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** 

Aeroacoustic Assessment of Wind Plant Control - Flatirons Campus TITLE:

**Funding Opportunity Announcement Number** Procurement Instrument Number NEPA Control Number CID Number DE-AC36-08GO28308 NREL-20-018 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:

**B5.15 Small-scale** renewable energy and pilot projects

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 research and development 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) is proposing to conduct research activities to characterize turbine noise emissions to determine the changes of acoustic emissions produced when operating a utility scale wind turbine.

The research would be conducted at the National Renewable Energy Laboratory's (NREL) Flatirons Campus (formally called the National Wind Technology Center) and at the Rocky Flats National Wildlife Refuge (Refuge). The Flatirons Campus is a federally-owned facility that consists of 305 acres and is primarily utilized for renewable energy research, development, and testing. Both sites are located southeast of the intersection of Colorado Highway 93 and CO-128, in Jefferson County, Colorado.

The proposed research would involve deploying acoustic recording and data acquisition equipment at three locations on Refuge property, just east of NREL's property line, about 195m from the GE 1.5 MW turbine. Researchers would pre-assemble eight enclosed sound board systems which would house microphones, pressure/temperature sensors, meteorological data acquisition systems, digital recorders and other small hardware. Data acquisition communications and power cabling would run from each of these systems to the GE wind turbine.

The U.S. Fish & Wildlife Service (FWS) maintains the Refuge and would be consulted for permission to access the site and to deploy the sound board systems. DOE and NREL have a special access permit with FWS that facilitates research activities at locations on the Refuge. This special-use permit is regularly updated and currently includes provisions for wind turbine noise testing. Vegetation may be cut and the ground leveled as needed using hand tools to accommodate sound boards but no major ground disturbance would be required.

Activities would start in late February or March 2020 and run for about three months. After research has been concluded the soundboard systems would be removed and, if needed, the sites would be remediated.

Existing NREL health and safety policies and procedures would be followed including employee training, proper protective equipment, engineering controls, monitoring, and internal assessments, as necessary.

Nesting bird surveys would be performed prior to the start of project activities if work is conducted between March 15th and September 15th. Soundboards system placement would avoid any area if nests are discovered. No significant impacts to wildlife or other resource areas would occur from the proposed project activities.

## NEPA PROVISION

DOE has made a final NEPA determination.

U.S. DOE: Office of Energy Efficiency and Renewable Energy - Environmental Question... Page 2 of 2 Notes: NEPA review completed by Laura Margason on February 13, 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. Signed By: Lisa Jorgensen

NEPA Compliance Officer NEPA Compliance Officer Signature: 2/13/2020 Date: FIELD OFFICE MANAGER DETERMINATION

Field Office Manager

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO:

Field Office Manager review not required

Field Office Manager review required

Field Office Manager's Signature:

Date: