

FIVE YEAR
LEASING
SCHEDULE

Alaska State Legislature

PETTYE FAHRENKAMP, CHAIRMAN
VIC FISCHER, VICE-CHAIRMAN
BRAD BRADLEY
DICK ELIASON
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POUCH V
STATE CAPITOL
JUNEAU, ALASKA 99811
(907) 465-3834
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Senate

Committee on Resources

February 26, 1982
1:40 p.m.

Butrovich Room
Room 205 - Capitol

MEMBERS PRESENT

Senator Fahrenkamp
Senator Mulcahy
Senator Sturgulewski

Briefing The State's 5-Year Oil and Gas Leasing Plan

Dick Wilson, Manager, Alaska/Pacific Exploration Division, Exxon, expressed support for the State's 5-year program and suggested that the scheduling of State sales be coordinated with adjacent federal sales. Exxon opposes any requirement that G & G (geological and geophysical) data from unleased State acreage be provided to the State prior to a lease sale, or that G & G data be used by the State to determine a tract's value. Rather, selection of tracts for lease should be based on nomination by interested parties. Exxon prefers cash bonus bidding, which acts as an incentive for exploration, and disagrees with the current seasonal drilling restrictions.

Bob Kropschot, Exploration Manager for Alaska for Chevron, expressed support for the State's 5-year program, but sees the state-imposed November to March drilling window as a problem. Chevron prefers the cash bonus bidding with royalties of 1/8 or 1/6, with the industry nominating tracts they wish to bid on. Kropschot feels dis-incentives must be removed to improve the efficiency of exploration and development to help compensate for the Prudhoe Bay decline.

Roger Herrera, Sohio, finds the State's 5-year program reasonable and rational. He urged contemporaneous state and federal sales, and labeled the seasonal drilling restriction a dis-incentive.

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Larry Vavra, Union Oil of California, finds the present permitting system cumbersome, and urged passage of SB 84.

The meeting was adjourned at 3:00 p.m.

Please find attached the written comments of Chevron, ARCO, and Exxon.

Alaska State Legislature

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Senate

Committee on Resources

February 5, 1982

Dan Hinckle
Division Attorney
Marathon Oil Company
P. O. Box 2380
Anchorage, Alaska 99510

Dear Dan:

On February 8th John Katz, Commissioner of the Department of Natural Resources, will be briefing the Committee on the State's Five-Year Oil and Gas Leasing Program.

As I am very concerned that this plan meets the needs of industry as well as the concerns and obligations of the State, I am inviting your written detailed comments on the Program.

Additionally, I am holding a hearing to gather this information and would like to ask you to brief the Committee. The date we have set is February 26, 1982, at 1:30 p.m., in the Beltz Room - 211 Capitol. Specifically, we would like your company's thoughts on:

1. The Five-Year Oil and Gas Leasing Program;
2. Specifics on the procedures and permitting process being utilized;
 - a) What is of benefit and working;
 - b) What is cumbersome and/or bureaucratic; and,
3. The State's leasing policy.

TESTIMONY
ALASKA 5-YEAR OIL & GAS LEASING PROGRAM
R. E. KROPSCHOT
FEBRUARY 26, 1982

*Medene Chairman
Committee Members*

Thank you for the opportunity to testify in your "5-Year Oil & Gas Leasing Program" hearings. My name is Bob Kropschot and I am Exploration Manager for Alaska for Chevron. I have spent the last 26 years exploring for oil for Chevron, beginning with the early days of exploration on the Kenai Peninsula through various parts of the United States and the world.

My comments will cover two areas:

1. The first concerning the 5-year schedule as presented to the legislature, and
2. The second to present Chevron's comments relative to some of the questions that were raised by the Committee members during the hearing on February 8, 1982.

Following are comments concerning the proposed schedule:

1. We feel the strategy of mixing the higher risk frontier areas with areas near proven oil fields and having lower risk is appropriate. Such a mix provides opportunities for all segments of industry, large and small, to participate as well as spread their capital between mature and frontier areas.
2. The Department should be complimented for its emphasis on the need to establish a predictable sale schedule to assist in meeting the needs of Alaska and the Nation.

3. Adding the Camden Bay sale in 1986 may pose problems. The offsetting Federal Arctic National Wildlife Refuge cannot be leased prior to late-1986 due to the terms of the Alaska National Interest Lands Conservation Act. Assuming normal slippage of sales, it would probably be advisable to schedule the state sale about one year later in 1987. An alternate strategy would be to encourage federal legislative change to accelerate the assessment of the Refuge's potential and move that possible sale ahead. The 1986 Camden Bay sale could then be left as proposed.

I was fortunate to be able to attend the Commissioner's presentation of his proposed 5-year plan to the Resources Committee on February 8, 1982. I would like to present Chevron's thoughts on some of the questions that came up at that meeting:

Those questions included:

1. How does activity by independent operators in Alaska compare with the Lower 48?
2. What are policy roadblocks holding up evaluation of present leases?
3. What is the outlook for production when Prudhoe Bay begins to decline in about 1988?
4. What are the effects of different types of leasing systems on future production?

5. What is the situation on seismic data release?

These are difficult questions to answer and I don't presume we can fully do it but I would like to present some facts that may give some insight.

Let me start with the first question: "How does the activity by independent operators in Alaska compare with the Lower 48?" The independent operator is not as active in Alaska as in the Lower 48 due to the high costs and risk and long delay time to first production. There is no shortage of drilling rigs or seismic crews at the present time. The costs to work in most areas of Alaska are very high. Chevron has drilled four dry holes on our Arctic Slope Regional Corporation leases in the foothills of the Brooks Range. They cost over \$140 million. We fortunately had partners in some of them to share the cost. We are currently drilling a fifth well. Needless to say, truly wildcat areas like this and some of your sale areas are not the kind of project an organization with relatively limited capital would undertake. Seismic crews on the slope cost some \$2 million a month. Production of 50 to 100 miles a month reflects costs of \$20,000 to \$40,000 per mile. This cost is also similar to shallow water and mud flat data we gathered in the Cook Inlet prior to the recent state sales. Costs for similar depth wells and seismic in the Lower 48 are \$2.5 million/^{per well}and \$10,000 per mile. The exceptional costs in Alaska make it difficult for the independent to operate alone. I would add though we did bid with an independent operator on some of the Cook Inlet tracts. I think you will find that many majors include responsible smaller operators in their OCS and state bidding. Competing companies do need a very large resource base to sustain them for the long period between initial exploration and production. Prudhoe Bay was discovered in 1968 and a period of 9 years went by until the first production in 1977.

I would like to address the second question next, which asks "What are the policy roadblocks holding up the elevation of present leases?" The acreage leased in the 1979 Beaufort Sea sale is worth examining. Two factors have delayed the evaluation of those leases. The first is the matter of the suit before the State Supreme Court to invalidate those leases, which really isn't a policy roadblock. It is difficult to invest any significant sum of money in evaluating the leases when the possibility exists that they would be judged invalid. We have taken the risk and participated with Sohio in the Challenge Island well and are drilling with our partners a well on Jeanette Island. Other companies have taken the risk also. The second problem relates to the state-imposed drilling window from November 1 through March 31. It is difficult to plan drilling operations for only that five month winter drilling period. Even if discoveries are made, delays in developing may make the projects uneconomic. We are hopeful this onerous and in our opinion unnecessary provision will be eliminated in the near future.

Now I would like to address the third question, which relates to the outlook for production when Prudhoe Bay begins to decline in 1987-89, as currently forecasted. It is quite typical of basins worldwide to find only one huge oil field and many fields of far lesser magnitude. As production from the major field begins to decline, it is extremely difficult to keep the total production up. In the Central Sumatra area of Indonesia, the huge Minas field produced at a level approaching 500,000 barrels a day for several years and by adding the smaller nearby discoveries the production reached 1 million

barrels a day, but shortly thereafter Minas, the major controlling factor, began to decline and no matter how many more nearby discoveries were made production has never reached the million barrel a day figure again. The production in that area now has dropped to approximately 700,000 barrels a day and can be expected to continue its gradual decline.

In Alaska the problem of keeping the production level up is compounded by the remoteness of so many areas, and the long lead times required to bring a discovery on production. I think the chances of finding another Prudhoe Bay size field on Alaska controlled lands on the North Slope are extremely slight. Therefore, if the state's current production is to be maintained, it will be necessary to provide for early evaluation of the remaining prospective areas. There is no better way to do this than by encouraging industry to aggressively explore the Alaska lands. Perhaps my discussion on questions 4 and 5, which follows, will shed more light on this subject.

Concerning question four, "What are the effects of different types of leasing systems on future production", this subject was studied by the federal government and their results were published in the January 26, 1982 Federal Register. That study examines 22 OCS sales where four different bidding systems were used.

The federal government's goal is to utilize systems that "encourage expeditious exploration of frontier areas and which provide adequate incentives for efficient and diligent production in developed regions." They also include objectives such as assuring fair market value, maintaining competition, and protecting the environment.

In reviewing the past sale results, they compared the customary one-sixth royalty with the bid variable being the bonus bid against:

1. Fixed bonus, royalty variable.
2. Fixed 1/3 royalty, bonus variable.
3. Sliding scale royalty, bonus variable.
4. Fixed net profit share, bonus variable.

Their preliminary conclusions state that:

1. Most alternates showed no meaningful differences in competition.
2. No indication that the government share of the expected economic return on tracts leased will increase with the alternate systems.
3. Royalty bidding gave the sharpest contrast, but it was decided to discontinue that system because:
 - a. Rates of some winning royalty bids were "sufficiently high to make substantial production losses very likely." A high royalty bid means the minimum economically developable field size must also be higher.

- b. Investment at risk may be so low that "tract owners will have greatly reduced incentives to explore and develop those tracts."
4. The fixed 1/3 royalty may result in frontier area tracts not receiving bids. They do not intend to use it in frontier areas because of the urgent need to avoid dis-incentives.
5. The sliding scale royalty system is difficult to design due to the uncertainty of price changes. It was not being recommended because it could provide a dis-incentive to the investments needed to achieve higher production.
6. The fixed net profit share system might have some merit in assuring competition in higher cost areas by reducing front-end investment if the lessor could earn a normal profit before sharing returns with the government. However, the benefits can be "offset by administrative and accounting burdens on both lessees and the government."

The federal government is suggesting comments on bidding systems for various OCS areas and in Alaska is proposing cash bonus bidding as the variable with royalties of 1/8 or 1/6. In some of the high cost areas, the fixed net profit share with a cost recovery program may be used in place of the 1/8 royalty with bonus bidding recommendation.

In summary, the trend in federal leasing appears to be away from systems that can provide dis-incentives to early and aggressive exploration and development,

back to the standard bonus bid variable with lower fixed royalties. Their experience indicates that generally non-bonus bidding and high royalties discourage timely exploration and development of potentially productive acreage.

The final question, concerning seismic data release, relates to the whole subject of oil and gas exploration. Even though the major companies normally have more data available to them than the smaller operators, more than one-half of the discoveries^{in the lower 48} are made by the "independents" without the large data bank. It is not just the data bank available that finds oil but rather the opportunity for various ideas to be brought to bear on the subject. I feel that the State of Alaska runs a real chance of slowing rather than expediting the assessment of its oil and gas potential when it undertakes a major effort to determine the potential of its exploratory areas and then tailors a bidding system and sale schedule based on those results.

On this subject, I would like to mention another review under way by the federal government. This relates to a February 5, 1982, Federal Register Notice about pre-sale evaluation of tracts in the OCS to insure that bidders pay fair market value. The Notice states that:

1. There are gains to the government if the costs of tract evaluation can be reduced.
2. The economic efficiency of exploration and development can be improved by relying more fully on the leasing market and less on government decision making to determine which tracts are leased.

I would recommend that you consider letting industry do some of the costly and highly inexact pre-sale work for you by letting them nominate tracts they wish to bid on and then letting their high bid by the bonus bid fixed royalty system determine the tract value. This system takes the cost and risk out of the hands of the taxpayer and provides a favorable climate to encourage early evaluation and development.

In summary, I would suggest that items 3 and 4 of the State Leasing Strategy which is on page 12 of ^{The 1982 Five-year leasing program} be carefully reviewed in light of the information I have mentioned. Long-term fiscal planning is a very necessary process and should be based on proven and potential reserves. The possible discoveries cannot be reliably quantified. However, by providing a climate that encourages industry to make that evaluation at an early date, the future production projections will be more reliable.

Thank you for this opportunity to address you. I will try to answer any questions you have.

ARCO Exploration Company
Post Office Box 360
Anchorage, Alaska 99510
Telephone 907 265 6515

G. T. Wilkinson
Vice President
Exploration Operations - Alaska



February 24, 1982

Senator Bettye Fahrenkamp
Chairman, Resources Committee
Alaska State Legislature
Pouch V (MS-3100)
Juneau, AK 99811

Dear Senator Fahrenkamp:


ARCO Exploration Company has reviewed the State Five-Year Oil and Gas Leasing Program, dated January 1982. As the Program states at several junctures, all Alaskans benefit from a fixed and predictable leasing program. As you are aware, this predictability is integral to an effective exploration program, and we are heartened by the Department of Natural Resources sharing of this concern. In this regard, the Department has been more responsive in adhering to the sale schedule.

The Five-Year Leasing Program represents a commitment on the part of the state to allow systematic and consistent exploration of the most promising areas in the state. In order to help ensure successful exploration efforts, especially in remote, high-cost, high-risk areas, we feel that the Department of Natural Resources should offer ten-year leases with cash bonus bidding and, to the extent feasible, coordinate federal OCS sales with state near-shore sales. We also urge the Department to replace the Chukchi Sea sale (No. 44) on the schedule. While it is recognized that operating conditions in this area are harsh, the near-shore area may be considerably easier for exploratory operations than tracts in deeper water scheduled to be leased by the federal government (OCS Sale No. 85, scheduled for February of 1985).

Again, we are encouraged by the efforts of the Department of Natural Resources to develop and adhere to the Five-Year Leasing Program.

Thank you for the opportunity to comment.

Very truly yours,


G. T. Wilkinson

cc: Mr. John Katz - Commissioner - Dept. of Natural Resources
Ms. Beverly Ward
Mr. Dave Harbour

TESTIMONY ON
FIVE-YEAR OIL AND GAS LEASING PROGRAM
AND THE STATE OF ALASKA'S LEASING POLICY

BY
RICHARD D. WILSON
MANAGER
ALASKA/PACIFIC EXPLORATION DIVISION
EXXON COMPANY, U.S.A.

BEFORE THE

STATE OF ALASKA
SENATE RESOURCES COMMITTEE

JUNEAU, ALASKA
FEBRUARY 26, 1982

MADAME CHAIRMAN AND MEMBERS OF THE COMMITTEE, I AM DICK WILSON, MANAGER OF EXXON'S ALASKA/PACIFIC EXPLORATION DIVISION LOCATED IN HOUSTON. I AM RESPONSIBLE FOR ALL OF EXXON'S EXPLORATION ACTIVITIES IN THE PACIFIC OFFSHORE AND IN ALL OF ALASKA, BOTH ONSHORE AND OFFSHORE. I APPRECIATE THE OPPORTUNITY TO BE HERE TODAY AND PRESENT THE VIEWS OF MY COMPANY ON THE STATE OF ALASKA'S FIVE-YEAR LEASING PROGRAM AND THE LEASING POLICY OF THE STATE.

EXXON SUPPORTS AND HAS SUPPORTED IN PREVIOUS TESTIMONY BEFORE THIS BODY AND IN COMMENTS TO THE DEPARTMENT OF NATURAL RESOURCES, THE CONCEPT OF THE FIVE-YEAR OIL AND GAS LEASING PROGRAM. A FIRM PROGRAM ALLOWS COMPANIES TO PLAN THE MOST EFFICIENT USE OF LIMITED AMOUNTS OF MANPOWER AND RESOURCES IN PREPARING FOR LEASE SALES. MOREOVER, WITH SUFFICIENT PLANNING TIME, THE STATE WILL BE ASSURED OF HAVING THE MAXIMUM NUMBER OF PARTICIPANTS IN A SALE. THIS INCREASES THE STATE'S REVENUE, ENSURES THE RECEIPT OF FAIR MARKET VALUE FOR THE LEASES, AND ACCELERATES EXPLORATION. IF A FIVE-YEAR LEASING PROGRAM IS TO BE OF SIGNIFICANT BENEFIT TO PROSPECTIVE BIDDERS AND TO THE STATE OF ALASKA, THE STATE MUST ADOPT A SCHEDULE AND THEN STICK TO IT.

WITH RESPECT TO THE FIVE-YEAR LEASING PROGRAM ITSELF, EXXON BELIEVES THAT THE MOST EFFECTIVE AND EFFICIENT SCHEDULING OF STATE SALES IS WHEN THEY ARE COORDINATED WITH ADJACENT FEDERAL SALES. WHERE APPROPRIATE, JOINT STATE/FEDERAL LEASE SALES SHOULD BE CONDUCTED. LACK OF COORDINATION WILL RESULT IN

DUPLICATION OF EFFORT AND CAN CREATE SIGNIFICANT OPERATIONAL PROBLEMS IN THE EXPLORATION AND DEVELOPMENT OF ADJACENT STATE AND FEDERAL AREAS. THIS IS PARTICULARLY TRUE IF THE SAME PROSPECTIVE GEOLOGICAL STRUCTURES UNDERLIE BOTH AREAS. IN ADDITION, BASED ON OUR PAST EXPLORATION EXPERIENCE, THERE IS A HIGH CHANCE OF THE STATE'S SALE AREA BEING CONDEMNED IF ADJACENT FEDERAL ACREAGE IS LEASED AND DRILLED BEFORE THE STATE SALE IS HELD. THIS SIMPLY REFLECTS THE HIGH RISK OF FINDING ANY OIL AND GAS IN A PARTICULAR AREA.

IN WRITTEN COMMENTS TO THE DNR LAST NOVEMBER ON THE PROPOSED REVISION OF THE FIVE-YEAR OIL AND GAS LEASING PROGRAM, EXXON PROVIDED COMMENTS ON SPECIFIC SALES WHICH I WILL NOT REITERATE AT THIS TIME. FOR THE CONVENIENCE OF THE COMMITTEE, YOU WILL FIND A COPY OF THOSE COMMENTS ATTACHED TO EACH COPY OF TODAY'S PRESENTATION WHICH I HAVE FURNISHED TO YOU.

I WOULD ALSO LIKE TO BRIEFLY DISCUSS THE STATE'S OIL AND GAS LEASING POLICY, AS IT RELATES TO THE STATE'S PERCEIVED NEED TO ACQUIRE GEOLOGICAL AND GEOPHYSICAL DATA (G&G DATA) PRIOR TO A LEASE SALE.

EXXON OPPOSES ANY REQUIREMENT THAT G&G DATA FROM UNLEASED STATE ACREAGE BE PROVIDED TO THE STATE PRIOR TO A LEASE SALE. WE BELIEVE THAT AN ANALYSIS OF G&G DATA BY THE STATE WILL NOT PRODUCE AN ACCURATE ESTIMATE OF THE VALUE OF A TRACT. RATHER, INTERPRETATIONS OF G&G DATA PROVIDE SPECULATIVE ESTIMATES OF

TRACT RESOURCE POTENTIAL. THESE ESTIMATES CAN VARY WIDELY AMONG QUALIFIED EXPLORATIONISTS AS EVIDENCED BY THE WIDE RANGES IN BIDS SUBMITTED IN STATE AND FEDERAL LEASE SALES. THERE IS NO PRECISE WAY, SHORT OF DRILLING, TO DETERMINE THE VALUE OF A TRACT. FOR A GIVEN TRACT, IN DECIDING WHETHER TO BID, AND AT WHAT LEVEL, WE CONSIDER A VARIETY OF FACTORS IN ADDITION TO G&G INFORMATION INCLUDING COSTS, TECHNOLOGY, ECONOMIC AND PRICE FORECASTS, TIMING AND TRANSPORTATION SYSTEMS. BECAUSE THE CHANCES OF ACHIEVING COMMERCIAL PRODUCTION FROM AN AREA DECREASE AS EXPLORATION AND DEVELOPMENT COSTS INCREASE, AN ESTIMATE OF RESOURCE POTENTIAL CANNOT BE THE SOLE BASIS FOR BID DECISIONS. AN EXAMPLE OF THE FEDERAL GOVERNMENT'S FAILURE TO CONSIDER ADEQUATELY ALL CRITICAL FACTORS IN REJECTING LEASE SALE BIDS OCCURRED IN OCS LEASE SALE NO. 59 HELD LATE LAST YEAR. IN THIS MID-ATLANTIC SALE, THE LARGE DISPARITY BETWEEN THE GOVERNMENT'S AND INDUSTRY'S EVALUATION OF TRACTS CAUSED THE USGS TO REJECT ALMOST HALF OF THE 98 HIGH BIDS. THE REJECTIONS IN THAT SALE AND THE RESULTING DELAY OF EXPLORATION, CAUSED CONSIDERABLE CONCERN TO EVERYONE INVOLVED, INCLUDING THE GOVERNMENT.

SINCE G&G DATA ALONE CANNOT PROVE THE PRESENCE OF OIL AND GAS ON A PARTICULAR TRACT, IT SHOULD NOT BE USED BY THE DNR DURING THE LEASE SALE PROCESS TO DETERMINE TRACT SELECTIONS, THE BIDDING SYSTEM EMPLOYED, NOR THE ADEQUACY OF A BID FOR A SPECIFIC TRACT.

THE SELECTION OF TRACTS TO BE OFFERED IN A LEASE SALE SHOULD BE BASED ON NOMINATIONS BY INTERESTED PARTIES. WE HAVE ALWAYS BEEN WILLING TO NOMINATE TRACTS WHEN GIVEN THE OPPORTUNITY. A SELECTION PROCESS IN WHICH INDUSTRY NOMINATES TRACTS AND THE DNR, AFTER CONSIDERATION OF RELEVANT ENVIRONMENTAL FACTORS, MAKES THE FINAL TRACT SELECTION BASED ON THESE NOMINATIONS BENEFIT BOTH THE STATE AND THE BIDDERS AT A LEASE SALE. SUCH AN APPROACH TO LEASE SALE TRACT SELECTION WOULD ELIMINATE THE STATE'S NEED TO CONDUCT COSTLY AND TIME-CONSUMING ANALYSES OF G&G DATA PRIOR TO THE SELECTION OF TRACTS. THE FREQUENCY OR INFREQUENCY WITH WHICH INDIVIDUAL COMPANIES NOMINATE A GIVEN AREA WOULD PROVIDE THE STATE A GOOD INDICATION OF THE COMPANIES' INTEREST IN THE VARIOUS PROPOSED SALE AREAS. ALSO, EXPLORATION AND DEVELOPMENT OF THE STATE'S OIL AND GAS RESOURCES WOULD BE EXPEDITED THROUGH THE TIMELY LEASING OF THOSE TRACTS IN WHICH INDUSTRY EXHIBITED A HIGH INTEREST.

