

PMC-ND  
(1.08.09.13)

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



RECIPIENT: NREL

STATE: CO

PROJECT TITLE : NWTC First Solar PV System; NEPA Tracking No. 17-004

|   |                               |                     |            |
|---|-------------------------------|---------------------|------------|
| Funding Opportunity Announcement Number | Procurement Instrument Number | NEPA Control Number | CID Number |
|   | DE-AC36-08GO28308             | NREL-17-004         | GO28308    |

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.

Rationale for determination:

The U.S. Department of Energy's (DOE) National Renewable Energy Laboratory (NREL), in collaboration with First Solar, have teamed up to install and conduct research on a 430kW capacity PV array. The array would be installed at NREL's National Wind Technology Center (NWTC), located southeast of the intersection of Colorado Highway (CO) 93 and CO-128, in Jefferson County, Colorado. The NWTC is a federally-owned facility that consists of 305 acres and is primarily utilized for wind energy research, development, and testing.

The proposed project would include the installation of PV panels, inverters, wiring and data gathering equipment. This system would be installed between rows 3 and 4 on the NWTC site. The array would be connected to the electrical infrastructure at the battery storage pad area and to the existing research grid interface system, known as the NWTC CGI research facility. This facility infrastructure allows the testing of various energy inputs (wind, solar, etc.), energy storage, and switch gear to optimize energy availability and test reliability in an actual grid configuration. The proposed project would be a component to the NWTC CGI research facility for three to five years as established in the cooperative agreement between NREL and First Solar.

First Solar employees would install the array by driving the support columns into the ground. This would not require trenching or drilling. The PV support structure would be connected to these columns and the solar panels would then be fixed to the support structure. The PV array would take up an area of approximately 2 acres. The area of total soil disturbance from array conduits, trenching, and disturbance from support column installation is estimated to be no more than 4,000 square feet or 0.09 acres. Construction equipment and lay-down area for the project would be on the adjacent road and not result in ground disturbance.

All ground disturbing activities would be conducted in accordance with NREL Lab Level Procedure 6-1.29: Stormwater Pollution Prevention for Construction Activities: National Wind Technology Center. Existing NREL health and safety policies and procedures would be followed including employee training, proper protective equipment, engineering controls, monitoring, and internal assessments. Additional policies and procedures would be implemented as necessary as new health and safety risks are identified.

The NWTC has no known archeological or historic sites or any significant cultural resources. The site has small areas of designated critical habitat for the Preble's meadow jumping mouse located at the southeast corner of the NWTC. The proposed activities would be in the northeastern portion of the site, and would not affect this habitat.

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.

Note to Specialist :

Completed by Laura Margason on September 20, 2017

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

NEPA Compliance Officer Signature:  Electronically Signed By Casey Strickland  Date: 9/20/2017  
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: \_\_\_\_\_ Date: \_\_\_\_\_  
Field Office Manager