OUTER CONTINENTAL SHELF LEASE SALES: EVALUATION OF BIDDING RESULTS AND COMPETITION

ANNUAL REPORT TO CONGRESS FISCAL YEAR 1998

U.S. Department of the Interior Minerals Management Service

January 1999

Introduction

This report analyzes the three Outer Continental Shelf (OCS) oil and gas lease sales held in Fiscal Year (FY) 1998: two in the Gulf of Mexico (GOM) and one in the Beaufort Sea. In addition, competition for leases pursuant to sections 8 and 15 of the OCS Lands Act (OCSLA) (43 U.S.C. 1337 and 1343) is evaluated.

The annual reports to Congress on OCS sales from 1978 through 1983 focused on the use of alternative bidding systems (other than cash bonus bidding with fixed royalty) as one means for attaining the multiple objectives of the OCSLA, as amended. However, analyses of the alternative systems used in the offering of more than 6,400 OCS tracts during the 5-year test period (1978-83) did not find statistical evidence that either competition or Government revenues from the OCS were enhanced. For this reason, no alternative bidding systems were used in sales held from 1984 through 1995.

However, in November 1995, the Deep Water Royalty Relief Act (DWRRA) was enacted. The DWRRA provides for potential royalty relief on new leases in water depths of 200 meters or greater in the GOM, west of 87 degrees, 30 minutes west longitude. This law, as well as other factors like technological advances, affected the level of bidding activity observed in GOM lease sales in 1998.

The report's objectives are to review bidding results and to assess industry competition in the three sales held during FY 1998. Cash bonus bidding with both 1/6- and 1/8-royalty rates was used in each GOM sale with a \$25 per acre minimum bid requirement. In addition, to comply with the DWRRA in the GOM, potential royalty suspension volumes for leases by water depth category were set as follows:

- (1) 17.5 million barrels of oil equivalent in water depths of 200 to 400 meters;
- (2) 52.5 million barrels of oil equivalent in water depths of 400 to 800 meters; and
- (3) 87.5 million barrels of oil equivalent in water depths of 800 meters or more.

Cash bonus bidding with a 1/8-royalty rate was used in the Beaufort Sea sale with a \$25 per acre (\$62 per hectare) minimum bid requirement.

¹ See the Annual Report to Congress for FY 1983 and for FY 1984-1986 on the evaluation of alternative bidding systems and competition (U.S. DOI, 1984, 1987).

Review of FY 1998 Lease Sales and Bidding Systems

Three OCS lease sales were held in FY 1998: Sale 169, Central Gulf of Mexico (CGOM); Sale 170, Beaufort Sea; and Sale 171, Western Gulf of Mexico (WGOM). In the two GOM sales, 7,958 tracts (about 43 million acres) were offered, and 1,196 tracts (6.63 million acres) received bids. Of the tracts receiving bids, 94.4 percent (1,129 tracts) were leased. In the Beaufort Sea sale, 247 tracts (about 0.37 million hectares or 0.92 million acres) were offered and 29 tracts (0.037 million hectares or 0.09 million acres) received bids. Of the tracts receiving bids in the Beaufort Sea, only one high bid was rejected. Sale results for the fiscal year are summarized in Table 1.

	Sale 169	Sale 170	Sale 171	Total
	CGOM	Beaufort Sea	WGOM	FY 1998
	(3/18/98)	(8/05/98)	(8/26/98)	(3 Sales)
Tracts Offered ² - Receiving Bids - Leased - Percent Rejected	4,180	247	3,778	8,205
	794	29	402	1,225
	752 ³	28	377	1,157
	5.3	3.4	6.2	5.6
Bids Received Average Bids/Tract Sum of All Bids (\$MM) Sum of High Bids (\$MM)	1,188	31	486	1,705
	1.50	1.07	1.21	1.39
	1,349.68	6.49	741.86	2,098.03
	810.42	6.24	553.44	1,370.10

Table 1. Bidding Results for FY 1998 Lease Sales

Overall bidding results by royalty rate and DWRRA water depth zone for the GOM sales held in FY 1998 are shown in Table 2. As in previous GOM sales, a water-depth criterion was used to assign royalty rates. In the GOM, a fixed 1/6-royalty was specified in water depths of less than

² "Tracts Offered" should be interpreted to mean bidding units if a bidding unit includes more than one block, i.e., the specific unit or area offered for bid in a sale.

³ 42 high bids were rejected including one invalid high bid of less than \$25 per acre.

400 meters and a fixed 1/8-royalty was specified in water depths of 400 meters or more. However, for water depths of 200 meters or more, DWRRA-specified royalty relief volumes apply on new leases. (The royalty suspension volumes are listed in the introduction.)

The bidding results for the Beaufort Sea sale are presented in Table 4. In the Beaufort Sea, a fixed 1/8-royalty was used on all tracts offered.