TURNING NOW TO BIDDING SYSTEMS, WE URGE THE STATE TO RETURN TO THE USE OF CASH BONUS BIDDING, TO THE EXCLUSION OF SYSTEMS WHICH EMPLOY NET PROFIT SHARE OR ROYALTY AS THE BID VARIABLE. THIS WOULD ELIMINATE THE STATE'S NEED FOR G&G DATA TO DETERMINE WHICH BIDDING SYSTEM TO EMPLOY. IT IS EXTREMELY UNLIKELY THAT THE STATE'S ULTIMATE REVENUES FROM NET PROFIT SHARE LEASES WILL EQUAL OR EXCEED THE RETURN WHICH WOULD HAVE BEEN GENERATED BY USE OF CASH BONUS BIDDING FOR THESE LEASES. IN RECOGNITION OF THIS PROBABILITY, THE FEDERAL GOVERNMENT HAS NEVER USED NET PROFIT SHARE AS THE BID VARIABLE. IN FACT, OCS LEASES AWARDED

IN FRONTIER AREAS SINCE 1973 HAVE GENERATED IN EXCESS OF FOUR BILLION DOLLARS IN BONUS REVENUE. TO DATE, NO PRODUCTION HAS RESULTED AND ONLY ONE POTENTIALLY COMMERCIAL DISCOVERY HAS BEEN MADE ON THESE FRONTIER LEASES. THUS, IT APPEARS THAT THE PUBLIC WOULD HAVE OBTAINED ESSENTIALLY NO RETURN HAD A CONTINGENCY PAYMENT BIDDING METHOD BEEN EMPLOYED INSTEAD OF CASH BONUS BIDDING.

EXXON VIEWS THE STATE'S CONTINUED USE OF BIDDING SYSTEMS WHICH EMPLOY NET PROFIT SHARE OR ROYALTY AS THE BID VARIABLE AS A MAJOR HINDRANCE TO THE EXPEDITIOUS EXPLORATION AND DEVELOPMENT OF THE STATE'S NATURAL RESOURCES. THESE CONTINGENCY PAYMENT SYSTEMS REDUCE THE INCENTIVES TO EXPLORE UNTESTED TRACTS AND ULTIMATELY TO DEVELOP MARGINAL FIELDS. THEY INVOLVE A RELATIVELY SMALL "UP-FRONT" FINANCIAL COMMITMENT BY BIDDERS AND PROVIDE A REDUCED PROFIT EXPECTATION TO LESSEES. THE NET PROFIT SHARE SYSTEM, IN PARTICULAR, PLACES MAJOR ADMINISTRATIVE AND ACCOUNTING BURDENS ON BOTH LESSEES AND THE STATE.

THE ECONOMIC AND ADMINISTRATIVE DISADVANTAGES INHERENT IN THE USE OF THESE CONTINGENCY PAYMENT SYSTEMS ARE IN CONTRAST TO THE NUMEROUS ADVANTAGES OF CASH BONUS BIDDING. FIRST, THE DESIRE TO MAXIMIZE THE RETURN ON THE CASH BONUS INVESTED PROVIDES A STRONG INCENTIVE TO THE SUCCESSFUL BIDDER TO RAPIDLY, EFFICIENTLY AND ECONOMICALLY EXPLORE AND DEVELOP ITS LEASE. SECOND, CASH BONUS BIDDING PLACES THE RISK, THAT HYDROCARBONS IN COMMERCIAL QUANTITIES WILL NOT BE FOUND, ON INDUSTRY WHERE

IT BELONGS, RATHER THAN ON THE STATE. WITH NET PROFIT SHARE BIDDING, THE STATE BEARS A MAJOR PORTION OF THE EXPLORATION RISK BECAUSE THE FAILURE TO MAKE A DISCOVERY OF HYDROCARBONS IN COMMERCIAL QUANTITIES MEANS NO COMPENSATION TO THE STATE. WE BELIEVE THAT SUCH RISK-TAKING, WITH ITS RESULTANT REWARDS OR LOSSES, IS MORE PROPERLY THE PROVINCE OF PRIVATE ENTERPRISE THAN IT IS THE STATE'S. FINALLY, THE CASH BONUS SYSTEM IS SIMPLE AND INEXPENSIVE TO ADMINISTER.

WITH RESPECT TO THE DETERMINATION OF BID ADEQUACY, WE BELIEVE THAT COMPETITIVE BIDDING BY COMPANIES ASSURES THE STATE'S RECEIPT OF FAIR MARKET VALUE. WE ARE IN THE BUSINESS OF EVALUATING RESOURCE POTENTIAL AND RISKING LARGE AMOUNTS OF MONEY BASED ON SUCH EVALUATIONS. COMPETITION WITHIN A SALE AREA, RATHER THAN THE STATE'S ARBITRARY EVALUATION BASED ON PRE-SALE G&G DATA, SHOULD BE THE PRIMARY DETERMINANT OF THE ADEQUACY OF A BID. SUCH COMPETITION WILL ENSURE THE STATE A FAIR RETURN FOR ITS POTENTIAL OIL AND GAS RESOURCES.

THERE ARE ADDITIONAL FACTORS WHICH CONTRIBUTE TO DELAYING A TIMELY EXPLORATION AND DEVELOPMENT PROGRAM IN THE STATE OF ALASKA. ONE MAJOR OBSTACLE TO THIS GOAL CURRENTLY UNDER REVIEW BY COMMISSIONER KATZ IS THE PRESENT SEASONAL DRILLING RESTRICTIONS ON EXPLORATION ACTIVITIES. EXXON BELIEVES THAT A DECADE OF SAFE OPERATIONS IN THE ARCTIC DEMONSTRATES THE ABILITY TO OPERATE IN A SAFE AND ENVIRONMENTALLY ACCEPTABLE MANNER.

ALASKA IS STILL ESSENTIALLY A FRONTIER AREA WHERE LITTLE EXPLORATORY DRILLING HAS OCCURRED. THE SHORTENED DRILLING SEASON NECESSITATES A LONGER TIME FRAME FOR THE DRILLING OF EXPLORATORY WELLS AND THE SUBSEQUENT DELINEATION OF ANY DISCOVERY MADE. THIS FURTHER DELAYS THE DEVELOPMENT AND PRODUCTION PHASE OF OIL AND GAS OPERATIONS. SUCH DELAYS WILL HAVE A SIGNIFICANT IMPACT ON THE STATE ECONOMY BY REDUCING THE STATE'S CASH FLOW.

IN CLOSING, I WOULD LIKE TO EMPHASIZE THAT EACH OF THE ISSUES WE HAVE DISCUSSED TODAY - THE FIVE-YEAR LEASING PROGRAM; THE STATE'S LEASING POLICY AS IT RELATES TO THE USE OF G&G DATA IN MAKING TRACT SELECTIONS, CHOOSING A BIDDING SYSTEM AND DETERMINING THE ADEQUACY OF A BID; AND SEASONAL DRILLING RESTRICTIONS - ALL WILL HAVE A SIGNIFICANT IMPACT ON THE TIMING OF FUTURE EXPLORATION AND DEVELOPMENT AND SUBSEQUENT REVENUES TO THE STATE OF ALASKA. ONE OF THE MAJOR PURPOSES OF ESTABLISHING A FIVE-YEAR LEASING SCHEDULE WAS TO PROVIDE A PLAN WHICH WOULD FACILITATE THE ORDERLY AND EXPEDITIOUS INVENTORY AND DEVELOPMENT OF ALASKA'S PETROLEUM RESOURCES. OUR PROPOSALS WOULD HELP ACHIEVE THIS PURPOSE.

I APPRECIATE THE OPPORTUNITY TO EXPRESS SOME OF EXXON'S VIEWS ON THE FIVE-YEAR OIL AND GAS LEASING PROGRAM AND THE STATE OF ALASKA'S LEASING POLICY. I WILL BE HAPPY TO ANSWER ANY QUESTIONS YOU MAY HAVE AT THIS TIME OR SUBMIT FURTHER WRITTEN COMMENTS TO THE COMMITTEE. THANK YOU FOR YOUR ATTENTION.



Alaska State Legislature

SENATE Resources Committee

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Official Business

BETTYE FAHRENKAMP, Chairman
VIC FISCHER, Vice-Chairman
BRAD BRADLEY
DICK ELIASON
DON GILMAN
BOB MULCAHY
ARLISS STURGULEWSKI

TO: Senate Resources Committee
FROM: Senate Resources Committee Staff
RE: State's 5-Year Oil and Gas Leasing Program
DATE: March 29, 1982

Please find attached further information received from Marathon Oil Company in response to our invitation for comments on the State's 5-Year Oil and Gas Leasing Program.

AGD 886413 +

K. Daniel Hinkle
Division Attorney
Production, U.S. & Canada

**Marathon
Oil Company**

P.O. Box 2380
Anchorage, Alaska 99510
Telephone 907/274-1511

March 23, 1982

Senator Bettye Fahrenkamp
Senate Resources Committee
Alaska State Legislature
Pouch V (MS 1300)
Juneau AK 99812

Re: Alaska 5-Year Oil and Gas Leasing Program
Attachments to Marathon Oil Company Comments

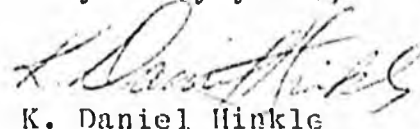
Dear Senator Fahrenkamp:

The attached enclosures listed below were inadvertently omitted from Marathon Oil Company's written comments on the Alaska 5-Year Oil and Gas Leasing Program, submitted to the Senate Resources Committee by letter dated March 19, 1982.

1. Request for Comments on the Outer Continental Shelf Bidding System of Oil and Gas Lease Sales, Federal Register, Vol. 47, No. 17, January 26, 1982, pp. 3613-3621.
2. Letter from Marathon Oil Company's Vice President R. R. Burke, dated 23 February 1982 to the Department of Interior re Comments on OCS Bidding Systems for Oil and Gas Lease Sales.
3. Secretary Watt's February 5, 1982 Release and Notice of Request for Recommendations on Fair Market Value of OCS Leases. (You already have been supplied a copy of Mr. Burke's reply, dated 3 March 1982.)
4. Letter to Secretary Watt from R. R. Burke, dated 18 September 1981 re Rejection of Bids in Recent South Atlantic OCS Sale No. 56.

Again, we thank you for the opportunity to submit comments and trust you will pardon the omission of the enclosed material.

Very truly yours,



K. Daniel Hinkle

KDH:mr
Encs.

xc w/encs.: John Katz, Commissioner
Department of Natural Resources

AGO 886414

4310-84

Department of the Interior
Assistant Secretary, Land and Water Resources

Request for Comment on Outer Continental Shelf
Bidding Systems for Oil and Gas Lease Sales

SUMMARY

Specific comments are requested on the concept of a proposed planning guideline for Outer Continental Shelf (OCS) bidding systems. The Department of the Interior (DOI) is pursuing a policy which encourages expeditious exploration of frontier (wildcat) areas and which provides adequate incentives for efficient and diligent production in developed regions. Other objectives include the provision of incentives to improve technology, the assurance of receipt of fair market value by the government, the maintenance of competition, and the protection of the environment. An example of a proposed bidding systems guideline, in matrix form, distinguishes each geographic and geologic cost area in recognition of the variance of relative bidding system performance. This inquiry is directed towards bidding systems for sales starting in mid 1982 and thereafter which follow past and planned experiments with the alternative systems established in regulations promulgated by the Department of Energy (DOE). If a final guideline is issued, experimentation with certain systems may be discontinued while others would be tested further. The guideline concept would be consistent with the Department's new "streamlining" approach of offering larger areas for lease. More time would be available for planning purposes and a bidding system design would be provided for large groups of tracts within an entire region as opposed to individual tract designations.

PURPOSE AND SCOPE

The choice of bidding systems potentially affects (1) the receipt of fair market value, (2) the economic efficiency and physical recovery of resources, (3) the level of competition, (4) the distribution of risks between lessee and lessor, and (5) administrative costs to the lessee and the lessor. The bidding systems differ in the manner in which perceived risks are shared between lessee and lessors. There are two basic risks: geologic (the probability that hydrocarbons exist) and economic (the probability that hydrocarbons can be developed at a profit to lessee). The bidding systems have one or more fixed components and one variable component. The bidding variable may be a cash bonus, a work commitment or a contingency percentage (royalty, net profit share). The relationship between the initial payment and the contingency percentage influences the distribution of risks between the lessee and lessor, and the distribution of revenues obtained from production.

Experiments for alternative bidding systems have been conducted in 22 OCS lease sales. Four of the six systems established by DOE regulation have been tested. Future tests are planned for the remaining OCS sales in calendar year 1981 and early 1982. A summary of past and future experiments is presented in a following section. The Department recognizes the need to announce the initial phases of experimentation and direct future tests toward those systems which offer the greatest promise to meet the goals prescribed in the OCS Land Act (OCFLA). Moreover, a consistent, reliable policy is necessary for prudent investment planning by industry.

The next phase of testing seeks to avoid a random diffusion of numerous, unproven systems which may be incompatible for the purposes of utilization of adjacent tracts. Certain systems may be eliminated from future testing because either, (1) past experiments indicate the expected costs do not justify possible

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gains, or (2) untested systems may be determined to present undue risks to the objectives of the OCS Lands Act.

It should be noted that a final analysis of the impacts of the tested alternative systems must ultimately await an observation of the effects on exploration, development, and production decisions. However, this does not mean that tests should continue until a final analysis is complete. It may be desirable to discontinue testing after an initial sample is deemed sufficient. If, in the future, the analysis concludes that a particular system enhances our achievement of the goals cited above, it may be determined that further leasing under that system is beneficial. The Department of the Interior currently plans to have substantially completed some testing of the most promising alternative systems by the end of calendar year 1981. At that time a sufficient sample size for those systems may have been offered for lease so that statistically significant results could be obtained. The analysis of the untested systems is continuing and the Department will inform interested members of the public of the results as they become available.

The purpose of this inquiry is to focus on the next phase of bidding system development for sales starting in mid 1982 and thereafter. A matrix of systems which offer the greatest contribution to our goals will be developed as a guideline for planning purposes. An example of a matrix is included in this notice. After receipt of comments, we plan to publish a final matrix which will serve as a policy base for specific sale designs. We recognize that specific conditions or new information and analysis may warrant the selection of different systems than those outlined. However, every effort will be made to inform interested

parties of our bidding system plans. The goals of this approach are to provide adequate information to the public and to share the necessary expertise in order that consistent and efficient systems are selected.

BACKGROUND INFORMATION

The OCS Lands Act provides the Secretary of the Interior with the authority to issue oil and gas leases by competitive bidding on the submerged lands of the OCS. Bidders submit bids in response to a lease sale offering for particular tracts under the terms and conditions specified in a Notice of Sale and published in the Federal Register. The bidding system used determines the method by which successful high bidders pay the United States for the lease.

The bidding system or systems used by DOI in each OCS lease sale are chosen from those authorized by the OCSLA and prescribed by Department of Energy (DOE) regulation (10 CFR Part 376). The Secretary of Energy also has the authority to disapprove the proposed bidding systems selected by DOI prior to issuance of the final Notice of Sale.

Section 8(a) of the OCSLA provides that bidding shall be by sealed bid and, at the discretion of the Secretary of the Interior, on the basis of the following types of systems:

- (A) cash bonus bid with a royalty at not less than 12-1/2 per centum fixed by the Secretary in amount or value of the production saved, removed, or sold;
- (B) variable royalty bid based on a per centum in amount or value of the production saved, removed, or sold, with either a fixed work commitment based on a dollar amount for exploration or a fixed cash bonus as determined by the Secretary, or both;

(C) cash bonus bid, or work commitment bid based on a dollar amount for exploration with a fixed cash bonus, and a diminishing or sliding royalty based on such formulae as the Secretary shall determine as equitable to encourage continued production from the lease area as resources diminish, but not less than 12-1/2 per centum at the beginning of the lease period in amount or value of the production saved, removed, or sold;

(D) cash bonus bid with a fixed share of the net profits of no less than 30 per centum to be derived from the production of oil and gas from the lease area;

(E) fixed cash bonus with the net profit share reserved as the bid variable;

(F) cash bonus bid with a royalty at no less than 12-1/2 per centum fixed by the Secretary in amount or value of the production saved, removed, or sold and a fixed per centum share of net profits of no less than 30 per centum to be derived from the production of oil and gas from the lease area;

(G) work commitment bid based on a dollar amount for exploration with a fixed cash bonus and a fixed royalty in amount or value of the production saved, removed, or sold; or

(H) subject to the requirements of paragraph (4) of this subsection, any modification of bidding systems authorized in subparagraphs (A) through (G), or any other systems of bid variables, terms and conditions which the Secretary determines to be useful to accomplish the purpose and policies of this Act, except that no such bidding system or modification shall have more than one bid variable."

The Department of Energy has issued regulations for the following systems:

- (1) Cash bonus bid, fixed royalty;
- (2) Royalty bid, fixed cash bonus;
- (3) Cash bonus bid, sliding scale royalty;
- (4) Cash bonus bid, fixed net profit share;
- (5) Net profit share bid, fixed cash bonus; and
- (6) Work commitment bid, fixed cash bonus, fixed royalty.

The statute requires that at least 20 percent, but not more than 60 percent of the total area offered each year be alternatives to a cash bonus bid, fixed royalty system (system A in the OCS Lands Act).

RECORD OF EXPERIMENTATION

A. Statistics for past sales The use of bidding systems other than the conventional cash bonus bid, fixed 16-2/3 percent royalty system began with OCS Sale 36 in the central Gulf of Mexico (GOM) in 1974, and testing has been conducted in a total of 22 OCS lease sales as of December 4, 1981. The following table displays this record of experimentation by bidding system.

Alternative Bidding System
Royalty Bid, Fixed Cash Bonus

Cash Bonus Bid, Fixed 33-1/3%
Royalty

Cash Bonus Bid, Sliding Scale Royalty 1/
Sliding Scale Formula 1

Sliding Scale Formula 2

Sliding Scale Formula 3

Sliding Scale Formula 4

Sliding Scale Formula 5

Sliding Scale Formula 6

Cash Bonus Bid, Fixed
Net Profit Share 2/

Sale Name, Area, and Date

Sale 36, Central GOM, 10/16/74
Sale C1, Lower Cook Inlet, 10/27/77

Sale 35, Southern California, 12/11/75
Sale 40, Mid-Atlantic, 8/17/76
Sale A62, Central GOM, 9/30/80
Sale 62, Western GOM, 11/18/80
Sale 53, California, 5/28/81

Sale 43, South Atlantic, 3/28/78
Sale 45, Central & Western GOM, 4/25/78

Sale 65, Eastern GOM, 10/31/78
Sale 51, Central & Western GOM, 12/19/78
Sale 48, California, 6/29/79
Sale 58, Central & Western GOM, 7/31/79
Sale 58A, Central & Western GOM, 11/27/79
Sale 57, Beaufort Sea, 12/11/79

Sale 49, Mid-Atlantic, 2/28/79
Sale 42, North Atlantic, 12/18/79

Sale A62, Central GOM, 9/30/80
Sale 62, Western GOM, 11/18/80

Sale 55, Gulf of Alaska, 10/21/80

Sale 53, California, 5/28/81

Sale A62, Central GOM, 9/30/80
Sale 55, Gulf of Alaska, 10/21/80
Sale 62, Western GOM, 11/18/80
Sale A66, Central & Western GOM, 7/21/81
Sale 56, South Atlantic, 8/4/81
Sale 66, Lower Cook Inlet, 9/29/81
Sale 66, Central GOM, 10/30/81

1/ The specific formulas cited herein include,

- Formula 1 : $R = 15.16667 + V$,
- Formula 2 : $R = 10(\ln V/2.5)$,
- Formula 3 : $R = 9(\ln V/2.5)$,
- Formula 4 : $R = 13(\ln V/3.0)$,
- Formula 5 : $R = 9(\ln V/3.5)$,
- Formula 6 : $R = 11(\ln V/3.25)$,

where V equals the quarterly value of production, adjusted for inflation, in millions of dollars, and R equals the percent royalty that is due and payable on the unadjusted value of production saved, removed, or sold. Also, there are limits for R which are used in each formula. In formula 1, 16-2/3 - R = 50, while in all other formulas, 16-2/3 - R = 65. The symbol "ln" denotes a conversion to natural logarithms.

2/ Sales A62 and 62 provided a capital recovery factor of 1.00, while the design for Sale 55 permitted a 1.30 capital recovery factor. Sales A62 and 62 involved a 50 percent net profit share rate, while Sale 55 fixed a 40 percent rate. Sale A66 provided capital recovery factors (CRF's) ranging from 0.25-1.00, Sale 56 had CRF's of 0.50 and 1.30, Sale 60 had a CRF of 0.75, and Sale 66 had CRF's of 0.25 and 0.50. Sale A66 and 66 had a 50 percent net profit share rate, Sale 56 had profit share rates of 30 and 45 percent, and Sale 60 had a profit share rate of 40 percent.

