## THE BUREAU OF OCEAN ENERGY MANAGEMENT, REGULATION AND ENFORCEMENT

## FACT SHEET

# **Renewable Energy on the Outer Continental Shelf**

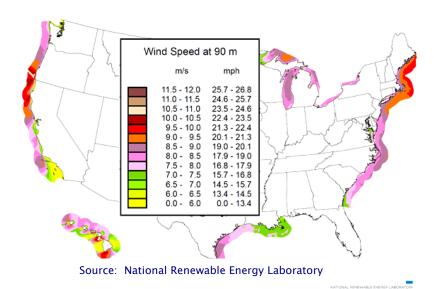
In 2009, President Barack Obama and Secretary of the Interior Ken Salazar announced the final regulations for the Outer Continental Shelf (OCS) Renewable Energy Program, which was authorized by the *Energy Policy Act of 2005* (EPAct). These regulations provide a framework for leases, easements, and rights-of-way for activities on the OCS that support production, and transmission of energy from sources other than oil and natural gas.

The Obama Administration's Goals for Offshore Renewable Energy include: achieving 10 gigawatts of wind capacity in the OCS and Great Lakes by 2020 (Great Lakes are not regulated by BOEMRE); completing a non-competitive offshore wind lease in 2011; completing a competitive offshore wind lease in 2012; and continuing to implement a streamlined, yet rigorous, environmental review process to facilitate responsible OCS renewable energy development.

The Department of the Interior (DOI) and its Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) continue to seek ways to improve the leasing and permitting process for developing this vital component of our nation's comprehensive energy policy without cutting corners on safety or environmental protection. In the foreseeable future, we anticipate development of renewable energy from three general sources on the OCS:

### 1. Offshore Wind Energy

Offshore wind turbines are being used in a number of countries to harness the energy of the moving air over the oceans and convert it to electricity. Offshore winds tend to flow at higher sustained speeds than onshore winds, making turbines more efficient. Despite tremendous offshore wind capacity, the United States has no offshore wind energy production to date. Offshore Atlantic winds could produce an estimated 1,000 gigawatts of energy.



#### First Commercial Lease Signed

The first commercial wind lease was signed in 2010 by Secretary Salazar and Cape Wind Associates for a project in federal waters offshore Massachusetts.

The Cape Wind energy project would be the first wind farm on the OCS, potentially generating enough power to meet 75% of the electricity demand for Cape Cod, Martha's Vineyard and Nantucket Island combined.

A thorough environmental assessment was conducted, and the Construction and Operation Plan, which details additional terms and conditions to be followed, was approved in April 2011.

Construction is expected to begin before the end of 2011, pending approval of the Avian and Bat Monitoring Plan.

## 2. Ocean Wave Energy (Hydrokinetic)

There is tremendous energy in ocean waves. Wave power devices extract energy directly from the surface motion of ocean waves. A variety of technologies have been proposed to capture that energy, and some of the more promising designs are undergoing demonstration testing.

## 3. Ocean Current Energy (Hydrokinetic)

Ocean currents contain an enormous amount of energy that can be captured and converted to a usable form. Some of the ocean currents on the OCS are the Gulf Stream, Florida Straits Current, and California Current. While technology is still at an early stage of development, it is likely that submerged water turbines similar to wind turbines would be employed to extract energy from ocean currents.

## **The Process**

Multiple federal agencies have responsibilities for the regulation and development of offshore renewable energy. BOEMRE issues leases and grants for both OCS wind and hydrokinetic projects. BOEMRE also permits the construction and operation of wind facilities, while the Federal Energy Regulatory Commission will permit the construction and operation of hydrokinetic facilities on BOEMRE-issued wave and current leases.

As required by EPAct, BOEMRE will issue leases on a competitive basis unless it determines that no competitive interest exists. After a lease is acquired, the developer must submit and receive approval of appropriate plans (wind) or license applications (hydrokinetic). At the end of the lease term, the developer must decommission facilities in compliance with BOEMRE regulations.

In the fall of 2010, Secretary Salazar launched the "Smart from the Start" wind energy initiative to expedite the responsible development of wind energy projects off the Atlantic coast. In coordination with the relevant states, BOEMRE has identified Wind Energy Areas (WEAs) offshore the Atlantic coast that appear most appropriate for renewable energy development, and will take steps to make the permitting process for projects more efficient. The "Smart from the Start" initiative will be integrated fully with President Obama's Executive Order on coastal and marine spatial planning efforts.

A number of states on the Atlantic coast have initiated planning for projects to support their renewable energy portfolio standards and



developers are pursuing leases. For example, Florida is interesting in developing ocean current energy. Pacific Northwest states are looking into developing wave energy. On both coasts, BOEMRE is working with interested and affected federal, state, local and tribal governments through individual state intergovernmental renewable energy task forces, memoranda of understanding (MOU), and other arrangements to assure proper consultation and coordination. Secretary Salazar and the Governors of 11 east coast states signed a MOU that established the Atlantic Offshore Wind Energy Consortium in May 2010. The Consortium has been working with BOEMRE on regional issues relating to siting, data and science, and authorization of renewable energy projects on the OCS.

BOEMRE and the Department of Energy (DOE) signed a MOU to address numerous offshore renewable energy issues of mutual interest; and DOI and DOE issued the first interagency plan on offshore wind energy, demonstrating a strong federal commitment to expeditiously develop a sustainable, world-class offshore wind industry in a way that reduces conflict with other ocean uses and protects resources. BOEMRE is also working with other interested federal agencies to establish MOUs to coordinate OCS renewable energy activity.

BOEMRE also has the authority to issue and is exploring the use of Rights-of-Way (ROW) for offshore transmission lines linking OCS renewable energy installations to facilitate efficient interconnection to the onshore electrical grid.

For more information, please visit: http://www.boemre.gov/offshore/RenewableEnergy/index.htm