

**STATEMENT OF  
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**COMMITTEE ON NATURAL RESOURCES  
HOUSE OF REPRESENTATIVES**

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Mr. Chairman, and Members of the Committee, thank you for the opportunity to appear here today to discuss the renewable energy program of the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) and our efforts to facilitate and expedite the development of the Nation's offshore wind energy resources.

**Outer Continental Shelf (OCS) Wind Resources and Energy Development Goals**

BOEMRE manages the energy and mineral resources of the OCS, which comprises some 1.7 billion acres of submerged lands generally located between 3 and 200 nautical miles off the continental U.S., Alaska, and Hawaii. The U.S. Department of Energy (DOE) estimates that the total offshore wind potential is over 4,000 gigawatts (GW) for areas up to 50 miles from shore with average wind speeds of 7 meters per second or greater at 90-meter elevation. This estimate includes the resources of the Great Lakes and the coastal submerged lands under state jurisdiction, which are not managed by BOEMRE. However, OCS lands constitute the vast majority of what DOE considers "offshore" in its wind energy estimate.

According to a report prepared and issued jointly by DOE's Office of Energy Efficiency and Renewable Energy and BOEMRE earlier this year, each average GW of wind power capacity can generate 3.4 million megawatt-hours of electricity annually.<sup>1</sup> This amount of power would replace the use of 1.7 million tons of coal or 27.6 billion cubic feet of natural gas and reduce the carbon emissions associated with those fossil fuels by 2.7 million metric tons. The Nation's vast offshore wind resources are located close to our largest electricity demand centers, allowing offshore wind to compete directly with fossil fuel-based electricity generation. Northeastern and Mid-Atlantic coastal states especially can benefit from OCS wind resources to meet ambitious renewable portfolio standards and related policy goals calling for the use of a stable and clean supply of energy resources for electrical generation.

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<sup>1</sup> *A National Offshore Wind Strategy, Creating an Offshore Wind Energy Industry in the United States*, February 7, 2011.

In addition to these energy and environmental benefits, offshore wind energy development would have considerable direct and indirect economic benefits. The National Offshore Wind Strategy suggests that offshore wind development would create approximately 20.7 direct jobs per annual megawatt installed in U.S. waters. Many of these jobs would be located in economically depressed port areas that could become important fabrication and staging areas for the manufacture, installation, and maintenance of offshore wind turbines.

The National Offshore Wind Strategy addresses these goals and discusses three focus areas that are central to achieving them—(1) technology development, (2) market barrier removal, and (3) advanced technology demonstration. BOEMRE is working closely with DOE and with other federal agencies, state, local, and tribal governments, and other stakeholders to establish an effective process for siting and permitting offshore renewable energy projects.

### **OCS Renewable Energy Regulatory Framework**

The Energy Policy Act of 2005 provided the Secretary of the Interior with the authority to administer an OCS renewable energy program. This authority, including the mandate to promulgate necessary regulations, was delegated to BOEMRE (then the Minerals Management Service) in March 2006. In early 2009, at the start of the Obama Administration, a draft rule had been issued, but a final regulatory framework was not yet promulgated. On taking office, Secretary Salazar addressed the remaining issues, leading to the publication of BOEMRE's final OCS renewable energy regulatory framework on April 29, 2009.

The regulatory framework is a comprehensive approach to managing the full life cycle of OCS renewable energy activities, from initial study and leasing, through site characterization and assessment and project construction and operation, ultimately to cessation and decommissioning. The regulatory framework reflects a renewable energy program based on the following principles:

- consult and coordinate with federal, state, local, and tribal governments and other stakeholders;
- apply the regulatory framework in conjunction with interagency-led planning activities;
- focus on multiple use of the OCS; and
- work within current authorities and responsibilities to achieve program goals.

