

**U.S. DEPARTMENT OF ENERGY  
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY  
NEPA DETERMINATION**



**RECIPIENT:** Brian Cox PM - Vivek Singh PI

**STATE:** CO

**PROJECT TITLE :** Behind the Meter Storage for Megawatt Scale Charging - Flatirons Campus - NREL 23-001

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
	DE-AC36-08GO28308	GFO-NREL 23-001	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:

<b>DOE/EA 1914 (NREL NWTC)</b>	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) proposes to design, construct, and operate energy storage and megawatt scale electric vehicle charging capabilities to support research efforts at the NREL Flatirons Campus (FC) in Arvada, Colorado.

**PROJECT**

The proposed system would be to the east of site 3.1. Proposed construction activities include the installation of paved areas, graveled areas, reclaimed vegetation areas and riprap where appropriate. Asphalt areas would include a truck ramp, access road, and parking area. Three utility vaults would be installed, and conduit would be run to provide a connection to the existing FC utility infrastructure.

Paved areas would consist of concrete pads that would support a small data shed (measuring approximately 25 feet by 20 feet), an approximately 40 foot by 39 foot pad (Pad E), an approximately 80 foot by 38 foot pad (Pad F), and a truck bay measuring approximately 97 feet by 35 feet. Pads E and F and the truck bay would house research equipment and would support electrical charging for various medium and heavy-duty vehicles such as school buses or military vehicles. Equipment that would be used include but is not limited to a DC interface, an electric vehicle grid interface, and a battery emulator. The data shed would house various communication, data storage, and computing equipment.

The graveled areas would be installed adjacent to pads E and F and would consist of mulch gravel and Geotech barrier. The area would also be graded for a possible future expansion of the truck may or truck access area measuring approximately 20 feet wide by the width of the site). This would support access of large electric vehicles to the site from Row 4.

Reclaimed vegetation areas and riprap would support stormwater management by acting as swales and detention basins.

Once the equipment has been installed and research activities have commenced, batteries located at the CGI1 or CGI2 sites on the FC may be linked to the system and used as components for the charging station.

Construction would begin in the fall of 2023 and research activities would begin once construction is completed in 2024.

**ANALYSIS**

The total project area including laydown areas measures approximately 2 acres. Ground disturbance would occur in areas that have been previously disturbed, and all ground disturbing activities would be conducted in accordance with existing NREL policies and procedures that guide such work. An EPA Construction General Permit for stormwater discharges would be required. Waste materials would be recycled where possible or reused or disposed offsite and the disturbed areas would be backfilled, regraded, and revegetated. Concrete washout would occur either offsite or onsite EcoPans.

Project activities would not affect air quality, cultural resources, threatened or endangered species, floodplains, or prime farmlands. 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.

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, as well as obtaining a Safe Work Permit. Additional policies and procedures would be implemented as necessary if new health and safety risks are identified.

Based on the review of the project, DOE has determined that the proposed project fits within the scope of activities that were analyzed in Section 2.1.1 "Increasing and Enhancing Research and Support Capabilities (Zone 1 and Zone 2)" of the 2014 Final Site-Wide Environmental Assessment of the NREL NWTC (DOE/EA-1914). DOE has determined that the proposed project is bound by the environmental impact analysis contained in this EA and its respective FONSI, and no further NEPA review is required.

## NEPA PROVISION

DOE has made a final NEPA determination.

Include the following condition in the financial assistance agreement:

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.

Notes:

NREL  
Completed by Nicole Serio, 11/4/2022

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

NEPA Compliance Officer Signature:  Electronically Signed By: Lisa Jorgensen Date: 11/8/2022  
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