Table 2 indicates that the majority of tracts receiving bids in FY 1998 GOM sales were deepwater tracts with 1/8-royalty rates. These tracts received about the same number of average bids per tract as shallow water tracts with 1/6-royalty rates. However, the average high bid per tract for the 1/8-royalty tracts was about 86 percent higher than that observed for the 1/6-royalty tracts. The 1/8-royalty tracts (400 or more meters) accounted for 73.4 percent of tracts receiving bids, 73.4 percent of tracts leased, and 83.6 percent of high bids received in the two FY 1997 GOM lease sales. As shown in Table 3, the mean high bid of \$1.14 million per tract receiving a bid was an increase of 46.2 percent compared to the FY 1997 sales.

Table 2. GOM Lease Sale Bidding Results for FY 1998 by Royalty Rate

	Fixed 1/6-Royalty		Fixed 1/8-Royalty		
FY 1998 (2 Lease Sales)	Less than 200 meters	200 to 400 meters	400 to 800 meters	More than 800 meters	Total
Tracts Offered - Receiving Bids - Leased	2,282 280 265	243 38 35	423 61 58	5,010 817 771	7,958 1,196 1,129
Bids Received Average Bids/Tract	403 1.44	45 1.18	75 1.23	1,151 1.41	1,674 1.40
Percent of Tracts with Multiple Bids	25.0 %	18.4 %	19.7 %	20.1 %	21.2 %
Sum of High Bids (\$MM)	194.32	28.76	75.75	1,065.04	1,363.87
Mean High Bid (\$MM)	0.69	0.76	1.24	1.30	1.14

Table 3	Mean High	Bid (\$	millions)	per Tract	(FY 1990	- FY 1998)	GOM Sales
Tuoic 5.	TITOMIT TITE	$\mathbf{D}\mathbf{I}\mathbf{G} \setminus \mathbf{\Psi}$	1111111101101	por riact	(I I I) / ()	1 1 1 1 1 0 1 1	O O I I Duito

Fiscal Year	Fixed 1/6-Royalty	Fixed 1/8-Royalty	Total (Both Rates)
FY 1990	0.73	0.60	0.70
FY 1991	0.59	0.34	0.50
FY 1992	0.41	0.43	0.41
FY 1993	0.39	0.28	0.37
FY 1994	0.62	0.23	0.58
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

Table 4 indicates that the mean high bid for the Beaufort Sea sale was about 19 percent of the mean high bid for the GOM sales in FY 1998. In addition, the level of competition in the Beaufort Sea sale was low as only two tracts received more than one bid.

Table 4. Beaufort Sea Lease Sale Bidding Results for FY 1998

FY 1998	Fixed 1/8-Royalty
Tracts Offered - Receiving Bids - Accepted	247 29 28
Bids Received Average Bids/Tract	31 1.07
Percent of Tracts with Multiple Bids	6.9 %
Sum of High Bids (\$MM)	6.24
Mean High Bid (\$MM)	0.22

Performance of Bidder Groups in Lease Sales

This section discusses the rate of winnings (percent of successful high bids and acreage) acquired by the restricted joint-bidder (RJB) group. The RJBs are specified pursuant to 30 CFR 256.41, and entities identified are restricted from bidding with other specified entities unless bidding is with an affiliate or subsidiary within the same group.

During the portion of FY 1998 when the lease sales were held, four companies and their subsidiaries were identified as RJBs: Exxon Corporation, Shell Oil Company, Mobil Oil Corporation, and BP America Incorporated. (A full listing of all companies in each group is included in Appendix A.)

Tables 5 and 6 present bidding results for RJBs and nonrestricted bidders. For both bidder groups analyzed, the sales data were adjusted to account for the percentage share of ownership attributable to firms in each group (i.e., a joint bid that was 50 percent RJB and 50 percent nonrestricted would result in 50 percent of the high bid and acreage being assigned to each group).

In FY 1998, nonrestricted bidders continued to be the dominant force in the GOM, as they were high bidders on 77 percent of the acreage leased and accounted for 88 percent of the winning high bids, in terms of dollars bid. Since FY 1990, nonrestricted bidders were awarded at least 66 percent of the acreage leased and submitted at least 70 percent of the winning high bid dollars.

Table 5. Acreage Leased to Restricted Joint Bidders Versus Nonrestricted Bidders FY 1990 - FY 1998, GOM Lease Sales

	Percentage of A	Number of Entities	
Fiscal Year	Restricted Nonrestricted		Participating
1990	34	66	106
1991	33	67	101
1992	17	83	71
1993	22	78	71
1994	22	78	82
1995	26	74	94
1996	24	76	105
1997	28	72	118
1998	23	77	102

The nonrestricted bidders' share of winning high bid dollars is greater than their percentage of acreage leased, which has consistently occurred from FY 1990 through FY 1998.

The RJBs tend to be relatively more active bidders in deepwater (400 meters or more) areas of the GOM (RJBs accounted for about 28 percent of the deepwater acres with bids and 14 percent of high bid dollars). Although the deepwater areas of the GOM have high costs of exploration and development, these areas also provide the potential for major discoveries that are of interest to large international companies, which are RJB's. Conversely, a number of nonrestricted bidders are independent natural gas and oil companies that are interested in exploring and developing smaller fields in shallow water where the costs and risks are lower than the deepwater areas.