Some comparative statistics of tract offerings for these 22 sales

are as follows:

Bidding System	Tracts Offered		Tracts Bid On		Tracts Leased	
	No.	%	No.	% Offered	No.	% Offered
Cash Bonus Bid, Fixed 16-2/3% Royalty	2,246		1,096	48.8	995	44.3
Cash Bonus Bid, Fixed 12-1/2 % Royalty	85		38	44.7	33	38.8
Royalty Bid, Fixed Cash Bonus	56		38	67.9	38	67.9
Cash Bonus Bid, Fixed 33-1/3% Royalty	54		47	87.0	41	75.9
Cash Bonus Bid, Sliding Scale Royalty						
Sliding Scale Formula 1	96		50	52.1	41	42.7
Sliding Scale Formula 2	304		172	56.6	163	53.6
Sliding Scale Formula 3	113		64	56.6	58	51.3
Sliding Scale Formula 4	69		50	72.5	38	55.1
Sliding Scale Formula 5	32		3	9.4	3	9.4
Sliding Scale Formula 6	35		22	61.1	19	52.8
Cash Bonus Bid, Fixed Net Profit Share	384		157	40.9	139	36.2
TOTAL	3,475		1,737	50.0	1,568	45.1

B. Preliminary Analyses

The results from these tests are currently being analyzed with much attention being devoted to more detailed data disaggregations (e.g., comparisons between bidding system results for individual sales as well as tracts with similar resource, cost, or net worth expectations). Preliminary indications

from these detailed analyses, which might not be readily apparent from the aggregate data shown above, suggest that most of the alternative bidding systems have produced no statistically meaningful differences in industry competition in comparison to the conventional cash bonus, fixed 16-2/3 percent royalty system. Also, there have been no indications that these alternative bidding systems have resulted in an increased government share of the expected economic returns on tracts leased. The preliminary findings for each bidding system regarding industry competition and effects on exploration, development, and production are further discussed in the following paragraphs. The intention of each of these systems is to increase competition by requiring higher contingency payments and reducing front-end bonuses. No effect on the government share of the expected economic profit has been observed and is not addressed.

1. Royalty Bidding. Of the alternative systems tested by DOI thus far, the royalty bidding system results appear to depict the sharpest contrast to the conventional OCS leasing system. On the surface, significant increases in competition for tracts offered under this system were evident, particularly in Sale 36 which required only nominal bonus payments. However, there are concerns regarding this system, which have resulted in our proposal to discontinue its use. First, the royalty rates submitted by winning bidders in Sales 36 and CI were sufficiently high to make substantial production losses very likely. A high royalty means the minimum economically developable field size must be higher in order for exploration and development to proceed and for marginal fields to be developed. Second, the winner of a royalty bid tract, particularly in the case of only a nominal fixed cash bonus, has little investment at risk compared to other successful bidders under alternative systems for similar tracts. Such risk may be so low that tract owners will have

greatly reduced incentives to explore and develop these tracts. The lessee is likely to delay exploration for many reasons, including speculation, or hopes that another developer on a nearby tract will prove or disprove resources of the royalty bid tract. Because the expected losses in production from these effects are likely to be substantial, it is not anticipated that this system will be used in future OCS sales.

2. Fixed 33-1/3% Royalty. Preliminary findings from actual tests indicate that this system may have only modest beneficial effects on competition for OCS leases. Furthermore, simulation analysis has shown that the use of this system for lower valued tracts or for tracts in frontier areas may result in tracts not receiving bids and may yield significant production losses due to the higher royalties. Because of the geologic uncertainty associated with most of the areas to be offered in future OCS lease sales, it is anticipated that the use of this system will be limited to the tracts with lower costs and better resource prospects where higher risk sharing is desirable. At present, we do not wish to test this system in 1982 sales because of the urgent need to avoid production and exploration disincentives.

3. Sliding Scale Royalty. In general, this system has had no significant statistical effect on competition in comparison to the conventional fixed 16-2/3 percent royalty system. This has probably resulted from the conservative specifications of the sliding scale formulae used thus far, in order to reduce potential production effects. Thus, prospective bidders may have assessed a low probability that the majority of tracts offered under this system would produce quantities of oil and gas sufficient to incur a royalty rate higher than the 16-2/3 percent minimum rate. In this case, they would have conceived this system to be identical to the

conventional one-sixth royalty system. Recent OCS sales have incorporated a sliding scale formula which is more aggressive. However, when such a formula is used there is a risk that production may be delayed in order, to avoid higher royalty payments. In addition, an aggressive formula reduces the lessee's payoff from exploration if large discoveries are made and thus may dampen investment in exploration. Finally, it is difficult to design a proper schedule given the uncertainty of real price changes which greatly influence effective royalty rates. Thus, it may be advisable to defer further use of this system.

4. Fixed Net Profit Share. Data on tests of this system show no statistically significant effects of this bidding system on industry competition in comparison to the conventional bidding system. It is probable, however, that this result may have been highly influenced by the uncertainty surrounding this new leasing system, which is significantly different from the more common cash bonus, royalty payment combination. Perhaps the most important test result on this system is that the geometric means of bids and high bids submitted for profit share leases were significantly lower than the same variables examined for similar fixed 16-2/3 percent royalty leases. Thus, front-end requirements for firms appear lower.

An appropriately defined profit share system may be capable of generating modestly improved production incentives if the lessee is allowed to earn a normal profit before sharing returns with the government. A greater number of tracts may be explored and developed as compared to use of a royalty system since that system extracts payments on production regardless of the costs incurred by lessees. The fixed net profit share system may be preferable especially in frontier areas where large-scale production is necessary to cover the unusually high costs of exploration and development. Fixed net profit share bidding reduces the bidders' risks in areas of high

geologic uncertainty and moderate to high tract values. However, such benefits are offset by administrative and accounting burdens on both lessees and the government.

In addition, the determination of the parameters of a fixed profit share bidding system are critical in determining subsequent exploration, development and production strategies. The fixed capital recovery factors which have been used in the past in conjunction with the fixed profit share bidding system present some problem areas because of the ex ante assumptions regarding both a necessary rate of return and the appropriate timing of capital expenditures. Incorrect estimates could result in large revenue losses to the government or companies and could cause large inequities creating misallocations of resources. Therefore, the Department is taking into consideration using an Investment Accounts System in addition to the Fixed Capital Recovery System in its consideration of fixed profit share bidding. It is anticipated that this system will continue to be tested in future OCS offerings, but with important attempts to eliminate the uncertainties previously experienced. In this manner, it is hoped that significant increases in competition and exploration incentives may be realized.

C. Alternative System Plans for Upcoming Sales

There are two additional tests of alternative bidding systems either completed or scheduled. Proposed bidding system designs have been published in the Federal Register as part of each offering's Proposed or Final Notice of Sale. These offerings are as follows:

Sale Name, Area, Expected Date	Number of Tracts by Bidding System
59, Mid-Atlantic, 12/81	Cash Bonus Bid, Fixed 16-2/3% Royalty - 4 Tracts Cash Bonus Bid, Fixed 12-1/2% Royalty - 166 Tracts Cash Bonus Bid, Fixed Profit Share - 83 Tracts
67, GOM, 2/82	Cash Bonus Bid, Fixed 16-2/3% Royalty - 223 Tracts Cash Bonus Bid, Fixed Profit Share - 13 Tracts

Of these bidding systems, the Cash Bonus Bid, Fixed 12-1/2 percent royalty system has only been used in one previous OCS sale, Sale 56.

The use of this system has been recommended for certain deep water tracts for Sale 56 and Sale 59. These tracts are expected to require substantially higher exploration, development, and production costs, as well as longer times before initial production, in comparison to shallow water tracts. DOI analyses indicate that the minimum developable discovery on a tract in such deep water areas under a fixed 12-1/2 percent royalty system would be about 14 percent less than for the same tracts under a fixed 16-2/3 percent royalty system. As a result, more tracts may be explored and developed. In addition, the lower royalty rate system is expected to yield more rapid production rates and higher economic profits. It is not anticipated, however, that the slightly larger cash bonus bids associated with a lower royalty rate will significantly reduce competition, since the higher costs for exploration and development are the primary restraints to competition.

Of the remaining tests planned for 1981 and early 1982, the Cash Bonus Bid, Fixed Profit Share tests include specific variations in design. These are:

Sale	Formula
59	NPSR = 30%; CRP = 1.50
67	NPSR = 50%; CRP = .50, and NPSR = 40%; CRP = 1.00

These tests will permit a broader analysis on the performance of this system.

C. Untested Systems

The DOE has promulgated regulations on the following alternative systems which have not been tested and are, at present, not planned for future testing.

1. Net Profit Share Bid, Fixed Cash Bonus A possible benefit of this system is the encouragement of competition because of its lower cash bonus, but it may also produce profit share bids that are excessively high. This problem may result from an improperly defined cost recovery feature, and because a

bidder can increase his chance of obtaining a tract by submitting higher bids with little financial commitment. At high profit share rates, the incentive to explore is relatively low and should production ensue, it will generally occur at too slow a pace. All of the strengths and weaknesses already discussed on the fixed net profit share system are also applicable to a variable net profit share approach in addition to the problems just mentioned. Finally, if the recovery factor is too high relative to the profit share rate, there may be an incentive for firms to make uneconomical expenditures to take advantage of the recovery feature.

2. Work Commitment Bidding, Fixed Bonus, Fixed Royalty The major goal of experimentation with alternative systems is to encourage increased competition through reduced front-end bonuses. The purpose of this system is to achieve such an improvement in competition by mitigating risk-averse behavior. However, firms must commit an expenditure equal to the estimated cash bonus plus expected exploration costs. Payments would be deferred until costs are expended or until the account is voluntarily closed before the commitment is satisfied.

Another objective of this system is to expedite exploration by permitting credits for actual expenditures and thereby forcing intensive exploration. However, this creates an incentive for firms to waste expenditures to avoid payments to the government. The result would be a serious misallocation of valuable resources. In order to prevent such an outcome Section 8(a) (7)(B) of the OCSLA provides that only 50 percent of qualifying exploration expenditures be included to satisfy the commitment. Despite this provision, our analysis indicates a potential for the drilling of exploratory wells which would otherwise be economic.

MATRIX OF BASE SYSTEMS

The following example matrix is to serve as a guideline for the selection of bidding systems in each geographic area. A key variable in the determination of the appropriate system is the relevant cost function for the area involved. Exploration, development, and production decisions, as well as bid submission, are based on the relationship of the cost function with respect to an expected revenue profile. The contingency component of the bidding system can be viewed as a direct addition to the cost curve and thus influences the optimal private levels of investment in exploration and development and resulting rates of production. In frontier and deep water areas, costs may be at such extreme levels that substantial resources may go undeveloped if contingency payments are added at the margin. In the more developed and low cost areas, most resources will be developed irrespective of the contingencies since revenues usually allow higher contingencies to be added before production is affected or before the minimal economic field size is increased. In addition, there is some theoretically optimal percentage of profits which may be extracted before production losses are generated. If it is a goal of our bidding system to avoid negative impacts to production, it becomes necessary to design systems which yield the government this optimal fraction of profits. Thus, the analysis must concentrate on cost and revenue functions.

For these reasons we propose a matrix which differentiates bidding systems by generalized cost areas and water depth. After analysis of the comments received, a final guideline may be published if the matrix is deemed to be a useful planning tool.

Example Bidding System Matrix *

Geographic Area*	Water Depth			
	0-50 meter	50-200 meter	200-400 meter	400+ meter
Central, Western, and Eastern Gulf of Mexico	Cash Bonus Bid Fixed 1/6 Royalty	Cash Bonus Bid Fixed 1/6 Royalty	Cash Bonus Bid Fixed 1/6 or 1/8 Royalty	Cash Bonus Bid Fixed 1/8 Royalty Fixed Profit Share
Northern and Southern Calif.	Cash Bonus Bid Fixed 1/6 Royalty	Cash Bonus Bid Fixed 1/6 Royalty	Cash Bonus Bid Fixed 1/6 Royalty	Cash Bonus Bid Fixed 1/6 or 1/8 Roy Fixed Profit Share
Portion of North Atlantic - Northern Georges Bank	Cash Bonus Bid Fixed 1/6 Royalty	Cash Bonus Bid Fixed 1/8 Royalty	Cash Bonus Bid Fixed 1/8 Royalty Fixed Profit Sh.	Cash Bonus Bid Fixed 1/8 Royalty Fixed Profit Share
Mid. South and North Atlantic (except Northern Georges Bank)	Cash Bonus Bid Fixed 1/6 Royalty	Cash Bonus Bid Fixed 1/6 Royalty	Cash Bonus Bid Fixed 1/6 or 1/8 Royalty Fixed Profit Sh.	Cash Bonus Bid Fixed 1/8 Royalty Fixed Profit Share
South Alaska (Includes Cook Inlet, Shumagin, Kodiak, Gulf of Alaska)	Cash Bonus Bid Fixed 1/6 Royalty	Cash Bonus Bid Fixed 1/6 Royalty	Cash Bonus Bid Fixed 1/6 or 1/8 Royalty	N/A
N. Aleutian, Hawaiian, and Norton Basins	Cash Bonus Bid Fixed 1/6 Royalty	Cash Bonus Bid Fixed 1/8 Royalty	Cash Bonus Bid Fixed 1/8 Royalty	Cash Bonus Bid Fixed 1/8 Royalty Fixed Profit Share
Beaumont Field	Cash Bonus Bid Fixed 1/6 Royalty	Cash Bonus Bid Fixed 1/8 Royalty Fixed Profit Share	Cash Bonus Bid Fixed 1/8 Royalty Fixed Profit Share	N/A
Barrow Arch & Hope Basin	Cash Bonus Bid Fixed 1/8 Royalty	Cash Bonus Bid Fixed 1/8 Royalty Fixed Profit Share	Cash Bonus Bid Fixed 1/8 Royalty Fixed Profit Share	N/A

* Notes: Where the profit share system is listed it may also be used in combination with a fixed royalty (System F in the OCS Lands Act, as amended).

* These areas correspond to those designated on the July, 1981 Proposed 5-Year OCS Oil and Gas Leasing Schedule.

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In addition to water depth, there are several factors which may affect the level of oil and gas exploration, development, and production costs for each OCS area. These include distance to shore, physical field dimensions, production characteristics, quality of oil and gas, geologic surface conditions, and climatic elements. These influences have been considered in the bidding system recommendations shown in the above matrix and included in the analysis wherever possible.

SPECIFIC QUESTIONS

To assist in this determination of policy direction regarding bidding systems, the following questions are presented to all interested persons. Respondants are invited to offer comments on these specific issues, or any other topics germane to bidding systems which may be appropriate to use in future OCS lease sales.

1. Is the publication of a base case matrix useful as a means of informing the public on policy direction?
2. Are there any additional systems not discussed above which should be considered for future sales?
3. As indicated in the bidding system matrix, the bidding systems recommended for use are a function of water depth and location. Is this

approach acceptable? What specific alternative form should a matrix follow? Are the specific area and water depth delineations we propose considered adequate to distinguish cost features?

4. What changes should be made to the specific bidding systems proposed in this matrix?
5. Should bidding systems recommended be a function of wildcat, development, or drainage type on a tract-by-tract basis?
6. Our proposal relies upon the continued testing of a fixed net profit share system in high cost areas as a means of promoting exploration and development, without the risk of contingency payments being obligated before costs are recovered. Is this a viable system? What are the administrative costs associated with this system?
7. What profit share parameters are suited to each region?

DATE AND ADDRESS

Information must be submitted by March 5, 1982 to the Assistant Secretary, Land and Water Resources, Attention David Russell, Department of the Interior, Washington, D.C. 20240.

FOR FURTHER INFORMATION

Questions concerning this request should be referred to either Thomas Readinger on (202) 343-5121 or H. Theodore Heints on (202) 343-7258.

Garrey E. Carruthers

Assistant Secretary for Land and Water Resources

JAN 1 1982

Certified to be a true copy of the original

Edward Cole
Certifying Officer

(FPA Doc 82-1868 Filed 1-25-82 8:45 am)
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Marathon
Oil Company

Findlay, Ohio 45840
Telephone 419/422-2121

February 23, 1982

Assistant Secretary, Land and Water Resources
Department of the Interior
Washington, D.C. 20240

ATTENTION: David Russell

RE: Comments on Outer Continental Shelf Bidding Systems for Oil and Gas Lease Sales

Dear Sir:

This letter constitutes the comments of Marathon Oil Company ("Marathon") in response to the Department of the Interior's ("Department") request for comment on Outer Continental Shelf bidding systems for oil and gas lease sales ("Request for Comment"), 47 Fed. Reg. 3613-3621 (January 26, 1982). Marathon welcomes the opportunity to comment and commends the Department's efforts to abandon experimentation with bidding systems that contain serious deficiencies. We also commend the Department's efforts to provide early guidelines as to the bidding systems to be used for a large group of tracts within a region as opposed to designating bidding systems on an individual tract basis.

General Comments

In the Record of Experimentation section of the Department's Request for Comment, the Department outlines the serious deficiencies inherent in various "alternative" bidding systems. Marathon agrees that these bidding systems are seriously deficient and supports the Department's preliminary decision to abandon future experimentation with them. Furthermore, Marathon urges that the following systems not be used in future sales:

1. Royalty Bidding
2. Fixed 33 1/3% Royalty
3. Sliding Scale Royalty
4. Net Profit Share Bid, Fixed Cash Bonus
5. Work Commitment Bidding, Fixed Bonus, Fixed Royalty

With respect to Fixed 33 1/3% Royalty, the Department states: "At present, we do not wish to test this system in 1982 sales because of the urgent need to avoid production and exploration disincentives." Marathon urges that this bid system not be used beyond 1982. The urgent need to expedite oil and gas exploration and production will not be materially decreased in only one year. In addition,

use of a bidding system which is a disincentive to oil and gas exploration and production will contribute to fewer discoveries and less production of oil and gas, thus resulting in higher prices to the public. Finally, significant use of this bidding system in the OCS could set a "standard" which may be applied to lands other than the OCS, resulting in greatly exaggerated exploration and production disincentives throughout the nation.

Specific Comments

1. Publication of a base case matrix.

We support the publication of a base case matrix and believe it will provide more time to efficiently plan for exploration activities and prudent investment schedules.

2. Use of additional bidding systems.

We do not consider systems other than those included in the base case matrix to be worthy of future use.

3. Bidding systems as a function of water depth and location.

We support the concept that bidding systems be, in part, a function of water depth and location. We further support the area and water depth delineations proposed. We strongly urge the Department to apply these criteria in a flexible manner, however, using the same bidding system on contiguous tracts as much as possible to promote joint exploration and unitization of tracts.

4. Suggested changes in the proposed bidding systems.

We suggest that the Department use a 1/8 royalty for water depths of 200-400 meters in Northern and Southern California and South Alaska. Furthermore, we suggest that the royalty should not exceed 1/8 in all water depths exceeding 400 meters.

5. Bidding systems as a function of acreage type.

We do not support the concept of choosing bidding systems on a tract by tract basis as a function of whether acreage is of the wildcat, development, or exploratory type. We believe this could create production delays and problems in unitization, particularly in frontier areas.

6. Viability of fixed net profit share system.

We agree that a cash bonus bid/fixed net profit share system may promote exploration and production, particularly in deep water and in hostile environments, provided the net profit share percentage and capital recovery factor are set at appropriate levels. We agree in general with the base case matrix as stated.

None of Marathon's fixed net profit share leases is as yet a producing lease. Marathon, therefore, does not have actual experience with the administrative costs arising out of the fixed net profit share accounting regulations. Marathon agrees, however, that efforts should be made to minimize the administrative burdens on lessees and the government.

In addition, Marathon believes that the cash bonus bid should be eligible for capital recovery, particularly in water depths exceeding 400 meters (such water depths probably will require untried production systems other than normal bottom-fixed platforms) and in ice areas of northern waters. The National Petroleum Council's report on "U.S. Arctic Oil and Gas", December, 1981, contains estimates that in Arctic areas at least 9 to 14 years will be required between a lease sale and commencement of production. This report states that regional transportation systems are very sensitive to the actual economic consequences of each Arctic region; hence, this time factor could be even longer for initial discoveries in given regions. These long delays before any recovery of initial investment, i.e., cash bonus bid, could deter exploration and development unless the initial investment is eligible for capital recovery.

Also, we suggest that the capital recovery factor be applicable to all platforms, and development plan wells on all platforms, in addition to the first platform. Without this change in the system, it is probable that the first platform may be economically attractive but subsequent platforms may not be. This could greatly deter complete development of individual fields and could be a significant disincentive to the economic justification of regional transportation systems in a given region.

7. Profit share parameters suited to each region.

We believe the following net profit share parameters are appropriate, provided the capital recovery factor is applicable to the cash bonus paid and all platforms and development plan wells on those platforms.

<u>Geographic Area</u>	<u>Water Depth (Meters)</u>			
	<u>0 - 50</u>	<u>50 - 200</u>	<u>200 - 400</u>	<u>400+</u>
Gulf of Mexico				50% CRF 1.0
Northern and Southern Calif.				40% CRF 1.5
N. Georges Bank			40% 1.5	40% CRF 2.0
Atlantic except N. Georges Bank			40% 1.5	40% CRF 1.5
N. Aleutian, Navarin and Norton Basins				30% CRF 2.5
Diapir Field		30% CRF 3.0	30% CRF 3.0	
Barrow Arch and Hope Basin		30% CRF 3.0	30% CRF 3.0	

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We appreciate the opportunity to comment on these matters and again wish to compliment the Department's efforts to accomplish the goal of expediting exploration and development of the nation's OCS resources.

Yours very truly,

A handwritten signature in cursive script, appearing to read "RRB".

RRB:WKS:bg

#3

OFFICE OF THE SECRETARY

For Release February 5, 1982

SECRETARY WATT ANNOUNCES REQUEST FOR RECOMMENDATIONS ON FAIR MARKET

VALUE FOR OUTER CONTINENTAL SHELF OIL AND GAS LEASES

Secretary of the Interior James Watt announced today a call by the newly created Minerals Management Service for recommendations on procedures to be utilized by the Department in evaluating bidding on the Outer Continental Shelf (OCS) to ensure receipt by the American public of fair market value for lands leased by the Department.

The request was published in today's Federal Register describing the procedures followed by the Department in the past and a range of options including three alternative methods for assuring fair market value for OCS tracts.

Comments are to be submitted no later than 12:00 noon on March 8, 1982. The notice also requested comments on proposed special bid acceptance criteria that would be applicable in frontier areas of the OCS.

"The equitable and efficient determination of fair market value of bids for OCS tracts is a major step involved in streamlining our OCS leasing program," said Secretary Watt. "I believe we will profit from the views and recommendations of the public, the regulated industry and Federal, State, and local governmental entities, all of whom I encourage to respond to the call for advice," the Secretary said.

The evaluations of OCS tracts would be performed by the Department's Minerals Management Service (MMS), which was established by the Secretary on January 19, 1982, to replace the former Conservation Division of the U.S. Geological Survey.

Comments on the Secretary's proposals should be forwarded to Mr. William P. Pandley, Acting Director, Minerals Management Service, Room 6651, Main Interior Building, 18th and C Streets, N.W., Washington, D.C. 20240.

