

Oil Development on Federal Lands and the Outer Continental Shelf

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January 26, 2009

Congressional Research Service 7-5700 www.crs.gov RS22928

Summary

Over the past year, crude oil prices have nearly doubled, reaching record levels, before falling below \$40 dollars per barrel by the end of the year. In the 110th Congress, proposals included a number of legislative initiatives to increase domestic oil production. These proposals fell into two broad categories: (1) to open areas of the Outer Continental Shelf (OCS) which were under a leasing moratoria; and (2) to encourage companies holding oil and gas leases to diligently develop leases to bring them into production. Two bills were introduced that would have denied new leases to those lessees who were not developing their leases or producing oil or gas (H.R. 6251 and H.R. 6515). The two bills, which included similar provisions, were introduced under suspension of the rules in the House and both failed to achieve the necessary two-thirds support. Comparable legislation was introduced in the Senate (S. 3239).

As the 111th Congress begins, Congress is faced with issues such as enhancing domestic energy supply and security while assessing areas of environmental concern. The Bush Administration lifted the OCS moratoria on July 14, 2008 and Congress allowed its annual OCS moratoria (see details below) to expire on September 30, 2008 under a continuing resolution—Continuing Appropriations Act for 2009 (P.L. 110-329). The continuing resolution expires on March 6, 2009 or when a permanent appropriations bill for FY2009 is enacted.

Under an annual Congressional funding prohibition (in the Interior, Environment, and Related Agencies appropriation bill) and a Presidential Withdrawal, oil and gas leasing and development has been banned in the offshore OCS areas along the U.S. Atlantic and Pacific coasts. However, on July 14, 2008, under a Presidential Directive, the Bush Administration lifted the Executive OCS moratoria that had been in place since 1990. The recent congressional action approving the Continuing Appropriations Act for FY2009 (P.L. 110-329, enacted September 30, 2008), that continued the funding of government activities through March 6, 2009, or until a regular appropriations bill is enacted, omitted language that provided for the congressional OCS moratoria along the Atlantic and Pacific coasts. Those areas may now be made available for preleasing, leasing, and related activity that could lead to oil and gas development. The moratorium, however, would remain in place for nearly all of the Eastern Gulf of Mexico as it was placed off-limits separately under the Gulf of Mexico Energy Security Act of 2006 (P.L. 109-432) until 2022.

Based on the executive branch relaxation of the OCS ban, the Bush Administration began the process of preparing the OCS five-year leasing program in August of 2008, two years ahead of schedule. The Draft Proposed OCS Oil and Gas Leasing Program, 2010-2015 was published in early January 2009. This draft proposal, if finalized, would supersede the current five-year program which runs from 2007-2012. The Obama Administration has not yet made a decision to move forward with the proposal. If the early draft is finalized by the Administration, Congress can accept or reject the plan.

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Introduction¹

In 2008, oil prices nearly doubled, reaching record levels, before falling back to below \$40 per barrel by the end of the year. In the 110th Congress, proposals included a number of legislative initiatives to increase domestic oil production. These proposals fell into two broad categories: to (1) open areas of the Outer Continental Shelf (OCS) which were under a leasing moratoria; and to (2) encourage companies holding oil and gas leases to diligently develop leases to bring them into production. Proponents of these initiatives argued that promising areas should be open for exploration to maximize domestic oil production as soon as possible. This report provides a review of selected legislative initiatives in the 110th Congress, examines oil production and resource data, and discusses oil development concerns on federal lands, both onshore and on the OCS.² Legislation on oil and gas development on federal lands has not yet been introduced for the 111th Congress.

As the 111th Congress begins, Congress is faced with issues such as enhancing domestic energy supply and security while assessing areas of environmental concern. The Bush Administration lifted the OCS moratoria on July 14, 2008 and Congress allowed its annual OCS moratoria (see details below) to expire on September 30, 2008 under a continuing resolution—Continuing Appropriations Act for 2009 (P.L. 110-329). The continuing resolution expires on March 6, 2009 or when a permanent appropriations bill for FY2009 is enacted.

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Legislation and Issues

Under current law, the primary onshore oil and gas lease term is for 10 years. Offshore lease terms are 5,8, or 10 years depending on water depth.³ If the lease is not producing oil or gas in commercial quantities by the end of its primary term, the lease reverts back to the government for a possible future lease sale—unless the lessee is granted an extension. Extensions are granted for onshore lessees under 43 CFR 3107 for a one-time, two-year period. Offshore extensions are granted under 30 CFR 250.180. The regulation for offshore extensions does not specify the length

¹ For a broader analysis of OCS leasing, revenue sharing, and the moratoria, please see CRS Report RL33493, *Outer Continental Shelf: Debate Over Oil and Gas Leasing and Revenue Sharing*, by (name redacted).

