

Testimony Before the (

Before the Committee on Energy and Natural Resources, United States Senate

For Release on Delivery Expected at 9:30 a.m. EST Thursday, January 18, 2007

OIL AND GAS ROYALTIES

Royalty Relief Will Likely Cost the Government Billions, but the Final Costs Have Yet to Be Determined

Statement of Mark E. Gaffigan, Acting Director Natural Resources and Environment





Highlights of GAO-07-369T, a testimony before the Committee on Energy and Natural Resources, United States Senate

Why GAO Did This Study

Oil and gas production from federal lands and waters is vital to meeting the nation's energy needs. As such, oil and gas companies lease federal lands and waters and pay royalties to the federal government based on a percentage of the oil and gas that they produce. The Minerals Management Service (MMS), an agency in the Department of the Interior, is responsible for collecting royalties from these leases. In order to promote oil and gas production, the federal government at times and in specific cases has provided "royalty relief," waiving or reducing the royalties that companies must pay. However, as production from these leases grows and oil and gas prices have risen since a major 1995 royalty relief act, questions have emerged about the financial impacts of royalty relief.

Based on our work to date, GAO's statement addresses (1) the likely fiscal impacts of royalty relief on leases issued under the Outer Continental Shelf Deep Water Royalty Relief Act of 1995 and (2) other authority for granting royalty relief that could further impact future royalty revenue.

To address these issues our ongoing work has included, among other things, analyses of key production data maintained by MMS; and reviews of appropriate portions of the Outer Continental Shelf Deep Water Royalty Relief Act of 1995, the Energy Policy Act of 2005, and Interior's regulations on royalty relief.

www.gao.gov/cgi-bin/getrpt?GAO-07-369T.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Mark Gaffigan at 202-512-3841 or gaffiganm@gao.gov.

OIL AND GAS ROYALTIES

Royalty Relief Will Likely Cost the Government Billions, but the Final Costs Have Yet to Be Determined

What GAO Found

While precise estimates remain elusive at this time, our work to date shows that royalty relief under the Outer Continental Shelf Deep Water Royalty Relief Act of 1995 will likely cost billions of dollars in forgone royalty revenue—at least \$1 billion of which has already been lost. In October 2004, MMS estimated that forgone royalties on deep water leases issued under the act from 1996 through 2000 could be as high as \$80 billion. However, there is much uncertainty in these estimates. This uncertainty stems from ongoing legal challenges and other factors that make it unclear how many leases will ultimately receive royalty relief and the inherent complexity in forecasting future royalties. We are currently assessing MMS's estimate in light of changing oil and gas prices, revised estimates of future oil and gas production, and other factors.

Additional royalty relief that can further impact future royalty revenues is currently provided under the Secretary of the Interior's discretionary authority and the Energy Policy Act of 2005. Discretionary programs include royalty relief for certain deep water leases issued after 2000, certain deep gas wells drilled in shallow waters, and wells nearing the end of their productive lives. The Energy Policy Act of 2005 mandates relief for leases issued in the Gulf of Mexico during the five years following the act's passage, provides relief for some gas wells that would not have previously qualified for royalty relief, and addresses relief in certain areas of Alaska.



Source: Minerals Management Service, the Department of the Interior

Mr. Chairman and Members of the Committee:

We appreciate the opportunity to participate in the Committee's hearing on federal royalties obtained from the sale of oil and natural gas produced from federal lands and waters. Oil and gas production from federal lands and waters is vital to meeting the nation's energy needs, supplying about 35 percent of all the oil and about 25 percent of all the natural gas produced in the United States in fiscal year 2005. Oil and gas companies that lease federal lands and waters agree to pay the federal government royalties on the resources extracted and produced from the lease. In fiscal year 2006, oil and gas companies received over \$77 billion from the sale of oil and gas produced from federal lands and waters, and the Minerals Management Service (MMS), the Department of the Interior's (Interior) agency responsible for collecting royalties, reported that these companies paid the federal government about \$10 billion in oil and gas royalties. Clearly, such large and financially significant resources must be carefully developed and managed so that our nation's rising energy needs are met while at the same time the American people are ensured of receiving a fair rate of return on publicly owned resources, especially in light of the nation's current and long-range fiscal challenges.

In order to promote oil and gas production, the federal government has at times and in specific cases provided "royalty relief"-the waiver or reduction of royalties that companies would otherwise be obligated to pay. When the government grants royalty relief, it typically specifies the amounts of oil and gas production that will be exempt from royalties and may also specify that royalty relief is applicable only if oil and gas prices remain below certain levels, known as "price thresholds." For example, the Outer Continental Shelf Deep Water Royalty Relief Act of 1995, also known as the Deep Water Royalty Relief Act (DWRRA), mandated royalty relief for oil and gas leases issued in the deep waters of the Gulf of Mexico from 1996 to 2000. These deep water regions are particularly costly to explore and develop. However, as production from these leases has grown, and as oil and gas prices have risen far above 1995 levels, serious questions have been raised about the extent to which taxpayer interests have been protected. These concerns were brought into stark relief when it was learned that MMS issued leases in 1998 and 1999 that failed to include in the lease contracts the price thresholds above which royalty relief would no longer be applicable, making large volumes of oil and natural gas exempt from royalties and significantly affecting the amount of royalty revenues collected by the federal government. Although leases are no longer issued under DWRRA, further royalty relief is currently available

under other legislation and programs, raising the prospect that the federal government may be forgoing additional royalty revenues.

Recently, congressional committees, the Department of the Interior's Office of the Inspector General,¹ public interest groups, and the press have questioned whether our nation's oil and gas royalties are being properly managed. Many of these entities have also amplified questions about whether the oil and gas industry is paying its fair share of royalties, especially in light of rapidly rising oil and gas prices, record industry profits, and a highly constrained federal budgetary environment. GAO has expressed similar concerns, and the U.S. Comptroller General has highlighted royalty relief as an area needing additional oversight by the 110th Congress.²

You asked us today to address royalty relief issues based on our ongoing work for this Committee. Specifically, my testimony (1) discusses the likely fiscal impacts of royalty relief for leases issued under the Deep Water Royalty Relief Act of 1995 and (2) describes other authorities for granting royalty relief that could further impact future royalty collections. To address these issues, our ongoing work has included interviews of MMS personnel in the Economics Division in Herndon, Virginia and the Gulf of Mexico OCS Region in New Orleans, Louisiana. We have collected and are analyzing key production data maintained by MMS and are examining numerous documents and studies. We are also reviewing appropriate portions of the Deep Water Royalty Relief Act of 1995, the Energy Policy Act of 2005, and Interior's royalty relief regulations. Our work follows the issuance of our report last year explaining why oil and gas royalties have not risen at the same pace as rising oil and gas prices.³ In addition, we are conducting other work for your Committee on federal oil and gas royalty rates and the diligent development of federal oil and gas resources. Our work is being done in accordance with generally accepted government auditing standards.

¹*Minerals Management Service's Compliance Review Process*, Department of the Interior Office of the Inspector General, Report No. C-IN-MMS-0006-2006 (Washington, D.C.: December, 2006).

²Suggested Areas for Oversight for the 110th Congress, GAO-07-235R (Washington, D.C.: November 17, 2006).

³Royalty Revenues: Total Revenues Have Not Increased at the Same Pace as Rising Natural Gas Prices due to Decreasing Production Sold, GAO-06-786BR (Washington, D.C.: June 21, 2006).

