PMC-EF2a
(2.04.02)

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

RECIPIENT: University of Central Florida **STATE:** FL

PROJECT TITLE : Photovoltaic Power Electronics Research Initiative (PERI) for developing low cost, ultra-compact, three-phase micro inverters or "AC bricks"

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
CDP	DE-EE0003176	GFO-10-526	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).

Rational for determination:

The University of Central Florida proposes to use federal funds to research and develop a low cost, ultra compact, three phase micro inverters to carry 300 watts of power through the use of photovoltaics. The goal of this project is to reduce the amount of large panel solar arrays required to carry equal amount of electrical energy.

This project will include research on 3-phase micro inverter circuit topologies, evaluation of topology candidates, research on high step-up front end DC/DC converters, research on soft switching techniques, development of micro inverter control strategy, development of three-phase micro inverter prototypes, testing and characterization of three phase micro inverter prototypes, and project management and reporting.

This project involves the use of existing laboratory facilities on the campus of the University of Central Florida. The University has submitted an R & D Questionnaire which thoroughly addresses safety and chemical handling protocols.

This project comprises of conventional research and development within existing university facilities; therefore a CX B3.6 will apply.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Eugene Brown 7/26/2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 8/4/2010
NEPA Compliance Officer