

PMC-ND  
(1.08.09.13)

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



**RECIPIENT:**The University of Texas at San Antonio

**STATE:** TX

**PROJECT TITLE :** Diversity in Science and Technology Advances National Clean Energy in Solar (Distance-Solar)

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
DE-FOA-0000857	DE-EE0006323		EE6323

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 the University of Texas at San Antonio (UTSA) to research and develop an innovative power electronic architecture that is modular, compact and cost-effective and that will enable high voltage AC wiring due to the integration of a high-frequency high-voltage solid-state transformer for solar power applications. UTSA would design, build, test and validate an N-port converter prototype in a controlled laboratory. Additionally UTSA would work with the Texas Sustainable Energy Research Institute, located on the UTSA campus, on creating an outreach and education opportunity for students from underrepresented communities focusing on theory and practices of solar power via classroom and "hands on" laboratory experiences.

Laboratory work would be completed at UTSA's Utility Scale Photovoltaic Research Laboratory located at One UTSA Circle, San Antonio, Texas. UTSA completed an environmental questionnaire addressing the protocols for laboratory and facility safety, risk management and waste disposal. The laboratory has standard safety procedures and equipment in place and complies with applicable federal, state and local health and safety regulations. The laboratory has all applicable permits in place, and would not need additional permits for the proposed activities. All handling and disposal of hazardous and non-hazardous wastes, gases, chemicals, and effluents would comply with appropriate federal, state and local regulations.

Outreach and education activities would occur in classroom settings and at the UTSA laboratory described above. Applicable health and safety procedures would be followed.

Based on review of the project information and the above analysis, DOE has determined the proposed research and development and outreach and education activities 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 exclusions 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 :

This NEPA Determination does not require a tailored NEPA provision.

Obadiah Broughton 9/10/2013

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

NEPA Compliance Officer Signature: \_\_\_\_\_

  
NEPA Compliance Officer

Date: 9/12/2013

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