Offshore Energy Opportunities

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“(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
Sec 3(3)
BOEM Activities

Outer Continental Shelf Oil and Gas Development Process

- 5-Year Program – Nationwide
- Lease Sale – Region Specific
- Exploration Plan – Specific Project
- Development Plan – Specific Platform(s)

Five Year Program
- Gulf: 2-3 Lease Sales per Year
- Gulf: 509 Exploration Plans (2014)
- Gulf: 601 Development Plans (2014)
OCMA Lands Act requires the Secretary of the Interior to 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.

Consideration of eight factors:

1. Resource Estimates and Net Social Value (= Economic Value minus Social Costs)
2. Equitable Sharing of Developmental Benefits and Environmental Risks
3. Regional and National Energy Needs
4. Other Uses of the OCS
5. Industry Interest and Resource Distribution
6. Environmental Sensitivity and Marine Productivity
7. Geographic, Geological, and Ecological Characteristics
8. Laws, Goals, and Policies of Affected States

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

Assure receipt of Fair Market Value.
**Request for Information (RFI)**  BOEM publishes a Federal Register notice simply requesting comments on the eight required balancing factors and any other specific issues from interested Parties on all 26 OCS planning areas.

Published in the Federal Register on June 16, 2014, with a 45-day comment period that was extended by 15 days and closed on August 15, 2014.
Draft Proposed Program (DPP) information on all 26 OCS planning areas is analyzed. The result may be a narrowing of planning areas in the draft proposal of the schedule of lease sales. BOEM seeks comments from Governors and from interested parties. Once the areas are narrowed, they cannot be added back in without either starting over with the entire Five-Year Program Development Process or an act of Congress.

The DPP was published on January 29, 2015, with a 60-day comment period that closed on March 30, 2015.

NOI for Programmatic Environmental Impact Statement (PEIS) Publication of Notice of Intent to prepare PEIS is followed by scoping comment period and public meeting in accordance with National Environmental Policy Act (NEPA). Input includes effects on marine and coastal conditions; migratory species; invasive species; and effects of catastrophic oil spills on leasing decisions and alternatives.

23 public scoping meetings and almost 380,000 comments received
Proposed Program (PP) is the second program proposal Decision Document. BOEM is required to submit the published PP to Congress, the Attorney General and Governors. BOEM also requests comments from all interested parties.

On March 15, 2016, the PP, was published with a 90-day comment period that closed on June 1, 2016.

The Atlantic Sale Area in the DPP was removed. BOEM received more than 1.83 million comments on the Proposed Program from the public, various stakeholders, including numerous environmental and other NGOs, government entities (e.g., local municipalities, county, state, and elected officials), local businesses, industry, academic institutions, and tribes and tribal organizations from Alaska. The comments expressed a full spectrum of views on offshore leasing.

Draft PEIS Published Publication of Draft PEIS is followed by comment period and public meetings.

BOEM held 13 public meetings and received about 75,000 comments on the Draft PEIS.
**Proposed Final Program (PFP)** is the third program proposal Decision Document; BOEM submits this proposed leasing program to the President and Congress. BOEM provides the summary of all comments from States (including local governments) and Federal agencies and reasons why any recommendations from Governors, local governments or the Attorney General were not accepted.

On November 18, 2016, the final proposal, the PFP, was published. The PFP schedules 11 potential lease sales in two program areas in all or parts of 4 OCS planning areas: 10 sales in the combined Gulf of Mexico (GOM) Program Area, and one sale in the Cook Inlet Program Area offshore Alaska. No lease sales are scheduled for the Pacific or Atlantic OCS.

**Final PEIS Published** Final PEIS is published followed by a Record of Decision.
Final Program Approval  New program shall be in place prior to expiration of current program. On January 17, 2017, sixty days after the transmittal of the Proposed Final Program to the President and Congress, the Secretary approved the 2017-2022 Program.

