

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 :** ESIF ESIL MVOTA Medium Voltage Overhead Line, NREL Tracking No. 15-027

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
	DE-AC36-08GO28308	NREL-15-027	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:

<b>DOE/EA 1440 S-II (NREL STM)</b>	Final Supplement-II to Final Site-Wide Environmental Assessment of the National Renewable Energy Laboratory's (NREL) South Table Mountain Complex (November 2009)
<b>DOE/EA-1968 (NREL STM)</b>	SITEWIDE ENVIRONMENTAL ASSESSMENT, U.S. DOE NATIONAL RENEWABLE ENERGY LABORATORY, SOUTH TABLE MOUNTAIN CAMPUS, GOLDEN, COLORADO

## Rationale for determination:

The U.S. Department of Energy (DOE) proposes a project to install overhead electrical power lines for test article and electrical line testing at the Energy System Integration Facility (ESIF) at the National Renewable Energy Laboratory (NREL) South Table Mountain (STM) campus located in Golden, Colorado.

The proposed project would include the installation of a 32-foot segment of overhead electrical line to replicate actual field conditions for device testing as part of the energy system integration research & development that occurs at the ESIF. The proposed work would occur in and immediately adjacent to the existing ESIF Medium Voltage Outdoor Test Area (MVOTA), which is located on the exterior of the northwest side of the ESIF building. The proposed project would include the following items and more details can be found in the supporting documentation uploaded to the PMC:

- Installation of two utility-style power poles in the previously-disturbed grassy area adjacent to the western retaining wall of the MVOTA area. The poles would be supported with guy wires and would include 3- to 5-foot crossarms for various test article and electrical line testing. The poles would be placed approximately 32 feet apart with electrical lines spanning between the poles.
- One pole would be equipped with a capacitor bank and the other pole would support a 13.2kV to 12.47kV transformer for experiments. Each pole would include metering, fusing and cutout switches.
- Installation of an electrical utility pass-thru in the MVOTA retaining wall for feeders and conduits to connect the proposed new equipment to existing MVOTA electrical infrastructure.
- Conducting of energy system integration research & development with the proposed new equipment and infrastructure.

Installation of the power poles would require a minimal amount of ground disturbance and would be conducted in accordance with NREL stormwater and erosion control procedures. The connection to existing electrical infrastructure would be through an existing retaining wall and no additional excavation or trenching would be required.

Any mobile air emission sources from construction equipment, such as back hoes, support trucks, etc., would be negligible and short-term. Construction-related noise would consist of a short-term, intermittent increase in ambient noise levels and would abide by applicable noise ordinances. A very small quantity of construction debris would be generated. All materials and waste would be managed accordingly under NREL's waste management program. A nesting bird survey would be completed by NREL's EHS Office before these activities are initiated, per NREL policy. NREL and their contractors would follow DOE, federal, state, local environmental, health, and safety regulations, as well as NREL policies and procedures.



Per agency consultations conducted during the November 2009 Final Supplement II to the Site-Wide Environmental Assessment for the NREL South Table Mountain campus (DOE/EA-1440-S-II) and the December 2014 Site-Wide Environmental Assessment for the NREL South Table Mountain campus (DOE/EA-1968), no cultural resources, threatened or endangered species, wetlands, floodplains, or prime farmlands would be impacted by this proposed project.

Existing corporate health and safety policies and procedures for electrical and other hazards would be followed for operation of the new equipment 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. This would help ensure compliance with applicable health and safety regulations, and minimize health and safety risks to employees and the public.

Installation and operation of energy system research equipment at ESIF outdoor test areas was analyzed in the November 2009 Final Supplement II to the Site-Wide Environmental Assessment for the NREL South Table Mountain campus (DOE/EA-1440-S-II). DOE has determined that these activities are bounded by the environmental impact analysis contained in DOE/EA-1440-S-II, and its FONSI, and no further NEPA review is required.

#### 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 :

NEPA review conduct by Rob Smith on 07/30/2015  
National Renewable Energy Laboratory

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

NEPA Compliance Officer Signature: \_\_\_\_\_

Electronically  
Signed By: Kristin Kerwin  
NEPA Compliance Officer

Date: 8/4/2015

#### 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: \_\_\_\_\_