Offshore Wind Energy Planning in Oregon

The Bureau of Ocean Energy Management (BOEM) and the State of Oregon (the State) are committed to offshore wind energy planning with a meaningful and effective data-gathering and engagement process to inform potential offshore wind energy leasing decisions. This effort includes outreach and engagement with research organizations and potentially interested and affected parties to gather data and information to inform leasing decisions. BOEM and the State, led by the Oregon Department of Land Conservation and Development (DLCD), are seeking to identify potential areas in federal waters offshore Oregon that may be suitable for offshore wind energy development. In partnership with the BOEM Oregon Intergovernmental Renewable Energy Task Force (Task Force), BOEM and DLCD developed the Data Gathering and Engagement Plan for Offshore Wind Energy in Oregon, which outlines the activities BOEM and the State will conduct for the outreach and engagement effort. The plan can be found at: www.boem.gov/Oregon.

BOEM Oregon Intergovernmental Renewable Energy Task Force

The Task Force provides coordination among federal, Tribal, state, and local governmental bodies regarding potential renewable energy activities in federal waters offshore Oregon. It serves as a forum to:

- Discuss stakeholder issues and concerns.
- Exchange data and information about biological and physical resources, ocean uses and priorities.
- Facilitate early and continual dialogue and collaboration opportunities.

Planning Area

BOEM is responsible for regulating offshore energy and mineral uses in federal waters, extending from 3 nautical miles (nm) offshore to the edge of the Exclusive Economic Zone ending at 200 nm offshore Oregon. The planning area for potential leasing offshore Oregon extends to water depths of 1,300 meters (4,265 feet), where the average wind speed is at least 7 meters per second (13.6 knots). However, data-gathering efforts will include environmental information, ocean uses, and other pertinent information along the entire coast, in both federal and state waters, as it relates to offshore wind energy development in Oregon. Relevant onshore data, such as transmission cable routes and landfall, points of interconnection, and access to ports for installation and operation will also be included.

DID YOU KNOW?

- BOEM manages nearly 2.5 billion acres of offshore energy and mineral resources in federal waters.
- Oregon HB 2021 (2021) requires the state’s investor-owned utilities and electricity service suppliers to supply 100% greenhouse gas free electricity by 2040.
- Oregon HB 3375 (2021), without committing to specific deployment targets, requires the Oregon Department of Energy to identify the benefits and challenges of integrating up to 3 gigawatts (GW) of floating offshore wind by 2030 (https://tinyurl.com/ODOE-FOSW).
- According to the National Renewable Energy Laboratory, more than 84,600 megawatts of technically available offshore wind energy resource exist in federal waters offshore Oregon.
About Offshore Wind Technology
Countries in Europe and Asia have many offshore wind farms installed providing electricity to millions of people. In the U.S., the 30-megawatt, five-turbine Block Island Wind Farm began producing energy in state waters off Rhode Island in 2016. In 2020, two wind turbines were installed in federal waters offshore Virginia with the Coastal Virginia Offshore Wind Project. On the U.S. West Coast, including Oregon, floating wind energy technology is gaining interest because the Outer Continental Shelf drops off rapidly and is too deep for fixed, bottom-mounted turbines in federal waters. An example floating offshore wind facility is illustrated below.

How Offshore Floating Wind Farms Work
A project in federal waters must pass through state waters with its electrical cable to get to a land-based substation, requiring federal and state permits in addition to a BOEM lease.

Data Catalog and Oregon Offshore Wind Mapping Tool (OROWindMap)
The DLCD, in partnership with BOEM, is developing a data catalog and map viewer within the West Coast Ocean Data Portal to provide public access to the best available data throughout the planning process. The Oregon Offshore Wind Mapping Tool (OROWindMap, https://offshorewind.westcoastoceans.org) is an easy-to-use mapping tool that provides visualization capabilities and includes relevant datasets such as wind speed, bathymetry, bird and marine mammal distribution and density, vessel traffic patterns, military-use areas, subsea cables, and commercial fishing datasets. The OROWindMap Catalog (https://portal.westcoastoceans.org/OROWindMap-data-themes) documents the data records incorporated into OROWindMap. OROWindMap will be used to inform leasing decisions offshore Oregon in the context of existing ocean resources and uses. The State and BOEM are seeking additional existing datasets during this planning and invite interested parties to participate in a Data Review group to help document gaps and priority resources.

How Can I Become Involved?
- Sign up to stay informed at www.boem.gov/OregonUpdates.
- Participate and provide comments in public meetings that are open to everyone and announced when scheduled.
- Stay informed about Oregon offshore wind energy activities and scheduled Task Force meetings at www.boem.gov/Oregon.
- Contact Whitney Hauer (whitney.hauer@boem.gov) or Andy Lanier (andy.lanier@state.or.us) if you have questions or if your organization would like a presentation about the offshore wind planning effort.
- Contact John Romero (john.romero@boem.gov) for public media inquiries.

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