Draft Proposed Program Outer Continental Shelf Oil and Gas Leasing Program 2007-2012

February 2006



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Abbreviations

AEWC	Alaska Eskimo Whaling Commission	LNG	liquefied natural gas
AMCC	Alaska Marine Conservation	Mcf	thousand cubic feet
	Council	M	thousand
API	American Petroleum Institute	MM	million
		MMS	Minerals Management Service
bbl	barrels	MT	metric ton
BBO	billion barrels of oil		
BBOE	billion barrels of oil equivalent	NAS	National Academy of Sciences
BCF	billions cubic feet of gas	NEPA	National Environmental Policy
Btu	British thermal unit		Act
		NEV	Net economic value
DOC	Department of Commerce	NMFS	National Marine Fisheries
DOE	Department of Energy		Service
DOI	Department of the Interior	NOAA	National Oceanic and
DWRRA	Deep Water Royalty Relief Act		Atmospheric Administration
		NOIA	National Ocean Industries
EA	Environmental Assessment		Association
EIA	Energy Information	NRC	National Research Council
	Administration	NRDC	Natural Resources Defense
EIS	Environmental Impact Statement		Council
ESI	Environmental Sensitivity Index	NSV	estimated net social value
ESP	Environmental Studies Program		
ESPIS	Environmental Studies Program	OCS	Outer Continental Shelf
	Information System	OCSLA	Outer Continental Shelf Lands Act
FY	Fiscal Year	OECM	Offshore Environmental Cost Model
GDP	Gross Domestic Product		
GOM	Gulf of Mexico	Tcf	trillion cubic feet

Preface

Management of the oil and gas resources of the Outer Continental Shelf (OCS) is governed by the OCS Lands Act (OCSLA), as amended, (Act) which sets forth procedures for leasing, exploration, and development and production of those resources. The Minerals Management Service (MMS) is the bureau within the Department of the Interior (DOI) that is responsible for implementing the requirements of the Act. Section 18 of the Act calls for the preparation of an oil and gas leasing program indicating a 5-year schedule of lease sales designed to best meet the nation's energy needs.

The MMS is in the process of preparing a 5-year program for 2007-2012. This document constitutes the Draft Proposed Program, which is the first in a series of leasing proposals developed for public review before the Secretary of the Interior may take final action to approve the new 5-year program for 2007-2012. The Draft Proposed Program provides a basis for conducting further analysis and gathering further information for the Secretary to consider in making future decisions. The document consists of the parts described below.

- Part I presents a summary of the Draft Proposed Program as decided by the Secretary. It briefly relates the location and timing of OCS oil and gas lease sales proposed for 2007-2012 and it discusses procedures for assuring the receipt of fair market value for leases as required by section 18.
- Part II describes the framework for developing the new program. It discusses the substantive and procedural requirements that are in place for preparing a program under section 18 and describes the MMS approach to meeting those requirements. This includes a discussion of the principles and factors relating to OCS oil and gas resources and environmental and social considerations that section 18 requires to be taken into account in deciding where and when to propose lease sales.
- Part III presents the options that the MMS prepared as a result of its analysis of the section 18 principles and factors. The options form the basis from which the Secretary chooses the Draft Proposed Program for 2007-2012. Each set of options is prefaced with a brief summary of the relevant results of the section 18 analysis and the comments that the MMS received from interested and affected parties.
- Part IV presents the detailed section 18 analysis executed by the MMS to develop the options presented to the Secretary.
- Appendix A is a summary of all correspondence received by the MMS in response to its public request for comments on the preparation of a new 5-year program, which was issued on August 24, 2005.

I. SUMMARY OF DECISION—DRAFT PROPOSED PROGRAM FOR 2007-2012

Introduction

Section 18 of the Act requires the Secretary of the Interior to prepare and maintain a schedule of proposed OCS oil and gas lease sales determined to "best meet national energy needs for the 5-year period following its approval or reapproval." Preparation and approval of a 5-year program must be based on a consideration of principles and factors specified by section 18. Those criteria and the manner in which they have been considered in the preparation of the Draft Proposed Program for 2007-2012, are summarized in part II of this document.

This Draft Proposed Program is part of a multi-step process to prepare a new 5-year program to follow the current one ending on June 30, 2007. This constitutes the first proposal of a schedule of OCS lease sales within the 2007-2012 timeframe. The areas included in this Draft Proposed Program warrant further study and analysis. The draft proposed lease sale schedule provides a basis for conducting further analysis and gathering further information needed for future decisions. Before the new 5-year program may be approved and implemented, the MMS must accept and consider comments on the Draft Proposed Program; issue for public review and comment a proposed program and draft Environmental Impact Statement (EIS); and a proposed final program and final EIS. The preparation process is described in part II of this document.

Section 18 requires that the 5-year schedule of lease sales be based upon a comparative analysis of the oil and gas-bearing regions of the OCS. Purely for administrative planning purposes, the MMS has created 26 planning areas. On January 3, 2006, the MMS published a notice in the *Federal Register* (71 FR 127) announcing the setting of Federal OCS offshore administrative boundaries beyond State submerged lands for planning, coordination, and administrative purposes. One of the reasons for developing such boundaries was for more accurate delineation of planning areas. As a result, some of the planning area boundaries have been moved to correspond to the new administrative lines. The number of planning areas has not changed; it remains at 26 (see maps 1 and 2, in part III, for the redrawn planning areas).

In developing the Draft Proposed Program for 2007-2012, the MMS has considered leasing in seven planning areas of the OCS, including some that currently are withdrawn from disposition by leasing through June 30, 2012, under section 12 of the Act and/or have been subject to annual congressional moratoria (see maps 1 and 2, in part III). While these withdrawn areas can continue to be included on a 5-year schedule, in order to actually hold a lease sale, the President must lift the withdrawal and Congress must discontinue the annual moratoria. In addition, pursuant to section 18 of the Act, no sale will be proposed until all affected states have the opportunity to comment. The program proposes sales in offshore areas that have the highest oil and gas resource values, highest industry interest, or are off the coasts of states that expressed interest in learning more about the impacts of energy exploration off their coasts.

On August 24, 2005, the MMS published a notice in the *Federal Register* (70 FR 49669) requesting comments on all areas of the OCS. One of the criteria to be considered under section 18 is the Nation's energy needs. The August notice laid out the current and future scenarios as put forth by the Department of Energy (DOE) in their *Annual Energy Outlook 2005*, which projected that annual oil price levels will reach \$52 per barrel and natural gas prices will reach \$8.20 per mcf in 2025. Those prices have already been exceeded. The DOE also expected petroleum demand to grow from 20 to almost 28 million barrels per day from 2003 to 2025. In 2003, domestic production amounted to 56 percent of total supply. The U.S. natural gas

consumption is expected to grow from 22 to almost 31 trillion cubic feet from 2003 to 2025, with domestic production meeting only about 30 percent of demand growth. In 2025, imports are expected to account for 68 percent of petroleum demand, but competition for those products will also be greater, especially from developing nations of Asia.

On August 29, five days after the notice was published, Hurricane Katrina made landfall east of New Orleans, having swept through much of the producing area of the offshore Gulf of Mexico (GOM) as a Category 5 hurricane. Less than a month later, Hurricane Rita swept through the Gulf also as a Category 5 storm. Between the two storms, approximately 90 percent of the facilities in the offshore GOM were affected. Through January 25, 2006, the cumulative shut-in oil production is 119,356,377 bbl, which is equivalent to almost 22 percent of the yearly production of oil in the Gulf. The cumulative shut-in gas production is 609.261 billions cubic feet of gas (BCF), which is equivalent to 16.7 percent of the yearly production of gas in the Gulf.

The MMS received over 11,000 comments in response to the August 2005 notice (see appendix A, Summary of Comments). With the national and global energy situation and the immediate impact on supply caused by the hurricanes as a backdrop, the comments from the public were about 75 percent in agreement with some level of expanded access to domestic sources of oil and natural gas. Many of the comments specifically supported "expansion of acreage offered for lease in federal waters in offshore Alaska, the Eastern GOM and certain offshore areas in the Atlantic Ocean." This is a much different scenario from the response to the November 2000, Request for Comments on the current 5-year program for 2002-2007. In that case, of the over 10,000 public comments, only a handful were supportive of any expansion of the program.

The draft program proposes a total of 21 OCS lease sales in 7 areas (4 areas off Alaska, 1 area off the Atlantic coast, and 2 areas in the GOM). Maps A and B show the areas proposed for leasing (proposed program areas).



Map A: Shows the Alaska Program Areas



Map B: Shows the Lower 48 States Program Areas

Table A lists the location and timing of the proposed lease sales in areas that are available for leasing consideration, i.e., not withdrawn or subject to congressional moratoria. Table B lists the location and timing of the proposed lease sales in areas that are withdrawn and/or subject to moratoria.

Sale No.	Area	Year
204	Western Gulf of Mexico	2007
205	Central Gulf of Mexico (portion)	2007
193	Chukchi Sea	2007
206	Central Gulf of Mexico	2008
207	Western Gulf of Mexico	2008
208	Central Gulf of Mexico	2009
209	Beaufort Sea	2009
210	Western Gulf of Mexico	2009
211	Cook Inlet	2009
212	Chukchi Sea	2010
213	Central Gulf of Mexico	2010
215	Western Gulf of Mexico	2010
216	Central Gulf of Mexico	2011
217	Beaufort Sea	2011
218	Western Gulf of Mexico	2011
219	Cook Inlet	2011
221	Chukchi Sea	2012
222	Central Gulf of Mexico	2012

 Table A: Draft Proposed Program for 2007-2012—Lease Sale

 Schedule for Available Areas

Table B:	Draft Proposed Program for 2007-2012—Potential
Lease	Sale Schedule for Areas Subject to Restrictions*

Sale No.	Area	Year
214	North Aleutian Basin	2010
220	Mid-Atlantic	2011
223	North Aleutian Basin	2012

*Lease sales would only be held if the President chooses to modify the withdrawal in both areas and Congress discontinues the annual statutory moratoria in the Mid-Atlantic.

Alaska Region

In the Alaska Region, the Draft Proposed Program schedules multiple lease sales in the Beaufort Sea, Chukchi Sea, and North Aleutian Basin Planning Areas. Multiple sales are consistent with the Governor of Alaska's recommendations and the state's administration of its offshore oil and gas program. The first sale in the Chukchi Sea is a carryover from the current program, due to the time needed to complete the necessary pre-lease steps and environmental documentation.

The North Aleutian Basin Planning Area is currently withdrawn by presidential order under section 12 of the Act. In response to the August notice, the Governor of Alaska stated that "[he] hope[s] that public and industry input will provide the secretary and the state with adequate information to decide whether or not to ask the President to lift the current withdrawal and allow a sale during the 2007 - 2012 program." In order to have this opportunity, the North Aleutian Basin is included in this proposal.

The Cook Inlet Planning Area is included on the schedule as a special interest sale area. The sales are proposed for 2009 and 2011, but before the MMS proceeds, it will issue a request for nominations and comments and will move forward only after consideration of the comments received in response to annual calls for information. If the comments from a call for information do not support consideration of a sale, the sale will be postponed and a request for nominations and comments will be issued again the following year, and so on through the 5-year schedule, until a sale is held or the schedule expires.

Maps 3-6, in part III, depict the specific Alaska OCS areas proposed for lease sales.

Gulf of Mexico Region

In the Central and Western GOM Planning Areas, which remain the two areas of highest resource potential and interest, the Draft Proposed Program would continue to schedule annual areawide lease sales, as has been the customary practice. As a result of the reconfiguration of some planning areas to follow the new administrative lines, some of the areas formerly included in the Eastern and Western Gulf Planning Areas are now part of the Central Gulf Planning Area. There are no lease sales scheduled in the Eastern Gulf Planning Area. Under this proposal, the first Central GOM Planning Area would include a portion of the area that was identified for Sale 181 in the 5-year program for 1997-2002. This portion of the previous Sale 181 area is proposed for offering in 2007. The original Sale 181 area is not under presidential withdrawal and has not been subject to congressional moratoria. In addition, the area being considered for leasing will not include the area within 100 miles of the Florida coast that used to be part of the Eastern Gulf Planning Area. This will respect the commitment made by the Secretary. In the August 2005 Request for Information, the Secretary stated that she "had no intention of offering for leasing" areas in the Eastern GOM Planning Area within 100 miles of the coast of the State of Florida." Subsequent annual Central Gulf sales may consider the area to the south that is currently under presidential withdrawal and has been subject to annual congressional moratoria. In addition, pursuant to section 18 of the Act, no sale will be proposed until all affected states have the opportunity to comment.

Maps 7, 8, and 8(a), in part III, depict the specific GOM OCS areas proposed for lease sales.

Atlantic OCS

There are four planning areas in the Atlantic OCS—North Atlantic, Mid-Atlantic, South Atlantic, and Straits of Florida. The Draft Proposed Program proposes a special interest sale in the Mid-Atlantic in late 2011; which may proceed based on comments received in response to the call for information, the presidential withdrawal is lifted, and the congressional moratoria is discontinued. The area proposed for consideration is in the Mid-Atlantic Planning Area off the coastline of Virginia. Inclusion of this area in the Draft Proposed Program will allow the gathering of additional information needed to decide whether to include this area in the proposed program. In addition, pursuant to section 18 of the Act, no sale will be proposed until all

affected states have the opportunity to comment. There have not been any lease sales in the Atlantic since the early 1980's. At this time, there are no active leases and no activity. This area is also under presidential withdrawal under section 12 and has been subject to congressional moratoria.

Map 9, in part III, depicts the specific Atlantic OCS area proposed for leasing consideration.

Assurance of Fair Market Value

Section 18 requires receipt of fair market value for OCS oil and gas leases and the rights they convey. The Draft Proposed Program provides for setting minimum bid levels by individual lease sale based on market conditions and for continuing to use a two-phase post-sale bid evaluation process that has been in effect since 1983 to meet this requirement.

II. FRAMEWORK FOR FORMULATING THE DRAFT PROPOSED PROGRAM FOR 2007-2012

A. Procedural Requirements

The Draft Proposed Program is an early step in the process of preparing the new 5-year program. This document is the first of three draft proposals of OCS lease sales for the 2007-2012 timeframe. Before the new 5-year program may be approved and implemented, the MMS must accept and consider comments on the Draft Proposed Program, and issue for public review a proposed program and draft EIS, and then a proposed final program and final EIS. The key steps in preparing a new 5-year program under section 18 of the Act and section 102(2)(C) of the National Environmental Policy Act (NEPA) are described below.

Request for Comments and Suggestions

On August 24, 2005, the MMS published in the *Federal Register* a request for comments and suggestions on the preparation of a new 5-year program for 2007-2012 and announced the start of scoping for the EIS that will be prepared (see appendix A for summarized comments). The MMS also sent letters to the governors of affected states and the heads of interested federal agencies requesting their input by October 11, 2005.

Draft Proposed Program

After considering all the analyses of information relating to section 18 factors and principles (see parts III and IV), the Secretary will select a Draft Proposed Program as the initial proposal for the 5-year program for 2007-2012. The MMS announces the Draft Proposed Program and notice of intent to prepare an EIS in the *Federal Register* and distributes it to Governors of affected states and interested and affected parties for a 60-day comment period. The Secretary's proposal is explained in part I of this document.

Proposed Program

Preparation of a proposed program will be based on further section 18 analysis and consideration of the comments received by the MMS concerning the Draft Proposed Program. The proposed program is the second draft of the Secretary's proposal. The MMS will publish the proposed program in the *Federal Register*, and submit it along with a draft EIS to the Congress, the Attorney General, the governors of affected states, and other interested and affected parties for a 90-day comment period. The MMS also will give the governors written responses to their comments on the Draft Proposed Program.

Proposed Final Program

Preparation of a proposed final program will be based on further section 18 analyses and consideration of the comments received by the MMS concerning the proposed program. The proposed final program is the third draft of the Secretary's proposal. The MMS will announce the proposed final program in the *Federal Register*, and submit it to the President and the Congress, along with summaries of any comments received and an explanation of the responses on any recommendations received from affected state and local governments, as well as the Attorney General. The MMS will issue a final EIS with the proposed final program.

Program Approval

Sixty days after the proposed final program is submitted to the President and the Congress, the Secretary may approve the new 5-year program.

B. Substantive Requirements

Section 18 of the Act sets forth specific principles and factors to guide 5-year program formulation. Analysis of information relating to those principles and factors produces results that the MMS uses to develop reasonable options from which the Secretary may select a schedule of proposed lease sales indicating, as precisely as possible, the size, timing, and location of leasing activity determined to best meet national energy needs. A brief overview of those section 18 requirements is presented below.

Energy Needs

Section 18(a) states that the purpose of the 5-year OCS oil and gas leasing program is to help meet the Nation's future energy needs. Part IV.A presents an analysis of anticipated energy needs. The analysis includes discussions of the DOE's projections of national energy needs according to the early release version of the *Annual Energy Outlook 2006*, the potential contribution of OCS oil and gas production in meeting those needs, alternatives to OCS production, and considerations relating to regional energy needs.

Environmental Considerations

Section 18(a)(1) provides that in addition to examining oil and gas resources, the Secretary is required to consider the values of other OCS resources and the potential impacts that OCS oil and gas activities could have on those resources and on the marine, coastal, and human environments. Part IV.B presents the environmental issues and concerns that have been raised by commenters and presents information relating to safe and sound operations, as well as pertinent findings of the final EIS for the 5-year program for 2002-2007 and other relevant NEPA documents and environmental information.

Factors for Determining Timing and Location of Leasing

Section 18(a)(2) lists eight factors that are to be considered in deciding the timing and location of oil and gas activities among the different areas of the OCS. While some of these factors lend themselves to quantification to facilitate comparison among planning areas, others do not and need to be considered qualitatively. Each of the eight factors provided in 18(a)(2)(A) through (H) is listed below along with references to the parts of the Draft Proposed Program analysis that address them.

(A) Geographic, Geological, and Ecological Characteristics

The main source of information on geographic, geological, and ecological characteristics of the OCS planning areas considered in preparing the Draft Proposed Program is the final EIS for the 5-year program for 2002-2007, April 2002.

Other sources include recent NEPA documents prepared for leasing and operations activities, the MMS 2005 resource assessment, its cumulative effects report (97-0027), the 1994 Natural Research Council (NRC) report concerning information for Alaska OCS decisions, scientific study results, which are reported in the environmental studies program information system (ESPIS) database, and information submitted or cited by commenters.

(B) Equitable Sharing of Developmental Benefits and Environmental Risks

Part IV.C briefly analyzes the equitable sharing factor. It discusses the analyses and findings of previous 5-year programs and briefly cites new developments and their potential influence on the nature and distribution of benefits and risks associated with the size, timing, and location options available for consideration.

The analysis also describes the significant effect that the existing long-term withdrawal and/or moratoria of areas from leasing has on equitable sharing by effectively precluding expansion of the lease sale schedule to include areas that were not proposed for leasing in the approved 5-year programs for 1997-2002 and 2002-2007. The withdrawal and moratoria are described in part III.C.

(C) Location with Respect to Regional and National Energy Markets and Needs

Part IV analyzes regional and national energy needs. The final EIS for the 5-year program for 2002-2007 describes existing regional oil and gas infrastructure and its relationship to new OCS leasing. Additional relevant information is available in recent lease sale EIS's and other NEPA documents cited in part II.D

(D) Location with Respect to Other Uses of the Sea and Seabed

Part IV.B discusses competing uses of the OCS. This summary is based on information provided in the final EIS for the 5-year program for 2002-2007.

Other sources include the 1997 MMS cumulative effects report, the recent lease sale EIS's and other NEPA documents cited above, ESPIS results, and information submitted or cited by commenters.

(E) Interest of Potential Oil and Gas Producers

Part IV.C describes industry interest as indicated in response to the August 2005, request for comments that was issued by the MMS. The discussions of size, timing, and location options in part III also include summaries of industry interest received from the oil and gas companies and associations (see appendix A for summarized comments).

(F) Laws, Goals, and Policies of Affected States

The discussions of size, timing, and location options in part III include summaries of the relevant laws, goals, and policies—and federally approved coastal zone management programs and policies—that state governments identified in responding to the MMS request for comments (see appendix A for summarized comments received from state governors and government agencies).

(G) Environmental Sensitivity and Marine Productivity

Part IV.C analyzes environmental sensitivity and marine productivity based on the latest available information from the National Oceanic and Atmospheric Administration (NOAA) and the National Marine Fisheries Service (NMFS).

(H)Environmental and Predictive Information

Part IV.B presents an analysis of environmental concerns that summarizes relevant information and findings from the final EIS for the 5-year program for 2002-2007, recent lease sale EIS's and other NEPA documents, and other MMS reports and studies.

Balancing Potential Environmental Damage, Discovery of Oil and Gas, and Adverse Impact on the Coastal Zone

Section 18(a)(3) requires the Secretary to render decisions on the timing and location of OCS leasing that strike a balance between environmental and developmental principles based on a consideration of the factors comprising section 18(a)(2), as listed in 18(a)(2)(A) through (H). Part IV.C addresses the balancing requirement by presenting a comparative analysis of all 26 planning areas.

The centerpiece of the comparative analysis is an estimation of net social value for each planning area that is derived by calculating the value of oil and gas resources minus the cost to industry and the environmental and social costs of developing those resources. The comparative analysis also ranks the planning areas according to quantified information relating to environmental sensitivity and marine productivity and according to the interest of potential oil and gas producers. The other section 18(a)(2) factors do not lend themselves as readily to quantification and are treated qualitatively. The comparative analysis also examines additional qualitative information pertaining to industry interest, the findings and purposes of the Act, the comments and recommendations of interested and affected parties, and other information relevant to striking a proper balance under section 18(a)(3).

The Act does not specify what the balance should be or how the factors should be weighed to achieve that balance, leaving to the Secretary the discretion to reach a reasonable determination under existing circumstances.

C. Judicial Guidance

The new 5-year program will be the seventh prepared by the DOI. The first three programs prepared and approved under section 18 were challenged in court—in 1980, 1982, and 1987. The U.S. Court of Appeals for the District of Columbia Circuit decided all of those lawsuits. The new 5-year program is being prepared in accordance with guidance provided in those decisions, which are cited as follows.

California I [California v. Watt, 688 F2d 1290 (D.C. Cir. 1981)];

California II [California v. Watt, 712 F2d 584 (D.C. Cir. 1983)]; and *NRDC* [Natural Resources Defense Council], *et al.* v. Hodel, 865 F2d 288 (D.C. Cir. 1988)].

No lawsuits were filed against the 5-year programs approved for 1992-1997, 1997-2002, and 2002-2007.

D. Analytic Approach

The analysis for formulating the Draft Proposed Program for 2007-2012 focuses on the size, timing, and location of leasing and the provisions for assuring fair market value.

The Secretary's proposal, in part I, identifies for further leasing consideration seven proposed *program areas* consisting of all or parts of seven of the OCS planning areas (see maps A and B, in part I)). This Draft Proposed Program analysis examines and compares all 26 of the planning areas in light of the criteria of section 18 of the Act. The Secretary's proposal will be further analyzed in the proposed program. It will also be analyzed in the draft EIS prepared to assess the effects of the Draft Proposed Program pursuant to the NEPA.

While the intent is to base this Draft Proposed Program on the newest available information, in some instances the analysis must refer to the information used to develop and approve the 5-year program for 2002-2007. The most notable example is in the analysis of environmental concerns (part IV.B). Because an EIS for the new program will not be prepared until the next step in the process—issuance of the proposed program later in 2006—the Draft Proposed Program relies greatly on the final EIS prepared for the 2002-2007 program. However, that information is augmented by other more specific environmental documents and reports that have been prepared by the MMS and that will provide basic information for the EIS for the new program. The MMS is also are reinterpreting resource data that in some cases is 20 to 25 years old, particularly in areas that have been unavailable for leasing for many years.

In addition to the information presented in this document, the Secretary's decision on the Draft Proposed Program for 2007-2012 will consider the following pertinent documents, which are incorporated by reference.

- Decision Document for the Proposed Final Program for 2002-2007 (April 2002)
- Final EIS for the Proposed Final Program for 2002-2007
- Cook Inlet Planning Area Oil and Gas Lease Sales 191 and 199, Final Environmental Impact Statement, OCS EIS/EA, MMS 2003-055, Volumes 1-3, 2003
- Structure-Removal Operations on the Gulf of Mexico Outer Continental Shelf, Programmatic Environmental Assessment, OCS EIS/EA, MMS 2005-013, 2005
- Gulf of Mexico OCS Oil and Gas Lease Sale 181, Eastern Planning Area, OCS EIS/EA, MMS 2001-051, 2001
- Gulf of Mexico OCS Oil and Gas Lease Sales 189 and 197, Eastern Planning Area, OCS EIS/EA, MMS 2002-056, 2002

- Gulf of Mexico OCS Oil and Gas Lease Sales: 2003-2007, Central Planning Area Sales 185, 190, 194, 198, and 201, Western Planning Area Sales 187, 192, 196, and 200, Final Environmental Impact Statement, OCS EIS/EA, MMS 2002-052, 2002
- Alaska Outer Continental Shelf Beaufort Sea Planning Area Oil and Gas Lease Sales 186, 195, and 202, Final Environmental Impact Statement, OCS EIS/EA, MMS 2003-001, 2003
- Environmental Assessment—Proposed Oil & Gas Lease Sale 195 Beaufort Sea Planning Area, MMS 2004-028, 2004
- Geological and Geophysical Exploration for Mineral Resources on the Gulf of Mexico Outer Continental Shelf: Final Programmatic Environmental Assessment, OCS EIS/EA MMS 2004-054, 2004
- EIA Annual Energy Outlook 2006 Early Release www.eia.doe.gov/oiaf/aeo/consumption.html - January 4, 2006

III. DRAFT PROPOSED PROGRAM OPTIONS

A. Size, Timing, and Location Options

Introduction

This section presents the options dealing with size, timing, and location of future leasing. The Secretary chooses from these options to create the Draft Proposed Program for 2007-2012. The MMS has formulated these options based on its consideration of information relating to the section 18 criteria and based on the results of consultation with interested and affected parties.

Comments of interested and affected parties play an important role in the section 18 process. The Departments responses to the various comments are a key element in shaping options and making programmatic decisions that best reflect the needs of the nation, the states, and local entities.

The OCS is divided into 26 planning areas. Eight whole planning areas located off the east and west coasts and off Alaska, as well as most of the Eastern GOM Planning Area located off Florida, are withdrawn from disposition by leasing until after June 30, 2012, by presidential action under section 12 of the Act and, except for the area of Alaska, have been subject to annual congressional moratoria.

In this section, maps 1 and 2 show the 26 planning areas and the areas are currently withdrawn under section 12. Also maps A and B, shown in part I, and maps 3-9, provided in this section III, show the proposed program areas that are identified in the Draft Proposed Program as options for further consideration of leasing or study. The areas selected will be analyzed further for the proposed program.



Map 1: Shows the Alaska Planning Areas



Map 2: Shows the Lower 48 States Planning Areas

The section 18 objectives of formulating a program to best meet national energy needs and to assure the receipt of fair market value for leases and the rights they convey are major factors in formulating size, timing, and location options. The analyses of net social value and the factors specified by section 18(a)(2) provide a solid basis for developing options. Part IV of this document presents those analyses and examines economic, social, and environmental values; oil and gas resource potential and industry interest; distribution of benefits and risks; competing uses of the OCS; regional energy needs; and the laws, goals, and policies of affected states. The MMS is able to weigh different resources, values, and policies in formulating reasonable options that can be selected by the Secretary to achieve the balance between areas being considered for lease sale, as required by section 18(a)(3).

Options for Scheduling Lease Sales

The following sections present leasing options for seven full or partial planning areas that are being considered for leasing from 2007 through 2012. Various background information, comparative analysis results, and comments received in response to the August 2005, Request for Comments precede the various options for each of the eight planning areas. Environmental issues and concerns are addressed in part IV. In most areas and at each stage of the preparation process, the Secretary is given the option of choosing to have no sales in that area. The "other" option in each area allows the Secretary to entertain a full range of possible actions that could be proposed and considered in accordance with section 18. Additional options are described in the following section. If scheduling of a lease sale is proposed, a map is referenced showing the program areas proposed for leasing consideration. Options for deferring portions of proposed areas are not being included in this proposal. Such decisions are more appropriately made as part of the individual lease sale process.

ALASKA REGION

Fifteen planning areas make up the Alaska Region. Of the 15, leasing consideration is being proposed in 4 of the planning areas--Beaufort Sea, Chukchi Sea, Cook Inlet, and the North Aleutian Basin, the only Alaska Region planning area currently under presidential withdrawal. There also is a brief discussion of the history and available information about the 11 planning areas that are not being proposed for leasing consideration.

BEAUFORT SEA

Background. Ten sales have been held in this area since 1979 and one additional sale is scheduled in the current program for 2007. Currently, there are 181 active leases in this area. Thirty-one exploratory wells have been drilled and there is production from a joint federal/state unit, with federal production of over 15 million barrels of oil since 2001. The State of Alaska holds periodic areawide sales in state waters, from which there is production.

Key Comparative Results. This area has an estimated net social value (NSV) of about \$11.4 billion, ranking it 6th of the 15 planning areas with some economic value. The area is in the low group for relative environmental sensitivity, the lowest for total primary productivity, and the lowest group for normalized primary productivity. Nine companies expressed interest in the area in response to the August 2005, Request for Comments.

