

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



RECIPIENT: Boise State University

STATE: ID

PROJECT TITLE: Designing an effective acoustic deterrent to protect bats

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0002828	DE-EE0011085	GFO-0011085-001	GO11085

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.)
B3.3 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.
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.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide funding to Boise State University (Boise State) to design and test an acoustic bat deterrent capable of reducing bat mortalities at wind turbine locations. The award aims to utilize controlled laboratory experiments, experimental field tests, and wind turbine tests to determine the most effective acoustic bat deterrent.

This NEPA Determination (ND) focuses on the capture of live bats and laboratory experiments, i.e., Budget Period (BP) 1 activities. This ND does not apply to BP2 activities. DOE will complete the NEPA review for BP2 when sufficient information is available to conduct a meaningful review. Sufficient information would include a finalized study plan for field and wind turbine tests as well as a finalized location for the wind turbine tests.

Boise State's Barber Sensory Ecology Lab (Barber Lab; Boise, ID) would be utilized for BP1's laboratory experiments. Barber Lab is a dedicated indoor flight facility for the study of echolocating bats. This laboratory would serve as the location for performing broadcasting acoustic deterrent experiments on captive bats as well as the location where the captive bats would be held and cared for. A dividing wall would be added to separate the laboratory into two sides. Other than the dividing wall, no facility modifications would be required for award activities.

The bats participating in the Barber Lab experiments would be captured at Lava Lake Ranch in Carey, ID which has served as a field site for Barber Lab in the past. Boise State would focus on the capture of the hoary bat (*Lasiurus cinereus*), the silver-haired bat (*Lasionycteris noctivagans*), and the big brown bat (*Eptesicus fuscus*) for use in BP1's laboratory experiments. None of these bat species have been identified for listing under the Endangered Species Act (ESA) by the U.S. Fish and Wildlife Service. Additionally, there are no ESA-listed bat species known to occur in the vicinity of Lava Lake Ranch. However, the capture and experimentation on live bats would require permits from Idaho Fish and Game as well as Institutional Animal Care and Use approval from Boise State. All captive bats would be released at the completion of BP1's laboratory experiments. BP1 activities would not require ground disturbance. Therefore, ground disturbing activities are not covered under this ND.

Award activities would involve hazards associated with the capture and handling of live bats with the added risk of a rabies virus infection. To mitigate these hazards, all personnel would be vaccinated against rabies and wear proper personal protective equipment. Existing health, safety, and environmental policies and procedures would be followed to mitigate hazards to acceptable levels. Mitigated hazards would pose negligible risks to the public and environment. All activities would comply with existing federal, state, and local laws and regulations.

DOE has considered the scale, duration, and nature of proposed activities to determine potential impacts on resources, including those of an ecological, historical, cultural, and socioeconomic nature. DOE does not anticipate impacts on these resources which would be considered significant or require DOE to consult with other agencies or stakeholders.

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

Include the following condition in the financial assistance agreement:

Before capturing and experimenting on live bats, Boise State University is required to obtain the necessary permits from Idaho Fish and Game as well as Institutional Animal Care and Use approval from the university.

Notes:

Wind Energy Technologies Office

This NEPA determination requires legal review of the tailored NEPA provision.

NEPA review completed by Corrin MacLuckie, 1/24/2024.

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: _____



Electronically Signed By: [Casey Strickland](#)

NEPA Compliance Officer

Date: [1/24/2024](#)

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: _____