

PMC-ND  
(1.08.09.13)

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



**RECIPIENT:** General Electric (GE) Renewable Energy

**STATE:** SC

**PROJECT TITLE:** Ultrasonic Jet Bat Deterrent System Advancement – Research and Large-Scale Validation with Comparisons to Wind Turbine Curtailment

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0001924	DE-EE0008730	GFO-0008730-001	

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.)

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide funding to General Electric Renewable Energy (GE) to undertake a large-scale field study on the effectiveness of acoustic ultrasonic bat deterrent technologies in wind turbine applications. Testing would be carried out using a tower/nacelle mounted system that would be installed at approximately 40 wind turbines at a wind farm in New York State. The deterrence effectiveness of the system would be evaluated relative to existing curtailment strategies via carcass and thermal imaging studies.

The project would be completed over two Budget Periods (BPs), with a Go/No-Go Decision Point in between each BP. This NEPA Determination only applies to BP1 tasks, which would consist of the development of the research study plan and permitting for the field study site. BP2 tasks are all dependent on the finalization of the research study plan and permitting. Accordingly, BP2 tasks are restricted until further NEPA review is completed. Additional NEPA review will be completed by DOE once the research study plan is approved by DOE, and all necessary information associated with BP2 activities has been provided by the Recipient.

Proposed project activities for BP1 include the following:

Task 1: Research Study Plan – This task would consist of the development of a Research Study Plan, which would describe the strategy for evaluation of the deterrent system's effectiveness at minimizing bat fatality rates. The plan would be submitted to DOE for review/approval. Additionally, an intellectual property (IP) management plan would be developed as part of this task.

Task 2: NEPA and Permitting – This task would consist of extending existing scientific research permits with the State of New York Department of Environmental Conservation (NY DEC) into the 2020 bat migration season. GE would also submit any relevant information needed to complete consultation in order to fulfill NEPA requirements for BP2 work.

All project work under BP1 would be completed by GE and its project partners at existing, purpose-built office facilities. Activities would be limited to data gathering and reporting and would not involve laboratory testing or field operations. Accordingly, no significant health or safety risks are anticipated. GE and its project partners would adhere to all relevant Federal, state, and local health, safety, and environmental regulations.

**NEPA PROVISION**

DOE has made a conditional NEPA determination.

The NEPA Determination applies to the following Topic Areas, Budget Periods, and/or tasks:

**Budget Period 1**

The NEPA Determination does not apply to the following Topic Area, Budget Periods, and/or tasks:

**Budget Period 2**

Notes:

**Wind Energy Technologies Office**

**This NEPA determination requires a tailored NEPA Provision.**

**NEPA review completed by Jonathan Hartman, 07/16/2019**

**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.

A portion of the proposed action is categorically excluded from further NEPA review. The NEPA Provision identifies Topic Areas, Budget Periods, tasks, and/or subtasks that are subject to additional NEPA review.

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

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

  
NEPA Compliance Officer

Date: 7/17/2019

**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: \_\_\_\_\_