Table 6. Winning High Bids by Restricted Joint Bidders Versus Nonrestricted Bidders FY 1990 - FY 1998, GOM Lease Sales

	Percentage of W	Number of Entities	
Fiscal Year	Restricted	Nonrestricted	Participating
1990	30	70	106
1991	20	80	101
1992	13	87	71
1993	13	87	71
1994	11	89	82
1995	17	83	94
1996	17	83	105
1997	22	78	118
1998	12	88	102

Bidding Systems

Section 8(a) of the OCSLA required testing of alternative bidding systems over a 5-year period from September 18, 1978, to September 17, 1983. This subject was discussed in detail in the 1987 Annual Report. The inconclusive bidding results achieved during the test period, as well as the administrative complexity of some of the systems tested, led the Department of the Interior (DOI) to cease experimenting with alternative systems. However, the use of these systems could be specified for future OCS sales if analysis determines that their use could best meet the OCSLA's goals.

In November 1995, the DWRRA was passed, which requires use of bidding systems that allow for royalty suspension volumes for new fields in water depths greater than 200 meters for leases awarded in the CGOM and WGOM lease sales that occur prior to November 28, 2000. Thus, in the FY 1998 oil and gas lease sales in the GOM, the royalty rates continued to be those used in the past, but in water depths of 200 meters or more, royalty relief was provided at the depth-specific rates mandated in the DWRRA. The provision of royalty relief appears to have

encouraged bidding activity in deepwater areas of the GOM as the number of tracts in water depths of 200 meters or more receiving bids in Sales 169 and 171 remained at a high level.

Supplies of Oil and Gas for Independent Refiners

Section 15(2)(E) of the OCSLA requires the Secretary to provide "an evaluation of present measures and a description of additional measures dealing with supplies of oil and gas to independent refiners and distributors." As of October 1, 1998, there were six offshore and one onshore royalty-in-kind contracts. In FY 1998, 17.21 million barrels of OCS oil and 0.23 million barrels of onshore oil were used in this program. The low numbers of refiners participating in this program would indicate that adequate supplies of oil to meet refining requirements are, in general, available through normal markets.

In addition, Section 8(b)(7) of the OCSLA includes a provision requiring lessees to offer 20 percent of the crude oil, condensate, and natural gas liquids produced from a lease to small or independent refiners. For FY 1998, about 45 million barrels of liquid hydrocarbons were available from leases issued after September 18, 1978, containing this requirement. The exchange of liquid hydrocarbons under this lease obligation is handled directly between the lessee(s) and an eligible refiner without Government intervention.

Schedule of FY 1999 Lease Sales

Lease sales scheduled for FY 1999 under the 5-year leasing program are listed in the table below.

Lease Sale (Date)	Bidding Systems
Sale 172 - CGOM (March 1999)	Cash bonus, fixed 1/6-royalty Cash bonus, fixed 1/6-royalty with potential royalty suspension volume Cash bonus, fixed 1/8-royalty with potential royalty suspension volume
Sale 174 - WGOM (August 1999)	Cash bonus, fixed 1/6-royalty Cash bonus, fixed 1/6-royalty with potential royalty suspension volume Cash bonus, fixed 1/8-royalty with potential royalty suspension volume

Restricted Joint Bidders in OCS Oil and Gas Sales during FY 1998

Under the joint bidding provisions of 30 CFR 256.41, each entity within any of the groups shown in the "List of Restricted Joint Bidders" is precluded from bidding with any entity in any other identified group at OCS oil and gas lease sales held during the specified bidding periods.

For FY 1998, pertinent Lists of Restricted Joint Bidders were published in the <u>Federal Register</u> as follows:

October 9, 1997, (at 62 <u>FR</u> 52771) for the bidding period November 1, 1997, through April 30, 1998.

March 25, 1998, (at 63 <u>FR</u> 14473) for the bidding period May 1, 1998, through October 31, 1998.

The four companies and subsidiaries identified were:

- Group I. Exxon Corporation, Exxon San Joaquin Production Co.
- Group II. Shell Oil Company, Shell Offshore Inc., Shell Western E&P Inc., Shell Frontier Oil & Gas Inc., Shell Consolidated Energy Resources Inc., Shell Land & Energy Company, Shell Onshore Ventures Inc., Shell Deepwater Development Inc., Shell Deepwater Production Inc., Shell Offshore Properties, and Capital II Inc.
- Group III. Mobil Oil Corporation, Mobil Oil Exploration and Producing Southeast Inc., Mobil Producing Texas and New Mexico Inc., Mobil Exploration and Producing North America Inc.
- Group IV. BP America Inc., The Standard Oil Co., BP Exploration & Oil Inc., BP Exploration (Alaska) Inc.