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UNITED STATES
DEPARTMENT OF THE INTERIOR
Minerals Management Service
Tract Evaluation Procedures to Assure Receipt of
Fair Market Value for Outer Continental Shelf
Oil and Gas Leases

AGENCY: Minerals Management Service, Interior.

ACTION: Request for comments.

SUMMARY: The Department seeks to identify the most efficient, practicable, and reliable method or methods of tract evaluation for purposes of assuring receipt of fair market value of lands it leases for oil and gas exploration and development on the Outer Continental Shelf (OCS) pursuant to the OCS Lands Act 43 U.S.C. 1801 et seq. This solicitation is necessary to obtain comments and recommendations from representatives of Federal, State, and local governmental agencies, industry, and the public. Current tract evaluation procedures and three options are presented for comment.

DATES: Comments must be submitted in writing and received in Room 6651, Main Interior Building by 12:00 noon, EST, March 8, 1982.

ADDRESSES: Comments may be mailed or delivered to Mr. William P. Pendley, Acting Director, Minerals Management Service, Room 6651, Main Interior Building, 18th and C Streets N.W., Washington, D. C. 20240.

FOR FURTHER INFORMATION CONTACT: Mr. Robert L. Rioux, (703) 860-7581, (FTS) 928-7581, or Mr. James N. Parrish, (703) 860-7835, (FTS) 928-7835.

CURRENT TRACT EVALUATION PROCEDURES: The Secretary of the Interior is required by law to assure that the Federal Government receives fair market value for the lands leased and the rights conveyed when leasing OCS resources. See 43 U.S.C. 1344(a)(4)(Supp. II 1978). Under past procedures all high bids received for OCS leases are examined to determine whether or not they constitute fair market value. The high bids submitted are compared with the presale estimate of value assigned to each tract by the Minerals Management Service (MMS), (formerly the Conservation Division of the U.S. Geological Survey).

MMS utilizes a "Monte Carlo Analysis Method" to obtain a "range of values" to determine MMS' presale estimate of value for each tract. The Monte Carlo simulation method has been considered appropriate for the evaluation of oil and gas exploratory prospects because of the uncertainty of the data which must be used in the evaluations. The following is a description of the Monte Carlo method:

1. MMS estimates the range and distribution of possible values of each variable that will affect the ultimate outcome of the oil and gas venture.
2. One value from the estimated distribution of each variable is selected at random and the tract value is computed using this combination of variables. This computation determines one point in the final distribution of possible tract values. A second value from the distribution of each of the variables is then selected at random, and the resulting tract value is computed to determine the second point in the distribution of possible tract values.

3. This process is repeated, each time with a set of values selected from the estimated distribution of each variable.

The mean of these values and the dry hole costs are then subjected to a risk factor to determine the presale estimate of value for a tract. The risk factor reflects the quality and quantity of the data used in determining the characteristics of the prospect, as well as the past successes and failures encountered in the geologic trend. Thus, while the quality and quantity of data available to evaluate offshore tracts are important, the Monte Carlo simulation method of evaluation provides a means for determining a reliable presale estimate of value even in the case of uncertainty regarding the precise measure of a particular variable.

The Department of the Interior (DOI) currently uses three major criteria for determining the adequacy of bids. The Monte Carlo simulation method provides two presale estimates of value for each tract--the mean range of values (MROV) and the discounted mean range of values (DMROV). The MROV represents the Government's presale estimate of value for a given tract. The DMROV represents a value estimate reflecting revenue delays to the Government if the bid is rejected, i.e., it represents the present value of leasing the tract at a later time. The third criterion, which is prepared by the Bureau of Land Management (BLM), is the average evaluation of tract (AEOT), which is the average of all bids received on a tract, including the Government's presale estimate of value. The

AEOT is the mechanism whereby market prices and competition are implicitly considered. If a bid exceeds the MROV or the DMROV, the bid is almost always accepted. If the bid is below both the MROV and DMROV, the bid is then compared to the AEOT. In determining whether the AEOT is a reliable criterion to assess the receipt of fair market value in a particular instance, MMS and BLM consider, among other things, (1) the number of bids on a tract, (2) the reliability of the evaluation data, and (3) the existence of an anomalously low bid on the tract.

The current procedure for tract evaluation is, in essence, an attempt to provide a separate, additional nonmarket, and hence artificial, estimate of the value of each tract offered. Tract value estimation involves geophysical and geological mapping and analysis coupled with an elaborate and complex, and by its nature arbitrary, computer program. An established procedure has been developed for the use of such tract value estimates in recommending bid acceptance or rejection. These procedures, in part, adjust for the information contained in other bids to reduce the chances that bids will be rejected, not because they are too low, but because the tract value estimate is too high. The inherent uncertainty in any nonmarket, and hence artificial, estimate of a tract's value raises serious questions about the wisdom and effectiveness of a strategy that incurs substantial costs for tract value estimates in an attempt to determine what specific high bids do not constitute fair market value.

STREAMLINED EVALUATION APPROACHES: One of the proposals for streamlining and accelerating the OCS leasing process is to increase reliance on the marketplace and the presence of competitive bidding for offered tracts, rather than to rely on a Government established presale evaluation on every tract, as the primary means of assuring receipt of fair market value. There are clear gains in the internal efficiency of the Department's leasing activities if the costs of tract evaluation can be reduced. More importantly, the economic efficiency of exploration and development can be improved by relying more fully on the leasing market and less on Government decisionmaking to determine which tracts are leased. Greater reliance on the free market and competitive bidding for assurance of receipt of fair market value reduces the likelihood that exploration of a prospect will be unnecessarily delayed because of a bid rejection that was based on artificial and uncertain assumptions.

However, the tract evaluation system may have added an additional deterrent to discourage systematic underbidding and collusion by, in effect, introducing the Government as an additional bidder. This assurance while subject to the same deficiencies has been considered important on drainage, proven, or development tracts on which one bidder has potentially superior information.

Although a strong case can be made that the lease market itself assures receipt of fair market value, there would appear to be a benefit from continuing an appropriately sized and designed effort

to review at least some of the bids received. Substantial changes in bidding patterns or the limited availability of information on resource prospects could provide opportunities for some bidders to gain from underbidding or collusion. An evaluation process is needed that will provide assurance that fair market value will be received for leases even if such opportunities should arise. A review procedure that provides a credible and cost-effective deterrent against underbidding and collusion would effectively meet this need.

In the OCS program, the market value of "the lands leased and rights conveyed" clearly depends on the oil and gas prospects of the tracts, the expected prices of oil and gas, the costs of OCS operations, the supply of leases and substitutes, and the financial, market, and technological characteristics of potential bidders. The market value of leases is not the market value of the oil and gas eventually discovered or produced, but the value of the right to explore, and, if there is a discovery, develop and produce, subject to a wide array of constraints. The market value of a lease is its value at the time it is offered, given conditions at that time. It is not necessarily the same as the value of the lease at a later time.

In summary, to assure receipt of fair market value for the rights conveyed by an OCS lease, the Secretary must determine that the payment received for the lease is the price that it, or would be, set by a market which is sufficiently competitive to yield fair transactions between buyers and sellers. We define fair market value as the amount at which property would change hands between a willing buyer and a willing seller, neither being under any compulsion to buy or sell and both having reasonable knowledge of the relevant facts. We believe the following guidelines should be reflected in any procedure adopted:

1. In deciding how to assure receipt of fair market value, the Secretary should consider and weigh a variety of objectives and factors enumerated in the OCS Lands Act as amended, including costs, administrative burdens, and delays in exploration.
2. Bid rejection decisions should be based on evaluations so as to be defensible as not arbitrary and capricious.
3. Tract evaluations should be done postsale to avoid the excessive and unnecessary workload involved in evaluating tracts on which bids are not received.
4. Competition in the lease market should be used as a principal basis for accepting bids as fair market value.
5. Random selection of tracts for evaluation should be used in establishing a deterrent against underbidding and collusion.

The DOI is in the final stages of developing a procedure to conduct postsale evaluation of a portion rather than all tracts receiving bids. A consideration in designing this procedure will be the effect on Government revenues for a given evaluation technique.

In designing a system, the costs of tract evaluation and bid rejection must be weighed against the benefits. Two types of costs are being considered. The first is the cost of the evaluation procedure itself. The second is the cost of the delay in resource exploration and development that results when a high bid is rejected. The income expected to be generated by the development of the resources of a tract must be discounted to reflect the effects on the productivity of the economy of delaying the availability of valuable resources. The extent of the delay caused by rejection of a bid depends on the timing of the next sale, assuming of course that it will be bid on and leased at that time.

OPTIONS: The DOI is in the final stages of reviewing options with regard to evaluation practices for OCS lease sales. Three options are under active consideration which present a range of considerations. Option 1 reflects reliance upon competition at a three or more bid level for bid acceptance with perhaps no sampling; or a 5 percent random sample of these bids combined with a 30 to 60 percent sample of one and two bid tracts which could be random, or part random and part based on predetermined criteria. Analysis of tracts sampled could be based partially on comparative analysis.

Option 3 would place more reliance upon Monte Carlo quantitative evaluations for a sample of prospects sufficient to cover about 60 percent of the tracts receiving bids.

Option 2 would combine elements of Options 1 and 3 through a phased screening process. DOI analysis to date has focused on this option. An initial screen would provide for acceptance of all high bids on structures having tracts which receive three or more valid bids, unless they contain drainage, proven or development tracts, or are selected for further evaluation by MMS and BLM in a 25 percent sample using predetermined criteria or selected in an additional 5 percent random sample. Subsequently, an evaluation of sampled tracts may be made using comparative analyses. A final screen would employ Monte Carlo techniques.

A description of proposed procedures to implement each of these three options is presented in the following section. Respondents should consider the following problems in commenting on any of the three options:

- (1) Workload implications with resultant Government expense of proposed sample sizes.
- (2) Difficulty in applying comparative analyses that are credible and yield consistent predictable results without simply adding an element of layering between use of competition and quantitative analysis.
- (3) Most of the technical effort involved is employed in mapping to define the nature of the prospect or structure and in developing

input for the Monte Carlo model. Increased reliance on competition avoids these two high workload areas. Comparative analyses are dependent on quantitative evaluations to identify possible candidates for rejection.

(4) Evaluations of one tract on a structure or prospect will require mapping of the entire structure or prospect. Sample size should therefore reflect all tracts on a structure or prospect basis.

EXAMPLES: The following are examples of proposed procedures for each of the three options under consideration. Various combinations are of course possible. Respondents may address each of the three options and/or any other evaluation procedures they choose to recommend.

Option I - Primary Reliance on Competition

This option focuses on evaluating few-bid tracts and relying on competition shown on many-bid tracts to give confidence of receipt of fair market value.

This option employs the following steps:

- Step 1 - Apply "noise bid" criteria to all bids received to discount for anomalously low, speculative, or random bids.
- Step 2 - Accept 100 percent of the high bids on tracts receiving three or more valid bids. Alternatively, subject all tracts receiving three or more bids to a 5 percent random sample.
- Step 3 - All tracts on a structure or prospect containing a tract receiving three or more bids, unless randomly selected in Step 2, would be deemed to be competitively bid and accepted.
- Step 4 - Subject a sample of 30 to 60 percent of all tracts receiving one or two bids to a comparative (qualitative) evaluation. All tracts on a structure or prospect would be included in the sample.
- Step 5 - Accept bids on all structures not selected above for sampling. Accept bids where there is no identifiable structure or prospect associated with tracts receiving at least minimum bids.
- Step 6 - If the structure or prospect is evaluated, accept all high bids if the sum of all tract (or structure) evaluations done by MMS does not exceed the sum of the high bids for the structure or prospect value.

Questions:

1. Should the Government rely on the market alone to assure receipt of fair market value (i.e., accept high bids on tracts without evaluation) or should it review (evaluate) a sample of tracts receiving bids?
2. Should tracts be selected for evaluation randomly or according to predetermined criteria (selective)? Should the sample be split between random and selective tracts? If so, how?
3. How large a sample should be selected for evaluation? Should it be between 25-60 percent of all tracts bid on? Is a 5 percent random sample sufficient to prevent and/or detect collusion and systematic underbidding?
4. If selectively sampled, what, if any, of the following or other criteria should be used?
 - a. The adequacy and availability of geological and geophysical data for further evaluation of certain tracts in a timely and cost-effective manner.
 - b. MMS interpretations of geological and geophysical data which are available may clearly indicate that certain tracts or groups of tracts can be judged to have no identifiable structure. These tracts would not be included in the sample.
 - c. Competition for certain tracts or competition for the sale in general may be deemed sufficient to warrant that the structure(s) not be included in the joint sample. A greater reliance can be placed on the market especially if the number of bids is high, even if it is possible that an independent evaluation would generate a high value. Where possible, competition should be judged relative to available MMS data.

- d. The history of a tract as evidenced by past offering, leasing, rejection, and exploration may be the basis for nonselection. Past high bids and past evaluations may be considered in conjunction with current high bids.
- e. Unique bidding patterns specific to a sale may indicate that companies view geologic trends in a different manner than MMS, and therefore, MMS may wish to carefully review possible alternate interpretations. In addition, where specific bidders may differ substantially from other bidders further evaluations may be recommended. Structures containing a pattern of anomalously bid tracts would be selected for further evaluation.
- f. Selection will focus a greater proportion of the evaluation on tracts receiving fewer bids. If systematic underbidding is to be deterred, percentage guidelines for each bid category would be flexible and permit sale specific considerations. Generally, unless predetermined departmental criteria indicate a necessity for further evaluation, structures containing tracts receiving three or more bids will be considered to represent adequate competition and will be deemed to be acceptable.
- g. Present value delays in Government receipts associated with the time consumed by an evaluation will be considered. Structures

containing tracts receiving high front-end bonuses will be more carefully compared to other selection criteria than lower bid tracts, if all other factors are equal.

5. Should all tracts selected be evaluated on a structure or prospect basis?
6. At what level should the bid cutoff point indicating adequate competition be? At three bids? Higher? Lower?
7. Would one or two bids be adequate competition for assuring receipt of fair market value if there is a particular number of bidders in a sale? For example, if there were 20 active bidders in a sale and only one bid is received on a tract or structure, does this represent a zero bid by all other participants? If yes, how many bidders would constitute a competitive sale? What combination of number of bids received on a tract with the number of bidders in a sale assures receipt of fair market value? Should the number change from frontier areas to developed areas or not?
8. If a comparative evaluation process is used to recommend acceptance or rejection of bids on tracts selected for evaluation, what methods could be employed? The use and efficacy of such methods should be discussed.
9. Would a comparative evaluation process be sufficient as a basis for bid rejection or should a comprehensive economic, resource (quantitative) evaluation be done?

10. Should the high bids on the tracts on a structure or prospect be accepted if the sum of the high bids received exceeds the Government's value for the entire structure or prospect?
11. On which basis should the Government attempt to assure receipt of fair market value--(1) on each tract leased, (2) each structure leased, or (3) for the entire sale area taken as a whole?
12. What is the value of and the potential problems associated with having the high bidder(s) on one tract, in effect, subsidize the high bid(s) on other tracts, as would happen when all the high bids on a structure are accepted if the sum of the high bids exceeds the sum of the tract values on the structure?
13. If at least one tract on a structure is determined to be competitively bid, should the high bid on all other tracts on the structure or prospect be accepted?
14. How should a "structure" or "prospect" be defined? Closing contour? Reasonable development and operating unit? Other?

Option 2 - Intermediate option using a phased screening process

Preliminary Evaluation

- Step 1. Apply noise bid criteria to bids received in sale to discount speculative or random bids.
- Step 2. Accept all high bids on structures having tracts which received three or more bids unless the structures contain drainage, proven, or development tracts or are selected for further evaluation by MMS and BLM in a 25 percent sample of all tracts receiving bids selected on the basis of predetermined criteria (see Option I, question 4) or selected in an additional 5 percent random sample. The selection of tracts for further evaluation will be made on a structure or prospect basis, i.e., all tracts on a sampled structure or prospect will be further evaluated.

The following definitions apply to these tracts:

- Drainage Tract - A tract which has a nearby well which is capable of producing oil or gas, and the tract could suffer if and when such a well is placed on production. The reservoir is interpreted to extend under the drainage tract to some extent.
- Proven Tract - A previously leased tract which is now expired but contains known oil and/or gas reserves. Volume of reserves may or may not be known.

Development Tract - A tract which has nearby wells with indicated hydrocarbons and which is not indicated to have a productive reservoir extending under the tract. There should be some indication that some part of the tract is on the same general structure as the proven productive well or wells.

Comparative Evaluation

Step 1. All tracts not recommended for acceptance in the initial phase may be considered for a comparative evaluation. These will include all tracts receiving bids on (1) structures containing tracts identified as drainage, proven, or development; (2) structures having no tracts receiving three or more bids; and (3) structures selected on the basis of predetermined criteria or as part of a random sample. The comparative screening process is designed to expeditiously and efficiently identify tracts for which bid acceptance recommendations are appropriate without the need for a detailed engineering and economic discounted cash flow evaluation. This testing process involves comparison of the high bid value with acceptable bids on tracts on comparable structures and/or resource economic values calculated presale for hypothetical tracts with similar geologic and other physical characteristics such as resource potential, areal extent of potential reservoirs, depth to potential reservoirs, probable producing characteristics, water depth, and distance from shore.

If, based upon this comparison, the high bid for a tract is favorable, it will be recommended for acceptance. Failure of a high bid to meet comparative evaluation criteria will not result in a bid rejection recommendation, but in a further quantitative evaluation.

Step 2. All high bids on a structure or prospect will be accepted if they exceed the value or value judgment placed upon the structure or prospect as determined by this comparative evaluation.

Quantitative Evaluation

All tracts not previously recommended for acceptance will undergo a detailed Monte Carlo type discounted cash flow analysis. Bid acceptance rejection decisions will be based upon the MROV, DMROV, and AEOT.

Questions

1. (a) What are the appropriate techniques for sampling tracts or structures to be evaluated?
 - (b) Advantages and disadvantages of selective vs. random sampling?
 - (c) What are appropriate selection criteria?
 - (d) What is a sufficient sample size to deter and/or detect collusion and systematic underbidding?
2. Should all bid acceptance/rejection decisions on a structure or prospect be based upon the same criteria, such as sufficient competition, a comparative analysis, or a quantitative evaluation?
3. How should a "structure" or "prospect" be defined? Closing contour? Reasonable development and operating unit? Other?

4. On which basis should the Government attempt to assure receipt of fair market value--(1) on each tract leased, (2) each structure leased, or (3) for the entire sale area taken as a whole?
5. What is the value of and the potential problems associated with having the high bidder(s) on one tract, in effect, subsidize the high bid(s) on other tracts, as would happen when all the high bids on a structure are accepted if the sum of the high bids exceeds the sum of the tract values on the structure?
6. If at least one tract on a structure is determined to be competitively bid, should the high bid on all other tracts on the structure or prospect be accepted?

Option 3 - Reliance on quantitative evaluation employing Monte Carlo techniques on tracts covering a sample of prospects.

This option would employ two steps:

Step 1. A sample of tracts would be selected to be evaluated utilizing predetermined criteria developed by MMS and BLM (see Option 1, question 4). All tracts on a prospect or structure would be included in the sample to be evaluated. The sample would equal about 60 percent of the tracts receiving bids. The sample would be drawn in a manner that includes a substantial portion of tracts receiving three or four bids, even if that means a slight reduction in the sample of tracts receiving one bid.

Step 2. Complete a Monte Carlo type quantitative evaluation of each tract included in the sample.

Questions

1. (a) What are the appropriate techniques for sampling tracts or structures to be evaluated?
 - (b) Advantages and disadvantages of selective vs. random sampling?
 - (c) What are appropriate selection criteria?
 - (d) What is a sufficient sample size to deter and/or detect collusion and systematic underbidding?
2. Should the percentage be varied with bid level? If so, how should it vary?

3. Should the sample be entirely selective? Part selective and random, or totally random?

ALTERNATIVE BID ACCEPTANCE CRITERIA FOR FRONTIER AREAS: Applicable to all of the above options is the consideration of special bid acceptance criteria for frontier areas in the OCS.

Three of the purposes of the OCS Lands Act are: (1) to make OCS resources available to meet the Nation's energy needs as rapidly as possible, (2) to balance orderly development with environmental protection, and (3) to insure that the extent of oil and natural gas resources is assessed at the earliest practical time. Since as much as one-third of the Nation's undiscovered oil and gas resources are estimated to underlie the OCS and much of the OCS is in frontier areas where little detailed geological information exists because it is available only through the drilling of boreholes, it is critical that new frontier areas be quickly explored. A principal return obtained by leasing these tracts expeditiously is the information gained from increased exploration and the resultant reduction in risks in subsequent offerings. In addition, decisionmaking is enhanced due to improved data. Finally, orderly development will be enhanced in the OCS which increases efficiency and Government receipts. The following potential alternative methods for incorporating the goals relating to expeditious and orderly exploration and development into our fair market value criteria are offered for comment.

1. Reduce the reservation price by an estimate of the value of information. Since this value is greater in frontier areas, these tracts are more likely to be accepted. This reduction would be based on accepted, nonarbitrary methods of estimating the decrease in risk of subsequent offerings and the alternative costs of obtaining such information.
2. Reduce the reservation price by the efficiency benefits due to orderly development. The rejection of a bid may have a negative impact on the efficient development of adjacent tracts. Production may not be feasible unless a large group of tracts are leased. Government revenues may be reduced if efficient development is impaired. Delays in development of entire units may be attributable to individual tracts. These types of costs would be subtracted from our MROV's.
3. Incorporate the uncertainty of MMS information in frontier areas into the criteria. A distinguishing feature of frontier areas is the greater range of the estimated resource values and exploration and development costs for a given tract compared to the more developed regions. This is largely due to the greater uncertainty for many of the parameters. At present, a reliability rating is provided for each tract but this rating has not been used as a bid acceptance or rejection criterion since it is based on subjective interpretations of the MMS definitions for each rating. An explicit method of incorporating this uncertainty into our criteria could be developed and evaluations in frontier areas where information is tenuous would

receive less weight. One technique would be to assign an uncertainty based on the standard deviations of the MMS values and use this to weight the MROV within the AEOT. This would provide a greater weight to the market in frontier areas. Other techniques include use of the median range of values or use of specific statistical intervals around the MROV.

