

PMC-EF2a

(10/02)

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

**RECIPIENT:**University of New Haven**STATE:** CT**PROJECT  
TITLE :**

University of New Haven Solar Testing and Training Lab (CT)

**Funding Opportunity Announcement Number**  
CDP**Procurement Instrument Number**  
DE-EE0003207**NEPA Control Number**  
GFO-0003207-002**CID Number**  
GO3207

**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:

**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 large scale and suitable for commercial deployment.

**Rational for determination:**

The U.S. Department of Energy (DOE) is proposing to provide federal funding to the University of New Haven (UNH) to conduct research and development activities that advance building-integrated photovoltaic (BIPV) technology. DOE funding would be used to design and develop a new alternative energy application, called Tri-Sol Tech, which integrates solar thermal, solar photovoltaic and daylight into a single unit. All work would be completed with the aid of engineering students through the Solar Testing and Training Laboratory (STTL) completed in the first phase of this award.

DOE made a previous NEPA determination, GFO-10-574(CXB5.1, 9/2/2010) which included the establishment of a Solar Rating Certification Corporation accredited Laboratory within the College of Engineering to test solar products. The laboratory utilized senior engineering students to design and validate automated testing systems. This NEPA determination applies to the addition and testing of Tri-Sol technology into the existing laboratory. Students would continue to play a role in the design, development and testing of the proposed technology.

All work would be completed at the UNH campus, located at 300 Boston Post Road, West Haven, Connecticut 06516 in Buckman Hall. UNH has completed an R&D questionnaire addressing the protocols for laboratory safety, risk management and waste disposal. The laboratory complies with standard safety procedures and all processes and procedures are monitored by the Environmental Health and Safety Department (EHS). The University has all applicable permits in place to conduct research on campus.

A prototype of the Tri-Sol Tech module measuring approximately 6 ft. by 4 ft. by 1 ft. would be designed and built from custom fabricated and off-the shelf components. It would be tested on an existing solar hot water rig at UNH's STTL in an open area adjacent to the facility. The rig would be modified to include a solar collector, electrical power measurements and daylight measurements. The U.S. Fish and Wildlife Service Endangered Species Program website identifies the Piping plover and Roseate tern as endangered or threatened species within New Haven County, Connecticut. DOE has determined that these species would not be affected due to the small scale of the proposed project, the nature of the Tri-Sol Tech project and the project occurring on previously disturbed land. The proposed scope of work would not have adverse effects on wetlands, floodplains, or cultural resources, 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 research, development and testing 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 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.

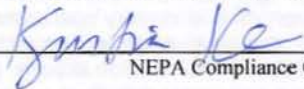
Note to Specialist :

Kelly Daigle 12/11/2012

DOE Share: \$500,000  
Cost Share: \$182,099  
Total Project Cost: \$682,099

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

NEPA Compliance Officer Signature:



NEPA Compliance Officer

Date:

12/12/2012

**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: