

BOEM Pacific OCS Region: Ongoing Study

Study Area(s): Southern California, Central California, Northern California

Administered By: Pacific OCS Region

Title: Collection of Metocean Resource Characterization Data off the California Coast (Study #PR-17-MET)

BOEM Information Need(s) to be Addressed: BOEM Pacific Outer Continental Shelf (OCS) Region is charged with the responsibility of granting a lease, easement, or right-of-way for renewable energy development on the OCS of California (offshore waters). Currently, there is a critical need to identify and document available resources for potentially suitable sites for renewable energy development in offshore waters. Specifically, there is currently a paucity of long-term wind observation data offshore California at wind turbine rotor plane heights. This study will improve knowledge of renewable energy resources on the OCS and aid in leasing decision-making.

Total BOEM Cost: \$989,998

Period of Performance: FY 2017–2019

Conducting Organization(s): U.S. Department of Energy, Pacific Northwest National Laboratory (PNNL)

Principal Investigator(s): [Mark Sturges](#)

BOEM Contact(s): [Karen Villatoro](#)

Description:

Background: To inform renewable energy development in the Pacific OCS Region BOEM has identified a requirement to obtain certain scientific and technical information. There is a critical need to identify and document available resources for potentially suitable sites for renewable energy development. To fulfill the need, BOEM is seeking performance of certain scientific and technical services which may include technical, economic, and policy analyses on a variety of offshore renewable energy and grid integration topics. The topics may include, but not be limited to, wind resource measurements and evaluation, GIS and resource data analyses, effects on biological resources, and participation in offshore wind and wave energy task force or other related meetings, and providing technical review of offshore renewable energy proposals developed and submitted to BOEM by industry.

Objectives: The purpose of the study is to acquire site-specific metocean data. A question to be answered by this study is: what is the wind regime at a specific site offshore the State of California.

Methods: DOE LiDAR buoys will be deployed off the coast of California. BOEM is funding PNNL to provide turn-key services to deploy and operate a buoy at a location to

be determined based on the engineering, siting, and permitting activities performed as part of this work.

Current Status: An interagency agreement (IA) with PNNL was awarded on September 18, 2017. Planning is underway to determine potential sites for deployment.

Final Report Due: November 2019

Publications Completed: None

Affiliated WWW Sites: None

Revised Date: July 13, 2018