Overview of the Federal Offshore Royalty Relief Program

This report provides a brief overview of the offshore royalty relief program operated by the Department of the Interior's Minerals Management Service. It describes the basics of revenue collection and royalty payments as well as provisions under which certain oil and natural gas leases are exempt from royalty obligations. Questions or comments on this article may be directed to Erin Mastrangelo at Erin.Mastrangelo@eia.doe.gov or (202)586-6201.

In order to explore and develop offshore oil and natural gas resources, the Department of Interior's Minerals Management Service (MMS) awards leases to interested parties through a competitive bidding process. The high bidders must pay a cash bonus bid and then pay an annual rental fee to retain the right to develop the resources in that area. The rental fee is eventually replaced by minimum or actual royalty payments if the lease produces natural gas or oil. Total revenue collected by MMS each year fluctuates based on market prices, amount of production, location of production, distribution of production by type of fiscal terms in the lease, and number of lease sales. According to MMS data, total revenue from Federal offshore areas averaged about $5-7 billion in recent years.

Background on Royalty Relief

Royalties are payments to the MMS based on the value at the lease of any natural gas and oil actually produced. The royalty due the Federal Government may be taken in dollar value or in produced oil or natural gas, known as Royalty-in-Kind (RIK). Royalty taken in value is a monetary payment by the lessee, while RIK is a payment by the lessee in product itself.

Under the Outer Continental Shelf Lands Act, as amended in 1978, and under the provisions of the Deepwater Royalty Relief Act of 1995 (DWRRA), relief from royalty obligations may be granted to increase production or to encourage development on certain producing or non-producing leases. Royalty relief may be applied to either active leases or to newly-offered leases directly in their fiscal terms. The primary MMS royalty relief programs include those that were required for Gulf of Mexico deepwater leases (located in water depth greater than 200 meters or 656 feet) issued in 1996-2000 under the DWRRA. After certain sunset provisions in the DWRRA expired in November 2000, the MMS adopted a program that provides lower amounts of royalty relief to each lease. The Federal Government has also offered royalty relief incentives since 2001 for natural gas production from certain deep wells in shallow water (15,000 feet total well depth) for newly issued leases, and commenced a similar program for active shallow water leases where drilling started on or after March 26, 2003.

The Energy Information Administration estimates there were 18,812 billion cubic feet (Bcf) of dry natural gas proved reserves and 4,144 million barrels of crude oil proved reserves in the Federal Gulf of Mexico as of the end of 2004. About 45 percent of the natural gas proved reserves and 79 percent of the crude oil proved reserves in the Federal Gulf of Mexico are in deepwater areas, although not all of this is subject to royalty relief. The following sections highlight provisions in several rules and regulations under which oil and natural gas production volumes may receive royalty relief.

Deepwater Oil and Natural Gas Royalty Relief Provisions
Provisions for deepwater royalty relief are applied based on location and the issue date of the lease. All leases must be located in water 200 meters or deeper in the Gulf of Mexico, west of the Florida/Alabama boundary.

Leases issued prior to DWRRA (November 28, 1995) are called Pre-Act Leases.

- The amount of relief is determined by an economic evaluation during which the applicant must prove that drilling is not economically feasible without the relief.
- Royalty suspension volumes are established for the field as a whole (not single leases) based on water depth for "new production."

Leases issued under sales held between November 28, 1995, and November 28, 2000, are called Eligible Leases.

- Relief does not require an economic evaluation. Automatic royalty suspension volumes are established for the lease based on water depth. The royalty suspension volumes by lease are as follows[1]:
  (1) 200 to 400 meters (656 to 1,312 feet)......................... 17.5 MMBOE (98.4 Bcf)
  (2) 400 to 800 meters (1,312 to 2,625 feet).................... 52.5 MMBOE (295.1 Bcf)
  (3) 800 meters or more. (> 2,625 feet).......................... 87.5 MMBOE (491.8 Bcf)
- For additional provisions: http://www.gomr.mms.gov/homepg/offshore/fr260.pdf

Leases issued in sales after November 28, 2000, with specific royalty suspension volumes determined by MMS outlined in the individual *Notice of OCS Lease* sales, are called Royalty Suspension Leases.

- After the DWRRA provisions expired, MMS changed the program so that royalty suspension volumes are granted on a lease-specific basis.
- The lessee can apply for supplemental royalty relief with an economic evaluation.
- The lease may receive royalty relief even if other leases in the same field are already producing.
- Section 345 of the Energy Policy Act of 2005 provides minimum production volumes by lease for which royalty payment would be suspended for oil and natural gas production in water depths greater than 400 meters. The minimum production volumes are:
  (1) 400 to 800 meters (1,312 to 2,625 feet) ……………..… 5 MMBOE (28.1 Bcf)
  (2) 800 to 1,600 meters (2,625 to 5,249 feet).……..... ……9 MMBOE (50.6 Bcf)
  (3) 1,600 to 2,000 meters (5,249 to 6,562 feet)………..… 12 MMBOE (67.4 Bcf)
  (4) 2,000 meters or more (> 6,562 feet) ..……………..…. 16 MMBOE (89.9 Bcf)

[1] The natural gas volumes were calculated based on the following equivalence: 1 million barrels of oil equivalent (MMBOE) equals 5.62 billion cubic feet (Bcf).