GENERAL QUESTION To assist in the determination of policy direction regarding OCS tract evaluation procedures, each respondent is requested to offer comments with regard to each of the three options presented, any additional options that may be offered, and alternative frontier area bid acceptance criteria. Respondents may wish to recommend options beyond those described as currently under consideration by the Department in this notice. In describing or recommending options other than those presented in this notice, respondents are requested to provide sufficient details so that distinctions can be made between the options involved, and so that all the options can be fully evaluated. Respondents are specifically requested to address the following general questions with regard to each option:

1. What bid level is an adequate indicator of competition?
2. What sample size should be employed for evaluation purposes?
3. What credible comparative or qualitative analyses could be employed for use under each option?

4. What affect would adoption of each option have on:

- (a) Bidding strategies or patterns?
- (b) Bid amounts?
- (c) Competition?
- (d) Exploration?
- (e) Development and Production?
- (f) Governmental Revenues?
- (g) Administrative burdens?
- (h) Detection of systematic underbidding and collusion?

5. Contingency payments represent a related problem in determining tract values, especially where comparative methods are employed. How should such contingent payments be taken into account in determining fair market value?

6. What is an appropriate minimum submissible per acre bid for OCS lease tracts? Should that bid vary by region, by evaluation approach, by contingency payment, or by any other factor?

Acting Director
William P. Pendley

Date

#4.

R. R. Burke
Vice President
Production Exploration, U.S. & Canada



Marathon
Oil Company

Findlay, Ohio 45840
Telephone 419/422-2121

September 18, 1981

James Watt
Secretary of the Interior
Department of the Interior
Interior Building
Washington, D.C. 20240

Subject: Rejection of Bids in Recent South Atlantic OCS
Sale No. 5b

Dear Mr. Watt:

Marathon has commented in the past on the Department of Interior's ("Department") practice of rejecting legitimate high bids for OCS tracts because the amount of the bid is too low when compared with the Department's evaluation of that particular tract. Marathon has opposed this practice and has urged the Department to abandon it. Because of the recent rejection of seven high bids in the Department's South Atlantic Sale No. 5b, including one on which Marathon was a joint bidder, Marathon feels compelled to again comment on this practice and urge the Department to abandon it.

Apparently, the Department of Interior's reason for evaluating tracts and rejecting bids based on those evaluations is "to insure the public a fair and equitable return on the resources of the Outer Continental Shelf" as mandated by Congress in section 102 of the Outer Continental Shelf Lands Act Amendments (43 U.S.C. §1802). Marathon, however, believes that Department of Interior evaluations are unnecessary to insure the public a fair and equitable return. Also, rejection of bids based on those evaluations is unfair and could impede development of the nation's OCS resources. Finally, rejection of high bids could result in the nation receiving less for its OCS resources than if all legitimate high bids were accepted.

1 Letter from R. R. Burke, Vice President, Production Exploration, U.S. and Canada to Director, Office of OCS Program Coordination, Office of Assistant Secretary -- Policy, Budget, and Administration, Department of the Interior, dated May 22, 1981.

James Watt
September 18, 1981
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The fact that a high bid is lower than the Department's evaluation simply does not mean the bid does not represent fair market value for the tract. The only true assessment of fair market value of a particular OCS tract is the value given it by expert oil and gas explorationists forced to place a value on it in a free market, competitive bid situation after evaluation of the tract.² In such an environment, there is simply no reason whatsoever for tract evaluations or rejections of bids. Indeed, to reject a bid as too low is tantamount to asking as many as 50 or more experts for their opinion of an item's worth, having them agree that it is not worth over a certain sum, and then rejecting their assessment as too low because one other expert, no more qualified, believes a higher assessment is more accurate.³ Of course, this simply does not make sense.

The ultimate value of any tract is never known prior to actual exploration and development. The presale value of a tract is nothing more than a scientific estimate. Even when numerous potential bidders utilize essentially the same geological and geophysical raw data prior to a lease sale, the interpretation of that data and hence the estimated presale value of each tract varies widely among potential bidders. A cursory review of bidding in other sales indicates that differences in presale evaluations by potential bidders cause some tracts to receive bids from some companies while other potential bidders do not bid on these tracts at all. The inaccuracy of presale evaluations

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- 2 Marathon notes that the sale of OCS leases does not take place in an environment of true free-market competition. While there are many bidders for OCS leases, the United States government is the only seller of those leases. The government, therefore, has a monopoly on OCS leases. This may explain to a large degree why, as indicated at pages 8 through 10, below, the government has been able to extract more than fair market value for its OCS leases.
- 3 Although a tract may receive only one bid in any given sale, this does not mean that only one expert has evaluated that tract. Many more experts have evaluated the tract. The fact that only one company chose to bid means that the other experts set the relative value of the tract so low as to not warrant submission of bid.

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is even more vividly demonstrated by the extremes of bid levels placed on the same tract. Frequently the same tract will receive dollar bids ranging from hundreds of thousands to tens of millions. In addition, an independent study made under contract for the U.S.G.S. analyzed 1,223 leases in the Gulf of Mexico issued in 17 OCS lease sales held over the years 1954 - 1969. The study determined that of the 1,223 individual leases, 62% were abandoned without production and another 15% were productive but unprofitable.⁴ The inescapable conclusion is that the successful bidders' presale evaluations were totally wrong with respect to nearly two-thirds of the leases issued. Seventy-seven percent of presale evaluations were greatly in error since those evaluations resulted in bids for leases which proved to be either worthless or failed to provide a profit.

The facts surrounding the Department's recent rejection of bids in South Atlantic Sale No. 56 once again illustrate that evaluation of tracts and bid rejections are unnecessary and unfair. In that sale, the U.S.G.S. estimated the total value of the tracts receiving bids at \$216,026,656.⁵ The total sum of the high bids for those tracts, was \$363,829,953.80.⁵ Viewed as a whole, the Department received high bids for those tracts far in excess of its own evaluation. In spite of this, it singled out seven tracts (Nos. 022, 026, 027, 064, 065, 096, and 097) and rejected the high bids for those tracts. Marathon was a high joint bidder on Tract No. 022. Although the Department does take into account the average of all bids plus its evaluation in determining whether to reject a bid, in each case the Department's higher evaluation was the determinative factor with respect to the bid rejection.

As with other OCS sales, however, there is simply no reason to assume that the Department's evaluations are any

⁴ "Competition and Performance in OCS Oil and Gas Lease Sales and Lease Development, 1954-1969," Walter J. Mead and Phillip E. Sorenson, March 1, 1980, under U.S.G.S. Contract No. 14-08-001-16552.

⁵ Letter of "Notification to High Bidders, Outer Continental Shelf Lease Sale No. 56," of H. P. Sleverding, Acting Manager, New Orleans Outer Continental Shelf Office, dated August 14, 1981.

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more accurate than industry's evaluations of those tracts. In fact, a review of the bidding in Offshore Lease Sale No. 56 points out the tenuous nature of presale lease evaluations. This review shows that the amount by which high bids for tracts exceeded the next highest bid ranged from \$76,124,000 on Tract 017 to \$17,000 on Tract 072.

That portion of the sale receiving the most bids and the highest evaluation (by both bidders and the Department) consisted of 22 contiguous tracts (Tracts 006 through 027) on a single geologic structure as shown in the attached Map One. Marathon evaluated the entire geologic structure and; with two other companies, bid on eight tracts. The Marathon group was high bidder on five of the tracts, with its high bids totalling \$225,765,000. This was almost double the Department's \$121,252,609 total evaluation of the same five tracts. The Department nevertheless singled out one of these tracts, Tract 022, and rejected the Marathon group's bid for that tract as too low.

Tract 022 received the following four bids, placed by eight companies.

Mobil	\$6,721,000
Amerada Hess	
Marathon	
Union	4,613,000
Conoco Inc.	
Tenneco Oil	1,490,000
Gulf	615,453
Amoco	

The bids averaged \$3,359,863. No other company bid on Tract 022, even though other companies bid on nearby tracts and of necessity evaluated Tract 022. The Marathon group's high bid was nevertheless rejected because the Department valued the tract at an astounding \$32,970,736. There is simply no reason, however, to assume that the Department's

6 The data in this letter regarding Offshore Lease Sale No. 56 is taken from the Offshore Oil Scouts Association's "Offshore Lease Sale No. 56 Preliminary" and "Offshore Lease Sale No. 56 Company Bid Summary," both issued in August, 1981.

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evaluation is more accurate than the evaluations of the eight companies which submitted bids and the other companies which apparently decided that Trac' 022 was not attractive enough to warrant any bid. Clearly, the Department's interpretation is out of step with the interpretation upon which Marathon's bid was based and the interpretations of other companies evaluating Tract 022.

By comparison Tract 017, located three miles north on the same structure, received the following seven bids, placed by fourteen companies.

Mobil	\$103,775,000
Amerada Hess	
Marathon	
Chevron	27,651,000
Union	
Conoco Inc.	
Shell	21,887,000
Cities S-Co.	
Getty	1,109,000
Gulf	615,453
Amoco	
Murphy	237,888
Odeco O & G Co.	
Tenneco Oil	144,849

The Department valued Tract 017 at \$29,049,168. Here the high bid was far higher than the Department's. The Department accepted the bid.

The bid distributions on Tracts 022 and 017 clearly show the tenuous nature of presale evaluations. Certainly the bid distributions do not indicate enough accuracy to warrant rejection of legitimate high bids submitted in a competitive environment because the Department's evaluation of a particular tract is higher than industry's.

The bid rejections are even more disturbing when one compares the high bids on the most valuable tracts on the

geologic structure⁷ (Tracts 012 - 019, 021 - 024, 026, and 027) to the Department's evaluation of those tracts. This review shows that industry undervaluation of the geologic structure represented by these tracts was not the real cause of the bid rejections. Industry submitted high bids for those tracts totalling \$305,278,000, compared to a total Department evaluation of \$162,597,293. Rather, the real cause of the bid rejections was that the industry's perceived relative value of individual tracts on the large geologic structure was different from the Department's.

The attached Maps One and Two show this to be the case. These show that the Department interpreted the geologic structure and assigned values to individual tracts based on that interpretation. Industry, as a part of the bidding process, did exactly the same thing and submitted high bids totalling much more than the Department's evaluation of the entire geologic structure. These evaluations are dependent on the seismic data coverage and geometry, application of various computer processing and analytical techniques, and the resulting interpretations utilizing sound geologic principles. The many variables involved in this process cause significant differences in the relative values placed on individual tracts even though the general area of a large geologic structure may be quite similar among the various interpretations. It is unreasonable, therefore, to assume that the single Department interpretation is "more accurate and correct" than those made by industry.

As Map Two clearly shows, the interpretation made by the Department placed the high value tracts south and east of the industry's interpretations. For example, industry placed less relative value on Tracts 019, 022, 024, 026, and 027. Consequently, industry bid less for those tracts than the Department's evaluation. By comparison, industry perceived the tracts to the north and west (Tracts 012, 013, 014, 015, 016, 017, 018, 021, and 023) as having more relative value than did the Department. Consequently, industry high bids for those tracts far exceeded the Department's evaluations. In short, the Department received high bids for the entire structure far in excess of what it could have hoped for, but at different locations than it expected. Different interpretations as to location, not undervaluation, was the cause of the bid rejections.

7 Those tracts on the structure which received a high bid or Department evaluation in excess of \$1,000,000.

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Because of the many variables involved, in any off-shore sale interpretations as to the detail of each and every tract will vary greatly, even though interpretations as to the overall character of a large geologic structure may be quite similar. In turn, the estimated relative values of the individual tracts based on these interpretations will also vary greatly. In fact, there will be as many different estimated values as there are different interpretations. Industry, through the process of interpreting data, evaluating tracts, and submitting bids or deciding not to submit bids, arrives at a collective evaluation of specific tracts through the competitive bidding process. There is no reason not to accept this collective evaluation, the high bid, in each and every case.

Apparently, the Department currently assumes its single interpretation of a large geologic structure, and its estimated relative values of individual tracts based thereon, is essentially "correct", as evidenced by the rejection of bids in Offshore Lease Sale No. 56. As long as the Department continues in this assumption, it can be expected that in future sales bids for certain tracts will be accepted while bids for certain other tracts on the same geologic structure will be rejected, not because industry has undervalued the structure taken as a whole, but simply because different interpretations of data have resulted in the Department's distributing the entire structure's value among the individual tracts differently than industry does through the competitive bidding process. In short, if a high bidder is lucky, the Department's interpretation will place a lower relative value on the tracts that bidder perceives as having higher relative values. If a high bidder is unlucky, the Department's interpretation will place a higher relative value and reject the high bids for the tracts that bidder, and the rest of the companies evaluating those tracts, perceives as having lower relative values. Chance, more than anything else, will determine whether a high bid is rejected or accepted. The Department's system of tract evaluation and bid rejection, therefore, simply does not operate in a manner designed to insure receipt of fair market value and is unnecessary and unfair.

The Department's unnecessary rejection of bids could even reduce the amount of money the Department, and ultimately the public, receives for the structure involved in Offshore Lease Sale No. 56. If, the structure is drilled before Tract 022 is leased and such drilling indicates

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Tract 022 is not valuable, the government will have lost \$6,721,000 simply because it refused to accept as indicating fair market value a legitimate high bid submitted in a competitive environment. In fact, the government may very well accept less even before exploratory drilling occurs. For example, in Offshore Lease Sale No. 62, held November 18, 1980, Marathon and its joint bidders submitted a bid of \$3,811,963 for Tract 62-66. This was the only bid submitted. It was rejected because the Department valued the tract at \$21,703,136. In Offshore Lease Sale No. 066, held July 21, 1981 before any nearby drilling had occurred, the Department reoffered the same tract and accepted a bid placed by another company of \$2,230,000. The Department had reduced its evaluation from \$21,703,136 to \$2,058,474.

In the initial sale the industry interpreted Tract 62-66 and placed a value on it in a competitive environment. The Department duplicated the industry's efforts and placed a far higher value on the tract. In the end, however, apparently the Department realized its former evaluation was far too high. It did so too late, however, and cost the public \$1,581,963. In short the Department's system of tract evaluation simply duplicates industry efforts, and does not insure the public fair market value for the nation's OCS resources.

Also, the Department's unnecessary rejection of bids could impede exploration of this structure. This structure, located in 3500 feet of water, will logically be explored jointly by the contiguous lease owners. This minimizes costs and risks, in accordance with good oil field practices. The lessees of the contiguous tracts are now faced with the choice of deferring drilling until Tract 022 is leased or conducting exploratory drilling which evaluates this tract, as well as their own, at no cost to the ultimate owner of Tract 022. If drilling is delayed, the end result will be slower and less efficient development of the nation's OCS oil and gas resources.

Finally, section 102 of the Outer Continental Shelf Lands Act Amendments (43 U.S.C. §1802) states that one of the Amendments' purposes is "to insure the public a fair and equitable return on the resources of the Outer Continental Shelf." However, this does not mean that the Department of Interior must obtain the maximum amount of revenue it can from each and every lease viewed as a single entity. Rather, the Department is charged with insuring a fair and equitable return from the entire OCS taken as a whole. The mandate surely does not require tract-by-tract evaluation and bid rejection which, as indicated above,

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could result in the public's receiving less than if all legitimate high bids were accepted by the Department.

In addition, the tract-by-tract approach ignores the normal operation of oil and gas exploration and development. It must be recognized that when the oil industry bids on OCS leases, it is not the same as bidding on a tangible good the value of which can be readily assessed in terms of its potential return on investment. When a manufacturing company invests in capital goods, it fully expects to earn a profit on each individual investment. However, when an oil company invests in OCS leases, it cannot readily assess the potential return on each individual investment. In fact, an oil company can expect that a majority of its individual OCS investments will be total losses. The oil company must rely on high profits from some individual investments to pay for the losses on the others.

A few tracts may ultimately be highly profitable, which would result in an unusually high rate of return when calculated on a single lease. But it is just such an expectation that constitutes the economic justification for any company to participate in exploration of the OCS. High profits from a successful lease are needed to absorb the costs, both lease bonus paid to government and exploratory costs, for the vast majority of leases that fail to be profitable. It is only the high profit lease that can provide an adequate rate of return calculated on the aggregate of any company's OCS exploration efforts, both successes and failures. The fact that a company achieves a high rate of return on one lease does not mean, therefore, that the United States is not receiving "a fair and equitable return on the resources of the Outer Continental Shelf [taken as a whole]."

In fact, the Mead and Sorenson study referred to at page 3 indicates that the federal government has captured much more than "fair market value" for OCS leases in the Gulf of Mexico. As indicated earlier, Mead and Sorenson analyzed 1223 leases issued in 17 OCS lease sales in the Gulf of Mexico held over the years 1954 - 1969. The study determined that 62% of all leases were abandoned without production and another 15% were productive but were not economic. For all 1223 leases, the average internal rate of return was 11.43% before corporate income tax. This return is far below the average return (1954-1976) of all U.S. manufacturing corporations of 19.81%. Of course, oil and gas exploration and development in the OCS entails much more risk than manufacturing operations. This study

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reveals that industry has made an inadequate rate of return on the OCS and that the federal government, therefore, has captured much more than its "fair market value."

All of these Gulf of Mexico sales were conducted in areas which were offshore extensions of the existing producing areas onshore Texas and Louisiana. Greater presale geologic data was available; hence, these sales had much less risk than those in frontier areas such as the South Atlantic. The table below indicates that only one out of 50 or more leases in frontier areas can be expected to be profitable. Exploratory drilling results in these areas conclusively show that industry has thus far obtained a negative return on investment.

<u>Frontier Areas</u>	<u>Date of Sale</u>	<u>No. of Leases Issued</u>	<u>Bonus Paid to Government (\$MM)</u>	<u>Results of Drilling to 8-1-81</u>
Eastern Gulf of Mexico	1973	87	1,490	No Production Found
California	1975	56	417	Only 3-4 Leases May be Profitable
Gulf of Alaska	1976	76	559	No Production Found
Mid-Atlantic	1976	93	1,127	3 Leases May Be Profitable
Lower Cook Inlet, Alaska	1977	87	398	No Production Found
South Atlantic	1978	43	100	No Production Found
TOTALS	-	442	4,092	6-7 Leases May Be Profitable

In summary, the record shows that tract evaluation and bid rejection are unnecessary to insure the public fair market value for OCS oil and gas resources. In fact, the public has received more than fair market value for those resources. In addition, bid rejection is unfair and could deter early exploration of tracts if lessees are faced with the choice of evaluating unleased land in which they own no interest or deferring exploration until the unleased

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land is leased at a subsequent sale. Finally, because of the inconclusive and highly speculative nature of tract evaluations, as indicated by the record, such evaluations are simply a waste of valuable Department resources and time.

Marathon believes the recent South Atlantic sale again clearly points out the unnecessary and arbitrary nature of Department of Interior tract evaluations and bid rejections based on those evaluations. Marathon respectfully urges the Department to abandon this practice and to accept all legitimate high bids for OCS tracts in the future.

Sincerely,



R. R. Burke
Vice President
Production Exploration
United States and Canada

cc: H. P. Sleverding
Acting Manager
Bureau of Land Management
New Orleans Outer Continental Shelf Office
Hale Boggs Federal Building
500 Camp Street
New Orleans, Louisiana 70130

6	7
217,000	456,000
142,848	142,848

8	9
217,000	456,000
142,848	142,848

10	11
515,000	623,000
142,848	142,848

12	13
2,340,000	6,840,000
142,848	142,848

14	15
8,120,000	28,512,000
142,848	7,554,877

16	17
16,600,000	103,775,000
431,150	29,049,168

7 bids with 14 companies

18	19
26,374,000	33,130,000
2,175,935	39,569,312

20	21	22	R
650,000	53,627,000	6,721,000	
142,848	12,108,516	32,970,736	

4 bids with 8 companies

23	24
3,600,000	7,515,000
142,848	19,549,824

25	26	R	27	R
217,000	4,800,000		3,324,000	
142,848	5,757,685		12,858,698	

LEGEND

X	R
\$xxxxx	
\$xxxxx	

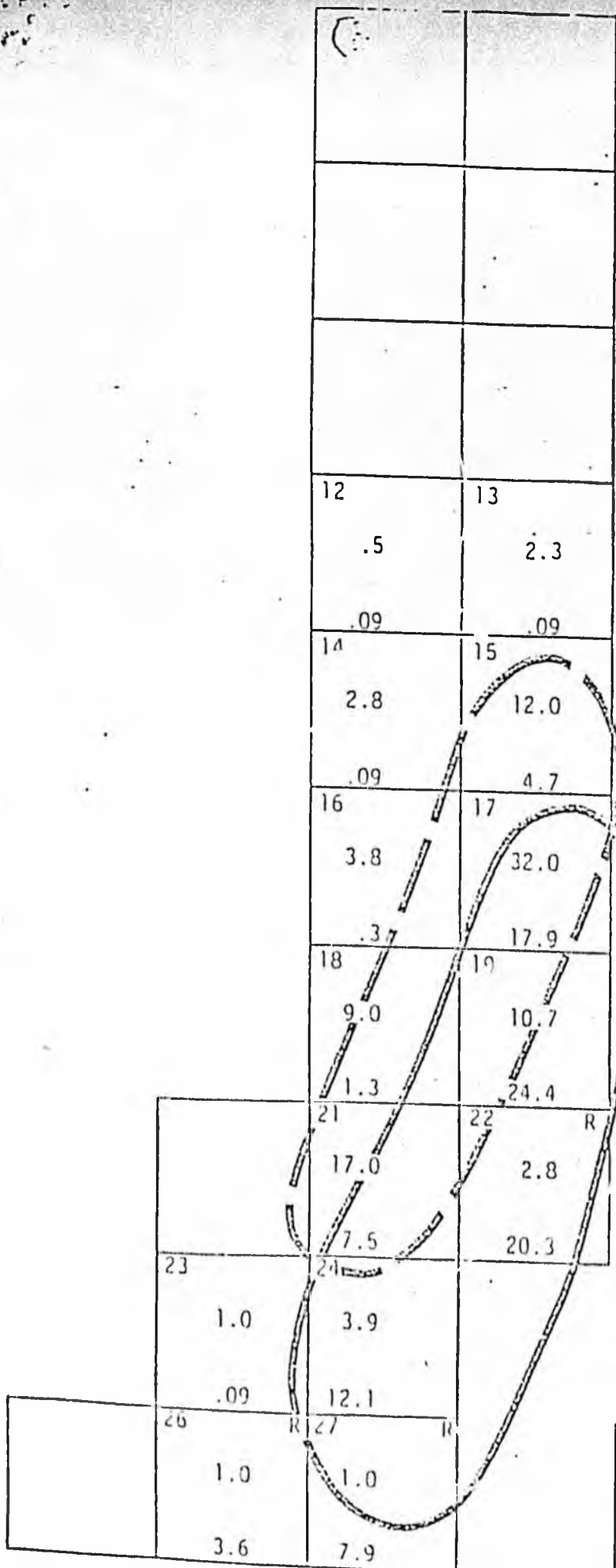
X = Tract No. R = Rejected

High bid

U.S.G.S. Mean Range of Values

Total Industry bids on 14 listed tracts = \$486,316,571

Total USGS Evaluation on 14 listed tracts - \$162,597,293



← Encompasses those tracts that Industry evaluated as at least 10% of total geologic structure.

