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 NREL-20-017 STM VTIF Chiller and Chiller Pad TITLE:

Funding Opportunity Announcement Number

DE-AC36-08GO28308

Procurement Instrument Number NEPA Control Number CID Number NREL-20-017 GO28308

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Policy 451.1), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

DOE/EA-1968 SITEWIDE ENVIRONMENTAL ASSESSMENT, U.S. DOE NATIONAL RENEWABLE ENERGY (NREL STM) LABORATORY, SOUTH TABLE MOUNTAIN CAMPUS, GOLDEN, COLORADO

Rationale for determination:

The U.S. Department of Energy's (DOE) National Renewable Energy Laboratory (NREL) proposes to modify the infrastructure of the Vehicle Testing and Integration Facility (VTIF) to support new research activities in the facility, which is located at the NREL South Table Mountain (STM) campus in Golden, Colorado.

The purpose of the proposed project is to change the focus of research in the VTIF from the Transportation directorate to the Materials & Chemicals Science & Technology (MCST) directorate. The project would implement laboratory upgrades (including electrical and mechanical systems, and the addition of a process chilled water system) and laboratory equipment relocations to support MCST work in VTIF.

Inside the VTIF, project activities would involve the partial demolition of HVAC, mechanical, and electrical systems. Existing direct-current power supplies, meters, equipment, and research enclosures would also be removed to provide additional floor space. The HVAC would be upgraded and a new chilled water system would be installed. Associated ductwork, mechanical, plumbing, and electrical utilities would be installed on the north side of the VTIF to support these systems, and the fire protection and detection system would be upgraded. The mechanical, plumbing, and electrical lines needed to support the new chiller would exit the north side of the VTIF and run above grade on asphalt to the chiller.

Outside the VTIF, a concrete pad would be installed to the north of the building to accommodate the new chilled water system. The concrete pad would be 5' wide by 15' long by 12" thick. Installation of the concrete pad would require saw-cutting and removing existing asphalt and concrete curb pan, and use of a backhoe to remove some soil.

Once the upgrades are complete, environmental chambers and solar simulators would be installed in the VTIF. MCST researchers would operate the equipment to conduct environmental, reliability, and characterization testing of various materials; as such, hazardous wastes are not anticipated to be produced by these research activities. The Transportation directorate would continue to operate research equipment that is located outside VTIF. Although the proposed project would introduce new research in the VTIF, such work is currently performed at other facilities on site.

The total area of disturbance for the proposed project would be approximately 1 square yard to support the new concrete pad. The proposed project would begin in May of 2020 and would take approximately 5 months.

Ground disturbance would occur in areas that have been previously disturbed, and the laydown area for equipment and materials would be located on pavement adjacent to the project area. Erosion control measures would be used and maintained during and after the project period as needed. All ground disturbing activities would be conducted in accordance with existing NREL policies and procedures that guide such work.

Project activities would not affect cultural resources, threatened or endangered species, wetlands, floodplains, or prime farmlands, and no permits would be required. A migratory bird nesting survey shall be completed if project activities involving ground disturbance occur between March 15 and September 15. If nests or eggs are found, the area would be cordoned off with a proper buffer until nestlings fledge.

Mobile air emissions from construction equipment and work trucks would be negligible and short-term. Constructionrelated noise would consist of a short-term, intermittent increase in ambient noise levels and would follow applicable noise ordinances. Non-hazardous construction waste would be reused, recycled, or disposed of in accordance with applicable regulations and NREL policy and procedures.

Individuals working on this project could be exposed to physical and electrical hazards. Existing corporate health and safety policies and procedures would be followed including employee training, proper protective equipment, engineering controls, and monitoring. Additional policies and procedures would be implemented as necessary if new health and safety risks are identified.

NEPA PROVISION

DOE has made a final NEPA determination.

Include the following condition in the financial assisstance agreement:

A migratory bird nesting survey shall be completed if project activities involving ground disturbance occur between March 15 and September 15.

Notes:

NREL Nicole Serio, 3/3/2020

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:

Referenceally Signed By: Lisa Jorgensen NEPA Compliance Officer

Date: 3/3/2020

Date:

FIELD OFFICE MANAGER DETERMINATION

Field Office Manager review not required

☐ Field Office Manager review required

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature:

Field Office Manager

https://www.eere-pmc.energy.gov/GONEPA/ND form V2.aspx?key=23502