Selected Comments. The Governor supports inclusion of the Beaufort Sea in the program and asks companies to work with local communities to avoid conflicts with subsistence whaling and to address stakeholder concerns. He supports federal law that would provide states and coastal communities with direct revenues derived from all OCS activities off their coasts. The junior senator from Alaska urged at the least, continuation of deferrals in the Eastern Beaufort Sea, with a slight expansion of near shore deferral areas toward the Canadian border. The North Slope Borough believes that federal and state governments should focus arctic oil and gas leasing efforts on land, rather than offshore. The Borough questions why the Beaufort and Chukchi Seas are not off-limits like so much of the lower 48 states. They want sale deferral areas permanently removed from consideration. The Northwest Arctic Borough agrees with the North Slope Borough. The Native Village of Point Hope opposes oil and gas leasing in OCS waters of the Arctic Ocean and Bering Sea. The City of Wasilla suggests consideration of adding acreage in the Beaufort Sea. The Alaska Eskimo Whaling Commission (AEWC) requests that the MMS retain the current deferral areas. The Alaska Marine Conservation Council (AMCC) and a consortium of 12 groups, including Earthjustice, the Natural Resources Defense Council (NRDC), and the Sierra Club believe that the risks associated with offshore oil and gas development are too high. About 40 business/organization commenters, from the Agriculture Energy Alliance to the Virginia Farm Bureau Federation, recommended expanded acreage consideration in the Alaska OCS. Seventeen oil and gas companies expressed interest in the Alaska OCS in general, with nine specifically mentioning the Beaufort Sea.

Options

- (1) Five sales (annual) in the program area depicted in map 3,
- (2) Two sales in 2009 and 2011 in the same area as Option 1,
- (3) One sale in 2009 in the same area as Option 1,
- (4) No sale, and
- (5) Other.



Map 3: Shows the Beaufort Sea Program Area

Discussion

Option 1 would be responsive to industry's request for expanded acreage off Alaska and regular sales in this area. *Option 2* would also be responsive, but at a slower pace of leasing, as would *Option 3*, at an even slower pace.

CHUKCHI SEA

Background. There have been two sales in this area with the most recent in 1991. There have been five exploratory wells drilled with no commercial discoveries. There are no existing leases at this time. This area is included in the current program as a special interest sale. No interest was expressed in the first two calls for information in 2003 and 2004. There was industry interest expressed in a large portion of the area, in response to the call in early 2005, but there was not adequate time remaining in the current program to complete the necessary pre-lease steps and environmental documentation. The sale was deferred for consideration in the 2007-2012 program.

Key Comparative Results. This area has an estimated NSV of almost \$12.8 billion, ranking it 5th of the 15 planning areas with some economic value. The area is in the low group for relative environmental sensitivity, the lowest group for total primary productivity, and the middle to low groups for normalized primary productivity. Nine companies expressed interest in the area in response to the August 2005, Request for Comments.

Selected Comments. The Governor supports continued leasing in the Chukchi Sea, but it should only occur with adequate local stakeholder consultation, planning, and environmental analysis. With the exception of the Senator's comments, the other comments listed under the Beaufort Sea Planning Area also are applicable to the Chukchi Sea Planning Area.

Options

(1) Three sales in 2007, 2010, and 2012 in the program area depicted in map 4,

(2) Two sales in 2007 and 2010 in the same area as Option 1,

- (3) No sale, and
- (4) Other.



Map 4: Shows the Chukchi Sea Program Area

Discussion

Option 1 would be responsive to industry's request for expanded acreage off Alaska and regular sales in this area. *Option 2* would also be responsive, but at a slower pace of leasing.

NORTH ALEUTIAN BASIN

Background. There was one sale in 1986 with 23 leases issued in 1988 after resolution of litigation. Those leases were relinquished in settlement of other litigation in 1995. The area is under presidential withdrawal through June 2012. It was under annual congressional restrictions from fiscal year (FY) 1990 through FY 2003. There has been no exploratory activity and there are no existing leases in this area.

Key Comparative Results. This area has an estimated NSV of about \$6 billion, ranking it 11th of the 15 planning areas with some economic value. It is in the highest group for relative environmental sensitivity, the middle group for total primary productivity, and the middle to low groups for normalized primary productivity. Eleven companies expressed interest in this area in response to the August 2005, Request for Comments, the second most mentioned area, after the Eastern GOM.

Selected Comments. The Governor stated that "oil and gas discoveries in federal waters could make oil and gas development on lands offered in the state sale more commercially attractive... [He] hope[s] that public and industry input will provide the Secretary and the State with adequate information to decide whether or not to ask the President to lift the current withdrawal and allow a sale during the 2007-2012 program." The Aleutians East and Lake and Peninsula Boroughs, the City of Wasilla, and the Becharof Corporation, a native village corporation, support inclusion of the area. The Bristol Bay Borough and Choggiung Limited, a native village corporation, are opposed. The U.S. Fish and Wildlife Service recommended retention of the moratoria, "given the importance of anadromous fish resources to Alaska natives, and the fact that affected species may spend part of their life-cycle in proposed lease areas,..." Forty-one environmental organizations, including the Friends of Bristol Bay, specifically opposed lifting the presidential withdrawal for this area. Of the about 40 commenters recommending expanded access to the Alaska OCS, eighteen made specific mention of this area. One company urged the Department "to produce a new 5-year Leasing Program that provides entry into many areas now off-limits and helps the industry to better address the right supply/demand picture facing American Consumers." Eleven oil and gas companies expressed specific interest.

Options

(1) Two sales in 2010 and 2012 in the program area depicted in map 5,

- (2) One sale in 2012 in the same area as Option 1,
- (3) No sale, and
- (4) Other.



Map 5: Shows the North Aleutian Basin Program Area

Discussion

Option 1 would be particularly responsive to industry's interest in expanding acreage access off Alaska, especially in this area. *Option 2* would slow the pace of leasing. *Options 1 and 2* would be responsive to the Governor's hope that keeping the area in the proposal would provide the necessary input to determine whether to request that the withdrawal be lifted. *Option 3* would continue to recognize the presidential withdrawal of this area to June 30, 2012.

COOK INLET

Background. There have been five sales in this area. The most recent was held in 2004 with no bids received. There are two active leases in the area. There have been 13 exploratory wells drilled with no commercial discoveries. Cosmopolitan, a discovery in joint federal/state waters, is being evaluated for commercial development. The State of Alaska schedules periodic areawide sales in state waters and there is production in state waters.

Key Comparative Results. There is an estimated NSV of about \$5.8 billion, ranking it 12th of the 15 planning areas with some economic value. It is in the middle group for relative environmental sensitivity, the low group for total primary productivity, and the high group for normalized primary productivity. Three companies expressed interest in the August 2005, Request for Comments.

Selected Comments. The Governor and the Kenai Peninsula Borough support the current approach, with lease sales included in the next five-year schedule. The Cook Inlet Keeper "strongly believes that the lower Cook Inlet and Shelikof Strait should be excluded from the proposed leasing program." The Keeper, along with a consortium of 28 environmental groups, believe that no further sales should occur due to lack of industry interest. Of the 40 businesses/ organizations that support access to the Alaska OCS, six mentioned this area. Three oil and gas companies expressed specific interest in the area.

Options

(1) Two special interest sales in 2009 and 2011 in the program area depicted on map 6,

(2) One special interest sale in 2009 in the same area as Option 1,

(3) No sale, and

(4) Other.



Map 6: Shows the Cook Inlet Program Area
Discussion

Options 1 and 2 would insure that this area could be considered for leasing only if and when there is industry interest, without having to proceed through the entire pre-lease process if there is no interest.

The remaining 11 planning areas are included in one set of options after the following brief description of each.

HOPE BASIN

Background. No lease sales have been held. This area is included in the current program in conjunction with the Chukchi Sea Planning Area as a special interest sale. There was no interest expressed in response to the first two calls for information. The 2005 call did generate significant interest in the Chukchi Sea portion of the area under consideration, but there was not sufficient time to complete all the necessary pre-lease steps in the current program. The Chukchi Sea area is part of the proposal for this program, without the Hope Basin, as there was no industry interest expressed in that area. The simultaneous U.S./Russia OCS lease sale that was proposed in the 5-year program for 1992-1997 was canceled, with this area being deferred for consideration in later programs.

