

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



RECIPIENT: NREL

STATE: CO

PROJECT TITLE : NREL-25-019 Cal Poly Pier Wave Energy Resource Assessment - San Luis Obispo, CA

Notice of Funding Opportunity Number

Procurement Instrument Number
DE-AC36-08GO28308

NEPA Control Number
GFO-NREL-25-019

CID Number

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:

**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's (DOE) National Laboratory of the Rockies (NLR) is proposing to partner with California Polytechnic State University (Cal Poly) to deploy, maintain, monitor, and recover a Datawell Waverider buoy at the Cal Poly Pier in San Luis Obispo, California. The Cal Poly Pier is owned and operated by Cal Poly and has been added to the Testing and Access for Marine Energy Research (TEAMER) network as an open ocean facility for testing wave energy technologies.

The project proposes to deploy the Waverider buoy to collect data to characterize the wave resource in the San Luis Obispo Bay across season and weather conditions. Cal Poly would deploy, maintain, monitor, and recover the buoy and associated anchors and moorings.

LOCATION AND EQUIPMENT

The buoy is approximately 3 feet in diameter and weighs approximately 500 pounds. The buoy floats on the ocean's surface, half submerged, and is mounted with an anti-spin triangle with each side of the triangle approximately 5 feet in length. A whip antenna would extend 6.4 feet upward from the top of the buoy for data transmission and an LED flasher at the end of the antenna. The buoy would be anchored to the seafloor with a steel chain weighing approximately 1100 pounds with a footprint of approximately 1-square meter on the seafloor.

DEPLOYMENT

Cal Poly and the NLR project manager would determine the exact location for deployment of the buoy within San Luis Obispo Bay based on modeled wave resource data, known oceanographic dynamics based on geomorphology of the bay, and wind patterns. Mooring and anchor deployment would be completed in one day, with an approximately two-hour round trip travel time and two-hour long deployment. All work would occur during daylight hours. The system would be assembled on the pier. From the pier, the buoy would be placed into the water using an existing 2-ton crane.

The buoy would be towed by a vessel to the deployment site in the San Luis Obispo Bay where it would be fixed to the mooring line by two divers.

MONITORING

Once deployed, the buoy would remain in a “watch circle” centered over the mooring and would be limited to move no more than 30 feet horizontally in any direction from the anchor. The team would be alerted in real-time should the buoy move outside of the specified area, stop reporting data, or begin reporting dubious data from the measurement instruments. If a problem were to occur, a crew would respond, recover, and redeploy the buoy.

RETRIEVAL

At the conclusion of testing, the buoy and moorings would be removed according to the Test Plan. A mooring maintenance vessel would be used for recovery. Work is expected to occur on the top side of the deck on the vessel; however, divers could be needed for recovery if circumstances dictate their use. If divers are required for recovery, two divers would separate the buoy from the mooring line, the buoy would be lifted from the water using an A-frame and winch, and the buoy would be secured on deck. The anchor would be retrieved or abandoned on the seafloor in accordance with applicable requirements.

SCHEDULE

Project equipment would be deployed for up to three years.

NMFS AND FWS CONSULTATIONS

DOE has an Endangered Species Act (ESA) Section 7 Programmatic Consultation in place for Cal Poly Ventura Fish and Wildlife Office of the U.S. Fish and Wildlife Service (FWS; concurrence letter dated February 2, 2025) and the West Coast Region of the National Marine Fisheries Service (NMFS; concurrence letter dated March 21, 2025). The Programmatic Consultation with NMFS also included consideration of Essential Fish Habitat (EFH). The DOE verification processes established with FWS and NMFS would be completed for each proposed TEAMER Technical Support Recipient (TSR) project to ensure activities fall within the terms of the Programmatic Consultation. If proposed TSR project activities do not fall within the terms of the Programmatic Consultation, additional consultation with FWS and NMFS would be required.

DOE submitted verification forms to both NMFS and FWS on April 28, 2026. NMFS completed their review and approved the verification form on April 28, 2026. FWS completed their review and approved the verification form on May 20, 2026.

All proposed activities would follow existing Cal Poly Health and Safety Manuals, which include information on safety equipment, spill control equipment, and deployment procedures in accordance with federal, state, and local laws and regulations. In addition, the Best Management Practices outlined in the Cal Poly Pier as a TEAMER Facility Final Programmatic Biological Assessment (Revision 2; March 14, 2025) would be adhered to for all deployment, monitoring, and recovery of marine technologies.

ADDITIONAL IMPACTS

Cultural resources were not identified in the project area. The proposed project would operate at an established test site that is used for research, and all land-based activities would occur at existing facilities (i.e. the Pier and its parking lots); as such, the project would not affect the use of the area by marine life or the public.

All required permits, authorizations, and/or approvals shall be obtained before project activities commence. Permitting agencies could include the U.S. Army Corps of Engineers (for activities in navigable waters); U.S. Coast Guard (USCG) (Private Aids to Navigation application/Notice to Mariners); U.S. Bureau of Ocean Energy Management - Coastal Zone Management Authority.

Vessel and vehicle use would result in de minimus air emissions. Project activities may temporarily elevate noise levels and would likely be masked by the existing background noise in the area from waves, existing recreational and commercial vessel activity, and other activities that regularly occur in the project area.

Individuals working on this project could be exposed to various hazards during equipment and device assembly, deployment, testing, and retrieval. Existing corporate health and safety policies and procedures would be followed, including employee training, proper protective equipment, and engineering controls; additional policies and procedures would be implemented as new health and safety risks are identified.

NEPA PROVISION

DOE has made a final NEPA determination.

Include the following condition in the financial assistance agreement:

All required permits, permissions, notifications, and/or approvals shall be received prior to commencing project activities.

All work performed to execute the project shall abide by all mitigation measures outlined in DOE's consultation with NMFS and FWS

Notes:

NLR
Brandon Bammel, 06/02/2026

FOR CATEGORICAL EXCLUSION DETERMINATIONS

The proposal fits within a class of actions that is listed in Appendix B to 10 CFR Part 1021 or Appendix B and C of DOE's NEPA Implementing Procedures (June 30, 2025). To fit within the classes of actions listed in Appendix B to 10CFR Part 1021, or Appendix B of DOE's NEPA Implementing Procedures, a proposal must satisfy the conditions that are integral elements of the classes of actions in Appendix B of both 10 CFR Part 1021 and DOE's NEPA Implementing Procedures.

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.

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: **Nicole Serio**

NEPA Compliance Officer

Date: 6/2/2026

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: _____