



**NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230**

July 23, 2012

MEMORANDUM FOR: ALL INTERESTED GOVERNMENT AGENCIES, INDIVIDUALS, AND ORGANIZATIONS

FROM: National Science Foundation (NSF)

Notice of Availability of a Draft Environmental Assessment of Marine Geophysical Surveys by the R/V *Marcus G. Langseth* for the Central Coastal California Seismic Imaging Project and Public Hearing

The National Science Foundation (NSF) gives notice of the availability of a Draft Environmental Assessment (Draft EA) of Marine Geophysical Surveys by the research vessel (R/V) *Marcus G. Langseth* for the Central Coastal California Seismic Imaging Project and public hearing. The proposed seismic surveys would be funded by Pacific Gas and Electric Company (PG&E) in collaboration with Columbia University's Lamont-Doherty Earth Observatory (LDEO). To conduct the surveys, LDEO and PG&E have proposed to use the R/V *Langseth*, which is owned by the NSF and operated on our behalf by LDEO. The purpose of the proposed survey for which the NSF is being asked to provide its vessel, R/V *Langseth*, is to conduct a high energy seismic survey in the vicinity of the Diablo Canyon Power Plant (DCPP) and offshore fault zones. The Project as proposed by LDEO and PG&E consists of deploying seismic or sound sources and receivers at onshore, nearshore and offshore locations to generate data that can be used to improve imaging of major geologic structures and fault zones in the vicinity of the DCPP. The surveys would take place within the Exclusive Economic Zones of the U.S. and within California State waters.

The proposed project would be approximately 82 days, with seismic surveys comprising approximately 42 of those days and the remaining days occupied in project preparation and mobilization. The R/V *Langseth* would deploy an array of 18 airguns with a total discharge volume of ~3300 in³. Acoustic signals would be recorded by an array of towed hydrophone streamers and geophones located in nearshore waters. Other equipment, such as a multibeam echosounder and a subbottom profiler, would also be operated from the R/V *Langseth* continuously throughout the surveys. In addition to the offshore marine component, the project would include an onshore component. Two onshore sound sources would be used: Accelerated Weight Drop and Vibroseis. Geophones would be used as onshore acoustic receivers.

The Draft Environmental Assessment (Draft EA) evaluates the use of the R/V *Langseth* and potential impacts on the human and natural environment associated with the proposed marine geophysical surveys. The Draft EA analysis includes an environmental assessment report prepared by Padre Associates, Inc., entitled, "Environmental Assessment of a Marine Geophysical Survey by the R/V *Marcus G. Langseth* for the Central Coastal California Seismic Imaging Project." The conclusions from the Padre Associates report were used to inform the NSF of potential environmental impacts of the survey. The NSF has reviewed and accepts the report's findings that implementation of the proposed activities will not have a significant impact on the environment, subject to further review following the close of the public comment period.

Four Alternatives to the proposed action, including the No Action Alternative, were considered in the Draft EA. Three additional Alternatives were considered but were eliminated from further analysis as

they did not meet the purpose of and need for the proposed action. The proposed action, and Alternatives, would include a monitoring and mitigation plan, or “a Marine Wildlife Contingency Plan,” (MWCP) to further minimize potential impacts on species that may be present during the conduct of the research to a level of insignificance. Potential impacts of the seismic surveys on the environment, if any, would be primarily a result of the operation of the airgun array. With the planned monitoring and mitigation measures, unavoidable impacts to each marine species of marine mammal and sea turtles that could be encountered would be expected to be limited to short-term, localized changes in behavior and distribution near the seismic vessel. No long-term or significant effects would be expected on individual species or the populations to which they belong or on their habitats. While essential Fish Habitat (EFH) would be located within the survey area and Habitat Areas of Particular Concern (HAPC) could be influenced by project activities, no project activities would result in any chronic or permanent negative effects to EFH. The seismic component of the proposed project would have little impact on fish resources, and the only effect on fish habitat would be short term disturbance that could lead to temporary relocation of pelagic fish species or their food. After reviewing all public comments received during the public comment period, the NSF will conduct another review and issue a Final Environmental Assessment, accompanied by a decision document.

The NSF has initiated consultations with the National Marine Fisheries Service and U.S. Fish and Wildlife Service under Section 7 of the Endangered Species Act, and PG&E is seeking an Incidental Harassment Authorization under the Marine Mammal Protection Act (MMPA) for the surveys. Additionally, other appropriate federal and state permits are being sought for the activities.

Public Comments:

The Draft EA regarding these proposed actions is posted for a 45 day public comment period on the NSF website at: <http://www.nsf.gov/geo/oce/envcomp/index.jsp>, closing on August 10, 2012. We welcome any comments you may have on the Draft EA. Comments may be submitted via email, U.S. Post, or at the public hearing:

VIA Email:

nsfnepacommentscentralca@nsf.gov

U.S. Post:

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Public Hearing:

The NSF will also conduct a public hearing to receive oral and written comments on the Draft EA. Federal, state, and local agencies and interested individuals are invited to be present or represented at the public hearing. The hearing will start with an open house session, followed by a presentation, and then the formal oral public comment period. The public hearing will be held on the following date, time, and location:

- Wednesday, August 8, 2012, 7:00-9:00 p.m. at the Board of Supervisors Chambers, San Luis Obispo County Government Center, 1055 Monterey Street, San Luis Obispo, CA 93408.

For further information: For further information about the public hearing, or to request printed copies of the Draft EA, contact Holly Smith, at the above address, (703) 292-8583, or nsfnepacommentscentralca@nsf.gov.