

PMC-ND  
(1.08.09.13)

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



**RECIPIENT:** American Wind Wildlife Institute

**STATE:** WA

**PROJECT TITLE** Evaluating the Effectiveness of a Detection and Deterrent System in Reducing Golden Eagle Fatalities at Operational Wind Facilities

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
DE-FOA-0001554	DE-EE0007883	GFO-0007883-002	

**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:

**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.)

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

**B3.3**

**Research related to conservation of fish, wildlife, and cultural resources** Field and laboratory research, inventory, and information collection activities that are directly related to the conservation of fish and wildlife resources or to the protection of cultural resources, provided that such activities would not have the potential to cause significant impacts on fish and wildlife habitat or populations or to cultural resources.

Rationale for determination:

The Department of Energy (DOE) is proposing to provide funding to American Wind Wildlife Institute (AWWI) to evaluate the effectiveness of the DTBird system in minimizing the risk of golden eagles colliding with wind turbines. The DTBird system is an automated system for bird monitoring and mortality mitigation for wind turbines.

DOE completed a NEPA determination for this award (GFO-0007883-001, CX A9, B3.2, and B3.3, signed on 4/28/2017). This NEPA Determination restricted proposed field work at the Glenrock Wind Energy Project in Converse County, Wyoming, which was one of the two sites originally selected by AWWI. Since that time, AWWI has proposed a change in location for the field work. AWWI is no longer considering completing field work at the Glenrock facility and is now proposing to complete field work at the Goodnoe Hills Wind Farm in Klickitat County, WA. This NEPA Determination applies to Tasks 5 – 12 at the Goodnoe Hills Wind Farm.

AWWI would conduct tests of the DTBird detection and deterrence functions using DTBird video data of in situ golden eagles and suitable surrogate raptors, unmanned aerial vehicles (UAVs) equipped with high-resolution GPS tracking devices, and, if appropriate, trained raptors equipped with high-resolution GPS tracking devices at a test facility. AWWI would use these results to model expected reductions in golden eagle fatality risk. These efforts would enable a robust evaluation of DTBird's ability to successfully deter eagles entering the rotor swept zone of wind turbines in landscapes similar to the study areas.

AWWI would install DTBird units on existing wind turbines at the wind facility in Washington. The DTBird system is designed to emit audible sounds when eagles and other birds approach within a defined distance of the turbine. Different sounds would be used for different types of birds. DTBird's deterrent signals are designed to prevent birds from colliding with turbines. AWWI would also conduct flight trials with raptor-sized, fix-winged electric UAVs and analyze footage to improve understanding of how landscape setting and behavioral covariates influence performance of detection and deterrence-triggering functions. The drone flights would follow relevant Federal Aviation Administration requirements. In addition, AWWI would conduct trained raptor flight trials at the Goodnoe Hills Wind Farm. The trained raptors would be equipped with high-resolution GPS tracking devices and the data would be used to supplement the UAV flight trials. These activities would be conducted properly permitted and trained individuals.

No physical modification of existing facilities at Goodnoe Hills Wind Farm would be necessary. The detection and deterrent technology attaches to wind turbine towers with magnets, and no ground disturbance would be required. Equipment modification would be limited to accommodating the transfer of power from the wind turbine to the DTBird systems. The noise emitted by the system would be intermittent and would not have adverse impacts on wildlife or facility employees. The sound levels at the source would be adjusted to ensure that the levels at sensitive receptors are within the requirements of the local noise ordinances, generally not above 65 decibels. AWWI has coordinated with U.S. Fish and Wildlife Service in Region 1 regarding the proposed activities. These proposed activities do not require any permits, additional permissions, or consultation. DOE does not anticipate adverse impacts to sensitive resources, including bald or golden eagles, as a result of the proposed activities.

Based on the review of the proposal, DOE has determined that Tasks 5.0 - 12.0 at the Goodnoe Hills Wind Farm in Klickitat County, WA fit 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. Tasks 5.0 – 12.0 are 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 :

Wind Program

This NEPA determination does not require a tailored NEPA provision.

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

NEPA Compliance Officer Signature: \_\_\_\_\_

 Electronically  
Signed By: Kristin Kerwin  
NEPA Compliance Officer

Date: 1/18/2018

#### 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: \_\_\_\_\_