

**OUTER CONTINENTAL SHELF  
LEASE SALES: EVALUATION OF  
BIDDING RESULTS**

**ANNUAL REPORT TO CONGRESS  
FISCAL YEAR 2005**

**U.S. Department of the Interior  
Minerals Management Service  
Economics Division**

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## Introduction

This report analyzes the three Gulf of Mexico (GOM) and one Alaska Outer Continental Shelf (OCS) oil and gas lease sales held in Fiscal Year (FY) 2005 pursuant to section 8 of the OCS Lands Act (OCSLA) [43 U.S.C. 1337].

The report's objectives are to review bidding results in FY 2005 and to present the schedule of lease sales for FY 2006. Cash bonus bidding was used in the Central GOM (CGOM) and Western GOM (WGOM) sales with a 1/6-royalty rate and \$25 per acre minimum bid requirement in water depths less than 400 meters and a 1/8-royalty rate and \$37.50 per acre minimum bid in water depths of 400 meters or more. In the Eastern GOM (EGOM) lease sale, only a 1/8-royalty rate was used along with a \$37.50 per acre minimum bid because all blocks offered were in water depths of 1,600 meters or more. In the Beaufort Sea lease sale on the Alaska OCS, a 1/8-royalty rate was used with a \$37.50 per hectare (about \$15 per acre) minimum for nearer shore blocks (Zone A) and a \$25 per hectare (about \$10 per acre) minimum bid for blocks farther from shore (Zone B). A lower minimum bid level was used for the Beaufort Sea sale because of the high costs associated with that area.

In the CGOM sale, potential royalty suspension volumes for leases by water depth category and subject to price thresholds were set as follows:

- (1) in water depths less than 200 meters, 30 CFR 203.40 through 203.47 specifies applicable volumes on deep gas production or unsuccessful wells where a new deep gas reservoir (15,000 feet or greater subsea) produces or drilling of a certified unsuccessful well commences before May 3, 2009;
- (2) 5 million barrels of oil equivalent per lease in water depths of 400 to less than 800 meters;
- (3) 9 million barrels of oil equivalent per lease in water depths of 800 to less than 1,600 meters; and
- (4) 12 million barrels of oil equivalent per lease in water depths of 1,600 meters or more.

In the WGOM sale, which was held after the passage of the Energy Policy Act of 2005, the 12 million barrels of oil equivalent per lease royalty suspension volume applied in water depths of 1,600 to 2,000 meters, as specified in the Act. In addition, the Act established a new royalty suspension category of 16 million barrels of oil equivalent per lease that applied to blocks in waters deeper than 2,000 meters in the WGOM sale.

In the EGOM sale, which was held before passage of the Energy Policy Act of 2005, all blocks offered were in water depths of 1,600 meters or more and the potential royalty suspension volume, subject to price thresholds, for all leases awarded was 12 million barrels of oil equivalent per lease.

In the Beaufort Sea sale, the potential royalty suspension, subject to an oil price threshold, varied depending on the sale zone in which the block was located. Leases awarded in Zone A (nearer to shore and infrastructure) received a potential royalty suspension volume of up to 30 million barrels of oil, depending on surface area. Leases awarded in Zone B (farther from shore and infrastructure) received a potential royalty suspension volume of up to 45 million barrels of oil, depending on surface area.

### **Review of FY 2005 Lease Sales and Bidding Systems**

Four OCS lease sales were held in FY 2005: Sale 197, EGOM; Sale 194, CGOM; Sale 196, WGOM; and Sale 195, Beaufort Sea – Alaska OCS.

The sales in the CGOM and WGOM were a continuation of the annual areawide sales that have been held in those areas since 1983. The sale in the EGOM was the third in that planning area since 2001. The sale in the Beaufort Sea was the second in that planning area since 2003.

In the three GOM sales, 7,949 tracts (about 42 million acres) were available for lease and 786 tracts (about 4.2 million acres) received bids. Of the tracts receiving bids in the GOM sales, 96.1 percent (755 tracts) were leased. In the Beaufort Sea sale, 1,728 tracts (about 9.3 million acres) were available for lease and 121 tracts (about 0.6 million acres) received bids. Sale results for the fiscal year are summarized in Table 1.

Table 1. Bidding Results for FY 2005 Lease Sales

|                       | Sale 197 –<br>EGOM<br>(3/16/05) | Sale 194 –<br>CGOM<br>(3/16/05) | Sale 195 –<br>Beaufort Sea<br>(3/30/05) | Sale 196 –<br>WGOM<br>(8/17/05) | Total – FY 2005<br>(4 Sales) |
|-----------------------|---------------------------------|---------------------------------|---|---------------------------------|------------------------------|
| Tracts Offered        | 124                             | 4,063                           | 1,728                                   | 3,762                           | 9,677                        |
| - Receiving Bids      | 12                              | 428                             | 121                                     | 346                             | 907                          |
| - Leased <sup>1</sup> | 10                              | 403                             | 117                                     | 342                             | 872                          |
| - Rejected            | 0                               | 19                              | 2                                       | 4                               | 25                           |
| Bids Received         | 12                              | 651                             | 121                                     | 422                             | 1,206                        |
| Average Bids/Tract    | 1.00                            | 1.52                            | 1.00                                    | 1.22                            | 1.33                         |
| Sum of All Bids       | \$6,974,531                     | \$540,254,193                   | \$46,735,081                            | \$335,628,130                   | \$929,591,935                |
| Sum of High Bids      | \$6,974,531                     | \$353,961,798                   | \$46,735,081                            | \$285,192,865                   | \$692,864,275                |

Overall bidding results by royalty rate and water depth zone for the GOM sales held in FY 2005 are shown in Table 3. As in previous GOM sales, a water-depth criterion was used to assign royalty rates. In the sales, a fixed 1/6-royalty was specified in water depths of less than 400 meters and a fixed 1/8-royalty was specified in water depths of 400 meters or more. In water depths less than 200 meters, a royalty suspension volume, subject to a price threshold, was offered on deep gas production or certified unsuccessful wells where a new deep gas reservoir (15,000 feet or greater subsea) is drilled or starts production prior to May 3, 2009. The procedure for assigning royalty suspension volumes for deep gas in shallow water can be found in 30 CFR 203.40 through 203.47.

<sup>1</sup> Companies with accepted high bids did not execute the leases on 2 tracts in Sale 197, 6 tracts in Sale 194, and 2 tracts in Sale 195.

In water depths of 400 meters or more, royalty suspension volumes in millions of barrels of oil equivalent (MMBOE), subject to a price threshold, are indicated in Table 2. Note that for Sale 196, the royalty suspension volumes were modified to comply with the provisions of the Energy Policy Act of 2005, which was passed prior to the sale.

Table 2. Deepwater Royalty Suspension Volumes, FY 2005 GOM Sales

| Water Depth                   | Sale 194 - CGOM | Sale 197 - EGOM | Sale 196 - WGOM |
|-------------------------------|-----------------|-----------------|-----------------|
| 400 to less than 800 meters   | 5 MMBOE         | 5 MMBOE         | 5 MMBOE         |
| 800 to less than 1,600 meters | 9 MMBOE         | 9 MMBOE         | 9 MMBOE         |
| 1,600 to 2,000 meters         | 12 MMBOE        | 12 MMBOE        | 12 MMBOE        |
| More than 2,000 meters        | 12 MMBOE        | 12 MMBOE        | 16 MMBOE        |

Table 3 indicates that the majority of tracts receiving bids in FY 2005 GOM sales were deepwater tracts with 1/8-royalty rates. These tracts received a lower average number of bids per tract than shallow water tracts with 1/6-royalty rates. However, the average high bid per tract for the 1/8-royalty tracts was similar to that observed for the 1/6-royalty tracts.

In the GOM, the 1/8-royalty tracts (400 meters or deeper) accounted for 51.8 percent of tracts receiving bids, 52.0 percent of tracts leased, and 52.4 percent of high bids received in the three FY 2005 GOM lease sales. Conversely, the 1/6-royalty tracts (less than 400 meters) accounted for 48.2 percent of tracts receiving bids, 48.0 percent of tracts leased, and 47.6 percent of high bids received. As shown in Table 4, the mean high bid of \$0.82 million per tract receiving a bid was an increase of 39 percent compared to the FY 2004 sales.

