

PMC-ND

(1.08.09.13)

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

**RECIPIENT:** Oregon State University**STATE:** OR

PROJECT TITLE: Advanced Collision Detection and Site Monitoring for Avian and Bat Species for Offshore Wind Energy

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0001924	DE-EE0008733		GO8733

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:

A9 Information gathering, analysis, and dissemination Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)

B3.6 Small-scale research and development, laboratory operations, and pilot projects Siting, construction, modification, operation, and decommissioning of facilities for smallscale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

B5.15 Small-scale renewable energy research and development 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 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 (DOE) is proposing to provide funding to Oregon State University (OSU) to design, build, and test a novel collision detection system for off-shore wind turbines that would seek to reduce avian and bat collisions. The system would be capable of providing visual confirmation of collisions in both daytime and nighttime conditions via on-blade visible light and infrared cameras, as well as relaying data from remote locations. Both laboratory and field testing would be conducted to validate system performance.

DOE completed two previous NEPA determination covering Task 1, 2, 3 and 5 (GFO-0008733.001, CX A9, B3.6, 07/12/2019; GFO-0008733.002, CX A9, B3.6, 10/28/2020). This NEPA review is Task 4 (Wind Turbine Testing).

In Task 4 OSU would conduct testing on an operating turbine at the National Wind Technology Center (NWTC). In Task 3 OSU conducted tests on wind blades that were on the ground. In Task 4 testing would be similar in scope to the testing in Task 3, but would include testing on operating wind turbine blades. OSU staff would attach vibration sensors to the nacelle and blades. OSU would also operate a video camera to get video footage of the testing. Blades would be tested by striking the blades with low-energy impact stimuli, such as striking the blades with tennis balls. Testing would be conducted over a two week period. Testing would not include testing of the wind turbines. All wind turbines and blades to be tested are previously installed turbines operating at NWTC.

The project would require installation of sensors and cameras on the blades and nacelle of a wind turbine. This would require work up tower at height, and around large machinery. This type of work is common at the NWTC. Established safety protocols are in place and would be followed, including employee training, proper protective equipment, pre-installation clearance of installation plans, and close collaboration with NWTC engineers and technicians. All equipment would be removed from the blades and nacelle after testing is completed.

Data collected by OSU during the tests would be analyzed.

Any work proposed to be conducted at a federal facility may be subject to additional NEPA review by the cognizant federal official and must meet the applicable health and safety requirements of the facility.

NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

Wind Energy Technology Office
This NEPA determination does not require a tailored NEPA provision.
Review completed by Roak Parker, 02/17/2021

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:

 Electronically Signed By: **Roak Parker**
NEPA Compliance Officer

Date: 2/17/2021

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:

Field Office Manager

Date: _____