Key Comparative Results. Available information indicates that this area has no development value, although it is estimated to have some oil resources. It is in the low group for relative environmental sensitivity, the middle group for total primary productivity, and the high to middle groups for normalized primary productivity. There was no industry interest expressed in response to the August 2005, Request for Comments.

Selected Comments. The Governor supports continuation of the interest-initiated program for the Hope Basin. One Alaska business organization specifically supported inclusion of the area.

GULF OF ALASKA

Background. Three lease sales were held from 1976 to 1981. There were 12 exploration wells drilled, but no commercial discoveries. The sale scheduled in the 5-year program for 1997-2002 was canceled, primarily due to low prices and low industry interest. There are no existing leases.

Key Comparative Results. This area has an estimated NSV of about \$0.5 billion, ranking it at 14th of the 15 planning areas with some economic value. It is in the high group for relative environmental sensitivity and total primary productivity and in the middle to low groups for normalized primary productivity. There was no industry interest expressed in response to the August 2005, Request for Comments.

Selected Comments. One Alaska business organization specifically supported inclusion of the area and one environmental group specifically opposed.

ST. GEORGE BASIN

Background. One sale was held in 1983. There were ten exploration wells drilled with no commercial discoveries. There are no active leases in this area. One sale was scheduled in the 5-year program for 1992-1997, but it was deferred for consideration in subsequent programs. The area has not been included for leasing consideration since that time.

Key Comparative Results. Available information indicates that this area has no development value, although it is estimated to have oil and gas resources. It is in the low group for relative environmental sensitivity and in the high groups for total and normalized primary productivity. There was no industry interest expressed in response to the August 2005, Request for Comments.

Selected Comments. One Alaska business organization specifically supported inclusion of the area.

NORTON BASIN

Background. One sale was held in 1983. There have been six exploration wells drilled with no commercial discoveries. There are no existing leases. The area was included in the current 5-year program for 2002-2007 as a special interest sale. Four calls for information have been issued with no expressions of interest. Therefore, there will not be any further steps taken toward a lease sale in the current program.

Key Comparative Results. Available information indicates that Norton Basin has no development value, although it is estimated to have oil and gas resources. The area is in the low group for relative environmental sensitivity, the middle group for total primary productivity, and the middle to high groups for normalized primary productivity. There was no industry interest expressed in response to the August 2005, Request for Comments.

Selected Comments. The Governor supports continuation of the interest-initiated program for Norton Basin and the City of Nome supports increased access to the Alaska OCS in the Norton Sound Basin. One Alaska business organization specifically supported inclusion of the area.

NAVARIN BASIN

Background. One lease sale was held in 1983. There were eight exploratory wells drilled with no commercial discoveries. There are no existing leases and the area has not been included in a 5-year program since 1987-1992.

Key Comparative Results. Available information indicates that this area has no development value, although it is estimated to have oil and gas resources. It is not ranked for relative environmental sensitivity and is in the middle groups for total and normalized primary productivity. There was no industry interest expressed in response to the August 2005, Request for Comments.

Selected Comments. There were no selected comments made.

ST. MATTHEW-HALL

Background. There have been no lease sales.

Key Comparative Results. This area is not ranked in NSV due to negligible resource estimates from available information. It is not ranked for relative environmental sensitivity. It is in the low group for total primary productivity and the middle group for normalized primary productivity. There was no industry interest expressed in response to the August 2005, Request for Comments.

Selected Comments. There were no selected comments made.

ALEUTIAN BASIN

Background. No lease sales have been held and no wells drilled.

Key Comparative Results. This area is not ranked in NSV due to negligible resource estimates from available information. It is in the high group for relative environmental sensitivity and total primary productivity and in the middle group for normalized primary productivity. There was no industry interest expressed in response to the August 2005, Request for Comments.

Selected Comments. There were no selected comments made.

BOWERS BASIN

Background. No lease sales have been held and no wells drilled.

Key Comparative Results. This area is not ranked in NSV due to negligible resource estimates from available information. It is not ranked for relative environmental sensitivity and is in the middle groups for total and normalized primary productivity. There was no industry interest expressed in response to the August 2005, Request for Comments.

Selected Comments. There were no selected comments made.

ALEUTIAN ARC

Background. No lease sales have been held and no wells drilled.

Key Comparative Results. This area is not ranked in NSV due to negligible resource estimates from available information. It is in the lowest group for relative environmental sensitivity, the low group for total primary productivity, and in the middle to low groups for normalized primary productivity. There was no industry interest expressed in response to the August 2005, Request for Comments.

Selected Comments. There were no selected comments made.

SHUMAGIN

Background. No lease sales have been held and no wells drilled.

Key Comparative Results. Available information indicates that this area has no development value, although it is estimated to have some oil and gas resources. It is in the low group for relative environmental sensitivity and in the high groups for total and normalized primary productivity. There was no industry interest expressed in response to the August 2005, Request for Comments.

Selected Comments. There were no selected comments made.

KODIAK

Background. No lease sales have been held and no wells drilled.

Key Comparative Results. Available information indicates that this area has no development value, although it is estimated to have some oil and gas resources. It is in the low group for relative environmental sensitivity and the high groups for total and normalized primary productivity. There was no industry interest expressed in response to the August 2005, Request for Comments.

Selected Comments. There were no selected comments made.

Options (for all 11 areas discussed immediately above)

(1) No sale.

(2) Other.

Discussion. None of these areas are proposed for leasing consideration. With the exception of Norton Basin, none were included in the current program for 2002-2007 and there is no new information to support including them in this proposed schedule for 2007-2012. There was no interest expressed in Norton Basin in the current program and none expressed in the August 2005, Request for Comments.

PACIFIC REGION

There are no proposals for leasing consideration in the Pacific Region. A brief history and summary of available information on the four planning areas are included in the following paragraphs.

WASHINGTON-OREGON

Background. One lease sale was held in 1964. There were 12 exploratory wells drilled with no commercial discoveries. There are no existing leases. The area has been under annual congressional restrictions since FY 1991 and under presidential withdrawal through June 2012.

Key Comparative Results. This area has an estimated NSV of about \$0.2 billion, ranking it 15th of the 15 planning areas with some economic value. It is in the middle groups for relative environmental sensitivity and for total primary productivity and in the high group for normalized primary productivity. There was no industry interest expressed in response to the August 2005, Request for Comments.

Selected Comments. The Governor of Oregon supports continuation of the existing moratorium and opposes any oil or gas development in or outside of its territorial sea. The State does not oppose non-invasive, ecologically benign inventorying activities. The State of Washington, whose comments were received two months after the close of the comment period, looks forward to working with the MMS to conduct baseline environmental studies, evaluate ocean resources and uses, complete an inventory of oil and gas resources, and evaluate renewable energy opportunities off their coast. The U.S. Fish and Wildlife Service expressed concern about the natural resources present along the Washington coast and recommends that the area be excluded from the Draft Proposed Program. Three comments from a total of 40 environmental groups do not want any areas currently under moratoria considered for the 2007-2012 program. While the overwhelming majority of business organizations supported expanding access to the OCS, only four listed the Pacific OCS without any further specification of which planning area.

NORTHERN CALIFORNIA

Background. One sale was held in 1963. There were seven exploratory wells drilled with no commercial discoveries. The area has been under annual congressional restrictions since FY 1982 and under presidential withdrawal through June 2012.

