

PMC-ND

(1.08.09.13)

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

**RECIPIENT:** University of California, Los Angeles**STATE:** CA

PROJECT TITLE: Building a framework to genetically characterize “feather spots” and understand demographic impacts of solar energy sites on migratory bird populations

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-SOL-0002064	DE-EE0009005	GFO-0009005-001	GO9005

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.
- B3.6 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 the University of California, Los Angeles (UCLA) to conduct research on the impacts of utility-scale solar energy facilities on avian species and populations. The project would seek to collect data on impacts to avian populations by gathering biological material (i.e. bird

carcass remains from “feather spots”) from solar energy sites, using this material to identify/assess bird species’ traits via laboratory testing, and building a publically accessible database with the information gathered. Variables to be assessed would include species identity, population trends, mortality trends, species vulnerability, etc. The project would be divided into three Budget Periods (BPs), with a Go/No-Go Decision Point in between each BP.

All project activities would be coordinated by UCLA. During BP1, UCLA would analyze feather spots currently in its possession (approximately 100 unknown feather spots collected from four solar energy facilities in CA) and would then design a protocol for sample collection at other solar energy facilities. In BP1, a fee-based feather analysis center would also be established at the campus of either UCLA (Los Angeles, CA) or Colorado State University (‘CSU’ – Ft. Collins, CO). Once a protocol is established, sample collection would take place in all three BPs. Proposed project activities, to be carried out in all three BPs, would include feather spot collection, DNA analysis/characterization of feather spots, database development, computer modeling, and stakeholder engagement.

Field collection would be performed at existing solar energy facilities that have the proper permits for feather spot collection (discussed below). Site selection for collection activities would be performed as part of the project, in conjunction with the development of a sampling protocol. Field collection would be performed at a minimum of eight different solar energy facilities, across at least three different states. Collection activities would not be expected to impact living bird species, as sampling of biological material would only be performed on specimens that are already deceased. No live bird specimens would be captured as part of this project.

Field collection activities would involve the collection and handling of biological matter from deceased organisms. The collection, transport, and storage of biological samples would be performed in accordance with Federal permits issued by the U.S. Fish and Wildlife Service (USFWS) and U.S. Department of Agriculture (USDA). These permits have already been obtained or would be obtained by the relevant parties (i.e. UCLA, CSU and the solar energy facilities where the collection of biological material collection would occur) prior to initiating field collection activities. Any additional Federal, state or local permits/authorizations that may be needed to perform project work would be secured prior to performing associated tasks. When undertaking collection activities, UCLA and its project partners would adhere to the applicable provisions of the collection and storage permits issued to them by the USFWS. Protocols would include the use of personal protective equipment (PPE) and adherence to safety standards established by the USFWS. All biological material would be disposed of in accordance with existing federal regulations.

Laboratory activities would be performed at existing, purpose-built facilities at UCLA’s campus in Los Angeles, CA and CSU’s campus in Fort Collins, CO. No physical modifications to existing facilities, construction of new facilities, ground disturbing activities, or changes to the use, mission, or operation of existing facilities would be required.

Laboratory work would involve the use and handling of industrial chemicals. All such handling would be performed in a controlled, laboratory environment. Established university health and safety policies and procedures would be adhered to. Protocols would include staff training, the use of proper PPE, and adherence to established waste management and disposal practices. UCLA and CSU would observe all applicable Federal, state, and local health, safety, and environmental regulations.

NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

Solar Energy Technologies Office

This NEPA determination does not require a tailored NEPA Provision.

NEPA review completed by Jonathan Hartman, 01/10/2020

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: _____

 **Kristin Kerwin**
NEPA Compliance Officer

Date: 1/16/2020

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: _____