Table 3. GOM Lease Sale Bidding Results for FY 2005 by Royalty Rate

| FY 2005<br>(3 Lease Sales) | Fixed 1/6-Royalty       |                      | Fixed 1/8-Royalty    |                        |                         | Total    |
|----------------------------|-------------------------|----------------------|----------------------|------------------------|-------------------------|----------|
|                            | Less than<br>200 meters | 200 to<br>399 meters | 400 to<br>799 meters | 800 to<br>1,600 meters | 1,600 meters<br>or more |          |
| Tracts Receiving Bids      | 350                     | 29                   | 72                   | 156                    | 179                     | 786      |
| Tracts Leased              | 339                     | 27                   | 67                   | 155                    | 175                     | 763      |
| Bids Received              | 502                     | 46                   | 103                  | 213                    | 221                     | 1,085    |
| Average Bids/Tract         | 1.43                    | 1.59                 | 1.43                 | 1.37                   | 1.23                    | 1.38     |
| Tracts with Multiple Bids  | 25.14 %                 | 34.48 %              | 26.39 %              | 22.44 %                | 18.99 %                 | 23.66 %  |
| Sum of High Bids (\$MM)    | \$288.39                | \$19.07              | \$62.38              | \$105.33               | \$170.96                | \$646.13 |
| Mean High Bid (\$MM)       | \$0.82                  | \$0.66               | \$0.87               | \$0.68                 | \$0.96                  | \$0.82   |

Table 4 compares the bidding results for GOM sales since FY 1995 by royalty rate. In Table 4, you can also observe the effects of alternative leasing policies over the years. The Minerals

Management Service began offering royalty relief for deep gas wells in shallow water in 2001. In the 1/6-royalty column, the mean high bid increased in FY 2001 compared to FY 2000, declined in FY 2002 and then increased in FY 2003 and FY 2004. In FY 2005, the shallow water mean high bid increased 53 percent compared to FY 2004. At least part of the increase in mean high bids in FY 2005 likely was due to higher oil and natural gas prices.

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The MMS began offering deep water royalty relief in 1996. In the 1/8-royalty column, the mean high bid began increasing in FY 1996 and reached a peak in FY 2000. Starting in 2001, lower amounts of deep water royalty relief were offered and the mean high bids continued to be relatively high before declining in FY 2003 and FY 2004. In FY 2005, the deep water mean high bid increased 22 percent compared to FY 2004, which likely was due to higher oil and natural gas prices.

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Table 4. Mean High Bid (\$ millions) per Tract (FY 1995 - FY 2005), GOM Sales

| Fiscal Year          | Fixed 1/6-Royalty | Fixed 1/8-Royalty | Total (Both Rates) |
|----------------------|-------------------|-------------------|--------------------|
| FY 1995              | \$ 0.57           | \$ 0.32           | \$ 0.49            |
| FY 1996              | \$ 0.63           | \$ 0.52           | \$ 0.57            |
| FY 1997              | \$ 0.71           | \$ 0.82           | \$ 0.78            |
| FY 1998              | \$ 0.70           | \$ 1.30           | \$ 1.14            |
| FY 1999              | \$ 0.36           | \$ 1.16           | \$ 0.74            |
| FY 2000              | \$ 0.42           | \$ 1.37           | \$ 0.80            |
| FY 2001              | \$ 0.47           | \$ 1.18           | \$ 0.77            |
| FY 2002 <sup>2</sup> | \$ 0.39           | \$ 1.48           | \$ 0.93            |
| FY 2002 <sup>3</sup> | \$ 0.39           | \$ 0.92           | \$ 0.62            |
| FY 2002 <sup>4</sup> | \$ 0.00           | \$ 3.58           | \$ 3.58            |
| FY 2003              | \$ 0.50           | \$ 0.54           | \$ 0.52            |
| FY 2004              | \$ 0.53           | \$ 0.68           | \$ 0.59            |
| FY 2005              | \$ 0.81           | \$ 0.83           | \$ 0.82            |

All available tracts in Beaufort Sea OCS Sale 195 were offered with a fixed 1/8-royalty rate with the minimum bid level and potential royalty suspension volumes varying by sale zone as previously described in this report. The distribution of bids by sale zones in Sale 195 is presented in Table 5.

