BOEMRE ENVIRONMENTAL STUDIES PROGRAM: ONGOING STUDIES

Region: Offshore

Planning Area(s): North, Mid, and South Atlantic

Title: Roadmap: Technologies for Cost Effective, Spatial Resource Assessments for Offshore renewable Energy (AT-10-x14)

Total Cost: $748,035 ($498,035 BOEMRE, $250,000 DOE)
Period of Performance: FY 2011-2013

Conducting Organization: University of Massachusetts-Dartmouth, Marine Renewable Energy Center

BOEMRE Contact: Angel McCoy

Description:
Background: The Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) with partners at the Department of Energy and the NOAA National Marine Fisheries Service jointly funded a study through a Broad Agency Announcement. This award was made through the National Oceanographic Partnership Program (NOPP) to the University of Massachusetts Dartmouth, Marine Renewable Energy Center (MREC) and their partners

Objectives: The object of this study is to develop a technology roadmap for the application of advanced spatial survey technologies for the assessment and post-construction monitoring of offshore wind and hydrokinetic renewable energy resources. Technologies to be assessed are radar, lidar, sonar and autonomous underwater vehicles. Partners include the Woods Hole Oceanographic Institution, the School of Marine Science and Technology at the University of Massachusetts Dartmouth, the Renewable Energy Research Lab at the University of Massachusetts Amherst, the University of Washington, Applied Physics Laboratory, the University of Hawaii, Satellite and Radio Oceanography Laboratory in the School of Ocean and Earth Science and Technology, Imaging Science Research Inc., Teledyne RDI, and Battelle Memorial Institute.

Methods: The partners will perform a research study of existing technologies, provide evaluations of analytical and numerical performance models, and field tests of existing systems. Topics to be investigated are wind profiling, characterization of renewable energy resources, spatial imaging and mapping of phenomena, geological surveys, and data management.

BOEMRE Information Need(s) to be Addressed: An assessment of the best available technologies for the offshore environment is required.

Current Status: Awarded 9/14/10 and ongoing.

Final Report Due: September 30, 2012

Publications:

Affiliated WWW Site:

Revised Date: November 22, 2010