Department of the Interior
Bureau of Ocean Energy Management

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Office of Renewable Energy Programs

Outer Banks Chamber of Commerce Energy Forum
January 28, 2016
Mandates

“(T)he outer Continental Shelf is a vital national resource reserve held by the Federal Government for the public, which should be made available for expeditious and orderly development, subject to environmental safeguards, in a manner which is consistent with the maintenance of competition and other national needs”

Outer Continental Shelf Lands Act (OCSLA)  
Sec 3(3)

“…may grant a lease [for] energy from sources other than oil and gas…in a manner that provides for safety and protection of the environment.”

Energy Policy Act of 2005 Sec. 388
Oil and Gas Program: Introduction

BOEM Offshore Oil and Gas Responsibilities Include:

- Identifying and calculating appropriate boundaries and legal descriptions;
- Identifying, inventorying, and assessing the Nation’s offshore energy and mineral endowment;
- Developing a transparent, systematic, and comprehensive schedule for OCS oil and gas resource offerings; and
- Developing appropriate financial terms to ensure the Nation receives fair market value for its OCS resources.
5-Year Oil and Gas Leasing Program

Multi-Year/Multi-Phase Process

- Collaborative effort among Government, industry, tribal, and public stakeholders
- Multiple steps, decision points, and opportunities for public input during each phase

The following eight factors are considered in determining the timing and location of leasing:

- Geographical, geological, and ecological characteristics
- Equitable sharing of developmental benefits and environmental risks
- Location with respect to regional and national energy markets and needs
- Location with respect to other uses of the sea and seabed
- Interest of potential oil and gas producers
- Laws, goals, and policies of affected states
- Environmental sensitivity and marine productivity
- Environmental and predictive information
OCS Lands Act Section 18 Requirements

1) Prepare, periodically revise, and maintain a leasing program with a schedule of sales showing size, timing, and location to best meet Nation’s energy needs

2) Based on consideration of eight factors

3) Program is to balance potentials for environmental damage, discovery of oil and gas, and adverse impact on coastal zone

4) Assure receipt of Fair Market Value
OCS Oil and Gas Leasing, Exploration, and Development Process
Atlantic Region Leasing History

• Nine Lease Sales were held on the Atlantic OCS from 1976 to 1983
  — 410 Leases issued for a total of $2.8 billion in payments to the Federal Government
  — 51 total wells

• Virginia Lease Sale 220 area was scheduled for 2011 in the 2007-2012 Program but was cancelled following the Deepwater Horizon event

• The Atlantic OCS Region is not in the current, 2012-2017 Program

• One Atlantic sale is currently included in the 2017-2022 Draft Proposed Program
2017-2022 Outer Continental Shelf Oil and Gas Leasing Program Development

<table>
<thead>
<tr>
<th>Year</th>
<th>Planning Area</th>
<th>Sale Number</th>
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<tr>
<td>1</td>
<td>2017 Gulf of Mexico Region</td>
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<td>2020 Beaufort Sea</td>
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The Draft Proposed Program (DPP) Decision Document and related information are available at: [http://www.boem.gov/Five-Year-Program/](http://www.boem.gov/Five-Year-Program/)

Information on scoping for the Draft PEIS is available at: [www.BOEMoceaninfo.com](http://www.BOEMoceaninfo.com)
OCS Oil and Gas Five Year Program: Comments & Next Steps

- BOEM received ~1 million comments on the DPP

**What's next:**

- Publication of the Proposed Program and Draft PEIS
- Public comment period
- Tabulation, summarization, and analysis of comments
- Prepare an analysis of the Proposed Program and present to the Secretary to develop the Proposed Final Program Decision
- Publication of the Proposed Final Program and Final PEIS
- Program approval
- Begin lease sale process
Individual Lease Sale Planning

- Each sale in the Five-Year Program must undergo its own subsequent multiple-year planning and consultation process.
Plan & Permit Reviews Prior to Drilling (BOEM & BSEE)

- Exploration or Development Plan reviewed by BOEM
  - Environmental reviews
  - Identify drilling locations
  - Worst-case discharge
- Oil-spill Response Plan reviewed by BSEE
  - Confirm worse-case discharge scenario
  - Verify contractual arrangements for spill containment capabilities
- Application for Permit to Drill reviewed by BSEE
  - Ensure operations to be conducted comply with regulations and environmental compliance with approved plan
Renewable Energy Programs

Office of Renewable Energy Programs (OREP)

The mission of the Bureau of Ocean Energy Management’s Office of Renewable Energy Programs (OREP) is to regulate environmentally-responsible offshore renewable energy development activities.