Deep Gas in Shallow Water Royalty Relief Provisions

Similar to deepwater leases, royalty relief incentives have been offered since 2001 to encourage production from wells drilled for deep natural gas in shallow water (less than 200 meters or 656 feet water depth, but greater than 4,572 meters or 15,000 feet total depth). These provisions as outlined in the individual lease instruments only applied to *new* leases and leases issued prior to 2001 meeting specific criteria.

In 2004, MMS published a final rule on deep gas in shallow water to provide incentives for *existing* leases (issued prior to 2001) and leases issued after 2001 if the lessee chooses to replace the lease-specific provisions with the incentive terms in this rule. Under this rule, a well is eligible for royalty suspension if drilling started on or after March 26, 2003, and production begins on or before May 3, 2009.[2] Royalty suspension volumes by lease are:

(1) 15,000 to 18,000 feet……………………….................15 Bcf
(2) 18,000 feet or greater……………………… ....25 Bcf
(3) An unsuccessful well at 18,000 feet or greater…………..5 Bcf (supplement)[3]

On August 8, 2005, President Bush signed into law the Energy Policy Act of 2005, which includes a provision to increase incentives on production of deep natural gas in the shallow waters of the Gulf of Mexico. Section 344 of this new legislation expands the royalty relief program for deep wells to include production of natural gas from deep wells on leases issued in waters more than 200 meters, but less than 400 meters. It also authorizes royalty relief of at least 35 Bcf for ultra-deep wells (deeper than 20,000 feet subsea) drilled on certain shallow water leases. Production from water depths over 400 meters is covered in the deepwater provisions mentioned above.

In summary, oil and natural gas leases in the Gulf of Mexico located west of the Florida/Alabama boundary may qualify for royalty relief if production occurs in waters greater than 200 meters (656 feet) deep or from wells greater than 15,000 feet total depth. The decision to suspend royalty obligations for these leases depends on when MMS issued the lease as well as economic considerations.

Price Thresholds for Royalty Relief

Section 302 of the DWRRA directs MMS to retract royalty relief when prices exceed specified limits. These price thresholds exist for Pre-Act, Eligible, and Royalty Suspension Leases, although the price thresholds for the latter category are determined somewhat differently. When the arithmetic average of the daily closing prices on the New York Mercantile Exchange (NYMEX) for oil and natural gas in the previous calendar year exceeds the threshold price, MMS is directed to 1) retract royalty relief for volumes produced in that year, and 2) count that production against any suspension volume of royalty relief remaining on the lease. The price thresholds for deepwater natural gas for leases issued in 1996 through August 2005 are outlined in Table 1.

[2] March 26, 2003, is the date of the proposed rule, and May 3, 2009, is 5 years from the effective date of the final rule.

[3] A royalty suspension supplement is applied to future lease production of natural gas and oil from any depth.

Similar tables may be obtained from MMS for shallow water deep gas and deepwater oil. For leases that have been issued after the Energy Policy Act of 2005 (August 2005), the price threshold is at the discretion of the Secretary of Interior.

Table 1: Price Thresholds for Deepwater Natural Gas Royalty Relief, 1994 - 2005

Calendar Year	Applicable Annual Inflation Rate	Gas Price Threshold (Dollars per Million British Thermal Units) for Leases Issued in Sales Held in:			Actual Prices (Dollars per Million Btu)
		1996, 1997, 2000, 2002, 2003 and March 2004*	2001	August 2004 – August 2005	Average NYMEX Nearby Delivery
1994	--	$3.50	--	--	--
1995	2.2%	$3.58	--	--	--
1996	1.9%	$3.65	--	--	$2.50
1997	2.0%	$3.72	--	--	$2.42
1998	1.2%	$3.76	--	--	$2.16
1999	1.4%	$3.81	--	--	$2.31
2000	2.3%	$3.90	$3.50	--	**$4.33**
2001	2.2%	$3.99	$3.58	--	**$4.06**
2002	1.2%	$4.03	$3.62	--	$3.36
2003	2.0%	$4.12	$3.69	--	**$5.49**
2004	2.6%	$4.22	$3.79	$6.50	**$6.18**
2005	2.7%	$4.34	$3.89	$6.68	**$8.96**
NYMEX Calendar Year 2005 Average					$8.96
Gap Between Threshold and Price Average		$4.63	$5.07	$2.29	--