 $^{^{2}}$ Federal lands include those lands with potential for oil and gas development onshore (279 million acres) and the OCS (1.76 billion acres).

³ The primary term is five years for shallow water (<400 meters deep), eight years for leases in water 400-799 meters deep and 10 years for deepwater leases 800 meters and beyond.

of the extension. Also, it is not clear how often the Bureau of Land Management(BLM) or Minerals Management Service (MMS) grant extensions.⁴

On July 17, 2008, an energy proposal that reached the House floor (H.R. 6515, Drill Responsibly in Leased Lands Act of 2008), was defeated under a suspension of the rules vote (which requires a two-thirds majority) by 244-173. This act was said to promote an "expeditious and environmentally responsible" development of the National Petroleum Reserve in Alaska (NPRA) and would have denied new leases to lessees that were not diligently developing their leases, producing oil or gas, or relinquishing non-producing leases. Proponents of this bill argued that many of the lessees are "sitting" on federal leases, and not producing oil or gas.

Although both bills, H.R. 6515, and H.R. 6251, retained the 10-year primary oil and gas lease term, language removed from an earlier version of H.R. 6251 would have reduced the primary lease term (for onshore and deepwater offshore) from a 10-year term to five years (with extensions possible). On June 26, 2008, under suspension of the rules, H.R. 6251 was also defeated by a vote of 223-195 (two-thirds needed for passage).

These two bills were referenced as "use it or lose it" proposals, supported by policymakers who argued that it was unnecessary to lift the OCS moratorium because there were millions of acres already leased that could yield crude oil production, but which were presently inactive. It is unclear how much, and how quickly, additional production would take place on non-producing leases. Some critics of "use it or lose it" proposals argued that these proposals could create a disincentive for companies to seek leases, and/or result in lower bonus bids on new leases. A "use it or lose it" policy, critics of the bills argued, would not necessarily lead to additional production sooner; it might, in fact, undercut that objective. As noted, implementation of "use it or lose it" legislation could result in fewer bids or lower bid offers if a more stringent timeline were to be imposed on all leases held. However, by maintaining the 10-year primary term, as both bills would have done, more federal funds might be appropriated for permitting, and other required environmental reviews.

A similar bill in the Senate (S. 3239, Responsible Federal Oil and Gas Lease Act) would have denied lessees new leases unless lessees were producing oil or gas on currently held leases; if lessees did not diligently develop each lease, they would have been required to relinquish them. The House and Senate proposals would have required the Secretary of the Interior to define diligent development as it relates to oil and gas leases.

Shifts in Oil Production

U.S. crude oil production peaked at 9.637 million barrels per day in 1970. The Energy Information Administration (EIA) of the Department of Energy projects that U.S. oil production will increase from today's 5.1 million barrels per day 5 (mbd) to 6.3 mbd by 2018, then decline to 5.6 mbd by 2030, but EIA did not factor-in possible changes in lease management.⁶ EIA projected that offshore crude oil production would increase from about 1.4 mbd to 2.2 mbd by 2030. When the EIA included access to the OCS, without the leasing moratoria, production was projected to

⁴ The BLM administers the federal onshore leasing program and the MMS administers the offshore leasing program, both agencies within the Department of the Interior.

⁵ U.S. DOE, Energy Information Administration, Monthly Energy Review, June 2008.

⁶ U.S. DOE/EIA, Annual Energy Outlook, 2008.

rise by an additional 200,000 barrels per day by 2020 with no significant impact on prices.⁷ Based on mean resource estimates by the MMS, an ICF International report⁸ prepared for the American Petroleum Institute estimates an increase in OCS production of 286,000 barrels per day in 2030 with increased access to the OCS. When ICF assumed a much larger resource base for the OCS (and without the leasing moratoria), oil production was estimated to increase 900,000 barrels per day in 2030.

An anticipated rise in U.S. domestic production on federal lands is seen as coming primarily from deepwater offshore areas as shallow water and onshore oil fields are in decline. According to the MMS, deepwater oil already accounts for more than 70% of offshore production and 18.5% of total U.S. crude oil production. Since 2002, shallow water lease sales have dropped from 418 to 264 while deepwater lease sales rose from 281 to 633. Deepwater lease sales spiked in 1997 at 1,110, following the Deepwater Royalty Relief Act of 1995. Further, it is notable that there has been increasing exploration activity and an increase in reported finds in the Gulf of Mexico in very deep waters since 2003. Given that oil prices are set in a world market, any additions to U.S. oil supply must be seen in the context of additions to oil supply worldwide.

