

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: UAS Flights at Substation - Flatirons Campus

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-AC36-08GO28308	NREL-20-038	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:

B3.2 Aviation activities Aviation activities for survey, monitoring, or security purposes that comply with Federal Aviation Administration regulations.

Rationale for determination:

The U.S. Department of Energy's (DOE) National Renewable Energy Laboratory (NREL) is proposing to use an unmanned aircraft system (UAS) to conduct photography and videography of the substation at the Flatirons Campus located in Jefferson County, Colorado. Multiple flights would occur over a one week period between September 16th and 22nd, 2020. Flights would facilitate inspection and documentation during a forensic investigation of a recent transformer loss being completed by Knott Laboratory, LLC. NREL would provide site access and pilot a UAS in support of the investigation.

Flights would be conducted at altitudes below 400 ft. above ground level (AGL), in winds less than 25 mph steady (30 mph gusts), within Class G airspace, which requires no notifications, authorizations, or permits. The launch area would be clear of obstructions in every direction by 50 ft. in the southwest portion of the Flatirons Campus. A provisionary, check-out flight would be conducted in the vicinity of, but not over, the substation. This flight is expected to occur in an open area directly north of the fence outside the substation. To ensure operational safety, a 25 ft. clearance will be maintained from the numerous vertical structures and aerial hazards that exist in the area of the substation. Spotters and a camera on the drone would be employed to aid situational awareness. All flights would maintain a minimum distance of 25 ft. from property boundaries. The UAS would be landed when large birds or bird flocks are present in the area. Flight activities would be conducted by NREL staff as authorized in accordance with OPP 650-7, "Unmanned Aircraft Systems" and under FAA 14 CFR Part 107 regulations. Flights would adhere to and take place in accordance with NREL policies, procedures, and safety requirements for conducting UAS missions on DOE facilities.

Currently flights are only planned for outside of the Class D airspace of Rocky Mountain Metropolitan Airport (KBJC). If this changes, authorization would be obtained from FAA Air Traffic Control via the Low Altitude Authorization and Notification Capability (LAANC) process prior to flights within KBJC's Class D airspace and if a lost link event were to occur, KBJC would be contacted immediately.

A risk assessment has been completed for flight activities with operational parameters, hazards, and controls being identified and set forth in an Aviation Safety Plan that was drafted in consultation with NREL Environment, Safety, and Health staff and the UAS Steering Committee. The Flight Plan for this project has been submitted and approved by the Golden Field Office's Aviation Manager and Office Director. Per the aviation manager, "the identified flight risks for the FC Forensic Investigation support mission have been adequately identified and mitigated to routine risk per the DOE Risk Assessment".

If flight conditions change or the documented mitigation factors are unable to be implemented the mission will need to be paused so a reevaluation of hazards can occur.

NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

NEPA review completed by Casey Strickland on September 15, 2020.

FOR CATEGORICAL EXCLUSION DETERMINATIONS

The proposed action (or the part of the proposal defined in the Rationale above) fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D. To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

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.

The proposed action is categorically excluded from further NEPA review.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:  _____ Date: 9/15/2020
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