

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: NREL METER Project, Flatirons Campus (NREL-19-042)

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-AC36-08GO28308	NREL-19-042	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 1914 (NREL NWTC)	Final Site-Wide Environmental Assessment of the Department of Energy's National Wind Technology Center at the National Renewable Energy Laboratory
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Rationale for determination:

The U.S. Department of Energy's (DOE) National Renewable Energy Laboratory (NREL) is proposing to design, install, and field test a remote islanded microgrid system field setup. The microgrid would be comprised of both physical equipment and a simulated net load. The purpose of the project is to confirm the performance of the microgrid setup in a real-world setting. The proposed project would take place at the NREL Flatirons Campus (formally called the National Wind Technology Center) located in Jefferson County, Colorado.

The physical equipment would be installed on site 1E.1 and would include a soft-shell shelter and associated infrastructure including HVAC, PV panels, diesel generator, battery storage units, and a regenerative load bank used to simulate various system loads. The shelter is made by Alaska Structures and is approximately 20 ft. by 32.5 ft.

Site prep for the installation of the shelter and equipment would comprise clearing and leveling an area 50 ft. by 50 ft. and 3 in. and placing gravel or road base down. The clearing would be approximately 2500 sq. ft and have a volume of gravel or road base of about 625 cu. ft. The shelter would be placed on the gravel pad and secured using an anchoring system. The anchoring system installation will follow the manufacturer's guidelines and included equipment, of which 14 stakes, each 1 ft. long, will be used to stake down 3" nylon straps attached to the structure's perimeter. Due to high wind speeds at the site, NREL discussed the wind loading concerns with the shelter manufacturer who stated that with proper staking following installation instructions the structure can withstand 100 mph wind for up to 30 minutes.

The diesel generator proposed for the project would be an Onan/Cummins 80kW model which is currently being used at the NREL South Table Mountain campus outside the ESIF facility (currently inventoried as AST Research Generator #1,). This would be placed on an existing concrete pad which would be about 20 feet from the shelter. All connections from the generator would be aboveground with no ground disturbance being required. The generator would run intermittently for very short durations, at any day or time during active testing only. Total run hours per year is expected to be 60-300 hours.

The air cooling-heat pump system would be installed on the gravel pad next to the shelter for environmental conditioning inside the shelter. The remaining project components would be placed inside the shelter.

NREL is proposing to install the system in September of 2019 and conduct research for a period of approximately three years. After three years the research would be complete and the shelter and infrastructure would be removed. NREL is proposing to leave the gravel pad in place for future use.

The area proposed for installation is currently scrub grassland that has been previously disturbed by ongoing research activities at the site. Per NREL procedures, all areas disturbed from construction would be backfilled and restored (grading, seeding, and mulching).

All ground disturbing activities would be conducted in accordance with NREL Lab Level Procedure for Stormwater Pollution Prevention for Construction Activities at Flatirons Campus. Existing NREL health and safety policies and procedures would be followed including employee training, proper protective equipment, engineering controls, monitoring, and internal assessments.

There are no known cultural resources, wetlands, floodplains, or prime farmlands at the Flatirons Campus, therefore this project would not adversely affect these resources. The site has designated critical habitat for the Preble's meadow jumping mouse at the southeast corner, this area is considered a conservation zone and no activities would occur in that region of the site.

Based on the review of the proposed activities, DOE has determined that this project falls into the category of "infrastructure upgrades for research capabilities", which was analyzed in section 2.1.1 Increasing and Enhancing Research and Support Capabilities of the 2014 Final Site-Wide Environmental Assessment of the NREL NWTC (DOE/EA-1914). DOE has determined that this activity is bound by the environmental impact analysis contained in this EA and the respective FONSI, and no further NEPA review is required.

NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

NEPA review completed by Laura Margason on September 25, 2019.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____



Signed By: Casey Strickland

NEPA Compliance Officer

Date: 9/26/2019

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

Date: _____