

PMC-ND
(1/08/09/13)

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



RECIPIENT: Illinois Department of Commerce & Economic Opportunity (Illinois Energy Office) **STATE:** IL

PROJECT TITLE : State of Illinois SEP: Continental Electrical Construction Company, LLC: Technology and Demonstration Grant No. 13-432003

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
SEP-ALRD-2014	DE-EE-0006225	GFO-0006225-002	

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:

- | | |
|--|---|
| B5.16 Solar photovoltaic systems | The installation, modification, operation, and removal of commercially available solar photovoltaic systems located on a building or other structure (such as rooftop, parking lot or facility, and mounted to signage, lighting, gates, or fences), or if located on land, generally comprising less than 10 acres 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. |
| B1.31 Installation or relocation of machinery and equipment | Installation or relocation and operation of machinery and equipment (including, but not limited to, laboratory equipment, electronic hardware, manufacturing machinery, maintenance equipment, and health and safety equipment), provided that uses of the installed or relocated items are consistent with the general missions of the receiving structure. Covered actions include modifications to an existing building, within or contiguous to a previously disturbed or developed area, that are necessary for equipment installation and relocation. Such modifications would not appreciably increase the footprint or height of the existing building or have the potential to cause significant changes to the type and magnitude of environmental impacts. |

Rationale for determination:

The Department of Energy is proposing to provide funding to the Illinois Department of Commerce and Economic Opportunity (Illinois Energy Office) to design, procure, and install a solar photovoltaic (PV) array in conjunction with a Lithium-ion battery storage system. The battery storage system would be utilized to participate in fast response frequency regulation services behind the meter.

The State of Illinois is proposing to install a roof top 53kW PV DC system at the corporate headquarters of Continental Electrical Construction Company located at 815 Commerce Drive, Oak Brook, IL 60523. The solar PV panels would be installed on the existing roof at a 15 degree angle which would ensure that the panels would not be seen from the ground. No structural modifications of the roof or building structure would need to be made. Wind load calculations for the array ballast would be made to ensure the array would remain in place during high wind instances. The PV system would be connected to a 114kWh Lithium-ion energy storage system housed in the ground floor of the building in a secured mechanical room, in a 2'x6' battery rack. No additional ventilation requirements would be necessary since the batteries do not produce any off-gassing. The Lithium-ion battery system would be designed with an internal battery management system that would continuously monitor each individual battery cell to ensure specific setpoints are not exceeded.

The proposed project would require a standard electrical permit from the Village of Oak Brook Department of Community Development. The PV and battery system would be connected to the utility grid through interconnection agreements with the local electrical utility, Commonwealth Edison.

The proposed building for the project was built in 1970, and is not listed on or eligible for listing on the National Register of Historic Places.

Based on a review of the project information and the above analysis, DOE has determined that the purchase and installation of an approximately 53kWh PV solar array and 114kWh Lithium-ion battery storage system 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 exclusion B 5.16 "Solar photovoltaic systems" and B1.31 "Installation or relocation of machinery and equipment" 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 :

Weatherization & Intergovernmental Programs Office
This NEPA Determination does not require a tailored NEPA provision.
NEPA review completed by Diana Heyder, 12/18/14

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Electronically Signed By: Lori Gray *Lori Gray* Date: 12/19/2014
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: _____ Date: _____
Field Office Manager