In summary, we have found the following:

- Our work to date shows that the likely fiscal impact of leases issued under the Deep Water Royalty Relief Act of 1995 is in the billions of dollars in lost royalty revenues, but precise estimates of the costs are not possible at this time for several reasons. First, MMS's failure to include price thresholds for leases issued in 1998 and 1999 along with current attempts to renegotiate these leases have created uncertainty about which leases will ultimately receive relief. MMS estimates that the failure to include these price thresholds during a period of higher oil and gas prices could cost up to \$10 billion in forgone royalty revenue. To date, about \$1 billion has already been lost. In addition, a recent lawsuit questions whether MMS has the authority to set price thresholds for the leases issued from 1996 through 2000. Depending on the outcome of this litigation, MMS preliminary estimates indicate that this could result in up to \$60 billion in additional forgone royalty revenue. Beyond the problematic implementation of the royalty relief provisions, assessing the ultimate fiscal impact of royalty relief is a complex task, involving inherent uncertainty about future production and prices. We are currently assessing MMS's estimates of royalty relief costs in light of two years worth of additional production data and several other variables, including changing oil and gas prices, revised estimates of the amount of oil and gas that these leases are expected to produce, the availability of deep water rigs to drill untested leases, and the present value of these royalty payments. In addition, any loss in royalty revenues may be partially mitigated by the potential benefits of royalty relief, such as increased production or increased fees that companies are willing to pay the federal government to acquire these leases.
- Additional royalty relief, potentially affecting future federal royalty collection, is offered under other programs and legislation. More specifically, royalty relief can be provided under two existing authorities: (1) the Secretary of the Interior's discretionary authority and (2) the Energy Policy Act of 2005. MMS currently administers several royalty relief programs in the Gulf of Mexico under discretionary authority provided by the 1978 amendments to the Outer Continental Shelf Lands Act of 1953. These programs largely address royalty relief for certain leases issued in deep waters after 2000, certain deep gas wells drilled in shallow waters, and wells nearing the end of their productive lives. In addition, the Congress authorized additional royalty relief under provisions of the Energy Policy Act of 2005. Certain provisions in the Energy Policy Act of 2005 are similar to those in DWRRA in that they mandate royalty relief for leases issued in the Gulf of Mexico during the five years following the act's passage. The Energy Policy Act of 2005 also

extends royalty relief to gas produced in the Gulf of Mexico from certain new wells that previously would not have qualified for royalty relief. Other provisions in the act address royalty relief in areas of Alaska where there currently is little or no production.

Background

The Department of the Interior (Interior), created by the Congress in 1849, oversees and manages the nation's publicly owned natural resources, including parks, wildlife habitat, and crude oil and natural gas resources on over 500 million acres onshore and in the waters of the Outer Continental Shelf. In this capacity, Interior is authorized to lease federal oil and gas resources and to collect the royalties associated with their production. Onshore, Interior's Bureau of Land Management is responsible for leasing federal oil and natural gas resources, whereas offshore, MMS has leasing authority. To lease lands or waters for oil and gas exploration, companies generally must first pay the federal government a sum of money that is determined through a competitive auction. This money is called a bonus bid. After the lease is awarded and production begins, the companies must also pay royalties to MMS based on a percentage of the cash value of the oil and natural gas produced and sold.⁴ Royalty rates for onshore leases are generally 12 and a half percent whereas offshore, they range from 12 and a half percent for water depths greater than 400 meters to 16 and two-thirds percent for water depths less than 400 meters. However, the Secretary of the Interior recently announced plans to raise the royalty rate to 16 and two-thirds percent for most future leases issued in waters deeper than 400 meters. MMS also has the option of taking a percentage of the actual oil and natural gas produced, referred to as "taking royalties in kind," and selling it themselves or using it for other purposes, such as filling the nation's Strategic Petroleum Reserve.

⁴Specifically, royalties are computed as a percentage of the monies received from the sale of oil and gas, with the total federal royalty revenue equal to the volume sold multiplied by the sales price multiplied by the royalty rate.