Oil Lease Data for Federal Lands

According to the Department of the Interior agencies (Bureau of Land Management and the Minerals Management Service), there are approximately 67 million acres of "active" (meaning that the lease is still in its primary term) oil and gas leases on federal lands that are not in production. About 33 million acres are located onshore and an additional 34 million acres are located offshore. Approximately 12 million acres onshore and about 10.5 million acres offshore are in producing status, (i.e., producing commercial volumes) (see **Table 2** below).⁹

| | Onshore | Offshore ^a I 5.43 billion barrels ^d (includes 8.55 proved and unproved reserves plus 6.88 bbl of reserve appreciation) | |
|--|--|---|--|
| Reserves ^b | l I.6 billion barrels (bbl) ^c (includes 5.3 proved reserves plus 6.3 bbl of reserve appreciation) | | |
| Undiscovered Technically Recoverable Resources (UTRR) possible oil available | 5.2 bbl 66.4 bbl | | |
| UTRR possible oil unavailable ^{e,f} | 19.0 ьы | 17.84 bbl | |
| Acreage available | 113 million acres | 178 million acres | |
| Acreage unavailable® | 166 million acres 574 million acres | | |
| Number of Leases | 49,73 | 7,500 | |
| Producing Leases | 21,612 1,600 | | |
| Leased acres producing | 11.8 million acres ^g 10.5 million acres ^h | | |

Table I.Oil on Federal Lands

⁷ U.S. DOE/EIA, Annual Energy Outlook, 2007.

⁸ *Strengthening Our Economy: The Untapped U.S. Oil and Gas Resources*, Submitted by: ICF International, December 5, 2008. Prepared for American Petroleum Institute.

⁹ Estimates provided by Bureau of Land Management and Minerals Management Service.

| | Onshore | Offshore ^a | |
|---------------------------------|--------------------|-----------------------|--|
| Leased acres not producing | 33.5 million acres | 33.6 million acres | |
| Percentage of acreage Offlimits | 60% | 79% | |
| Percentage of UTRR Offlimits | 62% | 21% | |

Note: Terms used in this table and throughout the report such as proved reserves, unproved reserves, reserve appreciation, and undiscovered technically recoverable resources are defined in the Department of the Interior, MMS, Report to Congress: Comprehensive Inventory of U.S. OCS Oil and Natural Gas Resources, February 2006. Energy Policy Act 2005, Section 357, Glossary.

- a. The amount of offshore acreage and possible oil unavailable is based on the OCS moratoria that was in place through FY2008. Congress allowed the moratoria to expire at the end of FY2008. A final decision is pending as part of the FY2009 appropriations bill.
- b. EIA reports official U.S. proved oil reserves at 21 billion barrels. Further, they report offshore proved oil reserves at 4.1 billion barrels.
- c. Onshore oil reserve, resource, and acreage data from the Interagency report, *Inventory of Onshore Federal Oil* and Natural Gas Resources and Restrictions to Their Development, Phase III Inventory, 2008. In compliance with the Energy Act of 2000, P.L. 106-469, as amended by the Energy Policy Act of 2005, P.L. 109-58.
- d. Oil reserve and resource data as shown in: DOI/MMS, Report to Congress: Comprehensive Inventory of U.S. OCS Oil and Natural Gas Resources, February 2006, Executive Summary, p. vii.
- e. For onshore UTRR, unavailable amounts include 6.7 billion barrels of oil on 55 million acres, pending Land Use Decisions. Some of these barrels may become available or remain unavailable. This category also includes acreage that technically could be leased and accessed through directional drilling or drainage, but currently does not meet BLM criteria for being accessible.
- f. Unavailable in the context of this report means lands that are formally withdrawn, inaccessible, or denied funding for oil and gas pre-leasing or leasing activity.
- g. Data for onshore leased producing and non-producing acreage provided by BLM, Steve Salzman, Division of Fluid Minerals, June 2008.
- h. Data for offshore leased producing and non-producing acreage provided by MMS, Office of Congressional Affairs, Lyn Herdt, July 2008.
- i. This figure represents 62% of 30.5 billion barrels of oil, of which 19 bbl is unavailable, 11.5 bbl available (including 6.3 billion barrels of reserve appreciation).