← Encompasses those tracts that USGS evaluated as at least 10% of total geologic structure.

AGO 886465

LEGEND

- X = Tract No.
- R = Rejected
- † Industry tract bids to total industry bids on 14 tracts.
- USGS Evaluation to total USGS Evaluation of 14 tracts.

dist 3-1-82

THE BEAUFORT SEA SALE DRILLING RESTRICTION

-- INFORMATION FOR A REEVALUATION --

January 15, 1982*

Sohio Alaska Petroleum Company
Pouch 6-612
Anchorage, Alaska 99502

* NEW MATERIAL ADDED: FEBRUARY 12, 1982.

III. SUMMARY AND CONCLUSIONS

As documented in this paper, two very different rationales were used to support the imposition of a restriction disallowing drilling from March 31 to November 1 on leases obtained by oil companies and Alaska Native Regional Corporations in the 1979 Federal/State of Alaska Beaufort Sea Lease Sale. For the Federal government, it was a concern for the endangered bowhead whale. Specifically the government wanted more information about the bowheads' migration routes in the spring and fall in relation to the lease sale area and more knowledge about the interaction of bowhead whales and oil activity.

Extensive research has been conducted in the past two years to address these two important concerns. Again, as documented herein, the results of the research show that the lease area is not critical to the continued existence of the bowhead whale. During the spring migration, the bowhead whales follow a far-offshore route, remote from the lease sale area by approximately 60 miles. In the summer, they feed among the drill ships and gravel islands where exploration is being conducted in Canada's Beaufort Sea. During September and October, the bowhead whales migrate north of the lease sale area in waters of 10 fathoms and deeper. A total of only six bowheads were observed in the lease area in 1979, and only three bowheads were sighted within the lease area in 1980. Significantly, during the fall migration, bowheads are also relatively insensitive to sound.

Further, there is no evidence that bowheads can not or do not adapt to operations on a gravel island. The evidence from research conducted in the Beaufort Sea in Canada during the summer shows instead that bowheads are neither attracted to nor repelled by the physical presence of an artificial island nor are they apparently disturbed by the sounds that are produced from operations on and around a gravel island. The activities on and around the islands included the operation of a large suction dredge, a barge camp, tug boats and crew boats. These research results from the Bureau of Land Management studies in Canada cannot be dismissed on the grounds that bowheads may be more sensitive while migrating in the fall than they are while feeding prior to the fall migration. Feeding and migration are both important. Neither Inupiat whaling using motor boats or commercial whaling in the past has caused the bowheads in the Arctic to alter their traditional course during the fall migration.

There is also relevant new information cited herein indicating that the bowhead population may be indeed healthier than previously thought. Additionally, the evidence shows that whales do not vacate areas because of sounds produced by boats or by seismic operations, though if a boat is deliberately steered into a pod of whales, they will separate but then regroup in a matter of several hours. In summary, this paper presents and documents the extensive research that has been conducted to answer the concerns about the bowhead whale, and the results show that there is no reason to continue the drilling restriction on account of the bowhead whale.

The rationale used by the State of Alaska was specious to begin with, and this paper documents why there is nothing magical about the March 31 to November 1 dates in that the 3-month worst case blowout scenario used by the State of Alaska to justify the "drilling window" is based on speculation and not on the facts. Indeed, the assertion that the chance of an oil blowout from an exploratory well in the Beaufort Sea is "very great" is patently false, as is documented herein. The facts are that the chance of an exploratory oil well blowout in the Beaufort Sea is next to zero, and the paper shows why what happened at the Mexican Ixtoc well would not happen in operations conducted by the leaseholders in the Alaska Beaufort Sea.

The paper also presents the 8-month worst case scenario for a blowout developed by the experts and documents why and/or how (1) Arctic conditions actually limit the spread of the oil; (2) one million barrels of oil could be contained under one square mile of ice because of the natural roughness of the under-surface of the ice; (3) the overall oil removal rate that would result is 94 percent, even with clean-up operations extending into the broken ice period and (4) the oil would not disappear into the ocean and float all over the Arctic.

Oil removal techniques and descriptions of new equipment that has been tested are also documented, including the Sohio-sponsored hoverbarge that can act as an icebreaker for ice up to 24 inches thick, clearing the way for tugboats or some other vessel to push through ice infested waters. To sum up, the assumption that the chances are great of a blowout from an exploratory oil well in the Alaska Beaufort Sea is incorrect; the scenario developed in defense of the March 31 and November 1 dates is wrong; and the imagined disaster that would be impossible to clean-up is not based on responsible analysis. The March 31 and November 1 dates are thus meaningless.

The paper also details the costs and valuable time and data that have been lost as the result of the imposition of the March 31 and November 1 drilling restriction on the 1979 Beaufort Sea leases. Tangible costs for lost time in the fall of 1981 alone amounted to an estimated \$25 million for the four operators and eight rigs and other equipment sitting idle out on gravel islands from mid-September until the November 1st date arrived and drilling was allowed to commence. That same \$25 million could have been used instead by the companies now trying to explore in the Beaufort to drill 40 wells onshore or 15 wells offshore in the Lower 48.

Although two-week extensions to the March 31 deadline are sometimes granted for wells drilled inside the Barrier Islands, the examples cited show that insufficient time remains for thorough evaluations even with an extension. Companies have thus frequently been forced to forfeit valuable data that is crucial to exploration planning. They have also incurred excessively high costs for the data that still can be obtained by re-entering the well in a subsequent drilling season. Yet the necessity of having to re-enter a well to obtain data makes it unlikely that a follow-up well can be drilled during that succeeding season. Instead that time period is used to test the well that should have been tested the

previous season to determine where next to drill. The drilling program initiated by Sohio alone should have been, under normal circumstances, completed within 18 months but will take five years to complete because of the drilling restriction, and the costs incurred are about 40% higher, representing tens of millions of dollars.

There is a substantial amount of evidence indicating that the environmental effects of oilspills may not be as devastating as once thought. It is also becoming more evident that even if oilspill impacts are distinguishable from the results of natural phenomena, ecosystems generally recover within one to a few years. There is also every indication that the arctic ecosystem is incredibly resilient. That is, it has adaptive mechanisms that compensate for environmental "disturbances" regardless of whether they are of natural or man-made origin.

The evidence for the success of these adaptive strategies is in the existence and continued survival of populations of arctic organisms in an environment of unbelievable extremes in ice, temperature, light, salinity, nutrients, etc. When all the various factors are taken into consideration it is obvious that oilspill concerns have usually been presented in a manner inconsistent with the facts.

Oil spill prevention, containment and clean-up technology is a fact, and its implementation is the most powerful mitigating measure available. The physical, chemical and biological weathering and detoxification of spilled oil is a fact. These processes significantly alter the types and concentrations of oil after it is released to the environment.

When all the evidence is realistically evaluated, it is difficult to imagine a scenario in which oil would be present in quantities, concentrations, and durations sufficient to result in massive numbers of organisms being impacted.

Finally, it should be noted that there is significant new knowledge that makes the possibility of any Bowheads being adversely affected by an oilspill, even during the months of September and October, as remote as is the likelihood of an oilwell blowout, i.e., a next to zero possibility, for a number of reasons.

First, September and October are the only months in which a Bowhead could possibly interact with industrial development off the coast of Alaska. Second, the whales are migrating: therefore, the amount of time that any one whale could interact is considerably limited, probably around 2 1/2 to 3 days. Third, it is also known that the whales are at the surface where they could contact an oilspill only 11-19% of the time. Fourth, the lease areas comprise approximately half of an area in which, for 1980, it was estimated there were only 15 Bowheads present at any given time, with a total of 107 Bowheads migrating through the area. (Current estimates put the Bowhead population at about 2500 animals.) Fifth, there were only three Bowheads actually sighted in the lease areas, and these sightings

were seaward of the Barrier Islands. Sixth, added to this already remote possibility should be a consideration of the mitigative effects of physical, chemical and biological alteration of spilled oil, and oil spill response, prevention and containment activities. These factors serve to weather, detoxify, contain and remove the oil from the environment. So even if the whales did encounter oil, there are not likely to be any resultant adverse impacts.

EXXON COMPANY, U.S.A.
POST OFFICE BOX 4279 - HOUSTON, TEXAS 77001

EXPLORATION DEPARTMENT
ALASKA/PACIFIC DIVISION
R.D. WILSON
MANAGER

November 11, 1981

Five-Year Leasing Program
State of Alaska

Division of Minerals and Energy Management
Pouch 7-005
Anchorage, Alaska 99510

Attention: Ms. Kristina O'Connor

Ladies and Gentlemen:

The following comments are submitted pursuant to your "Call For Comments" issued in conjunction with your proposed revision of the Five-Year Leasing Program.

Exxon is concerned about the deletion of the originally proposed Chukchi Sea Sale (No. 44) from the schedule because the most effective and efficient scheduling of State lease sales is accomplished by coordinating the State sales with adjacent Federal sales, and perhaps even conducting joint State/Federal lease sales. We had anticipated such coordination between Sale No. 44 and Federal Lease Sale No. 85. Postponing the proposed Chukchi Sea State sale will result in duplication of effort and could create significant operational problems in the exploration and development of these two areas, especially if prospective geological structures on the Federal acreage leased in Sale No. 85 extend onto State acreage.

The oil and gas industry has demonstrated its ability to operate successfully and without adverse effects on the environment in the environmentally sensitive Arctic Slope region. While the Chukchi Sea and its adjacent coastline may present unique technical and environmental challenges, we are confident that industry will respond with workable solutions.

The time remaining before the presently scheduled Chukchi Sea State Sale date of January, 1985 should be adequate to study any unknown factors and conclude the necessary environmental studies.

Although we urge you to retain Sale 44 (Chukchi) in its presently scheduled January 1985 position, we approve of your proposal to add two Kuparuk Uplands Sales (Nos. 47 and 48) to the 1985 Leasing Program. These are areas which should be of interest to industry.

November 11, 1981

With respect to the proposed Camden Bay (No. 50) State Sale, we do not believe that it should be scheduled unless and until it is assured that facility and support sites will be made available on shore in the Arctic National Wildlife Refuge opposite the sale area, together with pipeline and access easements across the Refuge. It simply is not feasible to attempt development of the Camden Bay area otherwise.

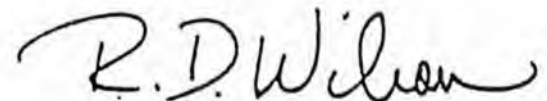
Exxon urges that the sales currently scheduled for 1982, particularly State Sales 34 and 36, be held as presently scheduled. In order for prospective bidders to make efficient and economic use of their manpower and financial resources, they must be able to rely with a degree of certainty on the published sale schedule for at least a year ahead. Such certainty would be highly desirable for even longer periods, but it is essential for at least the first full calendar year following issuance of the Five-Year Schedule.

We again ask you to give earnest consideration to utilizing bonus bidding and ten-year lease terms for these frontier area sales. We previously have furnished detailed reasons for these suggestions in written comments and testimony before various Alaska legislative and regulatory bodies. Please refer to (1) our letter dated June 28, 1979 addressed to the Director which enclosed a copy of Testimony on Use of Net Profit Bidding given on March 31, 1979 by J. D. Langston, Vice-President, Exploration, Exxon Company, U.S.A. before the State of Alaska House of Representatives Ad Hoc Committee and (2) our letter to the Director dated December 13, 1979 which enclosed our comments on the revised proposed leasing regulations.

Finally, the effectiveness and workability of any Five-Year Leasing Program which you may adopt will be related directly to the method of application and administration of the unitization regulations. In remote frontier areas, it is essential that holders of leases be encouraged to pool their expertise and their economic resources, as well as their leases, in their efforts to discover, define, develop and produce oil and gas, and such encouragement is best bestowed by the State making unitization available on reasonable, workable conditions.

Thank you for this opportunity to comment on these proposed sale schedule revisions. Any further information or details which you desire will be furnished on request.

RDW:bc



AGO 886472

**Marathon
Oil Company**

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Telephone 907/274-1511

March 19, 1982

Senator Bettye Fahrenkamp
Senate Resources Committee
Alaska State Legislature
Pouch V (MS 1300)
Juneau AK 99811

Re: Alaska 5-Year Oil and Gas Leasing Program
Marathon Oil Company Comments

Dear Senator Fahrenkamp:

Enclosed for the Senate Resource Committee's review and consideration are the written comments of Marathon Oil Company on the most recently released Alaska 5-Year Oil and Gas Leasing Program. These comments are in response to your February 5, 1982 letter; the Committee's February 8th hearing with John Katz, Commissioner of the Department of Natural Resources and the February 26th hearing with the oil industry.

An executive summary of our comments is as follows:

1. The 5-Year Oil and Gas Leasing Program:
 - A. Though Marathon contends a predictable leasing program is in the best interest of the State and Marathon, we would urge the Committee's consideration of the following proposals:
 - (1) Acceleration of the Camden Bay Sale to 1984 for the reason it lies in the industry's high interest area from Point Barrow to the Canadian Border.
 - (2) Return the Chukchi Sea Sale to the schedule for the reason it lies in an industry high interest area. Deletion of the sale creates a self-fulfilling prophecy, in that, if the sale area is deleted, it ensures technological questions regarding the area will not be answered.
2. specifics on the Procedures and Permitting Process Being Utilized.
 - A. Discussion of the cumbersome and/or Bureaucratic items in the process is not to say the remaining parts of the process are good, but rather they are

less onerous. In regards to cumbersome/bureaucratic items, the Committee is urged to review the following:

- (1) The social, economic and environmental analysis (SEEA) process that occurs pursuant to Administrative Order No. 52. This process is a de facto environmental impact statement and the legislature, on at least two occasions, has rejected this concept. Approximately 10 months of pre-leasing time schedule is devoted to the process and Marathon questions whether the SEEA serves more to alarm rather than inform the public.
- (2) The Committee should review further usage of the seasonal drilling restriction concept. Though this concept was originally proposed for the 1979 Beaufort Sea Lease Sale, we are seeing it being used more and more in other areas where the oil and gas industry has a proven record they can operate on a year-round basis - e.g., Cook Inlet.
- (3) The Committee is urged to consider the addition of a litigation notice provision to the leasing process. This notice would require those parties opposed to the sale to give notice that if the sale is held, they intend to bring suit and the claims they intend to bring in that suit. The Department of Natural Resources Commissioner would have the time to cure potential sale defects and, if unable to cure these defects, then the Commissioner could postpone the sale. In short, this concept could prevent the current situation faced in the 1979 Beaufort Sea Lease Sale where drilling has taken place, but the question of whether the state leases are valid remains with the Alaska Supreme Court.

3. The State's Leasing Policy.

Marathon responds to this point by providing its comments to the Department of Interior on Bidding Systems, Tract Evaluation and Rejection of Bids. In these comments Marathon's Vice President - Production/Exploration U.S. and Canada, R. R. Burke, comments as follows:

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March 19, 1982
Page 3

.Commends the Department of Interior's efforts to abandon experimentation with bidding systems that contain inherent deficiencies and, thereby, act as exploration/production disincentives.

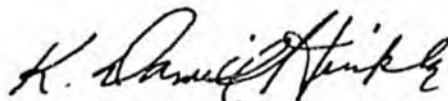
.The best methods for ascertaining fair market value tract evaluation still lies with the free market, competitive bidding process.

.A review of the OCS Lease Sale evidence leads to the conclusion that tract evaluations and bid rejections are unnecessary and wasteful.

We believe these comments to the Department of Interior should provide meaningful food for thought for the Committee, in that, the State of Alaska is currently in litigation over geophysical data collection, which they say they need for evaluation and the comments by various Committee members on particular bidding systems.

Marathon thanks you for this opportunity to provide comments on this very integral part of Alaska's well being. If you have any questions or comments, please feel free to contact me.

Very truly yours,



K. Daniel Hinkle

KDH:mr

Enc.

xc: John Katz, Commissioner
Department of Natural Resources

ALASKA 5-YEAR OIL AND GAS LEASING PROGRAM

WRITTEN COMMENTS

TO

SENATE RESOURCES COMMITTEE

BY

MARATHON OIL COMPANY

This document is submitted in response to the invitation of Senator Bettye Fahrenkamp, Chairman, Senate Resources Committee, for written detailed comments on the Alaska 5-Year Oil and Gas Leasing Program briefed to the Committee on February 8, 1982 by the Department of Natural Resources (DNR) Commissioner, John Katz. An executive summary of these comments was set out in this document's cover letter to Senator Fahrenkamp.

1. The 5-Year Oil and Gas Leasing Program.

Marathon adheres to the concept that an oil and gas leasing schedule should be predictable to the point where it

can be counted on by the public, the government and the industry in their planning on behalf of the citizens of Alaska and the rest of the United States. Recognizing full well there are factors beyond the control of the parties, Marathon would urge no deletion or postponement of a sale once the sale has progressed on the sale schedule to the two year time frame from sale date. In light of this statement and in recognition of the more specific factors commented upon below, Marathon makes the following lease sale schedule recommendation:

- A. Accelerate the Camden Bay sale to 1984.

The Camden Bay Sale area lies in the industry's prime area of interest in Alaska - that area between Point Barrow and the Canadian boundary. In comparison to other geologic areas in the state, the area from Point Barrow to the Canadian boundary holds the highest geologic interest and the location/existence of the Trans Alaska Pipeline, aids in its development interest. As stated on Page 32 of DNR's

5-Year Oil and Gas Leasing Program: "Rich source rocks, thick productive reservoirs, adequate seals and numerous, diverse traps have been documented" in the North Slope basin. As Commissioner Katz stated during the February 8th briefing to the Committee: "We (DNR) added the Camden Bay Sale, which I think is a very high value prospective area." As currently scheduled, only one sale in 1984 (Sale 43 - Beaufort Sea) may be considered a high value area. There will be two low to moderate sales during 1984 (Sale 42 - Minchumina and Sale 41 - Bristol Bay Uplands).

During the February 8th briefing, the Committee members expressed concern over production declines - state revenue drop (the decline of Prudhoe Bay production) within the decade - and the need for an appropriate leasing schedule to minimize this production/revenue drop. Commissioner Katz noted "it is becoming increasingly difficult" to find areas to lease that are considered "high potential". Given these points, plus the delays in exploration, it would appear to be

prudent to accelerate a "high potential" area such as Camden Bay.

- B. Return the Chukchi Sea Lease Sale to the Program.

Secretary of Interior Watts' recently released federal 5-year lease sale schedule includes 1987 Chukchi Sea Lease Sale(s). The 1981 Alaska Legislature approved an Alaska 1985 Chukchi Lease Sale. The 1985 Alaska sale has been deleted from the Alaska program and Commissioner Katz stated two reasons for this deletion.

The first reason is to avoid inconsistencies between what the State is saying to the Federal Government in connection with the Federal Chukchi lease sale. This point is a classic policy decision by the executive and legislative branches of government. In this case, the executive is requesting the legislature to legitimize the executive's policy decision to delete a sale previously approved by the

legislative body. Our response to this question is perhaps best stated by our comments on the second reason given for deletion. The Commissioner opines a lack of technology exists for operations in the area. We question the validity of this rationale and to some degree we see this point as a self-fulfilling prophecy. That is, the "technology" does not exist at this time; the incentive to develop technology is a scheduled lease sale; and, if the lease sale is deleted, the technology is not developed. On the other hand, the Federal Government has a lease sale scheduled for the area and this alone will be an incentive to develop the technology needed. The State, however, would be delayed in receipt of this development, because the Federal Chukchi lease sale is not on the State's program. Either way it appears in the State's best interest to maintain the Chukchi Sale on its schedule. For those of us operating in the Cook Inlet, we should be happy a "can do" attitude existed in the State.

2. Comments on Procedures and Permitting Process.

To a great degree, DNR's hands are tied in this area by statutory/regulatory mandate. One need only review Item X. Overview of the State Leasing Process, P. 34-36 of the Department's 5 Year Oil and Gas Leasing Program, to see the degree to which DNR has been tied down. Of course, an exception to this process is the SEEA, which is not a statutory regulatory mandate, but is brought into the process through Administrative Order No. 52. (A copy of these 21 steps is attached). There are, however, "cumbersome/bureaucratic" items of note in this leasing procedure. Discussion of these "cumbersome/bureaucratic" items is not to say the other parts of the procedure are good, but rather let us say they are less onerous.

a. Social, Economic and Environmental Analysis
(SEEA)

As stated, a primary concern in this area is that the SEEA is a de facto environmental impact statement. The legislature, in the past, has rejected the environmental

impact statement process, yet we have ended up in the same situation due to the Governor's Administrative Order No. 52. From the attached leasing process you will note approximately 10 months of that time is devoted to the development of this document. The document is supposedly advisory, but many of the assertions set out therein become part of the terms of the lease sale. (See seasonal drilling restriction below.) The document serves more to alarm the general public rather than to inform them. For instance, in the preliminary draft SEEA for the Upper Cook Inlet sales (1980) on page 11, the document uses oil spill numbers directly lifted from the federal environmental impact statement for the Lower Cook Inlet, which were based upon an annual production rate of 340 million barrels. The state lease sale area, to which the SEEA was to be addressing, had a total of 202 million barrels of recoverable reserves over the life of the field. Obviously, the spill rate would be overstated using a 340 million barrel annual production versus a 202 million recoverable over the life of the field figure.

b. Seasonal Drilling Restriction.