The Deep Water Royalty Relief Act Will Likely Cost the Federal Government Billions of Dollars in Forgone Royalty Revenues, but Precise Estimates Remain Elusive	Based on our work to date, the Deep Water Royalty Relief Act (DWRRA) will likely cost the federal government billions of dollars in forgone royalties, but precise estimates of the costs are not possible at this time for several reasons. First, the failure of MMS to include price thresholds in the 1998 and 1999 leases and current attempts to renegotiate these leases has created uncertainty about which leases will ultimately receive relief. Second, a recent lawsuit is questioning whether MMS has the authority to set price thresholds for the leases issue from 1996 through 2000. The outcome of this litigation could dramatically affect the amount of forgone revenues. Finally, assessing the ultimate fiscal impact of royalty relief is an inherently complex task, involving uncertainty about future production and prices. In October 2004, MMS preliminarily estimated that the total costs of royalty relief for deep water leases issued under the act could be as high as \$80 billion, depending on which leases ultimately received relief. MMS made assumptions about several conditions when generating this estimate and these assumptions need to be updated in 2007 to more accurately portray potential losses. In addition, the costs of forgone royalties need to be measured against any potential benefits of royalty relief, including accelerated drilling and production of oil and gas resources, increased oil and gas production, and increased fees that companies are willing to pay through bonus bids for these leases.
Implementing Royalty Relief Has Been Problematic and Resulted In Unanticipated Costs	The Congress passed DWRRA in 1995, when oil and gas prices were low and production was declining both onshore and in the shallow waters of the Gulf of Mexico. The act contains provisions to encourage the exploration and development of oil and gas resources in waters deeper than 200 meters lying largely in the western and central planning areas of the Gulf of Mexico. The act mandates that royalty relief apply to leases issued in these waters during the five years following the act's passage— from November 28, 1995 through November 28, 2000. As a safeguard against giving away all royalties, two mechanisms are commonly used to ensure that royalty relief is limited and available only under certain conditions. The first mechanism limits royalty relief to specified volumes of oil and gas production called "royalty suspension volumes," which are dependent upon water depth. Royalty suspension volumes establish production thresholds above which royalty relief no longer applies. That is, once total production for a lease reaches the suspension volume, the lessee must begin paying royalties. Royalty suspension volumes are expressed in barrels of oil equivalent, which is a term that allows oil and gas companies to combine oil and gas volumes into a single measure, based on the relative amounts of energy they

contain.⁵ The royalty suspension volumes applicable under DWRRA are as follows: (1) not less than 17.5 million barrels of oil equivalent for leases in waters of 200 to 400 meters, (2) not less than 52.5 million barrels of oil equivalent for leases in waters of 400 to 800 meters, and (3) not less than 87.5 million barrels of oil equivalent for leases in waters greater than 800 meters. Hence, there are incentives to drill in increasingly deeper waters. Before 1994, companies drilled few wells in waters deeper than 500 meters. MMS attributes additional leasing and drilling in deep waters to the passage of these incentives but also cites other factors for increased activity, including improved three-dimensional seismic surveys, some key deep water discoveries, high deep water production rates, and the evolution of deep water development technology.

After the passage of DWRRA, uncertainty existed as to how royalty suspension volumes would apply. Interior officials employed with the department when DWRRA was passed said that they recommended to the Congress that the act should state that royalty suspension volumes apply to the production volume from an entire field. However, oil and gas companies paying royalties under the act interpreted the royalty suspension volumes as applying to individual leases within a field. This is important because an oil and gas field commonly consists of more than one lease, meaning that if royalty suspension volumes are set for each lease within a field rather than for the entire field, companies are likely to owe fewer royalties. For example, if a royalty suspension volume is based on an entire field composed of three leases, a company producing oil and gas from a 210 million barrel-oil field---where the royalty suspension volume is set at 100 million—would be obligated to pay royalties on 110 million barrels (210 minus 100). However, if the same 210-million barrel field had the same suspension volume of 100 million barrels applied to each of the three leases, and 70 million barrels were produced from each of the three leases, no royalties would be due because no lease would have exceeded its royalty suspension volume. After passage of the act, MMS implemented royalty relief on a field-basis and was sued by the industry. Interior lost the case in the Fifth Circuit Court of Appeals.⁶ In October 2004, MMS estimated that this decision will cost the federal government up to \$10 billion in forgone future royalty revenues.