With over 20 existing laws and Executive Orders that apply to the OCS, consultation and coordination is critical to a successful renewable energy program. As BOEMRE strives to facilitate sustained development of a domestic offshore wind industry, we are working with a wide array of stakeholders to work together to find ways for offshore wind projects to proceed with minimal adverse effects on other uses and resources. Our most valuable consultation and coordination tools have proved to be the state-by-state intergovernmental task forces that we have established. These bodies bring

together all interested and affected government parties to facilitate information sharing and foster informed and efficient decision-making. To date, we have nine task forces on the Atlantic coast that are helping BOEMRE to proceed with commercial wind energy leasing, as well as one on the Pacific coast that is working on marine hydrokinetic energy from waves, currents and tides.

Since the OCS renewable energy regulatory framework was established in 2009, Secretary Salazar and BOEMRE have sought to outline, refine, and streamline our siting and permitting processes for wind leasing and development. We have launched several initiatives to support our efforts that I will summarize briefly.

### **Atlantic Offshore Wind Energy Consortium**

In early 2010 Secretary Salazar invited the governors of the Atlantic coast states to join with the Department of the Interior in an Atlantic Offshore Wind Energy Consortium (AOWEC) for the purpose of facilitating federal-state cooperation and coordination for the efficient, expeditious, orderly, and responsible development of wind resources along the Atlantic coast. On June 8, 2010, the Secretary and 11 governors signed a Memorandum of Understanding (MOU) outlining the scope and objectives of the Consortium and establishing working groups charged with formulating an action plan addressing issues relating to (1) siting and permitting, (2) data and science, and (3) investment in infrastructure. DOE is serving an advisory role to BOEMRE by assessing national infrastructure investment requirements as described in the National Offshore Wind Strategy. The action plan was completed in February of this year, and BOEMRE is considering its recommendations, which relate to improving coordination, implementing pilot projects, revising existing statutory and regulatory authorities to streamline permitting, and improving data acquisition and sharing.

### **Smart from the Start Atlantic Wind Initiative**

On November 23, 2010, Secretary Salazar announced *Smart from the Start*, a program to expedite commercial wind lease issuance on the Atlantic OCS. This initiative has three main elements:

- streamlined processes, including more efficient National Environmental Policy Act (NEPA) compliance review, for renewable energy lease issuance;
- identification of Wind Energy Areas (WEAs) followed by information gathering to stimulate investment in Atlantic OCS wind leasing and development; and
- processing of OCS energy transmission line proposals on a parallel but separate track from generation projects.

This approach will identify as WEAs those areas of the OCS that have high wind energy resource potential and relatively low potential use conflicts. BOEMRE will then conduct an environmental assessment (EA) to analyze potential impacts associated with issuing leases and conducting site characterization and assessment activities. If the EA leads to a finding of no significant impact, we will be able to issue leases and will not have to prepare an environmental impact statement (EIS). This will allow developers to

acquire leases on an expedited basis and enable them to acquire necessary financing of their projects. BOEMRE will conduct a full EIS when the lessee submits a construction and operations plan for review.

*Smart from the Start* also calls for enhanced coordination on offshore wind within the federal government. The Department of the Interior has led the formation of the Atlantic Offshore Wind Interagency Working Group—which includes executive level officials of DOE, Commerce, Defense, Homeland Security, the Environmental Protection Agency, the Council on Environmental Quality and other federal agencies—to facilitate the sharing of relevant data.

*Smart from the Start* has been well received by federal and state stakeholders and the offshore renewable energy industry.

### **Additional Cooperation with Other Federal Agencies**

BOEMRE is also working with interested federal agencies to establish agreements to facilitate coordination on OCS renewable energy development. For example, we have in place an MOU with DOE to facilitate and expedite OCS wind and hydrokinetic development. Consistent with this MOU, DOE is making available up to \$50.5 million over 5 years to develop offshore wind technology and to reduce specific market barriers to its deployment. We also have an established MOU with the U.S. Fish and Wildlife Service concerning the Migratory Bird Treaty Act and a MOU with the Federal Energy Regulatory Commission regarding the leasing and licensing of marine hydrokinetic projects. Other MOUs in development are with the Department of Defense (Secretary), the U.S. Army Corps of Engineers, the U.S. Coast Guard, and the National Oceanic and Atmospheric Administration (NOAA). We are confident that these inter-agency groups will ultimately streamline permitting processes and promote efficient and effective decision-making.

