

PMC-EF2a

(20402)

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



RECIPIENT: PLANT PV

STATE: CA

PROJECT**TITLE :**

Low-cost, epitaxial growth of II-VI materials for multijunction photovoltaic cells

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000387	DE-EE0005332	GFO-0005332-001	0

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

Siting, construction (or modification), operation, and decommissioning of facilities for indoor bench-scale research projects and conventional laboratory operations (for example, preparation of chemical standards and sample analysis); small-scale research and development projects; and small-scale pilot projects (generally less than two years) conducted to verify a concept before demonstration actions. Construction (or modification) will be within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible).

A9

Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.

Rational for determination:

DOE is proposing to provide federal funding to Plant PV to develop low-cost, wide band gap solar cells grown on silicon substrates for multijunction photovoltaic (PV) arrays. The proposed research would determine if it is possible to produce highly efficient cadmium selenide/silicon (CdSe/Si) tandem solar cells.

The proposed work would be completed at the DOE Molecular Foundry located at the Lawrence Berkeley National Laboratory (One Cyclotron Road, Berkeley, California 94720). In addition, Grazing Incidence X-Ray Diffraction could be performed at the SLAC linear accelerator located at Stanford University (2575 Sand Hill Road, Menlo Park, California 94025). R&D questionnaires were completed, which addressed the protocols in place regarding laboratory safety, risk management, chemical handling and waste disposal. All laboratory personnel have undergone proper safety and environmental training to learn appropriate handling and storage techniques. For all work conducted at DOE laboratories, project activities may be subject to additional NEPA review by the cognizant NEPA Compliance Officer at the lab.

Based on this information, DOE has determined the work outlined is consistent with activities identified in Categorical Exclusion A9 (information gathering) and B3.6 (indoor bench-scale research and conventional laboratory operations).

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 :

Cristina Tyler 10.25.2011

DOE Funding: \$375,000
Lab Funding: \$375,000
Cost-share: \$95,000