Key Comparative Results. The area has an estimated NSV of about \$10.3 billion, ranking it 7th of the 15 planning areas with some economic value. It is in the middle groups for relative environmental sensitivity and total primary productivity and in the high group for normalized primary productivity. There was no industry interest expressed in response to the August 2005, Request for Comments.

Selected Comments. The State of California is opposed to any new leasing in the California OCS. This stance was also espoused separately by the California Coastal and State Lands Commissions. Thirty-two representatives and the two senators expressed their strong opposition to any proposal to lift the moratorium on new oil and gas development on the OCS, including areas off the coast of California. The Boards of Supervisors for Mendocino and Sonoma Counties reconfirmed their opposition to oil and gas exploration and development off their coastlines. The U.S. Fish and Wildlife Service reiterated the "generally recognized ecological importance of the northern California coastline,..." Three comments from a total of 40 environmental groups do not want any areas currently under moratoria considered for the 2007-2012 program. While the overwhelming majority of business organizations supported expanding access to the OCS, only four listed the Pacific OCS without any further specification of which planning area.

CENTRAL CALIFORNIA

Background. One sale was held in 1963. There were 12 exploratory wells drilled with no commercial discoveries. The area has been under annual congressional restrictions since FY 1982 and under presidential withdrawal through June 2012.

Key Comparative Results. This area has an estimated NSV of about \$9.2 billion, ranking it 9th of the 15 planning areas having some economic value. It is in the middle group for relative environmental sensitivity, the low group for total primary productivity, and the high group for normalized primary productivity. There was no industry interest expressed in response to the August 2005, Request for Comments.

Selected Comments. The State of California is opposed to any new leasing in the California OCS. This stance was also espoused separately by the California Coastal and State Lands Commissions. Thirty-two representatives and the two senators expressed their strong opposition to any proposal to lift the moratorium on new oil and gas development on the OCS, including areas off the coast of California. Three comments from a total of 40 environmental groups do not want any areas currently under moratoria considered for the 2007-2012 program. While the overwhelming majority of business organizations supported expanding access to the OCS, only four listed the Pacific OCS without any further specification of which planning area.

SOUTHERN CALIFORNIA

Background. There have been ten lease sales from 1963 through 1984. Over 1,200 exploratory and development wells have been drilled. There are 79 existing leases, with 43 producing and 36 undeveloped. Oil and gas production totals about 1 billion barrels of oil and 1,300 billion cubic feet of natural gas through 2003. Much of the area has been under annual congressional restrictions since FY 1985 and all is under presidential withdrawal through June 2012.

Key Comparative Results. This area has an estimated NSV of almost \$17.9 billion, ranking it 4th of the 15 planning areas having some value. It is in the middle groups for relative environmental sensitivity and for total primary productivity and in the high group for normalized primary productivity. There was no industry interest expressed in response to the August 2005, Request for Comments.

Selected Comments. The State of California is opposed to any new leasing in the California OCS. This stance was also espoused separately by the California Coastal and State Lands Commissions. Thirty-two representatives and the two senators expressed their strong opposition to any proposal to lift the moratorium on new oil and gas development on the OCS, including areas off the coast of California. The Board of Supervisors for Santa Barbara County opposes any consideration of new leasing off their coast. Three comments from a total of 40 environmental groups do not want any areas currently under moratoria considered for the 2007-2012 program. While the overwhelming majority of business organizations supported expanding access to the OCS, only four listed the Pacific OCS without any further specification of which planning area.

Options (for all 4 areas discussed – (Pacific Region, Central California, Southern California, and Northern California)).

(1) No sale.

(2) Other.

Discussion. None of these areas are proposed for leasing consideration. They have not been included in a 5-year program since 1987-1992 and are under presidential withdrawal through June 30, 2012, and have been subject to annual congressional moratoria.

GULF OF MEXICO REGION

There are three planning areas in the GOM Region—Western, Central, and Eastern GOM. The Western and Central areas constitute the most active areas of the OCS program. The majority of the Eastern Gulf Planning Area is currently under presidential withdrawal under section 12 and is subject to annual congressional moratoria, with the exception of the area identified as Sale 181 in the 5-year program for 1997-2002. Much of the Sale 181 area is now in the Central Gulf Planning Area. The area, due south of the Sale 181 area, is subject to the presidential withdrawal and annual congressional moratoria.

WESTERN GULF OF MEXICO

Backgound. In this area as it has been configured in the past, there have been 45 sales, about 6,844 wells have been drilled, and 1,093 million barrels of oil and 30,709 billion cubic feet of natural gas have been produced through September 2005. There have been annual sales since the early 1980's. The most recent sale was held in August of 2005, with high bids accepted on 342 tracts for over \$283 million. There are approximately 1,960 active leases in the newly configured area, as delineated by the new administrative line. The State of Texas administers an oil and gas program that includes state waters adjacent to this area.

Key Comparative Results. This area has an estimated NSV of about \$78.6.billion, ranking 2nd of the 15 planning areas that have some economic value. The area is in the high group for relative environmental sensitivity, the low group for total primary productivity, and the middle group for normalized primary productivity. Ten companies expressed interest in response to the August 2005, Request for Comments, ranking it third with the Central GOM in number of expressions of interest

Selected Comments. The Governor of Texas states that it is critical to move aggressively to open all prospective OCS areas to leasing. He wants all acreage in the Western Gulf offered. Several businesses/organizations supported continued annual sales in this area. No one expressed opposition. Ten companies expressed interest.

Options

(1) Five areawide sales (annual) in the area depicted on map 7.

(2) Other.



Map 7: Shows the Western GOM Program Area

Discussion

Option 1 would continue the policy of holding areawide annual sales in one of the two areas with the most resources and highest values. Two whole and portions of other blocks within the boundary of the Flower Garden Banks National Marine Sanctuary are excluded from the area available for leasing.

CENTRAL GULF OF MEXICO

Background. As this area was configured in the past, there have been 63 sales, approximately 38,000 wells have been drilled, and some 13,422 million barrels of oil and 132,595 billion cubic feet of natural gas have been produced through September 2005. The most recent sale was held in March of 2005, with 428 tracts receiving bids and 403 leases issued. There are approximately 6,100 active leases in the newly configured area, as delineated by the new administrative line. In the area formerly part of the Eastern Gulf, the most recent sale of the area now in the Central Gulf Planning Area, was held as Eastern Gulf Sale 197 in March of 2005, with 12 bids received and 10 leases issued. There are 150 active leases in this new part of the Central Gulf. The States of Louisiana, Mississippi, and Alabama administer oil and gas programs that include state waters adjacent to this area. The area being considered for leasing will not include the area within 100 miles of the Florida coast that used to be part of the Eastern Gulf Planning Area. This will respect the commitment made by the Secretary. In the August 2005, Request for Information, the Secretary stated that she "had no intention of offering for leasing areas in the Eastern GOM Planning Area within 100 miles of the coast of the coast of the State of Florida."

Key Comparative Results. This area has an estimated NSV of \$124 billion, ranking it 1st of the 15 planning areas with some economic value. It is ranked the highest for relative environmental sensitivity. It is in the high group for total primary productivity and in the high to middle groups for normalized primary productivity. Ten companies expressed interest in response to the August 2005 Request for Comments, ranking it third with the Western GOM in number of expressions of interest. Twenty-five companies expressed interest in the Eastern Gulf, a portion of which is now in the Central Gulf Planning Area.