### **BOEMRE Research and Studies**

BOEMRE has two main scientific research programs. The Environmental Studies Program (ESP) has completed numerous research projects and has several more that are planned or ongoing to determine and evaluate the effects of OCS activities on natural, historical, and human resources and the appropriate monitoring and mitigation of those effects. For example, the ESP has completed or is conducting a number of scientific studies that explore the potential effects of offshore wind projects on birds, marine species, and other aspects of the environment. BOEMRE and DOE co-fund a number of studies within the Environmental Studies Program and also partner on research efforts led by the International Energy Agency. Pursuant to the MOU mentioned above, DOI and DOE have also formed an interagency working group with other federal agencies including NOAA, Department of Defense (DoD), US Army Corps of Engineers (US ACOE), and the Department of the Navy which will facilitate an integrated national network for characterization of offshore wind resources and design conditions.

BOEMRE's Technology Assessment and Research (TAR) Program also conducts research associated with operational safety, engineering standards, and pollution prevention.

One noteworthy research project just completed under our TAR program is on Offshore Wind Energy Turbine Structural and Operating Safety. BOEMRE asked the National Research Council's Marine Board to conduct a study relating to the structural safety of offshore wind turbines. The study addresses three specific areas: (1) standards and guidelines for design, fabrication and installation of offshore wind turbines; (2) expected roles of third-party entities, called Certified Verification Agents (CVA), in overseeing the design and construction of offshore wind turbines and identifying standards for monitoring, inspection and compliance verification; and (3) expected qualifications to be considered a recognized CVA. BOEMRE received the final report on April 28, 2011, and will analyze the recommendations to determine whether to modify the relevant offshore renewable energy regulations.

### **The National Ocean Policy's Coastal and Marine Spatial Planning**

BOEMRE is implementing the OCS renewable energy program in accordance with Executive Order 13547, which President Obama issued in 2010 to establish a comprehensive and integrated national policy for stewardship of the oceans, our coasts and the Great Lakes, including a framework for coastal and marine spatial planning (CMSP). We fully understand and support the need to work together with all OCS users and regulators, and we look forward to coordinating with the National Ocean Council and leading and participating in regional planning bodies undertaking CMSP. We believe our intergovernmental task forces are a valuable vehicle for informing these efforts. We will use an integrated interagency marine information system, developed in collaboration with the National Ocean Council, to implement Executive Order 13547. Part of this system will be the Multipurpose Marine Cadaster, which provides legal, physical, ecological, and cultural information in a common geographic information system framework. This tool was created in partnership with NOAA to comply with a mandate in section 388 of the Energy Policy Act of 2005.

### **Outreach to Non-government Stakeholders**

BOEMRE has repeatedly engaged non-government organizations (NGOs)—individually and in groups—to obtain feedback on its regulatory framework and associated processes. During promulgation of our renewable energy regulatory framework rule, we conducted several stakeholder information gathering sessions, as well as workshops on the draft and final regulations. Since the final framework was issued, we have continued meeting with NGOs and stakeholders, including The Nature Conservancy, the National Wildlife Federation, and the Mariners Advisory Committee and have had valuable information exchanges. We have also communicated with representatives of fishing interests through the special working groups established by Massachusetts and Rhode Island, as well as the regional Fisheries Management Councils.

BOEMRE also has continued its dialogue with industry representatives, primarily through the Offshore Wind Development Coalition. Based on all of our conversations with stakeholders, we have identified regulatory revisions that we will pursue to bring more clarity and efficiency to our processes. Our first such revision—designed to simplify the leasing process for offshore wind in situations where there is only one qualified and interested developer by eliminating a redundant and therefore unnecessary step—has been published and received comment. BOEMRE plans to complete this final rule and to propose other revisions in the near future.

