

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: Flatirons Campus Second CGI Installation (NREL-19-041)

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-AC36-08GO28308	NREL-19-041	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 install a second Controllable Grid Interface (CGI) infrastructure at the NREL Flatirons Campus (formally called the National Wind Technology Center) located in Jefferson County, Colorado.

The project would expand current research capabilities that test grid integration of utility scale renewable energy and storage technologies. The current CGI interface has a 6.3 MW capacity; the proposed new CGI would increase the total capacity to 16.3 MW.

NREL is proposing to place the new CGI infrastructure to the east of the existing CGI infrastructure; on the far north edge of the campus; and just east of the 5MW Dynamometer testing facility. The area is currently mixed grassland which has been disturbed by previous site road and construction activities. This area of the campus has recently been used as an equipment staging area for several other projects.

The major components of the CGI would consist of:

- 19.9 MVA Grid simulator (10 MW CGI) inside an enclosure building on a cement pad at the proposed location;
- 2 input transformers and 1 output transformer on the cement pad;
- 13.2 kV cables leading from the CGI to the existing switchgear in Building 253
- Two new Vista switches at the northeast corner of Building 258 (5 MW Dynamometer)
- Interconnections at the new Vista switches to the existing and new campus electrical infrastructure.

Prior to installing this equipment, an equipment yard would be installed. This would include clearing an area no more than 15,000 sq. ft. which would be topped with approximately 275 cu. yds. of road base and/or gravel. Within the yard, several cement pads would be installed – the largest at approximately 80' x 15' (1200 sq. ft.) and ten additional smaller pads ranging from 8' x 15' to 15' x 25' ft. (no more than 3,750 sq. ft).

From the equipment yard approximately 1500 ft of cabling would be installed to connect the CGI with existing infrastructure. It is unknown if the cabling would be placed underground, thus requiring trenching, or placed above ground in secure conduits. Should trenching be required, the amount of ground disturbance would be no more than 1,500' x 3' x 3' or 500 cubic yards of displaced soil. Should above ground cabling be selected, no trenching would be required.

NREL is proposing to order the long-lead CGI equipment in Aug 2019, complete final construction designs in the fall of 2019, construct the equipment yard and cabling in the spring of 2020 and install CGI equipment upon delivery in Aug-Sept of 2020.

Per NREL procedures, all areas disturbed from construction and trenching would be backfilled and restored

(grading, seeding, and mulching).

All ground disturbing activities would be conducted in accordance with NREL Lab Level Procedure 6-1.29: Stormwater Pollution Prevention for Construction Activities: 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, however, the proposed activities would take place in the northern portion of the site, and would not affect this habitat.

Based on the review of the proposed activities, DOE has determined that project activities have been considered and analyzed in section 2.1.1.1 "Grid Storage Test Equipment" in 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 8/7/2019

FOR CATEGORICAL EXCLUSION DETERMINATIONS

There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects of the proposal.

The proposed action has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:  Casey Strickland Date: 8/7/2019
NEPA Compliance Officer

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: _____ Date: _____
Field Office Manager