



CRS Report for Congress

Royalty Relief for U.S. Deepwater Oil and Gas Leases

Marc Humphries
Analyst in Energy Policy
Resources, Science, and Industry Division

Summary

The most common incentives for offshore oil and gas development include various forms of royalty relief. The Outer Continental Shelf Lands Act (OCSLA) authorizes the Secretary of the Interior to grant royalty relief to promote increased oil and gas production (43 U.S.C. 1337). The Deep Water Royalty Relief Act of 1995 (DWRRA) expanded the Secretary's royalty relief authority in the Gulf of Mexico outer continental shelf (OCS).

Controversy over royalty relief currently focuses on the lack of price thresholds in Minerals Management Service (MMS) OCS lease sales held in 1998 and 1999. Without the price thresholds, deepwater producers continued to benefit from royalty relief, even as oil prices hit record levels. How these price thresholds were omitted is the subject of ongoing congressional and administrative investigations. In an unresolved issue over the Secretary of the Interior's authority and discretion to impose price thresholds, the Department of the Interior asserts that the Secretary of the Interior is not required to impose price thresholds in each lease (but has the discretion to do so). However, all lease sales held since the enactment of DWRRA included price thresholds, except those held in 1998 and 1999. According to the MMS and the Government Accountability Office (GAO), omitting price thresholds for those two years could cost the federal government at least \$10 billion.

This situation has prompted efforts to amend the 1998 and 1999 leases to include price thresholds. On January 12, 2007, Representative Rahall and others introduced H.R. 6, cited as the Creating Long-Term Energy Alternatives for the Nation Act of 2007. Under Title II, this bill would, among other things, deny new Gulf of Mexico oil and gas leases to lessees holding leases without price thresholds or payment of or agreement to pay newly established "conservation of resources" fees. The bill would also repeal royalty relief provisions (sections 344 and 345) of the Energy Policy Act of 2005.

Introduction

As oil and gas prices hit record levels during 2006, allegations arose about missteps at the Minerals Management Service (MMS) regarding the collection of royalties for oil and gas production on the outer continental shelf (OCS). Of particular concern to Congress is that price thresholds for royalty relief in deepwater leases were omitted from deepwater lease sales held in 1998 and 1999. Such thresholds establish a maximum price per barrel of oil or million Btu of natural gas where producers may receive royalty relief; above the threshold price, royalties must be paid. Except for the 1998 and 1999 lease sales, the thresholds are included in all leases eligible for automatic royalty relief under the Deepwater Royalty Relief Act of 1995 (DWRRA, P.L. 104-58). Without the price thresholds, oil and gas can be produced from a lease up to a specified volume without being subject to royalties, no matter how high the price goes.

OCS Leasing System

The Outer Continental Shelf Lands Act of 1953 (OCSLA), as amended, provides for the leasing of OCS lands in a manner that protects the environment and returns to the federal government revenues in the way of bonus bids, rents, and royalties. Lease sales are conducted through a competitive, sealed bonus-bidding process, and leases are awarded to the highest bidder. Successful bidders make an up-front cash payment, called a bonus bid, to secure a lease. A minimum bonus bid is determined for each tract offered.

Bidding on deepwater tracts in the mid-1990s led to a surge in bonus revenue (e.g., \$1.4 billion in FY1997).¹ Bonus bids totaled \$865 million in FY2006. In addition to the cash bonus bid, a royalty rate of 12.5% or 16.66% is imposed on the value of production, with royalties sometimes paid “in-kind.”² Annual rents range from \$5 to \$9.50, with lease sizes generally ranging from 2,500 to 5,760 acres. Initial lease terms of 5-10 years are standard, and leases are continued as long as commercial quantities are being produced. The MMS, in the Department of the Interior, administers the offshore leasing program.

