PMC-ND

(1.08.09.13)

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



RECIPIENT: University of Central Florida

STATE: FL

PROJECT TITLE Scalable/Secure Cooperative Algorithms and Framework for Extremely-high Penetration Solar Integration (SolarExPert)

Funding Opportunity Announcement Number DE-FOA-0001495

Procurement Instrument Number NEPA Control Number CID Number DE-EE0007998

GFO-0007998-001

GO7998

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.

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 analysis, and dissemination (including, but not limited to, document publication and distribution, and classroom training dissemination and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide funding to University of Central Florida (UCF) to meet the long-term goal of enabling real-time grid integration of solar energy by designing scalable technologies for distribution systems to improve reliability and security and increase penetration of distributed energy resources.

The proposed project would: 1) design an advanced grid at both the device and local levels and integrate them at the system level in a fully modular manner; 2) develop various distribution management system functions to enhance the traditional system layer optimization; 3) develop the enhanced system layer by applying stochastic analysis and distributed optimization tools to predict power system behaviors; and 4) test and implement the sustainable grid platform through software simulation, hardware-in-the-loop testing, and experimentation on industry test cases.

UCF would lead the effort with a number of additional sub-recipients, including the National Renewable Energy Laboratory, to carry out this work. This project would be limited exclusively to intellectual, academic, or analytical activities and would use no physical materials beyond basic office supplies and software.

Any work proposed to be conducted at a DOE laboratory may be subject to additional NEPA review by the cognizant DOE NEPA Compliance Officer for the specific DOE laboratory prior to initiating such work. Further, any work conducted at a DOE laboratory must meet the laboratory's health and safety requirements.

Based on the review of the proposal, DOE has determined that the proposal fits within the class of action(s) selected above. DOE has also determined that: (1) there are no extraordinary circumstances (as defined by 10 CFR 1021.410(2)) related to the proposal that may affect the significance of the environmental effects of the proposal; (2) the proposal has not been segmented to meet the definition of a categorical exclusion; and (3) the proposal is not connected to other actions with potentially significant impacts, related to other proposals with cumulatively significant actions, or an improper interim action. This proposal 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 the Recipient intends to make changes to the scope or objective of this project, the Recipient is required to contact the Project Officer, identified in Block 15 of the Assistance Agreement before proceeding. The Recipient must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved. If the Recipient moves forward with activities that are not authorized for Federal funding by the DOE Contracting Officer in advance of a final NEPA decision, the Recipient is doing so at risk of not receiving Federal funding and such costs may not be recognized as allowable cost share.

Insert the following language in the award:

You are required to:

Any work proposed to be conducted at a DOE laboratory may be subject to additional NEPA review by the cognizant DOE NEPA Compliance Officer for the specific DOE laboratory prior to initiating such work. Further, any work conducted at a DOE laboratory must meet the laboratory's health and safety requirements.

Note to Specialist:

Solar Energy Technologies Office This NEPA determination requires a tailored NEPA provision. Review completed by Chris Rowe, 5/9/2017

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF	
NEPA Compliance Officer Signature: NEPA Compliance Officer	Date: 5/10/20/
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 Manager's attention.	e or controversial issue that warrants Field Office
Proposed action falls within an EA or EIS category and therefore requires Fig.	eld Office Manager's review and determination.
BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF	THE NCO:
Field Office Manager's Signature:	Date:

Field Office Manager