*These thresholds also apply to Pre-Act Leases with discretionary deepwater royalty relief. However, these thresholds do not apply to Eligible Leases issued in sales held in 1998 and 1999.
Note: Bolded prices are for these years in which the average NYMEX price exceeded at least one of the threshold prices.
Source: Minerals Management Service, http://www.mms.gov/econ/DWRRAPrice1.htm

According to Table 1, provided by MMS, the NYMEX average natural gas price was above at least one of the corresponding price thresholds in the years 2000, 2001, 2003, 2004, and 2005 (the average NYMEX Price is indicated in bold for these years). According to the DWRRA, royalty relief is denied for the corresponding leases in these years. The bottom of Table 1 provides an example of the gap between the NYMEX Calendar Year price average and the price threshold for different leases depending on when they were issued. For leases issued in 1996, 1997, 2000 2002, 2003, and March

2004, the average NYMEX nearby delivery price in 2005 exceeded the price threshold $4.63 per million Btu. For leases issued in 2001, the NYMEX price exceeds the price threshold by $5.07 per million Btu and for leases issued between August 2004 and August 2005, the NYMEX price exceeds the price threshold by $2.29 per million Btu.

Two major issues concerning royalty relief price thresholds are being examined by Congress and the U.S. courts. The first issue is that a price threshold was not included in leases issued in sales held in 1998 and 1999. This means that companies holding these leases are not subject to royalty payments in subsequent producing years, despite high natural gas prices. During a March 1, 2006, hearing before the U.S. House Committee on Government Reform, Subcommittee on Energy and Resources, MMS was not able to explain why price threshold language was excluded in these leases but included in surrounding years (1996, 1997, and 2000). At the request of certain members of Congress, the U.S. General Accountability Office is currently inquiring into why certain price threshold provisions in the 1995 DWRRA were not implemented consistently.[4]

In a related matter, Kerr-McGee Oil and Gas Corporation filed action against the U.S. Department of the Interior on March 17, 2006, challenging the Department's authority to impose price thresholds on royalty relief for leases issued between 1996 and 2000.[5] In the suit, Kerr-McGee argues that MMS regulations grant leaseholders a statutory minimum volume of production from each lease that is exempt from royalty payments. According to Kerr-McGee, there is no authority to impose limits such as price thresholds on this amount, and as a result, Kerr-McGee does not have to pay royalty payments during that period. The case is now before the U.S. District Court of Louisiana.

Other Types of Royalty Relief

End-of-Life Royalty Relief: The DWRRA also established terms and conditions for granting royalty relief to certain "end-of-life" leases. Producing leases may be offered a reduced royalty rate subject to certain stipulations regardless of water depth when it can be shown that the economic limit has been reached and relief will result in "increased production."

Special Case Relief: The DWRRA also allows for current projects to apply for relief if formal programs fail to offer enough incentives for increased production. There is no formal structure or program for this "special case" relief, and it is different than applying for discretionary relief under deepwater, deep gas, or end-of-life royalty relief programs.

[4] Intelligence Press Inc., "GAO Says Royalty Relief to Cost At Least $20B, and Much More if Producer Wins Lawsuit," *Natural Gas Intelligence's Daily Gas Price Index* (March 30, 2006). Platts, "GAO: Failure to Limit Royalty Relief Could Cost Treasury $10 Billion," *Gas Daily* (March 30, 2006).

[5] Intelligence Press Inc., "Kerr-McGee Files Against Interior Over Royalties; Government Has $500M at Stake," *Natural Gas Intelligence's Daily Gas Price Index* (March 21, 2006). Platts, "Kerr-McGee Sues Interior Department Over Disputed Gulf Royalty Payments," *Gas Daily* (March 20, 2006).

Effect of Royalty Relief Incentives
According to an MMS report, 3,401 deepwater leases were sold under the DWRRA, 1,400 more than would have been sold during the 1996-2000 period absent the DWRRA.[6] Moreover, the added cash bonus bids and rentals collected on these 3,401 tracts totaled about $2 billion. Because there is a lag period from lease acquisition to production, the impact of DWRRA on deepwater production appeared later, according to another MMS report.[7] The volume of natural gas subject to the DWRRA increased sharply in 2002 when it reached over 500 million cubic feet per day or 14 percent of total natural gas production from water depths greater than 200 meters.

[6] U.S. Department of the Interior, Minerals Management Service, *Effects of Royalty Incentives for Gulf of Mexico Oil and Gas Leases*, OCS Study MMS2004-077 (2005).

[7] Minerals Management Service, *Deepwater Gulf of Mexico 2004: America's Expanding Frontier* (May 2004). http://www.gomr.mms.gov/homepg/whatsnew/techann/2004/2004-021.pdf