The future of the OCS after Macondo

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Office of Petroleum, Gas, and Biofuels Analysis
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Historical crude oil production by source

- Other Lower 48 onshore
- Lower 48 offshore
- CO2 EOR
- Alaska

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Crude oil production by source, 1990-2035

- History
- Projections

- Lower 48 offshore
- CO2 EOR
- Other Lower 48 onshore
- Alaska

million barrels per day
Lower 48 offshore uncertainties

- Impact of new regulatory and safety requirements
- Timing of lease sales in the Pacific, Atlantic, and Eastern GOM OCS
- Cost of exploration and development in undeveloped areas
- Resource level uncertainty
Lower 48 offshore cases

- **Reduced OCS access** – no lease sales occur in the Eastern Gulf of Mexico, Pacific and Atlantic, and Alaska OCS through 2035.

- **High OCS cost** – 30 percent higher costs of exploration and development than in the Reference case.

- **High OCS resource** – Tripling of the crude oil and natural gas resources in the Pacific, Eastern Gulf of Mexico, Atlantic, and Alaska OCS than in the Reference case.
First year of available offshore leasing in two cases

<table>
<thead>
<tr>
<th>Area</th>
<th>Reference</th>
<th>Reduced OCS Access</th>
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<tbody>
<tr>
<td>Eastern Gulf of Mexico</td>
<td>2022</td>
<td>After 2035</td>
</tr>
<tr>
<td>North Atlantic</td>
<td>After 2035</td>
<td>After 2035</td>
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<tr>
<td>Mid- and South Atlantic</td>
<td>2018</td>
<td>After 2035</td>
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<tr>
<td>Northern and Central Pacific</td>
<td>After 2035</td>
<td>After 2035</td>
</tr>
<tr>
<td>Southern Pacific</td>
<td>2023</td>
<td>After 2035</td>
</tr>
<tr>
<td>Alaska</td>
<td>2010</td>
<td>After 2035</td>
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</tbody>
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General Timeline for Development of OCS Resources

Development of 5-year lease program by BOEM

- Lease Acquisition: 1-2 years
- Exploration & Appraisal: 1-2 years
- Development Drilling: 1-3 years
- Production: 1-3 years

Shallow waters: 1-3 years
Deep waters: up to 6 years

Total: 4-13 years
Offshore crude oil production

million barrels per day

<table>
<thead>
<tr>
<th></th>
<th>2035</th>
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<tbody>
<tr>
<td>Reference</td>
<td>2.15</td>
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<tr>
<td>High resource</td>
<td>3.25</td>
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<tr>
<td>High cost</td>
<td>1.93</td>
</tr>
<tr>
<td>Limited access</td>
<td>1.78</td>
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</tbody>
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U.S. crude oil production in four cases, 2009, 2025, and 2035

- Offshore
- Other

million barrels per day

2009

2025

2035
Summary

• Because of the timeline associated with developing offshore crude oil resources, little variation in the four cases is seen prior to 2025

• Although nationally the impacts across cases are small even through 2035, the regional impacts show variation:
  • **Pacific**: Production ranges from 0.1 to 0.5 million barrels per day
  • **Atlantic**: Production in the high resource case
  • **Gulf of Mexico**: Essentially no variation across cases
  • **Alaska**: Production ranges from 0 to one million barrels per day
Summary (continued)

• Although the differences on a regional level are significant, the total overall variation in production across cases represents less than 10 percent of total U.S. crude oil production.

• Import dependence for U.S. total liquid fuels ranges from 37 percent in the high resource case to 43 percent in the limited access case.

• Because U.S. crude oil production represents less than 10 percent of total world liquids production, the impact on prices is minimal, with low sulfur light crude oil prices in 2035 ranging from $122 per barrel in the high OCS resource case to $126 per barrel in the limited OCS access case.
For more information


Short-Term Energy Outlook | www.eia.gov/steo

Annual Energy Outlook | www.eia.gov/aeo

International Energy Outlook | www.eia.gov/ieo

Monthly Energy Review | www.eia.gov/mer

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