

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** NWTC UCB Unmanned Aerial System Meteorological Instrument Validation Project; NEPA Tracking No.  
: 17-009

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-AC36-08GO28308	NREL-17-009	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>B3.2 Aviation activities</b>	Aviation activities for survey, monitoring, or security purposes that comply with Federal Aviation Administration regulations.
<b>B5.15 Small-scale renewable energy research and development and pilot projects</b>	Small-scale renewable energy research and development projects and small-scale pilot projects, provided that the projects are located within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

**Rationale for determination:**

The U.S. Department of Energy's (DOE) National Renewable Energy Laboratory (NREL), in collaboration with the University of Colorado, Boulder (UCB), is proposing a project that would validate on-board meteorological instrumentation technologies utilizing an unmanned aerial system (UAS; i.e., drone) at NREL's National Wind Technology Center (NWTC), located southeast of the intersection of Colorado Highway (CO) 93 and CO-128 in Jefferson County, Colorado. The NWTC is a federally-owned facility that consists of 305 acres and is primarily utilized for wind energy research, development, and testing.

NREL staff would host UCB staff while visiting the site and throughout the operation of the UAS. Flight operations would also be supervised by the UCB's Director of Flight Operations (DO), who has over 37 years' experience with unmanned aircrafts.

Project activities would occur in April, 2017 and the duration of the operation would be no more than 5 days for 4-hours each day. UCB operators would fly the UAS in airspace around the NWTC met towers, no closer than 100m of the tower and guy wires.

Operation of a UAS would require a Certificate of Waiver or Authorization (COA) from the Federal Aviation Administration. UCB personnel have procured this certificate which is valid from April 19, 2016 through April 18, 2018. NREL and UCB personnel would comply with all FAA regulations and conditions, limitations, and provisions of the COA.

Project activities would not affect cultural resources, threatened or endangered species, wetlands, floodplains, or prime farmlands. No construction or ground disturbing activities are being proposed. By following the provisions of the FAA COA, no impact to aviation airspace would occur.

Based on the review of the proposal, DOE has determined the proposal fits within the class of action(s) and the integral elements of Appendix B to Subpart D of 10 CFR 1021 outlined in the DOE categorical exclusion(s) selected above. DOE has also determined that: (1) there are no extraordinary circumstances (as defined by 10 CFR 1021.410(2)) related to the proposal that may affect the significance of the environmental effects of the proposal; (2) the proposal has not been segmented to meet the definition of a categorical exclusion; and (3) the proposal is not connected to other actions with potentially significant impacts, related to other proposals with cumulatively significant actions, or an improper interim action. This proposal is categorically excluded from further NEPA review.

**NEPA PROVISION**

DOE has made a final NEPA determination for this award

Insert the following language in the award:

If the Recipient intends to make changes to the scope or objective of this project, the Recipient is required to contact the Project Officer, identified in Block 15 of the Assistance Agreement before proceeding. The Recipient must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved. If the Recipient moves forward with activities that are not authorized for Federal funding by the DOE Contracting Officer in advance of a final NEPA decision, the Recipient is doing so at risk of not receiving Federal funding and such costs may not be recognized as allowable cost share.

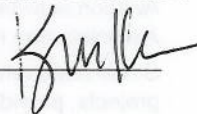
Note to Specialist :

Review completed by Laura Margason on April 11, 2017.

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

NEPA Compliance Officer Signature:

Electronically Signed By: Kristin Kerwin  
NEPA Compliance Officer



Date: 4/13/2017

**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: