

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



RECIPIENT: EPRI

STATE: CA

PROJECT TITLE: [Establishing Baseline Data on Bat Activity in The Offshore Environment: Developing Tools and Models to Quantify Risk of Offshore Wind Energy Development](#)

|  |                                      |                                 |                         |
|--|--------------------------------------|---------------------------------|-------------------------|
| <b>Funding Opportunity Announcement Number</b> | <b>Procurement Instrument Number</b> | <b>NEPA Control Number</b>      | <b>CID Number</b>       |
| <a href="#">DE-FOA-0002237</a>                 | <a href="#">DE-EE0010289</a>         | <a href="#">GFO-0010289-002</a> | <a href="#">GO10289</a> |

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.)

**B3.1 Site characterization and environmental monitoring**

Site characterization and environmental monitoring (including, but not limited to, siting, construction, modification, operation, and dismantlement and removal or otherwise proper closure (such as of a well) of characterization and monitoring devices, and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis). Such activities would be designed in conformance with applicable requirements and use best management practices to limit the potential effects of any resultant ground disturbance. Covered activities include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. (This class of actions excludes activities in aquatic environments. See B3.16 of this appendix for such activities.) Specific activities include, but are not limited to: (a) Geological, geophysical (such as gravity, magnetic, electrical, seismic, radar, and temperature gradient), geochemical, and engineering surveys and mapping, and the establishment of survey marks. Seismic techniques would not include large-scale reflection or refraction testing; (b) Installation and operation of field instruments (such as stream-gauging stations or flow-measuring devices, telemetry systems, geochemical monitoring tools, and geophysical exploration tools); (c) Drilling of wells for sampling or monitoring of groundwater or the vadose (unsaturated) zone, well logging, and installation of water-level recording devices in wells; (d) Aquifer and underground reservoir response testing; (e) Installation and operation of ambient air monitoring equipment; (f) Sampling and characterization of water, soil, rock, or contaminants (such as drilling using truck- or mobile-scale equipment, and modification, use, and plugging of boreholes); (g) Sampling and characterization of water effluents, air emissions, or solid waste streams; (h) Installation and operation of meteorological towers and associated activities (such as assessment of potential wind energy resources); (i) Sampling of flora or fauna; and (j) Archeological, historic, and cultural resource identification in compliance with 36 CFR part 800 and 43 CFR part 7.

**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.

**B3.16 Research activities in aquatic environments**

Small-scale, temporary surveying, site characterization, and research activities in aquatic environments, limited to: (a) Acquisition of rights-of-way, easements, and temporary use permits; (b) Installation, operation, and removal of passive scientific measurement devices, including, but not limited to, antennae, tide gauges, flow testing equipment for existing wells, weighted hydrophones, salinity measurement devices, and water quality measurement devices; (c) Natural resource inventories, data and sample collection, environmental monitoring, and basic and applied research, excluding (1) large-scale vibratory coring techniques and (2) seismic activities other than passive techniques; and (d) Surveying and mapping. These activities would be conducted in accordance with, where applicable, an approved spill prevention, control, and response plan and would incorporate appropriate control technologies and best management practices. None of the activities listed above would occur within the boundary of an established marine sanctuary or wildlife refuge, a governmentally proposed marine sanctuary or wildlife refuge, or a governmentally recognized area of high biological sensitivity, unless authorized by the agency responsible for such refuge, sanctuary, or area (or after consultation with the responsible agency, if no authorization is required). If the proposed activities would occur outside such refuge, sanctuary, or area and if the activities would have the potential to cause impacts within such refuge, sanctuary, or area,

then the responsible agency shall be consulted in order to determine whether authorization is required and whether such activities would have the potential to cause significant impacts on such refuge, sanctuary, or area. Areas of high biological sensitivity include, but are not limited to, areas of known ecological importance, whale and marine mammal mating and calving/pupping areas, and fish and invertebrate spawning and nursery areas recognized as being limited or unique and vulnerable to perturbation; these areas can occur in bays, estuaries, near shore, and far offshore, and may vary seasonally. No permanent facilities or devices would be constructed or installed. Covered actions do not include drilling of resource exploration or extraction wells.

#### Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide funding to the Electric Power Research Institute (EPRI) to deploy passive acoustic bat detectors and passive radio telemetry equipment to define the envelope in which bat activity occurs along the coasts of California, Oregon, and Washington. Findings would help identify the risk that offshore wind development may pose to bats along the West Coast of the U.S as well as advance the development of monitoring technologies.

DOE previously completed a NEPA Determination (ND) (GFO-0010289-001; A9 and B3.16; 04/05/2023) for Budget Period (BP) 1 activities. BP1 activities were necessary to inform BP2 activities. Specifically, site selections of monitoring equipment and methodologies were finalized in BP1. This ND would cover BP2 activities, i.e., the remaining award activities.

EPRI (Palo Alto, CA) would be responsible for project management and data analysis activities. Bat Conservation International (BCI; Austin, TX), the U.S. Geological Survey (USGS; Dixon, CA), Stantec (Topsham, ME), and the Woods Hole Group, Inc. (Bourne, MA and Richmond, TX) would participate in team coordination, engagement with site partners, data analysis and modeling, documentation, and project management. During BP1 of the award, the Saildrone, Inc. (Saildrone; Alameda, CA) autonomous survey vehicle was equipped with a passive acoustic bat detector. BP2 activities include operating the Saildrone vehicle (with the installed bat detector) on missions in the Morro Bay and Humboldt Wind Energy Areas located approximately 20 miles offshore the central and northern California coastlines, respectively. These missions would occur regardless of award involvement.

BP2 of the award would focus on data collection and analysis activities. Data collection would primarily involve the use of passive acoustic bat detectors at either fixed (e.g., offshore, coastal, and inland locations) or mobile (e.g., crewed and autonomous vessels) monitoring sites along the California, Oregon, and Washington coasts. Passive acoustic monitoring would occur for a duration of twenty-four months and be set to automatically record bat echolocation activity from a half an hour before sunset to three hours after sunrise. Offshore sites would include islands, rocks, and buoys located three to 110 kilometers (km) off the coast. Coastal sites proposed include lighthouses and nearshore islands. Inland sites would be located approximately five to twenty km from shore. The selected offshore, coastal, and inland sites would be of approximately similar latitudes. "Ships of Opportunity," which would consist of commercial and research vessels operating along the California and Oregon coastlines as well as autonomous survey devices, would serve as the mobile monitoring sites. Mobile monitoring sites and monitoring associated with buoys would not require any additional activities specific to this award. Specifically, the award would utilize existing missions for vessels and the autonomous survey devices. Bat detectors proposed for installation on buoys would only employ routine scheduled maintenance events for bat detector installation and maintenance activities. At the time of writing this ND, there are twenty-three coastal sites, thirteen inland sites, twenty-one offshore sites, four "Ships of Opportunity," and one autonomous survey device selected or "in progress" of being selected for acoustic monitoring. More acoustic monitoring locations may be proposed after this ND is signed. If additional locations are proposed, DOE must be notified, and the new locations reviewed prior to installation activities. The new locations must adhere to all restrictions presented in this ND.

Each passive acoustic bat detector would consist of an acoustic recorder, ultrasonic microphone, cable, telescoping pole, solar panel, battery, charge controller, waterproof case for storing the recorder and inverter, and a bicycle lock. The bat detector is designed to run off the solar panel and would not require an external power source. The detectors would either be affixed to existing infrastructure (e.g., fence post, roof, railing, vessel, or buoy), be anchored six to twelve inches into the ground via a t-post or supported by guide wires with three to five stakes. The only ground disturbance proposed are from the t-posts or guide wire stakes. The maximum dimensions of the full installation would be two feet long by two feet wide with an approximately four foot or nine-to-eleven-foot telescoping pole, depending on the location. The project team would work with the site partner to find an optimal location for the installation. Additionally, the project team would perform the installations or provide the site partners with detailed instructions on how to complete installation activities. Coastal and inland detectors would be maintained every two to six months, depending on site access. Offshore detectors would be maintained as site, vessel, or buoy maintenance schedules allow. Site partners would be utilized to the maximum extent practicable for maintenance and data collection activities. All acoustic monitoring sites (fixed or mobile) would require either a permit(s) or documented approval from the site partner before deployment of bat detectors. The award must adhere to all restrictions put forth in this ND and any proposed restrictions required by the site partner.

USGS and BCI would be responsible for performing mist net surveys at known tree roosts and water sources at four locations. These locations include the Southeast Farallon Island (San Francisco, CA), Point Reyes National Seashore (California), Muir Woods National Monument (Mill Valley, CA), and Samuel P Taylor State Park (Lagunitas, CA) . During the surveys, captured bats would receive Passive Integrated Transponders (PIT tags) and radio-transmitter tags. No federally listed bat species would be captured and tagged as no federally listed bat species are known to occur at the proposed survey locations. The award plans to tag at least twenty non-federally listed migratory bats during peak migration for two seasons. Bats would only be handled by experienced bat biologists. Additionally, bat handling would adhere to the latest American Society of Mammalogists Animal Care and Use guidelines as well as International Union for Conservation of Nature Bat Specialist Group guidance to reduce risk of pathogen pollution. Survey activities, including capturing, sample collection, radio-transmitter tagging, and PIT-tagging, would require active permits from all local, state, and federal permitting authorities prior to initiating surveys. Survey activities must adhere to each condition and restriction of all applicable permits.

A telemetry-based stopover study would be performed to document movement and stopover behavior of non-federally listed Hoary bats (*Lasiurus cinereus*) in the San Francisco Bay area and the Farallon Islands. This would be achieved by installing at least two passive radio telemetry receiving stations on Southeast Farallon Island, Point Reyes National Seashore, and/or Rancho Corral de Tierra (Golden Gate National Recreation Area, CA) to record bat movements. These stations would be added to the expanding Motus Wildlife Tracking System along the Pacific coast. Each station would include three to four directional Yagi antennas to maximize detection range and would require a thirty-foot-tall antenna mast supporting the Yagis. The Yagi antennas would have a total maximum diameter of eleven feet. These stations would require equipment to be installed on existing structures or be self-supporting stations. The self-supporting stations would consist of a center pole and result in minimal ground disturbance from three to six stakes anchoring the tower into the ground. Each stake would extend twenty feet from the center pole. Each station would require either a permit(s) or documented approval from the site partner before deployment of equipment. The award must adhere to all restrictions put forth in this ND and any proposed restrictions required by the site partner.

All equipment installations, including passive acoustic bat detectors and passive radio telemetry receiving stations, would be limited to minimal ground disturbance resulting from t-posts and stakes. No additional ground disturbance is permitted for this award. Additionally, no equipment is to be installed on Section 106 of the National Historic Preservation Act (NHPA) historic buildings or structures. This ND does not permit the use, modification, or damage of historic properties. If installing equipment on historic buildings or structures is deemed necessary, both a Section 106 consultation under the NHPA and an additional NEPA review would be required.

Equipment installations are not permitted to occur within Waters of the U.S., including wetlands. Additionally, to the maximum extent possible, the award should aim to avoid installations within 100-year floodplains to prevent the loss of equipment during flood events. If a severe weather event is predicted, the project team should work with the site partner(s) to secure and/or protect equipment when safe to do so.

Award activities would involve typical hazards associated with field studies and surveys as well as traveling to and from acoustic monitoring sites. 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.

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.

Include the following condition in the financial assistance agreement:

All award activities involving autonomous survey devices, "Ships of Opportunity," and buoys must only utilize existing missions or scheduled maintenance events. No award-specific in-water activities may occur.

All acoustic monitoring sites (fixed or mobile) and radio telemetry receiving stations would require either a permit(s) or

documented approval from the site partner before deployment of equipment. The award must adhere to all restrictions put forth in this NEPA Determination (ND) and any proposed restrictions required by the site partner.

If additional monitoring sites are proposed, DOE must be notified, and the new locations reviewed prior to installation activities. The new locations must adhere to all restrictions presented in this ND.

Site partners should be utilized to the maximum extent practicable for maintenance and data collection activities.

During survey activities, bats would only be handled by experienced bat biologists. Additionally, bat handling would adhere to the latest American Society of Mammalogists Animal Care and Use guidelines as well as International Union for Conservation of Nature Bat Specialist Group guidance to reduce risk of pathogen pollution. Survey activities, including capturing, sample collection, radio-transmitter tagging, and PIT-tagging, would require active permits from all local, state, and federal permitting authorities prior to initiating surveys. Survey activities must adhere to each condition and restriction of all applicable permits.

All equipment installations, including passive acoustic bat detectors and passive radio telemetry receiving stations, would be limited to minimal ground disturbance resulting from t-posts and stakes. No additional ground disturbance is permitted for this award.

No equipment is to be installed on Section 106 of the National Historic Preservation Act (NHPA) historic buildings or structures. This ND does not permit the use, modification, or damage of historic properties. If installing equipment on historic buildings or structures is deemed necessary, both a Section 106 consultation under the NHPA and an additional NEPA review would be required.

Equipment installations are not permitted to occur within Waters of the U.S., including wetlands. Additionally, to the maximum extent possible, the award should aim to avoid installations within 100-year floodplains to prevent the loss of equipment during flood events. If a severe weather event is predicted, the project team should work with the site partner(s) to secure and/or protect equipment when safe to do so.

Notes:

Wind Energy Technologies Office (WETO)  
This NEPA determination requires legal review of the tailored NEPA provision.  
NEPA review completed by Corrin MacLuckie, 03/27/2024.

#### 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.

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: **Andrew Montano**

NEPA Compliance Officer

Date: **3/28/2024**

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