As the Committee is aware, a seasonal drilling restriction (November 1 to March 31 - imposed for two years before reconsideration) currently exists for Beaufort Sea operations. Because the 2 year term has run, the Commissioner is currently grappling with the decision of whether to extend, modify or delete the drilling restriction. The Committee is also aware that a preliminary draft report by the Division of Minerals and Energy Management estimates the drilling limitation could cost the state approximately \$500 million. The Committee is also aware this lease sale area will not be able to be developed with the current restriction in place. The Committee should be aware of the fact that, if the restriction is continued, depending upon the case by case circumstances, the State of Alaska may be subject to a force majeure type action for the recovery of the lease sale bonus/rentals or net profit share lease expenditures. Since the lessee would be prohibited from developing the reserve it discovered during the exploratory phase by the State of

Alaska, it would appear the lessee should have the right to seek a refund of the lease expenditures it had made. Marathon is not saying actions of this type are imminent, but is saying the continuance of restrictions lays the ground work and increases the probability for such.

c. Litigation Notice.

Over the past years the "high-value frontier area sales" have suffered litigation delays. By this comment, Marathon suggests an additional step to the administrative lease sale process that should shorten the litigation period and increase the probabilities of the state lease sale being upheld. The suggestion is the addition of a notice of litigation/claims to be filed by those parties adverse to the sale. The notice would be given at some meaningful time period prior to the date of the sale and would require those parties to set out the basis or claim they will make in their litigation. A failure by these parties to give notice would subject their claim to a "failure to exhaust their adminis-

trative remedies" argument in court. Upon receipt of the notice, the DNR Commissioner would address and cure, if need be, the alleged sale defect claimed to exist. Litigation, if any, should then be shortened by the third party's concern being answered by the Commissioner's corrective action and the knowledge on the part of the third party that the corrective action carries with it the legal presumption of validity on the part of the State. Thus, the third party would carry an even heavier burden before the court in its attempt to void the lease sale.

The Federal Government on OCS sale has a similar provision, but the above includes added improvements. There are benefits to all of the parties concerned by such a mechanism. The State increases its probability of holding a valid lease sale. The concerns of the third parties are answered prior to the lease sale. Expensive litigation is avoided on the part of all parties. The industry does not buy a "pig in a poke". It is unclear whether this action could be taken through regulatory measures, but at a minimum,

the legislature could add the notice provision through legislative action.

d. Hearings Upon Hearings - SB 84.

Given the hearings upon hearings, the comments upon comments received from agencies and all other involved parties, it has been difficult for Marathon to comprehend the permit delays that occur subsequent to the issuance of a lease. In this regard, Marathon supports the passage of Senate Bill 84, which would shorten the permitting time delays presently occurring for those permits needed to explore and produce.

One need only to briefly review the State leasing process set out on Pages 34-36 of DNR's 5-Year Oil and Gas Leasing Program to substantiate the amount of general public, local, state, federal and industry input obtained and received during the pre-leasing process. From all of this input, it should be fairly obvious what actions will be taken

by the successful lessee on the lease. However, such apparently is not the case, because many of the questions answered during the pre-leasing stage must be reanswered by the successful lessee during its obtaining of the necessary permits to explore its lease. Granted there may be some questions related to a particular on-site activity, but philosophical and generic questions should definitely have been answered by this point.

Given the great amount of information obtained prior to the lease sale, Marathon contends the time delays associated with obtaining permits should be minimal. To aid in reaching this goal, Marathon supports the passage of SB 84.

3. State's Leasing Policy.

To a great degree, Alaska's leasing policy/procedure mirrors the federal leasing policy/procedures; therefore, the Federal Government's recent call for comments on their

reevaluation of bidding mechanisms and tract evaluations appears relevant. These same two points are, or should be, reexamined by the State of Alaska. In this regard, attached are the comments of Marathon's R. R. Burke, Vice President, Production/Exploration U.S. & Canada, to the Department of Interior. These relevant comments provide some excellent food for thought for the Senate Resources Committee and the Department of Natural Resources. In summary, the comments of Mr. Burke are as follows:

1. Commends the Department of Interior's efforts to abandon experimentation with bidding systems that contain inherent deficiencies and, thereby, act as exploration/production disincentives.
2. The best method for fair market value tract evaluation is the free market, competitive bidding process.
3. A review of the OCS lease sale evidence leads to

the conclusion that tract evaluation and bid rejection are unnecessary and wasteful. (This point is particularly relevant in regards to DNR's current position that it needs geophysical data in regards to lease sale evaluation.)

CONCLUSION.

Marathon, once again, thanks the Senate Resources Committee for this opportunity to comment on the Alaska 5-Year Oil and Gas Leasing Program. If you have any questions or comments, please feel free to contact us.



Marathon
Oil Company

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March 3, 1982

Mr. William P. Pendley, Acting Director
Minerals Management Service
Room 6651, Main Interior Building
18th and C Streets, N.W.
Washington, D.C. 20240

Re: Tract Evaluation Procedures to Assure
Receipt of Fair Market Value for Outer
Continental Shelf Oil and Gas Leases

Dear Mr. Pendley:

This letter constitutes the comments of Marathon Oil Company ("Marathon") in response to the Department of the Interior's ("Department") request for comments on Tract Evaluation Procedures to Assure Receipt of Fair Market Value for Outer Continental Shelf Oil and Gas Leases ("Request for Comments"), 47 Fed. Reg. 5694-5698 (February 5, 1982). Marathon feels that the Department's examination of tract evaluation procedures comes at an opportune time in light of the rejection of an overwhelming number of bids in two recent Outer Continental Shelf ("OCS") lease sales -- Mid-Atlantic OCS Sale No. 59 ("Mid Atlantic Sale 59") and Gulf of Mexico OCS Sale No. 67 ("Gulf of Mexico Sale 67"). Marathon believes the number of bid rejections in Mid-Atlantic Sale 59 (44 of 98 high bids) and Gulf of Mexico Sale 67 (22 of 137 high bids) is evidence of a system which has gotten out of hand and which seriously threatens timely exploration of the nation's OCS oil and gas resources. Marathon, therefore, welcomes the Department's inquiry into this entire system and the opportunity to submit comments.

Marathon has commented in the past on the serious deficiencies inherent in the Department's evaluation of tracts and rejection of bids.^{1/} In its past comments, Marathon

^{1/} See Marathon Oil Company's comment letters regarding "Request for Information on Proposed Changes in Offshore Leasing Programs" (May 22, 1981), "Rejection of Bids in Recent South Atlantic OCS Sale No. 56" (September 18, 1981), and "Proposed 5-Year OCS Oil and Gas Leasing Program" (October 17, 1981).

has pointed out that the Department's evaluation of tracts and rejection of high bids in OCS lease sales is unnecessary, costly, unfair, and impedes timely exploration of the OCS. Because of these serious deficiencies, Marathon has urged the Department to abandon completely tract evaluations and bid rejections.

Marathon has read the Department's Request for Comments and the three options for changing the system contained therein. Although Marathon commends the Department for recognizing that something needs to be done, Marathon cannot support any system of tract evaluations and bid rejections. Instead, Marathon's position is that the practice is inherently deficient and that no amount of fine tuning can rectify its inherent deficiencies. Marathon, therefore, again strongly urges the Department to completely abandon this practice and rely on the free market, competitive bidding process to insure receipt of fair market value for leases on the OCS.

GENERAL COMMENTS

A. Tract Evaluations and Bid Rejections are not Required by the OCS Lands Act Amendment of 1978

Section 102(2)(A) of the OCS Lands Act Amendment of 1978 (the "Act") provides in part that one of the purposes of the Act is to "insure the public a fair and equitable return on the resources of the Outer Continental Shelf." 43 U.S.C. § 1802(2)(C). In addition, Section 208 of the Act provides in part that "[l]easing activities shall be conducted to assure receipt of fair market value for the lands leased and the rights conveyed by the Federal Government." 43 U.S.C. § 1344(a)(1). Neither of these provisions, however, requires evaluations of tracts and bid rejections. In addition, Marathon has found nothing in the legislative history of the Act or court decisions interpreting the Act which requires tract evaluations and bid rejections.

Section 208 requires that "leasing activities . . . be conducted to assure receipt of fair market value for the lands leased and the rights conveyed by the Federal Government." Marathon believes there is no better way to assure this than

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to allow operation of the free market, competitive bidding system without tract evaluations and bid rejections.^{2/}

The Department's Request for Comments contains the following statement at page 5695:

"In the OCS program, the market value of "the lands leased and rights conveyed" clearly depends on the oil and gas prospects of the tracts, the expected prices of oil and gas, the costs of OCS operations, the supply of leases and substitutes, and the financial, market, and technological characteristics of potential bidders. The market value of leases is not the market value of the oil and gas eventually discovered or produced, but the value of the right to explore, and, if there is a discovery, develop and produce, subject to a wide array of constraints. The market value of a lease is its value at the time it is offered, given conditions at that time. It is not necessarily the same as the value of the leases at a later time.

The Department, therefore, apparently recognizes the normal operation of oil and gas exploration and development. When the oil industry bids on OCS leases, it is not the same as bidding on a tangible good the value of which can be readily assessed in terms of its potential return on the investment. When a manufacturing company invests in capital goods, it fully expects to earn a profit on each individual investment. However, when an oil company invests in OCS leases, it cannot readily assess the potential return on each individual investment. In fact, an oil company can

^{2/} Marathon notes that the sale of OCS leases does not take place in an environment of true free market competition. While there are many bidders for OCS leases, the United States government is the only seller of those leases. The government, therefore, has a monopoly on OCS leases. This may explain to a large degree why, as indicated below at pages 6 and 7, the government has been able to extract more than fair market value for its OCS leases.

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expect that a majority of its individual OCS investments will be total losses. The oil company must rely on high profits from some individual investments to pay for the losses on the others.

A few tracts may ultimately be highly profitable, which would result in an unusually high rate of return when calculated on a single lease. But it is just such an expectation that constitutes the economic justification for any company to participate in exploration of the OCS. High profits from a successful lease are needed to absorb the costs, both lease bonus paid to government and exploratory costs, for the vast majority of leases that fail to be profitable. It is only the high profit lease that can provide an adequate rate of return calculated on the aggregate of any company's OCS exploration efforts, both successes and failures. The fact that a company achieves a high rate of return on one lease does not mean, therefore, that the United States is not receiving "fair market value for the lands leased and the rights conveyed" by it.

Considering these facts, there is no reason to assume that the Department's duty to conduct leasing activities "to assure receipt of fair market value for the lands leased and the rights conveyed by the Federal Government" requires the Department to evaluate those lands and reject bids to insure that no particular parcel or group of parcels is leased at below the Department's estimate of fair market value. Rather, the Department should employ a leasing system designed to assure receipt of fair market value for the OCS lands leased as a whole. Marathon believes that there is no system better suited to this than a free market, competitive bidding leasing system which is not overruled by Department evaluations and bid rejections.

Finally, Section 102 also provides that other purposes of the Act are to: 1) "preserve, protect, and develop oil and natural gas resources in the Outer Continental Shelf in a manner which is consistent with the need to make such resources available to meet the Nation's energy needs as rapidly as possible" (43 U.S.C. §1802(2)(A)) and 2) "insure that the extent of oil and natural gas resources of the Outer Continental Shelf is assessed at the earliest practicable time . . ." (43 U.S.C. §1802(9)). When the Department rejects the high bid for a tract, this delays leasing and exploration of that tract, which conflicts with the provisions quoted above. Marathon believes, however, that reliance on a free market, competitive bidding system without Department evaluations and bid rejections will assure receipt of fair

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market value for OCS leases and a fair and equitable return on the resources of the OCS. In addition, such a policy will further the goals enunciated in the provisions quoted above, rather than inhibit them. Marathon, therefore, strongly urges the Department to further all three purposes of the Act by relying on a free market, competitive bidding system without Department evaluations and bid rejections.

B. Tract Evaluations and Bid Rejections
are Unnecessary, Wasteful, and Unfair

Marathon believes that tract evaluations are unnecessary to assure receipt of fair market value, wasteful, and unfair. First, the Department's evaluation of a tract is simply one more inexact estimate of the value of a tract in addition to those made by numerous experts in the industry. The Department interprets geologic structures and prospects and estimates the values of individual tracts based on interpretation. Industry, as a part of the competitive bidding process, does exactly the same thing. Although the Department takes into account the companies' bids through use of an Average Evaluation of Tract ("AEOT"), if the Department's evaluation is much higher than the bidding companies', or if only a few companies estimate a tract's relative value as high enough to warrant submission of a bid, the high bid for a tract will be rejected.

The fundamental problem with rejecting bids because of a high tract evaluation by the Department is that it simply ignores the fair market value arrived at through the competitive bidding process. The only true assessment of fair market value of a particular OCS tract is the value given it by expert oil and gas explorationists forced to place a value on it in a free market, competitive bidding situation after evaluation of the tract. In such an environment, there is simply no reason whatsoever for tract evaluations or rejections of bids. Indeed, to reject a bid as too low is tantamount to asking as many as 50 or more experts for their opinion of an item's worth, having them agree that it is not worth over a certain sum, and then rejecting their assessment as too low because one other expert, no more

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qualified, believes a higher assessment is more accurate.^{3/}
Of course, this simply does not make sense.

Second, there simply is no evidence of lack of competition for OCS leases or collusive bidding in OCS lease sales. In July of 1981 the Department formally submitted its Proposed 5-Year OCS Oil and Gas Leasing Program to the House of Representatives under a cover letter to the Honorable Thomas P. O'Neill dated July 24, 1981. Attachment 5 to that letter contains a discussion of fair market value, tract evaluations, and bid rejections on the OCS.

At page six of Attachment 5, the Department refers to the low rates of return on OCS leases. The Department also states:

"This indicates that OCS lessees did not earn surplus profits, providing further strong evidence that the OCS lease market has yielded fair market value to the government."

"In addition, the DOE sponsored an elaborate study of OCS competition by the Cabot Consulting Group which was completed in July, 1980. This study concluded that there is no evidence of strategic underbidding for OCS leases and that all of the studies of the profitability of OCS leases indicated that the government has received fair market value."

In addition, a review of Competition and Performance in OCS Oil and Gas Lease Sales and Lease Development, an independent study made by Walter J. Mead and Phillip E. Sorenson under contract with the United States Geological Survey (the "Mead and Sorenson study"), indicates that the federal government has captured more than "fair market value" for OCS

^{3/} Although a tract may receive only one bid in any given sale, this does not mean that only one expert has evaluated the tract. Many more experts have evaluated the tract. The fact that only one company chose to bid may mean that the other experts set the relative value of the tract so low as to not warrant submission of a bid.

leases in the Gulf of Mexico.^{4/} Mead and Sorenson analyzed 1,223 leases issued in 17 Gulf of Mexico OCS lease sales held in the years 1954-1969. For all 1,223 leases, the average internal rate of return was 11.43% before corporate income tax. This return is far below the average return (1954-1976) of all U.S. manufacturing corporations of 19.81%. Of course, oil and gas exploration and development in the OCS entails much more risk than manufacturing operations. This study reveals that industry has made an inadequate rate of return on the OCS and that the federal government, therefore, has captured more than "fair market value."

All of these Gulf of Mexico sales were conducted in areas which were offshore extensions of the existing producing areas onshore Texas and Louisiana. Greater presale geologic data was available; hence, these sales had much less risk than those in frontier areas. The table below indicates that perhaps only one out of 50 or more leases in frontier areas can be expected to be profitable. Exploratory drilling results in these areas conclusively show that industry has thus far obtained a negative return on investment.

<u>Frontier Areas</u>	<u>Date of Sale</u>	<u>No. of Leases Issued</u>	<u>Bonus Paid to Government (\$MM)</u>	<u>Results of Drilling to 2-1-82</u>
Eastern Gulf of Mexico	1973	87	1,490	No Production Found
California	1975	56	417	Only 3-4 Leases May Be Profitable
Gulf of Alaska	1976	76	559	No Production Found
Mid-Atlantic	1976	93	1,127	3 Leases May Be Profitable
Lower Cook Inlet, Alaska	1977	87	398	No Production Found
South Atlantic	1978	43	100	No Production Found
TOTALS	-	442	4,092	6-7 Leases May Be Profitable

^{4/} W. Mead and P. Sorenson, Competition and Performance in OCS Oil and Gas Lease Sales and Lease Development, U.S.G.S. Contract No. 14-08-001-16552 (1980).

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The government's own studies, not industry's, show there is adequate competition and that the government has received more than fair market value for the OCS lands it has leased. The government's own studies show that evaluations and bid rejections are unnecessary. Considering this evidence, it simply does not make sense to have government personnel duplicate industry's efforts in evaluating leases. It is a waste of the government's and industry's time and resources. For if the industry evaluates a tract, bids on it in a competitive system, and no lease is awarded, industry's efforts are wasted as well.

Finally, bid rejections are unfair. Marathon puts great effort into evaluating the lands offered in OCS lease sales, finding bidding partners, and formulating bids which it hopes will allow it to earn a reasonable rate of return on its OCS investments and also win the bidding. It is gratifying to submit a bid at a sale and win the right to explore a particular prospect. It also is very disappointing to learn that although you have competed well and won the bidding, the Department nonetheless has decided to reject your bid.

C. Department Tract Evaluations and Bid Rejections
Achieve No Rational Results

As indicated at page 5, above, the Department's evaluation of a tract is simply one more inexact estimate of the value of a tract in addition to those made by numerous experts in the industry. Although the Department takes into account the companies' bids through use of an AEOT, if the Department's evaluation is much higher than the companies', or if only a few companies estimate a tract's relative value as high enough to warrant submission of a bid, the high bid for a tract will be rejected. Geologic evaluations, however, simply are not accurate enough to allow one estimate of value to result in rejections of high bids.

The ultimate value of any tract is never known prior to actual exploration and development. The presale value of a tract is nothing more than a scientific estimate. These estimates are dependent on the seismic data coverage and geometry, application of various computer processing and analytical techniques, and the resulting interpretations utilizing sound geologic principles. The many variables involved in this process cause significant differences in the relative values placed on individual tracts even though the general area of a large geologic structure may be quite similar among the various interpretations. It is

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unreasonable, therefore, to allow the single Department interpretation to cause rejection of a high bid.

Even when numerous potential bidders utilize essentially the same geological and geophysical raw data prior to a lease sale, the interpretation of that data, and hence the estimated presale value of each tract, varies widely among potential bidders. A cursory review of bidding in other sales indicates that differences in presale evaluations by potential bidders cause some tracts to receive bids from some companies while other potential bidders do not bid on those tracts at all. The inaccuracy of presale evaluations is even more vividly demonstrated by the extremes of bid levels placed on the same tract. Frequently, the same tract will receive dollar bids ranging from hundreds of thousands to tens of millions.

In addition, the Mead and Sorenson study referred to at page 6 determined that of the 1,223 individual leases studied, 62% were abandoned without production and another 15% were productive but unprofitable. The inescapable conclusion is that the successful bidders' presale evaluations were totally wrong with respect to nearly two-thirds of the leases issued. Seventy-seven percent of presale evaluations were greatly in error since those evaluations resulted in bids for leases which proved to be either worthless or failed to provide a profit.

A review of past lease sales reveals that the Department's practice of evaluating tracts and rejecting bids does not achieve rational results. The overwhelming number of high bids rejected in the recent Mid-Atlantic Sale 59 indicates this is the case. In Mid-Atlantic Sale 59, numerous experts evaluated the tracts and formulated bids or decided not to bid at all. Only some of those bids were high bids. The Department rejected 44.9% of the high bids. It certainly does not make sense to assume, however, that the Department's geologists were correct 44.9% of the time and the many more industry geologists were correct 55.1% of the time. Certainly Marathon would not maintain that its evaluations are correct 44.9% of the time and the entire rest of the industry 55.1% of the time.

Another example is the rejection of bids in South Atlantic OCS Sale No. 56 ("South Atlantic Sale 56"). Marathon commented on this matter in a September 18, 1981 letter from R. R. Burke (Vice President of Production Exploration, U.S. and Canada) to Secretary of the Interior James Watt. In those comments Marathon pointed out the capricious and

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irrational results of Department evaluations and bid rejections. A copy of the September 18, 1981 letter is attached hereto.

In South Atlantic Sale 56, the Department estimated the total value of the tracts receiving bids at \$216,026,666. The total sum of the high bids for those tracts was \$363,829,953.80. Viewed as a whole, the Department received high bids for those tracts far in excess of its own evaluation. In spite of this, it singled out seven tracts (Nos. 022, 026, 027, 064, 065, 096 and 097) and rejected the high bids for those tracts. Marathon was a high joint bidder on Tract No. 022.

Although the Department does take into account through its Average-Evaluation of Tract criterion the average of all the bids plus its evaluation in determining whether to reject a bid, in each case the Department's higher evaluation was the determinative factor with respect to the bid rejection. In fact, the Department's Average Evaluation of Tract criterion insures that bid rejections will occur most frequently when the Department's evaluation is entirely out of line with all of industry. In short, the more unreasonable the Department's evaluation is when compared with industry, the more likely it is that the Department evaluation will cause rejection of a high bid.

Finally, Marathon has reviewed 59 bid rejections in seven Gulf of Mexico sales held between June 23, 1977 and November 18, 1980.^{5/} The review of bid rejections in these sales again illustrates that Department evaluations and bid rejections achieve no rational results. Between June, 1977 and November, 1980, seven sales were conducted in the Gulf of Mexico -- Gulf of Mexico OCS Sale Nos. 47, 45, 51, 58, 58A, A62

5/ The Department admits at page 5695 of its Request for Comments that market value changes with time due to changes in geologic knowledge, including development of productive trends, improvement in geophysical data and interpretive tools and techniques, and nearby drilling, and changes in other relevant variables such as anticipated prices for oil and gas. To minimize distortion caused by these changes, Marathon chose these seven Gulf of Mexico sales because these tracts were subject to (or to be subject to) the "new gas" pricing provisions of the Natural Gas Policy Act, many rejected tracts were quickly reoffered, and the sales were located in offshore Louisiana and Texas, the most mature OCS area.

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and 62. Ninety-seven high bids were rejected during this time period. Fifty-nine of the tracts on which high bids were rejected were subsequently reoffered and leased.

The sum of the Mean Ranges of Value ("MROV") the Department had assigned to each tract when a high bid for it was rejected equals \$661,419,512 (the sum of 64 MROV's since three tracts had high bids rejected twice and one tract three times). The sum of the MROV's the Department had assigned to each tract when a high bid for it was accepted equals only \$181,027,610. It is obvious that the MROV's were too high at the time high bids for tracts were rejected and that the Department's input data was significantly altered when MROV's were estimated for the sales in which the tracts were leased.