For offshore oil, under the Known Resources category, (proved reserves, unproved reserves, and reserve appreciation), the Minerals Management Service (MMS) estimates oil reserves in the OCS to be 8.55 billion barrels. In addition, the MMS categorizes 6.88 billion barrels of oil as Reserve Appreciation. In the Undiscovered Technically Recoverable Resources category, the MMS estimates oil resources to be near 86 billion barrels. Within the Undiscovered Resources category, about 41 billion barrels of oil would potentially come from the Gulf of Mexico and about 25.3 billion possible barrels of oil would come from Alaska. With that total, roughly 66.4 billion possible barrels out of 84.24 billion possible barrels are available (about 79%) for leasing in the current MMS five-year leasing program. MMS estimates the amount unavailable at around 17.8 billion possible barrels.¹⁰ Federal onshore proved oil reserves are estimated at 5.3 billion barrels, plus about 6.3 billion barrels in reserve appreciation according to a recent survey of onshore federal lands.¹¹ Further, there is an estimated, 24.2 billion possible barrels of

¹⁰ Department of the Interior, Statement of C. Stephen Allred, before the Senate Committee on Energy and Natural Resources, Resource Estimate Table, January 25, 2007.

¹¹ Interagency Report, Inventory of Onshore Federal Oil and Natural Gas Resources and Restrictions to Their Development, 2008.

undiscovered technically recoverable oil resources [see note above] on federal lands, of which 19.0 billion possible barrels of oil are offlimits.

The Energy Policy Act of 2005 (EPACT-05) enacted several provisions that were aimed at expediting the development of oil and gas on public lands, particularly concerned with the approval of applications for permits to drill (APDs) (see **Table 2**). Some critics of EPACT-05 believe that the permitting is moving too fast without adequate environmental review.

| | 2000 | 2002 | 2004 | 2006 | 2007 |
|---------------|-------|-------|--------|-------|-------|
| APDs Approved | 3,413 | 3,727 | 6,05 l | 6,738 | 7,124 |
| Wells Started | 2,623 | 2,772 | 3,696 | 4,708 | 5,343 |

Source: Bureau of Land Management, Public Land Surveys, Various Years.

A number of concerns arise in the oil and gas leasing process that might delay or prevent oil and gas development from taking place, or might account for the large number of leases held in non-producing status. Below is a list of often-cited issues which, individually or in combination, are used to explain why more leases are not producing.

- Rig or equipment availability, particularly offshore
- Higher capital costs
- Skilled labor shortages
- Leases in the development cycle (e.g., conducting environmental reviews, permitting, or exploring) but not producing
- Legal challenges that might delay or prevent development
- No commercial discovery on a lease tract
- Holding leases (because of the lack of capital or as "speculators") to sell or "farm out" at a later date Ability to secure extensions on non-producing leases
- Securing and being able to hold large number of lease tracts, often contiguous, to maximize return on their investment

Many leases expire before exploration or production occurs. Data from the BLM or MMS on the development status for existing leases has not been made available; thus, it is difficult to classify the amount of acreage that has had no activity, is in the permitting stage, or is under exploration but not producing.

The OCS Moratoria

Under an annual Congressional funding prohibition (in the Interior, Environment, and Related Agencies appropriation bill) and a Presidential Withdrawal, oil and gas leasing and development has been banned in the offshore OCS areas along the U.S. Atlantic and Pacific coasts. However, on July 14, 2008, under a Presidential Directive, the Bush Administration lifted the Executive OCS moratoria that had been in place since 1990, first imposed by President George H.W. Bush, and extended to 2012 by President Bill Clinton. The Congressional ban began in 1981 and was

expanded and continued through the annual appropriations process since that time. Each year Congress must approve language that would prohibit funding for pre-leasing and leasing activity in designated areas of the OCS. However, separate withdrawals might be enacted legislatively, such as provided in the Gulf of Mexico Energy Security Act of 2006 (GOMESA, P.L. 109-432) which placed nearly all of the Eastern Gulf of Mexico under a leasing and drilling moratorium until 2022. The Eastern Gulf of Mexico was not part of the Executive OCS ban that was recently lifted by President Bush or the annual congressional ban that Congress allowed to expire on September 30, 2008. Over the past several years, there have been many legislative proposals to lift the congressional ban, some of which have been successful, on part or all of the OCS. For example, GOMESA removed a small section of the Central Gulf of Mexico (an area south of lease sale area 181; under a previous boundary configuration, the area was located in the Eastern Gulf of Mexico). In 2003, Congress omitted language from the FY2004 Interior appropriation bill that would have prevented lease sales in the North Aleutian Basin Planning Area of Alaska. The President concurred with congressional actions, thus making that area open for a future lease sale. The recent congressional action approving the Continuing Appropriations Act for FY2009 (P.L. 110-329, enacted September 30, 2008), that continued the funding of government activities through March 6, 2009, or until a regular appropriations bill is enacted, omitted language that provided for the congressional OCS moratoria along the Atlantic and Pacific coasts. Those areas may now be made available for preleasing, leasing, and related activity that could lead to oil and gas development.

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