⁵One barrel of oil equals one barrel of oil equivalent. One thousand cubic feet of gas (mcf) is converted to barrels of oil equivalent by dividing it by 5.62.

⁶Santa Fe Snyder Corp. v. Norton, 385 F.3d 884 (5th Cir. 2004).

A second mechanism that can be used to limit royalty relief and safeguard against giving away all royalties is the price threshold. A price threshold is the price of oil or gas above which royalty relief no longer applies. Hence, royalty relief is allowed only so long as oil and gas prices remain below a certain specified price. At the time of the passage of DWRRA, oil and gas prices were low—West Texas Intermediate, a key benchmark for domestic oil, was about \$18 per barrel, and the average U.S. wellhead price for natural gas was about \$1.60 per million British thermal units. In an attempt to balance the desire to encourage production and ensure a fair return to the American people, MMS relied on a provision in the act which states that royalties may be suspended based on the price of production from the lease. MMS then established price thresholds of \$28 per barrel for oil and \$3.50 per million British thermal units for gas, with adjustments each year since 1994 for inflation, that were to be applied to leases issued under DWRRA.

As with the application of royalty suspension volumes, problems arose with the application of these price thresholds. From 1996 through 2000 the five years after passage of DWRRA—MMS issued 3,401 leases under authority of the act. MMS included price thresholds in 2,370 leases issued in 1996, 1997, and 2000 but did not include price thresholds in 1,031 leases issued in 1998 and 1999. This failure to include price thresholds has been the subject of congressional hearings and investigations by Interior's Office of the Inspector General. In October 2004, MMS estimated that the cost of not including price thresholds on the 1998 and 1999 leases could be as high as \$10 billion. MMS also estimated that through 2006, about \$1 billion had already been lost. To stem further losses, MMS is currently attempting to renegotiate the leases issued in 1998 and 1999 with the oil and gas companies that hold them. To date, MMS has announced successful negotiations with five of the companies holding these leases and has either not negotiated or not successfully negotiated with 50 other companies.

In addition to forgone royalty revenues from leases issued in 1998 and 1999, leases issued under DWRRA in the other three years—1996, 1997, and 2000—are subject to losing royalty revenues due to legal challenges regarding price thresholds. In 2006, Kerr McGee Corporation sued MMS over the application of price thresholds to leases issued between November 28, 1995 and November 28, 2000, claiming that the act did not authorize Interior to apply price thresholds to those leases. ⁷ MMS

⁷Kerr-McGee (Andarko) suit 3/17/06, W.Dist. LA, CV06-0439LC

	estimated in October 2004 that if price thresholds are disallowed for the leases it issued in 1996, 1997, and 2000, an additional \$60 billion in royalty revenue could be lost.
Assessing the Fiscal Impact of Royalty Relief Is Inherently Complex	Trying to predict the fiscal impacts of royalty relief is a complex and time- consuming task involving considerable uncertainty. We reviewed MMS's 2004 estimates and concluded that they had followed standard engineering and financial practices and had generated the estimates in good faith. However, any analysis of forgone royalties involves estimating how much oil and gas will be produced in the future, when it will be produced, and at what prices. While there are standard engineering techniques for predicting oil and gas volumes that will eventually be recovered from a lease that is already producing, there is always some level of uncertainty involved. Predicting how much oil and gas will be recovered from leases that are capable of producing but not yet connected to production infrastructure is more challenging but certainly possible. Predicting production from leases not yet drilled is the most challenging aspect of such an analysis, but there are standard geological, engineering, and statistical methods that can shed light on what reasonably could be expected from the inventory of 1996 through 2000 leases. Overall, the volume of oil and gas that will ultimately be produced is highly dependent upon price and technology, with higher prices and better technology inducing greater exploration, and ultimately production, from the remaining leases. Future oil prices, however, are highly uncertain, as witnessed by the rapidly increasing oil and gas prices over the past several years. It is therefore prudent to assess anticipated royalty losses using a range of oil and gas prices rather than a single assumed price, as was used in the MMS estimate.
	To fully evaluate the impacts of royalty relief, one must consider the potential benefits in addition to the costs of lost royalty revenue. For

	example, a potential benefit of royalty relief is that it may encourage oil and gas exploration that might not otherwise occur. Successful exploration could result in the production of additional oil and gas, which would benefit the country by increasing domestic supplies and creating employment. While GAO has not assessed the potential benefits of royalty relief, others have, including the Congressional Budget Office (CBO) in 1994, and consultants under contract with MMS in 2004. ⁸ The CBO analysis was theoretical and forward-looking and concluded that the likely impact of royalty relief on new production would be very small and that the overall impact on federal royalty revenues was also likely to be small. However, CBO cautioned that the government could experience significant net losses if royalty relief was granted on leases that would have produced without the relief. The consultant's 2004 study stated that potential benefits could include increases in the number of leases sold, increases in the number of wells drilled and fields discovered, and increases in bonus bids—the amount of money that companies are willing to pay the federal government for acquiring leases. However, questions remain about the extent to which such benefits would offset the cost of lost royalty revenues.
Additional Programs and Legislation Authorize Royalty Relief, Potentially Affecting Future Federal Royalty Collection	Although leases are no longer issued under the Deep Water Royalty Relief Act of 1995, royalty relief can be provided under two existing authorities: (1) the Secretary of the Interior's discretionary authority and (2) the Energy Policy Act of 2005. The Outer Continental Shelf Lands Act of 1953, as amended, granted the Secretary of the Interior the discretionary authority to reduce or eliminate royalties for leases issued in the Gulf of Mexico in order to promote increased production. The Secretary's exercising of this authority can effectively relieve the oil and gas producer from paying royalties. MMS administers several royalty relief programs in the Gulf of Mexico under this discretionary authority. MMS intends for these discretionary programs to provide royalty relief for leases in deep waters that were issued after 2000, deep gas wells located in shallow waters, wells nearing the end of their productive lives, and special cases not covered by other programs. The Congress also authorized additional royalty relief under the Energy Policy Act of 2005, which mandates relief

⁸ Waiving Royalties for Producers of Oil and Gas from Deep Waters, Congressional Budget Office, May 1994. *Effects of Royalty Incentives for Gulf of Mexico Oil and Gas Leases*, P.K. Ashton, L.O. Upton III, and M.H. Rothkopf, under Contract No. 0103CT71722, U.S. Department of the Interior, Minerals Management Service, Economics Division, Herndon, VA, OCS Study 2004-077.

for leases issued in the Gulf of Mexico during the five years following the act's passage, provides relief for some wells that would not have previously qualified for royalty relief, and addresses relief in certain areas of Alaska.

MMS Currently Administers Royalty Relief Using Discretionary Authority	Under discretionary authority, MMS administers a deep-water royalty relief program for leases that it issued after 2000. This program is similar to the program that DWRRA mandated for leases issued during the five years following its passage (1996 through 2000) in that royalty relief is dependent upon water depth and applicable royalty suspension volumes. However, this current program is implemented solely under the discretion of MMS on a sale-by-sale basis. Unlike under DWRRA, the price thresholds and the water depths to which royalty relief applies vary somewhat by lease sale. For example, price thresholds for leases issued in 2001 were \$28 per barrel for oil and \$3.50 per million British thermal units for natural gas, with adjustments for inflation since 2000. As of March 2006, MMS reported that it issued 1,897 leases with royalty relief under this discretionary authority, but only 9 of these leases were producing.
	To encourage the drilling of deep gas wells in the shallow waters of the Gulf of Mexico, MMS implements another program, the "deep gas in shallow water" program, under final regulations it promulgated in January 2004. MMS initiated this program to encourage additional production after noting that gas production had been steadily declining since 1997. To qualify for royalty relief, wells must be drilled in less than 200 meters of water and must produce gas from intervals below 15,000 feet. The program exempts from royalties from 15 to 25 billion cubic feet of gas per well. According to MMS's analysis, these gas volumes approximate the smallest reservoirs that could be economically developed without the benefit of an existing platform and under full royalty rates. In 2001, MMS reported that the average size of 95 percent of the gas reservoirs below 15,000 feet was 15.7 billion cubic feet, effectively making nearly all of this production exempt from royalties had it been eligible for not royalty relief at that time. ⁹ This program also specifies a price threshold for natural gas of \$9.91 per million British thermal units in 2006, substantially exceeding the average NYMEX futures price of \$6.98 for 2006, and ensuring that all gas production is exempt from royalties in 2006.