The deficiencies inherent in tract evaluations are more vividly demonstrated when a comparison is made between individual MROV's at the time high bids for tracts were rejected and individual MROV's at the time the tracts were leased. This comparison shows the Department substantially lowered its MROV 52 times, while substantially raising the MROV only 4 times. This is tantamount to admitting that most MROV's at the time of rejection did not represent fair market value and had to be lowered after bids were rejected.

Marathon commends the Department's effort to adjust its evaluations more in line with the values arrived at on the free market. Marathon wonders, however, why this is necessary at all. Why not accept the value arrived at in the free market, competitive bidding system to begin with and avoid the cost, and more importantly the delays in exploration, caused by such a system.

D. Tract Evaluations and Bid Rejections Delay Exploration and Development of the Nation's OCS Resources

Of the 59 bid rejections Marathon analyzed, 36 were single bids and 19 were on tracts that received two bids. The Department's rejections of high bids for these tracts clearly delayed leasing and exploration of tracts where industry as a whole had no desire to explore. This is the one sure result of bid rejections and, of course, the most pernicious. If the high bid for a tract is rejected, that tract simply is not leased in that lease sale. It may never be leased if industry's interest is low and the one or two bidders who bid change their minds. In short, the tract is not explored as soon as it would have been, and maybe not at all.

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The Department's Request for Comments indicates the Department feels, as a general rule, that tract evaluations and bid rejections should focus on those tracts which receive fewer than three bids. Marathon fails to see the logic in such a system, however. First, the number of bids a tract receives does not indicate how many experts have evaluated the tract. The fact that only one or two companies or bidding groups choose to bid means that the other experts estimate the relative value of the tract so low as to not warrant submission of a bid.

Second, Marathon feels that high bids for tracts on which only one or two bids are received are precisely the bids the Department should be eager to accept. If only one or two bidders want to explore the tract and the rest of industry is not interested enough to even submit a bid, certainly the Department should accept the high bid and let the one or two bidders who are interested explore the lease and develop the oil and gas resources found, if any.

Bid rejections also delay exploration and development by impeding exploration and development of nearby tracts. As pointed out at page eight of the attached September 18, 1981 letter, the structure involved in South Atlantic Sale 56 will logically be explored jointly by contiguous lease owners. In that sale the Department rejected the high bid for Tract 022. The lessees of the contiguous tracts are now faced with the choice of deferring drilling until Tract 022 is leased or conducting exploratory drilling which evaluates this tract, as well as their own, at no cost to the ultimate owner of Tract 022. If drilling is delayed, the end result will be slower and less efficient development of the nation's OCS oil and gas resources.

E. Marathon's Recommendation

As indicated above, Marathon believes that the Department should abandon completely its practice of evaluating and rejecting bids. Marathon does not believe that any system devised by the Department is more likely to assure receipt of fair market value for OCS leases than reliance on a free market, competitive bidding leasing system.

The Department has 25 years of experience with OCS leasing. The government's own studies indicate there has been no collusion or strategic underbidding during these 25 years. If the Department suspects collusion or systematic underbidding in future lease sales, it can monitor companies'

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bidding behavior and compare that to past behavior. If behavior has changed in a manner indicating collusion or systematic underbidding, the Department could investigate and take necessary corrective action. History indicates there simply is no reason to assume collusion or systematic underbidding and continue a system which is wasteful and delays exploration and development of the nation's OCS oil and gas resources.

SPECIFIC COMMENTS

As indicated throughout these comments, Marathon strongly urges the Department to abandon completely its practice of evaluating tracts and rejecting high bids. Marathon has commented at length on this practice's serious deficiencies. Marathon does not feel that any amount of amendment or fine tuning of the system will improve it over the free market as a means for assuring receipt of fair market value. In addition, any system which results in rejections of high bids necessarily impedes expeditious exploration of the OCS. Marathon, therefore, cannot support any of the three options outlined in the Department's Request for Comments. Marathon's answers to the specific questions enunciated under each option, therefore, should not be interpreted as its support for any of the three options or any variations of them.

I. Option 1

1. As indicated throughout these comments, Marathon believes the government should rely on the free market, competitive bidding system to assure receipt of fair market value. Marathon does not believe that any method of evaluation and bid rejection can improve on the free market as an indicator of fair market value. Marathon, therefore, strongly urges the Department to accept in the future all high bids on tracts without evaluation.

2. Same as answer to question 1.

3. Same as answer to question 1.

4.a. Same as answer to question 1.

4.b. Same as answer to question 1.

4.c. Same as answer to question 1.

4.d. Same as answer to question 1.

12. Marathon does not understand how this results in a subsidy. The bidder whose high bid for hypothetical Tract A exceeds the Department's evaluation is not giving anything to the bidder whose high bid on a hypothetical Tract B is lower than the Department's evaluation. The fact that the high bidder on Tract A lost the bidding for Tract B indicates the high bidder for Tract A does not feel Tract B is worth even what the high bidder for Tract B is paying, much less the Department's evaluation of Tract B.

13. Same as answer to question 1.

14. Marathon believes the Department should abandon the use of evaluations and bid rejections completely and avoid altogether the problem of trying to define a structure or prospect. Each entity evaluating an OCS lease sale prepares its evaluation of prospects or structures involved. These evaluations depend on many variables and subjective judgments, including seismic data coverage and geometry, application of various computer processing and analytical techniques, and resulting interpretations utilizing sound geologic principles.

In some cases the basic interpretive element is structure. But because of the uncertain and subjective nature of geologic evaluations, no two definitions of the structure will be the same. If the Department's definition is different from the sum of industry's definitions (arrived at through competitive bidding), a completely irrational pattern of bid rejection and acceptance could arise, as evidenced by the results in South Atlantic Sale 56.^{6/}

Marathon also does not believe prospect can be defined with sufficient certainty for use in a system of evaluation and bid rejections. There are many crucial interpretive elements that cause no two definitions of a prospect to be the same. These include, but are not limited to, the existence, location and extent of faults, geological perceptions of changes in potential reservoir rock, geophysical

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Marathon commented on the bid rejections in South Atlantic Sale 56 in its letter regarding "Rejections of Bids in Recent South Atlantic OCS Sale No. 56" (September 18, 1981), a copy of which is attached hereto.

4.e. Same as answer to question 1.

4.f. As indicated at pages 11 and 12 of these comments, Marathon believes that evaluations and bid rejections effect the most pernicious results when they prevent or delay leasing and exploration of those tracts in which industry as a whole has no interest. Marathon believes it is in the nation's best interest to accept high bids for these tracts and let that one bidder explore the lease that no one else, or perhaps only one other bidder, wants to explore. Marathon believes any evaluation and bid rejection system which focuses on tracts receiving fewer bids contradicts this interest. As a practical matter, it appears that the Department frequently just lowers its bid, reoffers the tract, and accepts a later bid in the reoffering sale, if anyone is still interested enough to bid. In many cases, therefore, nothing, other than delay, is accomplished.

4.g. Same as answer to question 1.

5. Same as answer to question 1.

6. The government's own studies of 25 years of OCS leasing indicate there has been adequate competition for OCS leases. In addition, the fact that only one or two bidders bid on a tract does not mean that many other experts have not evaluated it. The other experts, however, perceive the relative value of the tract as too low to warrant submission of a bid. There simply is no reason to assume, therefore, that a low number of bids represents inadequate competition.

7. If only one company or bidding group participates in a sale, that means the other potential bidders value the entire area so low as to not warrant submission of even the minimum bid. The government can accept that company's or bidding group's bid and get the area explored. Or the government can reject the bid and delay or prevent exploration of the entire area. Marathon believes the government should accept the bids, lease the tracts, and further expeditious exploration of the area.

8. Same as answer to question 1.

9. Same as answer to question 1.

10. Same as answer to question 1.

11. Same as answer to question 1.

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interpretations of velocity surveys which indicate changes in reservoir rock or in the fluids contained therein, and geological interpretations of this data as it relates to reservoir characteristics such as depositional facies and/or onlap-offlap of potential reservoir beds.

In addition, even if the Department's definition of a structure or prospect essentially coincides with the one industry arrives at through competitive bidding, the Department's estimate of the structure's or prospect's value could be out of step with industry's. If that is the case, all bids might be rejected and the entire structure unleased and unexplored.

For example, in Mid-Atlantic Sale 59, the Department obviously placed a higher value on the northern portion of the sale than did industry. Even though industry's and the Department's definition of the "structure" or "prospect" involved may have coincided, most of the bids for the northern tracts were rejected. Unless one assumes that all of industry was wrong and the Department right, the resulting bid rejections simply do not make sense. Marathon fears such results could become common if the Department employs a "structure" or "prospect" evaluation approach.

II. Option II

A. General Comments

At pages 5,694 - 5,695 of the Request for Comments, the Department suggests that the tract evaluation and bid rejection system has been considered important as an additional deterrent to discourage underbidding "on drainage, proven, or development tracts on which one bidder has potentially superior information." Option II seeks to provide this assurance by subjecting structures containing drainage, proven, or development tracts to evaluations. Unfortunately, however, this assumes that other bidders' lack of information necessarily will cause them to bid lower than a bidder possessing superior information about a tract. This is not necessarily the case, however.

For example, West Delta Block 78 in the Gulf of Mexico offsets one of Marathon's prime producing properties, where Marathon possesses a wealth of data from wells drilled from four platforms and considerable seismic work. Marathon has interpreted this data and consistently determined that West Delta Block 78 has no value to Marathon. Other companies

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nonetheless have been willing to bid on the tract, as evidenced by the following bidding history:

<u>Date</u>	<u>Sale</u>	<u>Bid Amount</u>	<u>Sole Bidder</u>	<u>MMS Evaluation</u>
7/31/79	58	\$155,187	OXOCO	\$3,249,625
9/30/80	A62	517,500	Paragon Pet.	6,388,495
.7/21/81	A66	608,000	Paragon Pet. & Pacific Res. Inc.	1,680,067

This shows two things. First, the Department has refused to accept bids for a tract which Marathon believes is worthless. Second, it shows why a company possessing superior information about a tract simply cannot assume others will bid lower than it and risk losing the tract by bidding lower than it believes the tract is worth.

In each lease sale, only one bidder expressed an interest in leasing and exploring a tract Marathon believes is worthless. Marathon, the Department, and the bidders cannot be certain of their estimates of West Delta Block 78's value. The only way to find out is to explore the block. Had the Department allowed the free market to operate, West Delta Block 78 may have been explored already. However, because of the Department's bid rejections, West Delta Block 78 remains unleased and unexplored in recent years.

In this same area, Marathon and its co-venturers have a long history of bidding for drainage tracts, as shown by the following table:

<u>Date</u>	<u>Block #</u>	<u>Marathon Bid</u>	<u>Second-High Bid</u>	<u>Department Evaluation</u>
3/66	57/79/80 (por.)	\$19.101	\$17.758	Unpublished
11/68	79/80 (por.)	94.190	71.706	Unpublished
7/70	80 (por.)	15.377	6.062	Unpublished
11/71	80 (por.)	2.200	--	Unpublished
10/74	86 (N/2)	20.566	6.400	4.965
11/79	86 (S/2)	39.656	22.215	29.309
10/81	85 (por.)	30.917	--	33.053

It is apparent the government has received fair market value from Marathon's and its co-venturers' bids. Nonetheless, under the Department's system of tract evaluations and bid rejections, the high bid for the Federal portion of Block 85 would have been rejected if the Marathon bid had been 2.29% lower or if the Department's Discounted Range of Values

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("DROV") had been 2.35% higher.^{7/} Considering the inexact nature of geological evaluations, such fine tuning simply serves no useful purpose. Marathon readily admits that, in spite of its knowledge of the area, its evaluation is not even close to a 2.29% accuracy.

B. Specific Questions

1.a. Same as answer to question 1 under Option 1.

1.b. Same as answer to question 1 under Option 1.

1.c. Same as answer to question 1 under Option 1.

1.d. Again, Marathon urges the Department to deter and monitor collusion and systematic underbidding by comparing current bidding behavior to the bidding behavior of the last 25 years. If a company's bidding behavior changes in a suspicious manner, the Department can investigate to determine the cause of the change and take appropriate measures.

2. Same as answer to question 1 under Option 1.

3. Same as answer to question 1 under Option 1.

4. Same as answer to question 1 under Option 1.

5. Same as answer to question 1 under Option 1.

6. If only one company or bidding group bids in a sale or on a structure or prospect, that means that company or bidding group is the only one willing to invest its money in that sale, structure, or prospect. The Department should accept those bids and allow exploration by the one company or bidding group willing to explore the lands offered.

III. Option 3

1. Same as answer to question 1 under Option 1.

2. Same as answer to question 1 under Option 1.

^{7/} The Department's MROV was \$33.053 million, its DROV was \$30.210 million, and the AEOT was \$31.985 million.

3. Same as answer to question 1 under Option 1.

4. Here the Department admits that bid rejections are harmful and deter expeditious exploration and development of the nation's OCS oil and gas resources. Again, however, the Department suggests fine tuning a system which Marathon believes is inherently deficient. Marathon does not believe any amount of fine tuning will make what it believes is a bad system good. Marathon, therefore, urges the Department to abandon completely the practice of evaluations and bid rejections.

IV. General Questions

1. Same as answer to question 1 under Option 1.

2. Same as answer to question 1 under Option 1.

3. Marathon does not believe any analysis is credible enough to warrant overriding a decision arrived at through a free market, competitive bidding process.

4.a. Marathon will continue to formulate its bidding strategy in a manner designed to win the bidding and acquire properties at a value which provides the possibility of a reasonable return on investment.

4.b. Same as answer to question 4.a.

4.c. If the government uses its monopoly power to extract more than fair market value from the OCS lands it leases, return on investment will be too low to provide an adequate incentive for OCS exploration and development. Eventually, some companies will be forced to invest in other endeavors where returns on investment are better and competition for OCS leases will be reduced.

4.d. Of course, when the Department rejects the high bid for a tract, exploration, development, and production are delayed. Also, same as answer to question 4.c.

4.e. Same as answer to question 4.d.

4.f. As exploration, development, and production of the nation's OCS resources are delayed, the government's receipt of revenues from production also will be delayed.

4.g. Each option still requires Department evaluations which duplicate industry efforts in the free market, competitive bidding system, thus wasting government resources.

4.h. The government's own studies have found no evidence of collusive bidding or strategic underbidding in 25 years of OCS leasing history. The Department can compare current bidding behavior to past behavior to detect and investigate suspicious bidding patterns. There simply is no reason to assume the worst and employ a system of tract evaluations and bid rejections which provides no logical results and deters exploration and development of the nation's OCS resources.

5. Bidders must take into account contingency payments each time they evaluate OCS lands and formulate bids for those lands. If the Department relies on the free market, competitive bidding system to determine the value of OCS lands, contingency payments will be taken into account automatically.

6. Minimum bids should be kept low so this threshold amount does not prevent exploration of OCS lands with marginal potential for oil and gas.

CONCLUSION

Again, Marathon feels the overwhelming number of bid rejections in Mid-Atlantic Sale 59 and Gulf of Mexico Sale 67 is evidence of a system which has gotten out of hand. Marathon welcomes the Department's inquiry into evaluation and bid rejection procedures and the opportunity to submit comments. Marathon cannot, however, support any of the three options suggested in the Department's Request for Comments.

Marathon believes that tract evaluations and bid rejections are not required by law, that they are unnecessary, wasteful, and unfair, that they achieve no rational results, and that they delay exploration and development of the nation's OCS oil and gas resources. Marathon does not believe that any amount of fine tuning or amendment can eliminate the serious deficiencies inherent in any system of evaluations and bid rejections.

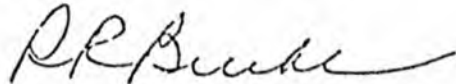
The fundamental problem with rejecting bids because of evaluations by the Department is that this simply ignores the fair market value arrived at through the competitive bidding process. The only true assessment of fair market value of a particular OCS tract is the value given it by expert oil and gas explorationists forced to place a value on it in a free

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market, competitive bidding situation after evaluation of the tract. In such an environment, there is simply no reason whatsoever for evaluations or rejections of bids.

Marathon believes there is no better way to assure receipt of fair market value for OCS lands than through a free market, competitive bidding leasing system without Department evaluations and bid rejections. Also, eliminating Department evaluations and bid rejections will further the goal of expeditious exploration and development of the nation's OCS oil and gas resources by eliminating the delays caused by bid rejections. Marathon, therefore, strongly urges the Department to abandon completely its practice of evaluating OCS lands and rejecting legitimate high bids. Instead, Marathon urges the Department to accept all legitimate high bids in future OCS lease sales.

Very truly yours,



R. R. Burke

X. Overview of the State Leasing Process

The planning and execution of an oil and gas lease sale is a lengthy process, beginning before the sale area is included in the State's proposed five-year leasing program. It involves a number of state agencies, with the Department of Natural Resources as the lead agency. It also involves the public and local communities. The process described here is an idealized version and one the Department hopes to follow for future sales. Given the time constraints in this process, those sales scheduled for late 1983 will be the first ones to have fully undergone these steps.

Aside from certain legal noticing requirements, there are important reasons why a process as lengthy as this one is necessary. The early announcement of a potential sale encourages the early mobilization of public and private resources for the purpose of gathering information (geologic/geophysical, environmental, socioeconomic) relevant to the proposed sale area.

Certain aspects of the process require added emphasis. Approximately 30 months before a proposed sale date, the Department of Natural Resources begins to acquire regional geophysical/geological data. This information is used in conjunction with industry nominations and public comments to define a specific sale area. This reduces the proposed sale area to a smaller, more compact size and permits public and private agencies to more accurately focus their sale-related evaluations. In the past, industry nominations have largely determined the tract selections for a given sale.

As the information gathering process continues, the Department gathers additional geophysical/geological data, including information about geohazards. This information permits the Department to roughly assess the hydrocarbon potential of the sale area. These rough approximations provide other state and local agencies with information important to their assessments of potential sale related socioeconomic and environmental impacts.

The Department's evaluation process gradually moves from region to basin to a tract specific analysis. These refinements permit the assessment of potential trade offs associated with tract deletions that may be suggested for reasons of environmental concern. Without tract specific information, the Department may unknowingly delete high potential tracts.

AS 38.05.180 requires that the Department conduct a thorough presale analysis prior to each proposed sale. This analysis is used to select a bidding system and lease terms tailored to a specific area and designed to yield the State a maximum return on its hydrocarbon resources. For the analysis to be valid, an intensive interpretation of geophysical/geological, engineering and economic data is necessary.

With this overview in mind, the steps in the process are set out below. (For "exempt" sales--those excepted from the five-year program requirement by AS 38.05.180(d) or (w)--most of these same steps are followed, but they are compressed into a much shorter period of time.)

1. Approximately 26 to 61 months before a sale is proposed to take place: Department of Natural Resources chooses new areas to add to the leasing program or revises the schedule, based on its assessment of oil and gas potential, industry interest, and informal state

agency review. DNR then invites the public to comment on the proposed additions and revisions. The State's Agency Advisory Committee on Leasing (AACL) and officials of potentially affected communities located near proposed sale areas also review the proposed additions and revisions.

2. 24 to 59 months before the proposed sale date: The Five-Year Leasing Program is presented to the Alaska Legislature.
3. 22 to 32 months before the proposed sale date: DNR issues a formal Call for Nominations or Comments to the oil industry, State and federal agencies, and the public for a general sale area shown in the Five-Year Leasing Program. At the same time, DNR begins a search for available seismic data and starts compiling surface and subsurface geologic data on the nomination area.
4. 23 months: DNR analyzes the nominations or comments submitted by the oil industry, interest groups, other agencies, and the public. On the basis of this information, the nomination/comment area is scaled down to the "proposed sale area."
5. 21 months: The availability of the new proposed sale area maps is advertised. The map is sent to potentially affected communities to use in planning for the proposed sale. Other State agencies, including members of the AACL, are also invited to review the proposed sale area boundaries. After making its final selection of geophysical data, DNR begins contracting to purchase and process the data over the next seven months. Meanwhile, DNR starts interpreting the geologic data that has been gathered on the proposed sale area and schedules field work to fill in any identified gaps.
6. 15 months: State members of the AACL begin researching and summarizing the data they will contribute to the Social, Economic and Environmental Analysis (SEEA) that is prepared for major sales pursuant to Administrative Order No. 52. A member of a potentially affected community is appointed as ex-officio member of the AACL.
7. 12 months: The Department completes its preliminary geologic analysis of the proposed sale area and provides the economic and engineering units with estimates of ranged reservoir parameters.
8. 10 to 11 months: The draft SEEA is made available to the public and comments are solicited.
9. 9 to 10 months: Public meetings are held on the draft SEEA and additional comments are received.
10. 8 to 9 months: Public review period for draft SEEA ends.
11. 8 months: DNR initiates land status research to determine leasable acreage. Once engineering data are gathered, an economic analysis of a proposed lease sale is begun.
12. 6 months: Geologic analysis, including the identification of potential geohazards, is completed. DNR begins a preliminary assessment of bidding methods to be used in the proposed sale.

13. 5 to 6 months: The draft SEEA is revised as a result of public and agency review. Meanwhile, based on a combination of the information contained in the SEEA, agency comments made directly to DNR, and geological and geophysical information, the proposed sale area boundaries undergo their final revision. A preliminary tract map of the revised sale area is prepared.
14. 3 to 4 months: Final version of the SEEA is printed and distributed.
15. 4 months: A preliminary finding that sets out the issues and facts regarding the proposed sale is made by DNR and is distributed to the public for comment. At the same time, advertisements are published in the proposed sale area stating that the preliminary finding on the proposed sale is available and public response is invited.
16. 3 months: Comments are received from the general public and from communities within the proposed sale area. Final decisions on the sale, tracts to be included, and the mitigating measures that will be enforced on the leases are made on the basis of these comments and those of other State agencies. A final tract map is prepared. A coastal management consistency determination is prepared and the final decision pursuant to AS 38.05.035(a)(14) is written.
17. 2 months: Based on geophysical information, DNR prepares a final prospect map (confidential) of the proposed sale area, completes the required pre-sale economic analysis and selects a bidding method to be used for the specific sale.
18. 2 months: Public notice of the final sale terms is initiated, with a copy of the notice sent to affected communities and to all parties on the DNR oil and gas mailing list.
19. 1 month: A final land status check and identification of third-party interests are carried out.
20. Day zero: The lease sale is held on its scheduled date.
21. Within a week after the lease sale, the apparent high bids are analyzed, and the Commissioner of DNR decides whether to accept the high bids. The winning bidders are notified.