

PMC-ND
(1.08.09.13)

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



RECIPIENT: Advanced Energy Industries Inc.

STATE: Mult

PROJECT TITLE : Transforming PV installations toward dispatchable, schedulable energy solutions

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
FOA-0000479	DE-EE0005340	GFO-0005340-003	

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.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to Advanced Energy Industries Inc. to advance solar photovoltaic (PV) technology. DOE funding would be used to develop and demonstrate power electronic (inverter) technologies that address barriers to high penetration of PV on distribution feeders.

DOE made previous NEPA determinations (GFO-0005340-001, CX A9, B3.6 12/14/2011; GFO-0005340-002, CX A9, B5.15 10/17/2013) for Phase 1 (Tasks 0-4) and Phase 2 (BP2 and BP3) activities which included planning, research, laboratory activities and advancement of solar photovoltaic (PV) technology by developing and demonstrating power electronic (inverter) technologies, addressing barriers to high penetration of PV on distribution feeders. These activities for Phase 1 and 2 were categorically excluded from further NEPA review. This NEPA determination applies to modifications to the SOPO to provide more information on work during Phase 2 including information on an additional location where testing would occur. The technical work approved in the previous NEPA determinations for Phase 1 and 2 remains unchanged.

Work would be completed at the following two sites:

- Baldock PV Facility, located adjacent to the Oregon Department of Transportation's rest area at exit 281.6 off Interstate 5, Aurora, Oregon, 97002.
- Berkowitz Glass Manufacturing Facility, 1 Gateway Blvd, Pedricktown, New Jersey, 08067.

Baldock is a 1.75 megawatt solar facility that provides renewable power to the local electric utility, Portland Gas and Electric. The activities at this site have not changed with revisions to the SOPO and were categorically excluded in a previous NEPA determination (GFO-0005340-002, CX A9, B5.15 10/17/2013) for Phase 2 (BP2 and BP3) activities.

This NEPA determination applies to modifications to the SOPO to mention work at the Berkowitz Glass Manufacturing facility. Work at this location includes the use of an existing large PV system where impacts of the inverter functional controls would be tested. Equipment would be installed on the service feeder consisting of capable devices to monitor grid voltage and current, using the installed equipment for energy data monitoring to evaluate the success of the inverter design. There would be no modifications to the existing facilities at the Berkowitz location for the proposed project and no new permits, licenses or authorizations would be required. The project activities would pose no risk to the public or project workers. Equipment disposition will take place at the conclusion of the program with equipment being shipped via standard means to Advanced Energy facilities. A decommissioning plan and team will oversee this

portion of the project ensuring that the facilities are left in safe working order.

Based on review of the project information and the above analysis, DOE has determined the modifications to the SOPO to provide more information and clarity on tasks performed at the Berkowitz Glass Manufacturing Facility 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" and B3.6 "small-scale research and development, laboratory operations, and pilot projects" and is 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:

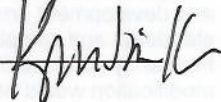
If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing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

Note to Specialist :

May Mock 03/25/2014

This NEPA determination does not require a tailored NEPA provision.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Electronically Signed By: Kristin Kerwin
NEPA Compliance Officer  Date: 3/26/2014

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