 $^{^9{\}rm The}$ average of the other 5 percent was 105 billion cubic feet, and these reservoirs are within the highly productive Norphlet Trend.

	Finally, MMS administers two additional royalty relief programs in the Gulf of Mexico under its discretionary authority. One program applies to leases nearing the end of their productive lives. MMS intends that its provisions will encourage the production of low volumes of oil and gas that would not be economical without royalty relief. Lessees must apply for this program under existing regulations. MMS administers another program for special situations not covered by the other programs. Lessees who believe that other more formal programs do not provide adequate encouragement to increase production or development can request royalty relief by making their case and submitting the appropriate data. As of March 2006, no leases were receiving royalty relief under the "end of productive life," and only three leases were receiving royalty relief under the "special situations" programs.
The Energy Policy Act of 2005 Authorizes Additional Royalty Relief	The Congress authorized additional royalty relief under the Energy Policy Act of 2005. Royalty relief provisions are contained in three specific sections of the act, which in effect: (1) mandate royalty relief for deep water leases sold in the Gulf of Mexico during the five years following passage of the act, (2) extend royalty relief in the Gulf of Mexico to deep gas produced in waters of more than 200 meters and less than 400 meters, and (3) specify that royalty relief also applies to certain areas off the shore of Alaska. In the first two situations, the act specifies the amount of oil and/or gas production that would qualify for royalty relief and provides that the Secretary may make royalty relief dependent upon market prices.
	Section 345 of the Energy Policy Act of 2005 mandates royalty relief for leases located in deep waters in the central and western Gulf of Mexico sold during the five years after the act's passage. Similar to provisions in DWRRA, specific amounts of oil and gas are exempt from royalties due to royalty suspension volumes corresponding to the depth of water in which the leases are located. However, production volumes are smaller than those authorized under DWRRA, and this specific section of the Energy Policy Act clearly states that the Secretary may place limitations on royalty relief based on market prices. For the three sales that MMS conducted since the passage of the act, MMS included prices thresholds establishing the prices above which royalty relief would no longer apply. These price thresholds were \$39 per barrel for oil and \$6.50 per million British thermal units for gas, adjusted upward for inflation that has occurred since 2004. The royalty-free amounts, referred to as royalty suspension volumes, are as follows: 5 million barrels of oil equivalent per lease between 400 and 800 meters; 9 million barrels of oil equivalent per lease between 800 and 1,600 meters; 12 million barrels of oil equivalent per

lease between 1,600 and 2,000 meters; and 16 million barrels of oil equivalent per lease in water greater than 2,000 meters. MMS has already issued 1,105 leases under this section of the act.

Section 344 of the Energy Policy Act of 2005 contains provisions that authorize royalty relief for deep gas wells in additional waters of the Gulf of Mexico that effectively expands the existing royalty-relief program for "deep gas in shallow water" that MMS administers under pre-existing regulations. The existing program has now expanded from waters less than 200 meters to waters less than 400 meters. A provision within the act exempts from royalties gas that is produced from intervals in a well below 15,000 feet so long as the well is located in waters of the specified depth. Although the act does not specifically cite the amount of gas to be exempt from royalties, it provides that this amount should not be less than the existing program, which currently ranges from 15 to 25 billion cubic feet. The act also contains an additional incentive that could encourage deeper drilling-royalty relief is authorized on not less than 35 billion cubic feet of gas produced from intervals in wells greater than 20,000 feet deep. The act also states that the Secretary may place limitations on royalty relief based on market prices.