Royalty Relief

OCSLA authorizes the Secretary of the Interior to grant royalty relief to promote increased oil and gas production. There are generally four royalty relief categories in the Gulf of Mexico (GOM): Deepwater (more than 200 meters), Shallow Water Deep Gas, End-of-Life, and Special Case. Royalty relief under the End-of-Life and Special Case categories was already in place under OCSLA before the Deep Water Royalty Relief Act of 1995 (DWRRA) and is not involved in the current controversy. DWRRA expanded the Secretary’s authority to grant royalty relief to deepwater leases in the Gulf of Mexico

¹ Department of the Interior, FY2002 Budget Justifications, p. 63.

² A royalty-in-kind payment would be in the form of barrels of oil or cubic feet of natural gas.

OCS. Under DWRRA, the Secretary may reduce royalties if production would otherwise be uneconomic.³

In an unresolved matter over price thresholds, the Department of the Interior interprets the DWRRA (P.L. 104-58) to provide the Secretary of the Interior with the authority and discretion to establish thresholds, above which the relief is discontinued. Another interpretation of the law concludes that thresholds are mandatory, not discretionary.⁴ In addition, the authority of the Secretary to impose price thresholds has come into question in a lawsuit filed by Kerr-McGee.⁵ Threshold levels were established in 1995 for eligible deepwater leases and are adjusted annually for inflation.⁶ For lease sales in 2004-2005, the threshold prices in late 2006 were \$41.39 per barrel for deepwater oil and \$6.90 per million Btu for deepwater natural gas. The late 2006 threshold prices are lower for earlier lease sales. The market price for oil in late 2006 was above the threshold, so leases with thresholds were paying royalties on oil production. Some gas lease thresholds were below the late-2006 market price and others slightly above.⁷

DWRRA provides for “fields”⁸ with eligible leases to receive royalty suspensions for specific volumes of production at specified depths (**Table 1**). The royalty relief was contingent on the lease being part of a non-producing field before DWRRA was enacted.⁹ Eligible leases are those issued in the GOM between 1996 and 2000 at depths greater than 200 meters located wholly west of 87 degrees, 30 minutes West longitude. The lease is offered subject to a lease suspension volume — the amount of oil and gas that can be produced royalty-free. Eligible leases do not require an economic evaluation to be granted royalty relief.

Also within the Deepwater category are “Pre-Act” leases (lease sales held before November 1995), Post-2000 leases (lease sales held after November 2000), and leases classified as Expansion Projects, all of which can qualify for royalty relief under DWRRA

³ A description of MMS royalty relief programs is available at [<http://www.gomr.mms.gov/homepg/offshore/royrelief.html>]. A more detailed analysis of the royalty relief programs is contained in a Department of the Interior, MMS, report: *Guidelines for the Application, Review, Approval, and Administration of the Deepwater Royalty Relief Program for Pre-Act Leases and Post-2000 Leases*, Appendix 1 to NTL No. 2002-No. 2, February 2002.

⁴ Letter to House Committee on Government Reform, by Stephen Lowey of Lowey Dannenberg Bemporad & Selinger, P.C., Re: Gulf of Mexico defective deep water drilling leases, Oct. 31, 2006.

⁵ For more details on this case, see CRS Report RL33404, *Offshore Oil and Gas Development: Legal Framework*, by Adam Vann.

⁶ Price threshold levels for deepwater oil and gas can be found on the MMS website at [<http://www.gomr.mms.gov/homepg/offshore/royrelief.html>].

⁷ See the MMS website at [<http://www.mms.gov/econ/PDFs/currentkick-outsNOV-2006.pdf>].

⁸ A *field* is defined as an area consisting of a single reservoir or multiple reservoirs with the same geological structure or stratigraphic trapping condition and may contain more than one lease.

⁹ The MMS rule pertaining to royalty relief for each field as opposed to each lease was challenged in district court in Louisiana in 2003. The court ruled in favor of the lessees (and was upheld by the Court of Appeals), allowing royalty relief to apply to individual leases rather than fields (reported at 385 F. 3rd 884, 5th Circuit Court).

with an application demonstrating economic need. In addition, “Post 2000” leases or “royalty suspension leases” may be offered with an automatic royalty suspension volume on a “lease,” rather than field, basis. The Energy Policy Act of 2005 (EPACT-05, P.L. 109-58) expanded the “post-Act” royalty relief program by providing automatic minimum suspension volumes at specified depths in each lease.

A shallow-water, deep-gas incentive became effective March 1, 2004.¹⁰ The rule suspends the royalty on gas from wells with at least 15,000 feet “true vertical depth” located in waters less than 200 meters deep in the central and western GOM. It also provides a royalty suspension supplement for drilling “certain” unsuccessful deep wells in that region. The gas price threshold for discontinuing this royalty relief was \$9.91 per million Btu in late 2006 for 2004-2005 lease sales.¹¹ The shallow-water, deep-gas incentive was expanded by EPACT-05 to require royalty suspension volumes of at least 35 billion cubic feet of natural gas produced in waters less than 400 meters deep from ultra-deep wells (20,000 feet true vertical depth), leases that have previously produced from wells at 15,000 feet deep, or “sidetrack wells.”

Table 1. Minimum Royalty Suspension Volumes Per Lease

DWRRA 1995 (P.L.104-58)		Energy Policy Act 2005 (P.L. 109-58)	
Depth	Barrels of Oil Equivalent (in millions)	Depth	Barrels of Oil Equivalent (in millions)
200-400 meters	17.5	—	—
400-800 meters	52.5	400-800 meters	5.0
> 800 meters	87.5	800-1,600 meters	9.0
—	—	1,600-2,000 meters	12.0
		> 2,000 meters	16.0

Source: P.L.104-58 and P.L.109-58.

Proponents of these royalty relief measures contend that without incentives, little GOM deepwater or shallow-water, deep-gas drilling would have taken place, because these areas would not have been competitive with foreign offshore prospects (e.g., Brazil and West Africa). Increased GOM drilling enhances U.S. energy security, proponents contend. Critics, during the debate on royalty relief that preceded passage of EPACT-05, charged that the government would forfeit millions of dollars through the subsidy and that drilling costs were already coming down as a result of advances in technology, thus making many deepwater lease tracts economical. According to MMS, deepwater drilling in the Gulf of Mexico has benefitted from a combination of improved technology, higher prices, and royalty reductions.¹²

¹⁰ 69 *Federal Register* 3492, Jan. 26, 2004.

¹¹ See the MMS website at [<http://www.mms.gov/econ/PDFs/currentkick-outsNOV-2006.pdf>].

¹² *Deepwater Gulf of Mexico 2006: America's Expanding Frontier*, OCS Report MMS 2006-022, U.S. Department of the Interior, May 2006.

Deepwater Development

A significant amount of activity is taking place in deepwater GOM. Out of 8,221 active offshore oil and gas leases, 54% are in deep water. Interest surged after enactment of DWRRA, with 3,000 deepwater leases bid between 1996 and 1999.¹³ Deepwater oil production rose from 42 million barrels in 1994 to 348 million barrels in 2004. Natural gas production increased dramatically as well. Production went from 159 billion cubic feet in 1994 to 1.4 trillion cubic feet in 2004. Within the past two years, there was a 37% increase in the number of producing projects.

Deepwater development, however, is facing major challenges. The objective of many oil and gas firms to build large inventories of deepwater leases and the limited number of rigs available to drill have led to a decline in the ratio of wells drilled to the number of leases issued since 1994. Currently, about 8% of the DWRRA-eligible leases issued between 1996 and 2000 have been drilled, and only a few are in production. In 2004, of the 1,667 leases producing in the GOM, 30 qualified as eligible leases under DWRRA. Since 2004, oil and gas prices rose above the price thresholds, and full payment of royalties became due on 10 of those leases that were issued in 1996, 1997, and 2000. The other 20 were issued in 1998 and 1999 without price thresholds.