The Bureau estimates that the entire OCS contains approximately 90 billion barrels of undiscovered technically recoverable oil (bbo) and 327 trillion cubic feet (tcf) of undiscovered technically recoverable natural gas (leased and unleased – mean estimate). In total, the Proposed Final Program makes available nearly one half of the estimated undiscovered technically recoverable OCS oil and gas resources and approximately 70 percent of the economically recoverable resources at an oil price of $40 per barrel.

Once completed, any significant revisions to the Program would require undertaking a new Five-Year Program planning and development process.

The inclusion of an area in the Proposed Final Program does not necessarily mean that the area will be offered in a lease sale. There are several subsequent decision points available for reducing the area offered or cancelling a sale.
Record of Decision (ROD). On January 17, 2017, the Secretary of the Interior approved the 2017-2022 OCS Oil and Gas Leasing Program and issued a ROD for the Programmatic EIS. In approving the Program, the Secretary chose Alternative C (the Preferred Alternative) from the Final Programmatic EIS. The ROD identifies Alternative D, the No Action, as the environmentally preferable alternative. In addition, the ROD outlines programmatic mitigation measures that will apply to all sales that occur during this Program in areas where the mitigation measures are applicable. These mitigation measures include the Protection of Biologically Sensitive Underwater Features in the Gulf of Mexico and implementation of a Conflict Management Plan for lease sales in Alaska (Cook Inlet). The Secretary has also directed BOEM to analyze a seasonal restriction on seismic surveys and exploration for drilling for Cook Inlet Lease Sale 258.
## 2017 - 2022 Lease Sale Schedule

<table>
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<tr>
<th>Sale Number</th>
<th>Area</th>
<th>Year</th>
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<tr>
<td>247</td>
<td>Gulf of Mexico Central</td>
<td>2017</td>
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<tr>
<td>244</td>
<td>Cook Inlet</td>
<td>2017</td>
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<tr>
<td>249</td>
<td>Gulf of Mexico Region</td>
<td>2017</td>
</tr>
<tr>
<td>250</td>
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</table>
The Gulf of Mexico is a proven petroleum basin that still offers significant opportunities for exploration and development.

The United States Depends on the Gulf of Mexico

The Gulf of Mexico is one of the world's prolific hydrocarbon basins, with a production history of more than 100 years.

It is the primary offshore source of hydrocarbons for the United States, generating approximately 97 percent of all offshore oil and natural gas production.

The Gulf of Mexico Production is expected to account for 18% and 21% of total forecast U.S. crude oil production in 2016 and 2017.

The Gulf of Mexico is a proven petroleum basin that still offers significant opportunities for exploration and development.
Comparison of Annual Production Volumes from Deep and Shallow Water

**OIL**

**GAS**

deep surpassed shallow
Gulf of Mexico Highlights

Monthly oil production from U.S. federal Gulf of Mexico (2010-17)

- April 30 - October 12, 2010: moratorium on deepwater drilling as a result of the Macondo blowout
- Hurricane Gustav

Source: U.S. Energy Information Administration, Short-Term Energy Outlook, February 2016
Shallow Water vs. Deepwater

- Shallow Water:
  - Billion Barrels of Oil Equivalent (BBOE): 49,700
  - UTRR: 14,684
  - Grown Reserves: 35,016

- Deepwater:
  - Billion Barrels of Oil Equivalent (BBOE): 59,005
  - UTRR: 29,682
  - Grown Reserves: 29,323
• Very Deep Water
• Remote location from infrastructure
• Thick overlying salt of complex shapes
• Deep subsea drilling
• High well costs
• Low porosity and permeability
• Low gas-to-oil ratio
The Lower Tertiary and Jurassic Norphlet trends in deepwater continue to be excellent exploration targets.

The deepwater Lower Tertiary trend has spurred the acquisition of numerous, nonexclusive wide-azimuth (WAZ) and full-azimuth (FAZ) seismic surveys.

The Lower Tertiary and Jurassic Norphlet trends in deepwater continue to be excellent exploration targets.

Eight production platforms located in deepwater have been installed since 2009, continuing to expand the infrastructure to bring deepwater production to shore.
Deepwater Report


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