

PMC-ND
(1.08.09.13)

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



RECIPIENT: SolarBridge Technologies, Inc.

STATE: TX

PROJECT TITLE : Module-Integrated Power Converters Based on Universal Dock

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000479	DE-EE0005341		GO5341

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:

DOE is proposing to provide federal funding to SolarBridge to support Phase 2 of SolarBridge's advance solar photovoltaic (PV) technology project. DOE funding would be used to support research, development and limited field testing of power electronics for alternating current PV modules.

The proposed project originally was going to be conducted in three Budget Periods. DOE completed a NEPA review for Budget Period 1 in December 2011. Since that time the project has been reduced from three to two Budget Periods. This NEPA determination applies to Budget Period 2.

Budget Period 2 includes prototype development, enclosure development, module integration, laboratory testing and field testing. Laboratory work would be conducted at SolarBridge's facility in Austin, Texas. An R&D questionnaire has been completed for this facility and addresses the protocols in place for laboratory safety, risk management, chemical handling and waste disposal. Field testing would be conducted at this facility as well.

SolarBridge is located at 9229 Waterford Centre Boulevard #110, Austin, Texas 78758. This facility has a laboratory for electronic, mechanical, and reliability engineering. It includes standard electrical instrumentation (oscilloscopes, multimeters, etc.), mechanical prototyping tools, and environmental chambers. SolarBridge follows all OSHA and company safety standards.

The prototype ACPV modules would be field tested the same location. The building is one-story commercial office and electronics laboratory space. The rooftop is flat and has conventional racking apparatus used to mount PV modules already installed. The prototype modules would be installed on the racking system according to standard PV industry practices and checked by a NABCEP-certified engineer or technician. The performance of the prototypes would be monitored from the indoor laboratory using data acquisition equipment. The array would consist of up to ten ACPV modules with an aggregate power output of less than 350 watts. The array would be connected into the building's 240-VAC, split-phase power supply.

Based on this information, DOE has determined the work outlined is consistent with activities identified in categorical exclusion A9 (information gathering), B3.6 (small-scale research and development activities, laboratory operations and pilot projects) and B5.16 (installation, modification, operation, and removal of commercially available solar photovoltaic systems located on a building or other structure).

NEPA PROVISION

DOE has made a final NEPA determination for this award

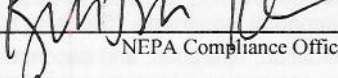
Insert the following language in the award:

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.

Note to Specialist :

This determination does not require a tailored NEPA provision.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: 
NEPA Compliance Officer

Date: 12/16/2013

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: _____