- Wind
- Wave
- Ocean Current
- Transmission
4- Stage Renewable Energy Authorization Process

**Planning and Analysis**
- Intergovernmental Task Force
- Request for Information (RFI)/Call for Information & Nominations (Call)
- Area Identification
- Environmental reviews

**Leasing**
- Publish leasing notices
- Issue Lease(s)

**Site Assessment**
- Site Characterization
- Site Assessment Plan (SAP)

**Construction and Operations**
- Construction and Operations Plan (COP)
- Facility design and facility installation reports (FDR/FIR)
- Decommissioning
Boem's Atlantic Outer Continental Shelf (Ocs) Activities

Maine: No Competitive Interest

New Hampshire: Shown Interest In Offshore Development

Massachusetts: 3 Commercial Leases (Cape Wind Associates, DONG Energy, Offshore MW)

Rhode Island/Massachusetts: 2 Commercial Leases (Deepwater Wind); Row grant (The Narragansett Electric Company)

New York: Area Identification

New Jersey: 2 Commercial Leases (RES America, US Wind)

Delaware: Commercial Lease (Bluewater Wind)

Maryland: 2 Commercial Leases (US Wind)

Virginia: Commercial Lease (Dominion Power); VOWTAP (DMME)

North Carolina: Publish Proposed Sale Notice

South Carolina: Published Call and NOI

Georgia: EA published April 2014; Ongoing consultations with NMFS

Florida: IP Lease (FAU)

Five-Year Ocs Oil & Gas Leasing Draft Proposed Program
BOEM’s Pacific Outer Continental Shelf (OCS) Activities

- **Washington**: No Competitive Interest
- **Oregon**: Research Lease Request from Oregon State University *(PMEC-SETS: Marine Hydrokinetic)*
- **Oregon**: Unsolicited Lease Request from Principle Power, Inc. *(WindFloat Pacific)*
- **Hawaii**: Two Unsolicited Lease Requests from AW Hawaii Wind, LLC *(Oahu Northwest and South Projects)*
- **California**: Increased interest in offshore renewable energy development.
Intergovernmental State Task Forces

Pacific
- Oregon
- Hawaii

Atlantic
- Maine
- Massachusetts
- Rhode Island
- New York
- New Jersey
- Delaware
- Maryland
- Virginia
- North Carolina
- South Carolina
- Florida
Renewables Program: Turbine Size Comparison

- **Washington Monument**: 555 feet (169 m)
- **Golden Gate Bridge**: 746 feet (227 m)
- **Empire State Building**: 1,250 feet (381 m)

- **1991**: 500 KW Vestas V39, 196 feet (60 m)
- **2000**: 2 MW Vestas V80, 328 feet (100 m)
- **2007**: 3.6 MW Siemens SWT 120, 492 feet (150 m)
- **2013**: 6 MW Alstom Haliade 150, 659 feet (200 m)
- **2015**: 8 MW Vestas V164, 721 feet (220 m)
Visual Simulations

For General Presentation Purposes Only
Not Representative of Any Proposed Project

Oak Island Simulation, Late Afternoon, Vestas V164-8.0 MW, 10 Nautical Miles
Visual Simulations Offshore North Carolina

- Collaborated with National Park Service
- Simulations from 18 different viewpoints under four lighting conditions at three distances (10, 15, and 20 nm)
- Simulated largest turbine model available (Vestas 8 MW)
- Open houses held in North Carolina (January and August 2013)
- Simulations available on BOEM’s website
Relevant Visual and Tourism Study Results

- NC Visual Simulation Meteorological Report (BOEM)
  - Turbines 10 nm away visible 35% of the time (27% in summer)
- An Assessment of the Potential Costs and Benefits of Offshore Wind Turbines (Global Insight)
  - Negative impacts to tourism decrease with distance from coast
  - A wind facility over 6 nm from the coast generally results in no net negative impacts to tourism, and can possibly result in an increase in tourism revenues
Questions?

Bureau of Ocean Energy Management

www.boem.gov

Renewable Energy Program

www.boem.gov/Renewable-Energy

Oil & Gas Program

www.boem.gov/Oil-and-Gas-Energy-Program

Regulatory Information