Table 5 indicates that the majority of tracts receiving bids the FY 2005 Alaska OCS sale were

<sup>2</sup> Includes results from all three GOM sales held in FY 2002.

<sup>3</sup> Excludes results from Sale 181 in the EGOM to provide better comparison with previous years in which sales were held only in the CGOM and WGOM.

<sup>4</sup> Includes results only from Sale 181 in the EGOM. In Sale 181, only blocks with a fixed 1/8-royalty rate were offered. Clearly, the bidding results in Sale 181 - the first time tracts had been offered for lease in the EGOM since 1988 - differ significantly from other recent C&W GOM sales.

located in Zone B (farther from infrastructure). All tracts with bids in Sale 195 received one-bid, however, the average high bid per tract for the Zone B tracts was more than 400 percent higher than for the Zone A tracts. This difference in mean high bid between the two zones indicates industry's perception of a greater resource potential in Zone B.

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The Zone B tracts accounted for 80.2 percent of tracts receiving bids, 80.3 percent of tracts leased, and 95.5 percent of high bids received in the sale. Conversely, the Zone A tracts accounted for 19.8 percent of tracts receiving bids, 19.7 percent of tracts leased, and 4.5 percent of high bids received. Compared to the previous Beaufort Sea OCS sale that was held in FY 2003 (Sale 186), the number of tracts receiving bids increased from 34 to 121 (256 percent) and high bids increased from \$8.9 million to \$46.7 million (425 percent). The increases in both tracts receiving bids and high bids likely were due to higher oil prices and higher future oil price expectations.

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Table 5. Alaska OCS Lease Sale Bidding Results for FY 2005 by Sale Zone

| FY 2005 – Sale 195      | Fixed 1/8-Royalty |         | Total   |
|-------------------------|-------------------|---------|---------|
|                         | Zone A            | Zone B  |         |
| Tracts Receiving Bids   | 24                | 97      | 121     |
| Tracts Leased           | 23                | 94      | 117     |
| Bids Received           | 24                | 97      | 121     |
| Average Bids/Tract      | 1.00              | 1.00    | 1.00    |
| Sum of High Bids (\$MM) | \$2.10            | \$44.64 | \$46.74 |
| Mean High Bid (\$MM)    | \$0.09            | \$0.46  | \$0.39  |

### Schedule of FY 2006 Lease Sales

Lease sales scheduled for FY 2006 under the 5-Year Leasing Program and the bidding systems expected to be used in those sales are listed in the table below. For CGOM Sale 198 and WGOM Sale 200, royalty relief will be offered in shallow water for natural gas production from deep wells and the quantity will depend on the type of drilling and depth as specified in 30 CFR 203.40 through 203.47 and the Energy Policy Act of 2005. For deepwater (water depths of 400 meters or deeper), royalty relief will be offered for oil and natural gas production in the quantities specified in the final notices of sale, subject to price thresholds.

Lease Sale (Date)

Sale 198 - CGOM  
(March 15, 2006)

Bidding Systems

Cash bonus, fixed 1/6-royalty  
Cash bonus, fixed 1/6-royalty with classes of  
royalty suspension volume for drilling to  
and production of natural gas from deep  
depth wells

Cash bonus, fixed 1/8-royalty with classes of  
royalty suspension volume dependent on  
oil and gas production from deepwater  
categories

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Sale 200 - WGOM  
(August 16, 2006)

Cash bonus, fixed 1/6-royalty  
Cash bonus, fixed 1/6-royalty with classes of  
royalty suspension volume for drilling to  
and production of natural gas from deep  
depth wells

Cash bonus, fixed 1/8-royalty with classes of  
royalty suspension volume dependent on  
oil and gas production from deepwater  
categories

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