



Resource Assessment and Design Conditions

Summary: The offshore renewable energy industry and government researchers, regulators and policy makers require accurate meteorological and oceanographic (metocean) data for evaluating energy potential, economic viability, and engineering requirements for renewable energy projects on the Outer Continental Shelf (OCS). It is generally recognized that currently available metocean data, instrumentation, and models are not adequate to meet these needs on a national scale.

Initiatives under the MOU relating to the acquisition of metocean data to support resource assessment and engineering designs include:

- 1) Development of a plan for offshore wind measurement and prediction, focused first on the Atlantic coast and followed by plans for other regions as appropriate. This includes establishing an Interagency Working Group on Offshore Resource Assessments and Design Conditions and hosting of a multi-disciplinary workshop of experts to address data requirements and paths forward.
- 2) Development of a plan for marine hydrokinetic resource measurement and prediction; and
- 3) Coordination with appropriate parties to acquire resource measurements and to develop models to characterize variable wind, wave, tidal, and ocean current resources on the OCS.

Targeted Stakeholders: In addition to reaching out to other federal agencies with interest in offshore resource assessment, DOE and DOI plan to coordinate with state and local agencies as well as academia, private industry, and nongovernment associations to identify appropriate design conditions.

Status/Next Steps: DOE and DOI have established an Interagency Working Group on Offshore Resource Assessment and Design Conditions with other Federal agencies including the National Oceanic and Atmospheric Administration (NOAA), Department of Defense (DoD), US Army Corps of Engineers (US ACOE), and Department of the Navy to coordinate activities under this initiative. Activities underway include an assessment of currently available metocean observing information; identification of targeted research areas to improve characterization of offshore resources; and a draft data requirements document. Next steps include engaging subject matter experts to carry out a gap analysis, which will in turn lead to development of a long-term national scale strategic implementation plan.

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