

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 : Electrical Expansion Program at the Energy Systems Integration Facility; NREL Tracking No. 15-004

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-AC36-08GO28308		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:

DOE/EA-1968 (NREL STM)	SITELINE ENVIRONMENTAL ASSESSMENT, U.S. DOE NATIONAL RENEWABLE ENERGY LABORATORY, SOUTH TABLE MOUNTAIN CAMPUS, GOLDEN, COLORADO
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Rationale for determination:**PROJECT DESCRIPTION:**

The U.S. Department of Energy (DOE) proposes the installation of new electrical infrastructure for the National Renewable Energy Laboratory's (NREL's) Energy Systems Integration Facility (ESIF) located at the South Table Mountain (STM) campus in Golden, Colorado. ESIF was designed to conduct large, megawatt-scale research and development on testing, controlling, and integrating renewable energy technologies into the nation's electrical distribution grid. The electrical expansion program consists of two components:

- 1) Expansion of an electrical power feed to ESIF; and,
- 2) Expansion of the research electrical systems inside of ESIF.

Currently, ESIF's electrical capability is close to full capacity. A recent STM Campus 15 MW electrical upgrade has made the expansion of the electrical power feed to ESIF possible. Much of this work would include the installation of components in previously disturbed areas and through existing conduit/duct work. In addition, installation of transformers, electrical lines in trenches, and an electrical Vista® switch would be completed. Trenching would occur from the new Vista® switch to the new transformer. A project map showing the proposed locations of components for the ESIF power connection has been uploaded to the PMC.

Interior building modifications would house new equipment and provide climate control in new rooms. Interior modifications would also include the expansion of electrical distribution buses, switchboards, and fixed equipment for research purposes. This would not increase the overall building footprint.

PREVIOUS NEPA DETERMINATIONS:

The construction and operation of STM electrical infrastructure were within the scope of proposed actions analyzed in the July 2003 NREL STM Site-Wide Environmental Assessment (DOE/EA-1440), as well as its two supplements (DOE/EA-1440-S-I May 2008 and DOE/EA-1440-S-II November 2009). In addition, the construction of ESIF was analyzed in DOE/EA-1440-S-II November 2009. A NEPA determination was completed for the STM 15 MW Electrical Upgrade Project (NREL Tracking No. 13-007). The latest December 2014 Site-Wide EA (DOE/EA-1968) for STM incorporates all previous NEPA determinations.

IMPACTS OF PROPOSED ACTION:

A U.S. EPA General Construction Permit for stormwater is not required for this project since total disturbance is less than 1.0 acre. Excavation would be along the roadway, cutting through asphalt pavement. The trench would be no longer than 300 feet and about 3 feet wide. The total disturbance would be approximately 1,800 square feet (0.04 acres). A small amount of asphalt would be needed to repave the road. Even though a permit is not required, the

construction and restoration activities would follow NREL's Laboratory Level Procedure 6-1.28: Stormwater Pollution Prevention for Construction Activities: South Table Mountain Site. Any mobile point emission sources from construction equipment would be negligible. Construction-related noise would consist of a short-term, intermittent increase in ambient noise levels. Per agency consultations conducted during the Site-Wide Environmental Assessment for the STM (DOE/EA-1968), no cultural resources, threatened or endangered species, wetlands, floodplains, or prime farmlands would be impacted by this proposed project. If any construction activities occur off the asphalt drive, between mid-March and mid-September, a survey for ground-nesting birds would be completed by NREL's EHS Office before these activities are initiated, per NREL policy. NREL and contractors would follow federal, state, local safety and security regulations.

The Vista® switch would contain approximately 25 pounds of sulfur hexafluoride (SF-6), which is a regulated greenhouse gas (GHG). The total amount of SF-6 at the STM is below the reporting threshold for EPA. In addition, the switch is excluded from mandatory GHG reporting since the SF-6 is within hermetically sealed-pressure equipment. For maintenance, the switch would be taken out of service, removed and sent to the factory for repairs by qualified personnel. Even though, total amounts of SF-6 would be reported to the NREL EHS department for tracking within the NREL GHG inventory.

NEPA DETERMINATION:

The proposed action including infrastructure and utility upgrades was analyzed in the 2014 Final Site-Wide Environmental Assessment of NREL's STM (DOE/EA-1968). A Finding of No Significant Impact was issued in December 2014. As no extraordinary circumstances were identified, the December 2014 FONSI determination applies to this proposed action.

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 :

Completed by Amy VanDercook, P.G. NEPA Specialist on 01/08/15

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____

NEPA Compliance Officer

Date: _____

1/8/2015

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: _____