Finally, the Energy Policy Act of 2005 contains provisions addressing royalty relief in Alaska that MMS is already providing. Section 346 of the act amends the Outer Continental Shelf Lands Act of 1953 by authorizing royalty relief for oil and gas produced off the shore of Alaska. MMS has previously included royalty relief provisions within notices for sales in the Beaufort Sea of Alaska in 2003 and 2005. All of these sales offered royalty relief for anywhere from 10 million to 45 million barrels of oil, depending on the size of the lease and the depth of water. Whether leases will be eligible for royalty relief and the amount of this royalty relief is also dependent on the price of oil. There currently is no production in the Beaufort Sea. Although there have been no sales to date under this provision of the act, MMS is proposing royalty relief for a sale in the Beaufort Sea in 2007. Section 347 of the Energy Policy Act also states that the Secretary may reduce the royalty on leases within the Naval Petroleum Reserve of Alaska in order to encourage the greatest ultimate recovery of oil or gas or in the interest of conservation. Although this authority already exists under the Naval Petroleum Reserves Production Act of 1976, as amended, the Secretary must now consult with the State of Alaska, the North Slope Borough, and any Regional Corporation whose lands may be affected.

Conclusions	In order to meet U.S. energy demands, environmentally responsible development of our nation's oil and gas resources should be part of any national energy plan. Development, however, should not mean that the American people forgo a reasonable rate of return for the extraction and sale of these resources, especially in light of the current and long-range fiscal challenges facing our nation, high oil and gas prices, and record industry profits. Striking a balance between encouraging domestic production in order to meet the nation's increasing energy needs and ensuring a fair rate of return for the American people will be challenging. Given the record of legal challenges and mistakes made in implementing royalty relief to date, we believe this balance must be struck in careful consideration of both the costs and benefits of all royalty relief. As the Congress continues its oversight of these important issues, GAO looks forward to supporting its efforts with additional information and analysis on royalty relief and related issues. Mr. Chairman, this concludes my prepared statement. I would be pleased to respond to any questions that you or other Members of the Committee may have at this time.
GAO Contact and Staff Acknowledgments	For further information about this testimony, please contact me, Mark Gaffigan, at 202-512-3841 or gaffiganm@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement. Contributors to this testimony include Dan Haas, Assistant Director; Ron Belak; John Delicath; Glenn Fischer; Frank Rusco; and Barbara Timmerman.

This is a work of the U.S. government and is not subject to copyright protection in the United States. It may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.

GAO's Mission	The Government Accountability Office, the audit, evaluation and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.
Obtaining Copies of GAO Reports and Testimony	The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO's Web site (www.gao.gov). Each weekday, GAO posts newly released reports, testimony, and correspondence on its Web site. To have GAO e-mail you a list of newly posted products every afternoon, go to www.gao.gov and select "Subscribe to Updates."
Order by Mail or Phone	The first copy of each printed report is free. Additional copies are \$2 each. A check or money order should be made out to the Superintendent of Documents. GAO also accepts VISA and Mastercard. Orders for 100 or more copies mailed to a single address are discounted 25 percent. Orders should be sent to:
	U.S. Government Accountability Office 441 G Street NW, Room LM Washington, D.C. 20548
	To order by Phone: Voice: (202) 512-6000 TDD: (202) 512-2537 Fax: (202) 512-6061
To Report Fraud,	Contact:
Waste, and Abuse in Federal Programs	Web site: www.gao.gov/fraudnet/fraudnet.htm E-mail: fraudnet@gao.gov Automated answering system: (800) 424-5454 or (202) 512-7470
Congressional Relations	Gloria Jarmon, Managing Director, JarmonG@gao.gov (202) 512-4400 U.S. Government Accountability Office, 441 G Street NW, Room 7125 Washington, D.C. 20548
Public Affairs	Paul Anderson, Managing Director, AndersonP1@gao.gov (202) 512-4800 U.S. Government Accountability Office, 441 G Street NW, Room 7149 Washington, D.C. 20548