

PMC-EF2a

(2.01.02)

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



RECIPIENT: Cascade Engineering

STATE: MI

**PROJECT TITLE :** Innovative Ballasted Flat Roof Solar PV Racking System

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
DE-FOA-0000493	DE-EE0005440	GFO-0005440-002	GO5440

**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:

**B5.15 Small-scale renewable energy research and development and pilot projects**

Small-scale renewable energy research and development projects and small-scale pilot projects, provided that the projects are located 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:**

DOE is proposing to provide federal funding to Cascade Engineering, Inc. (Cascade) to conduct pre-commercial development and deployment activities that advance photovoltaic (PV) technology. DOE funding would be used to design, develop, engineer, manufacture and market a flat roof, polymer solar PV racking system.

DOE made a previous NEPA determination under this award, GFO-0005440-001 (CX A9, B3.6, 11/7/2011), for design activities under Budget Period 1. This NEPA determination applies to Budget Period 2 activities that would include tooling and process development, product and process validation and production.

Cascade, a manufacturer of plastic injection molded products, is located at 3400 Innovation Court SE, Grand Rapids, Michigan 49512. Work would be performed in existing buildings located on Cascade's campus, which is in an industrial area. All research, prototype fabrication and testing would occur in a laboratory environment within the Cascade facility.

Cascade has completed an R&D questionnaire addressing the protocols in place for laboratory safety, risk management, chemical handling and waste disposal. The facility complies with standard laboratory safety procedures and labs are inspected by staff and safety personnel. Environmental, Safety, and Security policies and procedures are in place throughout campus with individual responsibilities enforced by management. Safety is monitored internally through audits and measurements and externally through Michigan OSHA and OSHA standards. The facility operates under all applicable permits to conduct research. Liquid effluents consisting of solvents, acids, bases, chemical reagents, and other liquid wastes will be disposed of by licensed contractors.

Based on review of proposed project information and the above analysis, DOE has determined the activities under Budget Period 2 would not have a significant individual or cumulative impact to human health and/or environment. The proposed project is consistent with the actions identified in categorical exclusions B5.15 "small-scale renewable energy research and development and pilot projects."

**NEPA PROVISION**

Note to Specialist :

Kelly Daigle 9/24/2012

DOE Share: \$258,876

Cost Share: \$477,086

Total Project Cost: \$735,962

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

NEPA Compliance Officer Signature: *[Signature]*  
NEPA Compliance Officer

Date: 9/24/2012

**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: \_\_\_\_\_