PMC-ND

(1.08.09.13)

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



**RECIPIENT:**Arizona State University

STATE: AZ

**PROJECT** 

TITLE:

Unified Numerical Solver for Device Metastabilities in CdTe Thin-Film PV

Funding Opportunity Announcement Number DE-FOA-0000861

Procurement Instrument Number NEPA Control Number CID Number

GFO-0006344-001

DE-EE0006344

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. 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) laboratory operations, 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 Department of Energy is proposing to provide federal funding to Arizona State University to complete a project titled "Unified Numerical Solver for Device Metastabilities in CdTe Thin-Film PV".

The project would include modeling and analysis as well as small scale research and development activities that would be completed at several universities, a national laboratory, and at the existing facilities of an industry partner. Existing corporate health and safety policies and procedures would be followed including employee training, proper protective equipment, engineering controls, monitoring, and internal assessments. One 55-gallon waste barrel per year of Cadmium contaminated PPE would be collected and stored in a hazardous waste storage location and transported per DOT regulations a hazardous waste landfill.

Based on review of the project information, DOE has determined the research and development 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:

None Given.

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|--|--|-------------|---------------|
| SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.  |  |             |               |
| NEPA Compliance Officer Signature:   |  | Date:       | 8/12/2013     |
|  | NEPA Compliance Officer  | 8) == 1     |               |
| FIELD OFFICE MANAGER DETERMINATION   |  |             |               |
|  | Field Office Manager review required   |             |               |
| NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:   |  |             |               |
|  | roposed 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 representation. | eview and d | etermination. |
| BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO:   |  |             |               |
| Field Office Manager's Signature:  |  |             |               |

Field Office Manager

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