

PMC-ND

(1.08.09.13)

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



RECIPIENT: Integral Consulting Inc.

STATE: CA

PROJECT TITLE: Rapidly deployable acoustic monitoring and localization system based on a low-cost wave buoy platform

| | | | |
|--|--------------------------------------|----------------------------|-------------------|
| Funding Opportunity Announcement Number | Procurement Instrument Number | NEPA Control Number | CID Number |
| DE-FOA-0001418 | DE-EE0007822 | GFO-0007822-006 | GO7822 |

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.)

B5.15 Small-scale renewable energy research and development and pilot projects

Small-scale renewable energy research and development projects and small-scale pilot projects, provided that the projects are located within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

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 Integral Consulting Inc. (Integral) to develop and field test an array of acoustic vector sensors (named the NoiseSpotter) that characterizes, classifies, and provides accurate location information for anthropogenic and natural sounds for environmental monitoring of marine and hydrokinetic energy devices.

The proposed project would be divided into three Budget Periods, with a Go/No Go decision point between each Budget Period. DOE previously completed five NEPA reviews. (BP1, Tasks 1-3, GFO-0007822-001 CX A9 and B3.16, 12/02/2016; BP2 Tasks 4 and 6 GFO-0007822-002 CX A9 and B3.16, 12/27/2017; BP3 Tasks 7, 8.1 and 8.2 GFO-0007822-003 CX A9 and B3.16, 01/14/2019; BP3 Task 7 GFO-0007822-004 CX B3.16, 03/11/2019; BP3 Task 8.3 and

9 GFO-0007822-005 CX B3.16, 02/26/2020). Since that time Integral has made changes to the proposed scope of work, specifically to move the testing reviewed in tasks 8.3 from Hawaii to California.

The NoiseSpotter would be the combination of an off the shelf WaveSpotter buoy with 9 small acoustic vector sensors attached to it. The Buoy itself is approximately 15 inches in diameter and weighs approximately 20 pounds. The acoustic sensors would not add significant size or weight to the device. The device would be lowered into the ocean by hand from a small boat, and would be retrieved in the same manner. The NoiseSpotter would be a passive acoustic instrument.

In Task 8.3, as it is now re-scoped, Integral would deploy the NoiseSpotter at a fully energetic test site offshore of the Scripps Institution of Oceanography Pier, in La Jolla, CA. During this testing, the Integral NoiseSpotter acoustic mooring system will be deployed in the vicinity of the CalWave wave energy converter. The CalWave converter is not a part of this project, but was funded by DOE and reviewed separately. DOE conducted informal consultation regarding the deployment of the CalWave converter.

Task 9 would be limited to providing to DOE a final technical report and cost performance evaluation. Task 9 would be limited to information gathering and data analysis.

Eighteen Endangered Species Act listed species may be found within the proposed project area, off the coast of La Jolla. As such DOE, through the Pacific Northwest National Laboratory (PNNL), completed a Biological Assessment (BA) to evaluate potential impacts to those Endangered Species Act listed species (T&E species) and Essential Fish Habitat Assessment (EFH) from proposed the Noise Spotter deployment. DOE determined that the proposed action may effect but would not likely adversely affect (NLAA) the T&E species. On May 17, 2021 DOE engaged in informal consultation with the National Marine Fisheries Service (NMFS) seeking concurrence of the DOE determination. NMFS subsequently asked DOE for clarifications. On August 4, 2021 DOE presented an updated BA to NMFS, and on August 16, 2021 NMFS concurred with DOE's determination.

All in water work would be conducted by qualified personnel, including staff from Scripps and PNNL. Corporate, university and government health and safety procedures would be followed, including use of appropriate personal protective equipment. NMFS Best management Practices would be followed.

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.

DOE has made a conditional NEPA determination.

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

[Task 8.3 - Energetic Environment Field testing](#)

[Task 9 - Final Technical and Cost Performance evaluation](#)

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

[Task 5 - Second Round Testing](#)

Notes:

[Water Power Technologies Office](#)

[This NEPA determination does require a tailored NEPA provision.](#)

[Review completed by Roak Parker, 08/26/2021](#)

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: **Roak Parker**
NEPA Compliance Officer

Date: 8/26/2021

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: _____