PMC-EF2a
(2.04.02)

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

RECIPIENT: NREL **STATE:** CO

PROJECT TITLE : NWTC Lightning Detection System; NREL Tracking No. 10-039

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
		NREL-10-039	GO10337

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:

DOE/EA-1378 Final Site-Wide Environmental Assessment of the National Renewable Energy Laboratory's National Wind Technology Center

B3.1 Onsite and offsite site characterization and environmental monitoring, including siting, construction (or modification), operation, and dismantlement or closing (abandonment) of characterization and monitoring devices and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis. Activities covered include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. Specific activities include, but are not limited to:

Rational for determination:

This proposed project would entail the purchasing and installation of a lightning detection system at the National Renewable Energy Laboratory's (NERL) National Wind Technology Center (NWTC), located southeast of the intersection of Colorado Highway (CO) 93 and CO-128, in the County of Jefferson, State of 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 lightning detection system would enable the NWTC to log data on lightning activity in the area and would be set to notify onsite personnel of approaching lightning for safety purposes.

NREL would purchase a Vaisala TSS 928 Lightning Detection System for the NWTC and would locate it between Row 2 and Row 3 (see attached layout in PMC) at approximately 39.910750, -105.229068. The system would require two concrete pads, one measuring 2-foot by 2-foot by 2-foot deep with the second pad (4-foot by 4-foot by 1-foot deep) located approximately 20 to 40 feet north of the first pad. The lightning detection system would require two 2" conduits about 18" underground from the Site 3.1 Data shed running directly across the Row 3 road to the first concrete pad and then to the second pad for a total linear length of about 640 feet. The system would only protrude six feet above the concrete pads.

The proposed project would not create any point-source air emissions, de minimis fugitive air emissions, hazardous materials, or hazardous waste. The total area of land disturbance would be less than 2,000 SQFT, and therefore not require an EPA Storm Water Associated with Construction Activity permit as it is under one acre. The proposed project would still be conducted in accordance with NREL Procedure 6-2.16 Storm Water Pollution Prevention for Construction Activities: National Wind Technology Center to minimize erosion and fugitive dust. The spoils piles around each pad would be spread around the immediate area to reclaim these sites. The trench would be backfilled and allowed to revegetate naturally due to its narrow width of disturbance. An overall site review of project disturbances across the NWTC this year would assess revegetation success and recommend further action on disturbance sites that are not meeting revegetation standards. Should the disturbance created by the lightning detection system need additional seeding, it would be done when all the other disturbance sites are reseeded. Per agency consultations conducted during the Site-Wide Environmental Assessment for the NWTC (DOE/EA-1378), no cultural resources, threatened or endangered species, wetlands, floodplains, critical habitats, or prime farmlands are located at the NWTC and none would be impacted by this proposed project. A survey for ground-nesting birds would not be required per NREL EHS&Q policies as the working would commence after the end of nesting season (after August 15th). Given the short height of the detection tower, this project has no aesthetic impacts and does not require lightning or other FAA considerations. NREL and all contractors would follow all federal, state, local safety and security regulations.

Based upon the information above, the proposed project would qualify for Categorical Exclusion 3.1.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

EF2A prepared by Rob Smith on 08/25/2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Lou Plummer Date: 8/26/2010

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