### **Status of OCS Wind Development**

All of the initiatives I have just discussed are helping BOEMRE to identify areas where there are relatively few impediments to offshore wind development and move forward quickly and efficiently to promote the establishment of an offshore renewable energy industry.

Our efforts have already resulted in significant accomplishments in offshore wind development:

- We have issued 4 short-term leases that permit the installation of data collection facilities to inform planned commercial wind development activities (3 off New Jersey and 1 off Delaware). These leases were issued in 2009 under an interim policy initiated while the OCS renewable energy regulatory framework was being developed. We anticipate the first data collection facilities to be constructed this summer.
- Interior issued the first ever U.S. offshore commercial wind energy lease in October 2010 for the Cape Wind Energy Project in Nantucket Sound off Massachusetts. Shortly thereafter, the lessee submitted a construction and operations plan, which BOEMRE approved on April 18, 2011. The lessee hopes to begin construction later this year. The Cape Wind Energy Project proposal contemplates building 130 wind turbine generators, 3.6 megawatts each, with the maximum capacity to produce about 468 megawatts. The average expected production from the wind facility could provide about 75 percent of the electricity demand for Cape Cod and the islands of Martha's Vineyard and Nantucket. At average expected production, Cape Wind could produce enough energy to power more than 200,000 homes in Massachusetts.
- BOEMRE announced the first four WEAs—off the coasts of New Jersey, Delaware, Maryland, and Virginia—established under *Smart from the Start* on February 9, 2011, in a Notice of Intent to Prepare an Environmental Assessment for Mid-Atlantic Wind Energy Areas. We have determined that there is no competitive interest in leasing the area made available off Delaware and will complete a noncompetitive process in response to NRG Bluewater Wind's commercial wind lease request. We hope to make a final decision on lease issuance by the end of this year. By contrast, we have determined that there is competitive interest off Maryland, and we believe there will also be competitive interest off New Jersey and Virginia. BOEMRE plans to complete competitive

processes for these three states by early 2012. We will continue to consult with our intergovernmental task forces on all of these leasing processes.

- BOEMRE intends to designate a second set of WEAs—off Massachusetts, Rhode Island, New York, and North Carolina—by the end of this year. We have already received numerous expressions of interest off the coast of Massachusetts, and we will be soliciting nominations and other relevant information in the other three areas in the coming months. We will continue to consult with the intergovernmental task forces in these states.
- BOEMRE will consult with the established Maine intergovernmental task force concerning possible future deepwater wind leasing and development and anticipates establishing new task forces in Georgia and South Carolina later this year. The University of Maine’s DeepC wind program, funded in part by DOE, is working on developing new technologies, including floating wind turbines for use in deep waters. BOEMRE will work with Maine in the event that any entities are interested in pursuing leasing opportunities offshore Maine. We also have received an application for a short-term lease for data collection off Georgia under the interim policy.
- BOEMRE also received a request for a right-of-way for a 750-mile backbone transmission line running about 10 miles offshore from New York to Virginia. The developer has ambitious plans for this transmission line, believing that it can link future Atlantic OCS wind energy installations in a manner that can facilitate efficient interconnection to the onshore electrical grid. We will consult and coordinate with federal, state, local, and tribal governments and other stakeholders in processing this request.

### **Conclusion**

As I stated at the outset, we has set ambitious but achievable goals to help the U.S. make development of domestic sources of clean, renewable energy a reality. The combination of streamlined processes along with the increased involvement of our state and federal partners is helping BOEMRE make good strides in reaching those goals. We are excited to have a prominent role in the nation’s renewable energy future, and we look forward to working with stakeholders to develop a thriving domestic offshore wind industry that is coordinated and supports Executive Order 13547 and the national policy for stewardship of the oceans.

Mr. Chairman this concludes my statement. Thank you again for the opportunity to appear here. It would be my pleasure to answer any questions you or other Members of the Committee may have.