MMS maintains that the future of deepwater production looks bright. Proved oil and gas reserve and resource estimates have more than doubled since 2000 (**Table 2**), discoveries are taking place in much deeper waters since 2000, and development time decreased from 10 years in the mid-1990s to 7 years in 2006. Although DWRRA spurred a surge of interest in deepwater oil and gas development, major production directly related to the act's incentives has yet to be realized. For leases containing price thresholds, relatively little royalty relief has been granted.

Table 2. Deepwater Proved Reserves and Resources
(in million barrels of oil equivalent)

Year	Proved Reserves	Proved and Unproved Resources and Industry Discoveries
2000	4,015	8,622
2002	4,385	12,871
2004	6,702	15,573
2006	9,435	18,531

Source: DOI, MMS, OCS Report MMS 2006-02.

Congressional Concerns

Controversy over royalty relief currently focuses on the lack of price thresholds in OCS lease sales held in 1998 and 1999. Without the price thresholds, deepwater producers continued to benefit from royalty relief even as oil prices hit record levels.

¹³ Ibid., Fig. 52.

How these price thresholds were omitted is the subject of ongoing congressional and administrative investigations. According to the Minerals Management Service, although the Secretary of the Interior is not required to impose price thresholds in each lease (but has the discretion to do so), all lease sales held since the enactment of DWRRA included price thresholds except those held in 1998 and 1999. The MMS and the Government Accountability Office (GAO), estimate that this error could cost the federal government at least \$10 billion. The MMS estimated that about \$956 million in royalty revenue was foregone through FY2006. Annually, the MMS collects about \$10 billion in revenues from oil and gas leases on federal lands.

The policy concern for some is whether, and if so how, to amend the 1998 and 1999 leases to include price thresholds. Some argue that modifications to the leases should be retroactive to capture past as well as future revenues from deepwater oil and gas production. Others in Congress argue that any mandatory modification of the leases might be a breach of contract or unconstitutional, and would be contested in court. Another legislative possibility is to enact incentives, such as prohibiting lessees from bidding on future leases to induce holders of 1998-1999 leases to accept price thresholds. MMS has initiated efforts to have lessees voluntarily modify their leases to include price thresholds going forward from October 2006. In December 2006, five companies holding about 25% of the leases have agreed to the MMS initiative.¹⁴ Of the 1,032 deepwater leases issued in 1998 and 1999, 526 are active (under exploration or development) and 19 are currently producing. While prices remain at the current level, the only volumes subject to royalty relief will come from deepwater leases that were awarded in 1998 and 1999 without price thresholds and from shallow-water, deep-gas leases.

Legislative Actions

At the start of the 110th Congress, the House majority leadership has made the issue of royalty relief one of its top priorities, including it in its “100-hour agenda.” On January 12, 2007, Representatives Rahall and Rangle introduced H.R. 6, cited as the Creating Long-Term Energy Alternatives for the Nation Act of 2007. Under Title II, this legislation would, among other things, require that the Secretary of the Interior accept a lessee’s request to modify those leases without price thresholds (“covered leases”) to include price thresholds. The bill would not make available to lessees holding “covered leases” new oil and gas leases in the Gulf of Mexico unless current leases included price thresholds or the lessee agreed to pay a newly established “conservation of resources fee”¹⁵ or an agreement to pay such fees. Covered leases would not be transferrable unless they were modified to include price thresholds or newly established fees are paid or an agreement is made to pay the fees. H.R. 6 would repeal royalty relief provisions (sections 344 and 345) related to shallow water deep gas and deepwater production in the Energy Policy Act of 2005. The bill would also “reaffirm” the Secretary’s authority to impose a price threshold in certain leases. The bill was referred to the Committees on Ways and Means, Natural Resources, Budget, and Rules.

¹⁴ Companies include BP Plc, ConocoPhillips, Marathon Oil, Royal Dutch Shell, and Walter Oil and Gas Corp.

¹⁵ The fee would be \$9/barrel oil and \$1.25/million Btu natural gas on producing leases and \$3.75/acre annually on non-producing leases.