area of .5 acres and .25 acres, respectively. All installation activities would occur in a previously disturbed area that was historically an agricultural field and an equipment storage area. The solar installations would be tied into metered connections at existing power poles less than fifty feet away that service existing facilities at each property. The two solar installations are required to obtain building permits from the appropriate agencies and complete associated inspections prior to beginning construction activities. The portion of the proposed project that would be constructed at 14251 E. Mariposa would occur in an area designated as Prime Farmland; however, due to the minimal coverage of the solar installation

(.5 acres) there would be no significant adverse effects to Prime Farmland. The area surrounding the identified locations is existing agricultural land; therefore, adverse effects to threatened and endangered species, cultural resources, or wetlands and floodplains are not expected as a result of the proposed project.

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

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved.

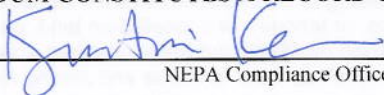
Insert the following language in the award:

You are required to:
The proposed project is required to obtain building permits as needed from the appropriate agencies and complete associated inspections prior to beginning construction activities.

Note to Specialist :

Solar Energy Technologies Office
This NEPA Determination does not require a tailored NEPA provision.
NEPA review completed by Logan Sholar, 11/10/14

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:  Date: 11/13/2014
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