

PMC-ND

(1.08.09.13)

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



RECIPIENT: Electric Power Research Institute

STATE: TN

PROJECT TITLE : Beneficial Integration of Energy Storage and Load Management with PV

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-EE0007163	GFO-0007163-002	GO7163

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.)

B5.15 Small-scale renewable energy research and development and pilot projects

Small-scale renewable energy research and development projects and small-scale pilot projects, provided that the projects are located within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to Electric Power Research Institute (EPRI) to optimize photovoltaic (PV) control architecture for beneficial integration of distributed energy resources with the grid.

DOE previously completed a final NEPA determination for this project (GFO-0007163-001, CX-A9, CX-B3.6, 12/22/2015). DOE is now considering changes to the project as proposed by EPRI. EPRI has proposed the following:

- Changing the location of the roof-mounted PV system to the Mandel School of Applied Social Sciences at Case Western Reserve University (CWRU)
- Installing PV demonstration systems that include smart inverters and energy storage systems at two residential properties.

At the CWRU site, a 50 kW rooftop solar system, a battery (50 kW, 200kWh) and an ultra-capacitor (50 kW, 150 kWh) which would be installed and connected through an AC-coupled hybrid inverter to the pre-existing CWRU campus distribution system. The energy storage system would be located in a covered garage under the building. Medical Center Company (MCC) would obtain the necessary building permits from the city to construct the array. MCC would review and approve the interconnection of grid-interactive inverter and energy storage devices.

A 5.13 kW rooftop PV system would be installed on two homes in Pensacola, FL along with a Li-Ion battery-based utility distributed energy storage system (DESS). The DESS would be located in the front yard of the two houses. The DESS would be installed on top of a concrete pad on previously disturbed area. Building permits would be obtained from Pensacola Building Inspection Division prior to installation. The local electric company, Gulf Power, would be notified regarding this connection. Minor structural and electrical changes to the sites would occur. The systems would remain in service after the study at the discretion of the university/homeowner.

Based on the age and context of the CWRU facility and the two residential properties, DOE has concluded that this project would not have the potential to adversely impact historic properties. Installation contractors would comply with relevant OSHA regulations to limit health and safety related risks associated with the project. There would be minor, temporary ground disturbance adjacent to the sites which would be returned to its original condition upon completion of the project construction. A small amount of waste would be generated and appropriately recycled or disposed of. Based on the scope and the location of the proposed activities, DOE does not anticipate adverse impacts to sensitive

resources, including floodplains, wetlands, prime farmland, native vegetation, migratory birds, or threatened or endangered species.

Based on the review of the proposal, DOE has determined the proposal fits within the class of action(s) and the integral elements of Appendix B to Subpart D of 10 CFR 1021 outlined in the DOE categorical exclusion(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:

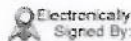
The recipient is restricted from carrying out modifications or installations on or within buildings of historic, archaeological, or architectural significance designated by federal, state or local governments, property located within or immediately adjacent to a historic district, property 50 years or older, or property eligible for listing on the National Register of Historic Places without first providing additional property details to the DOE Project Officer and awaiting approval from DOE to move ahead with those modifications and installations.

Note to Specialist :

Solar Energy Technologies Office
This NEPA determination requires a tailored NEPA provision.
Review completed by Chris Rowe on 6/1/2017

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____



Kristin Kerwin

Date: _____

6/2/2017

NEPA Compliance Officer

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: _____