Selected Comments. The States of Alabama and Louisiana support continued activity in this area, as does Texas. The Governor of Alabama continues to support a balanced and environmentally sound leasing program off its coast, which includes this area and points out the "urgent need to develop additional domestic energy resources from other areas of the OCS, many of which are currently unavailable...." It requests the continued exclusion of the blocks south and within 15 miles of Baldwin County. Eleven elected officials from Alabama expressed their support for increased development of the OCS. Both Alabama and Louisiana recommend revenue sharing with states that have production off their coasts to address onshore impacts of OCS activities. Several businesses/organizations supported continued annual sales in this area. Many companies and associations stated that the "next 5-year plan must provide for expanded leasing in the OCS." The first priority of many commenters was to hold a sale in the "remaining Sale 181 area—it has substantial energy resource potential and access to existing infrastructure that could help speed delivery to energy users." Ten companies expressed interest in the Central Gulf and 25 in the Eastern Gulf.

Options

(1) Five areawide sales (annual) in the area depicted on map 8; plus one sale in 2007 to include only a portion of the Planning Area as depicted on map 8(a).

(2) Other.



Map 8: Shows the Central Gulf of Mexico Program Area



Map 8(a): Shows the Central Gulf of Mexico Program Area

Discussion

Option 1 would continue the policy of holding areawide annual sales in one of the two areas with the most resources and highest values. This program area includes a portion of the area that was identified for Sale 181 in the 5-year program for 1997 – 2002. This portion of the previous Sale 181 area is proposed for offering in 2007. Some of the Central Gulf program area that was in the Eastern Gulf is under presidential withdrawal and has been subject to annual congressional moratoria. Including it in the proposal allows the public and industry the opportunity to provide the Secretary and the state with adequate information to decide whether or not to ask the President to lift the current withdrawal. To hold a sale in this area during the 2007-2012 program, the President must lift the withdrawal and Congress must discontinue the annual moratoria. In addition, pursuant to section 18 of the Act, no sale will be proposed until all affected states have the opportunity to comment.

EASTERN GULF OF MEXICO

Background. As this area was configured in the past, there have been 12 sales held and there have been 54 exploratory wells drilled with significant discoveries of natural gas. In the newly configured area, there are 98 active leases. Much of the planning area has been under annual congressional restrictions since FY 1991 and is under presidential withdrawal through June 2012. The State of Florida does not permit oil and gas activity in its state waters.

Key Comparative Results. This area, as reconfigured, has an estimated NSV of about \$36.2 billion, ranking it 3rd of the 15 planning areas with some economic value. It is in the high groups for relative environmental sensitivity and for total primary productivity and in the high to middle groups for normalized primary productivity. There were 25 companies that expressed interest in this area in response to the August 2005, Request for Comments. This area received more than twice as many expressions of interest as any other area.

Selected Comments. The Governor of Florida "has long held that no oil or gas drilling should occur within 100 miles of Florida's coast. Providing long-term protection for Florida's environment is our priority. Codifying into law a buffer from oil and gas leasing of at least 100 miles around the entire Florida coastline and placing the decisions on offshore development in the hands of the Governor and Legislature would provide permanent protections for our natural resources. Without these legal assurances, the State of Florida will continue to oppose oil and gas drilling within the entire Eastern Planning Area, including the area outside of the revised Lease Sale 181 area commonly known as the bulge. We are pleased that, as stated in the notice, the Secretary of the Interior does not intend to offer areas within 100 miles of the coast of Florida in the Eastern GOM Planning Area for leasing. The Department of Interior should extend this commitment to 100 miles around the entire State of Florida...." The City Commissioner of Gainesville, Florida, expressed support for increased activity in other areas. Over 40 environmental groups expressed opposition to lifting the restrictions in any areas, with two groups specifically concerned about the Eastern Gulf. A large majority of the business/organization commenters supported expansion of activity in the Eastern Gulf. This area received 25 expressions of interest from industry, twice the number of any other area.

Options

(1) No sale.

(2) Other.

Discussion

No lease sales are scheduled for this area. The vast majority of the area is under presidential withdrawal through June 2012 and has been subject to annual congressional moratoria.

ATLANTIC REGION

There are four planning areas that make up the Atlantic Region—North Atlantic, Mid-Atlantic, South Atlantic, and Straits of Florida, the only one of the areas that is not currently subject to presidential withdrawal through June 2012 and to annual congressional moratoria. Leasing options are being considered in one of the areas, the Mid-Atlantic.

MID-ATLANTIC

Background. There have been five sales held between 1976 and 1983. There have been 32 exploratory wells drilled with no commercial discoveries. There are no existing leases. The area is subject to presidential withdrawal through 2012 and to annual congressional restrictions since FY 1990.

Key Comparative Results. This area has an estimated NSV of about \$6.7 billion, ranking it 10th of the 15 planning areas with some value. It is in the high group for relative environmental sensitivity, in the highest group for total primary productivity, and the high group for normalized primary productivity. Four companies expressed interest in this area in response to the August 2005, Request for Comments.

Selected Comments. The State of Virginia does not specifically state whether their offshore area should either be included or excluded, but identified issues that should be considered in an EIS. They stated that in Virginia, most energy use is in coastal areas. Some of these areas have experienced natural gas supply constraints in the recent past, due to distance from source areas and inadequate pipeline infrastructure. Development of natural gas resources near these markets would reduce supply disruptions and transportation costs, and reduce the risk of transportationrelated accidental discharges. These factors should be considered in making decisions on the future of the Atlantic OCS. Virginia Department of Historic Resources is concerned that oil and gas activities off Virginia's coast may affect historic sites and would like the MMS to work closely with them should those activities take place. The States of Delaware and North Carolina continue to support the moratorium. The States of Connecticut and New Jersey and a total of 14 members of the New Jersey congressional delegation expressed their support that the area should remain under congressional moratoria and presidential withdrawal. However, these two states are no longer adjacent to this planning area. Numerous environmental groups opposed any consideration of leasing in areas currently withdrawn, none specifically mentioned the Mid-Atlantic. About 15 businesses/organizations supported opening the Atlantic OCS to

consideration, only one mentioned the Mid-Atlantic, without more specificity. Four companies expressed interest in this area. One company commented that the "withdrawal of the OCS areas off the...Atlantic...until 2012 continues to exclude promising OCS lands from exploration and development activities."

Options

(1) One special interest sale in 2011 in the program area depicted on map 9,

(2) No sale, and

(3) Other.



Map 9: Shows the Mid-Atlantic Program Area

Discussion

Option 1 would be responsive to the many comments received that requested access to expanded areas of the OCS. As a special interest sale, the pre-lease steps would only proceed if comments received in response to the call for information and analyses supported such a decision. It also allows the public and industry the opportunity to provide the Secretary and the state with adequate information to decide whether or not to ask the President to lift the current withdrawal and allow a sale during the 2007-2012 program. In addition, pursuant to section 18 of the Act, no sale will be proposed until all affected states have the opportunity to comment. When commenting on previous programs that considered offerings offshore Virginia, the military identified areas where conflicts may exist. The MMS will work closely with the Department of Defense to identify and address their specific issues and concerns relative to potential oil and gas activities in this area.

Option 2 would continue to recognize the presidential withdrawal of this area to June 30, 2012 and the annual congressional moratoria and would avoid any potential conflicts with the military. To hold a sale in this area during the 2007-2012 program, the President must lift the withdrawal and Congress must discontinue the annual moratoria.

SOUTH ATLANTIC

Background. Four sales have been held between 1978 and 1983. There were six exploratory wells drilled with no commercial discoveries. There are no existing leases. The area is subject to presidential withdrawal through 2012 and to annual congressional restrictions since FY 1990.

Key Comparative Results. This area has an estimated NSV of about \$2.3 billion, ranking it 13th of the 15 planning areas with some economic value. It is in the middle group for relative environmental sensitivity, is the highest for total primary productivity, and in the high group for normalized primary productivity. One company expressed interest in the area in response to the August 2005, Request for Comments.

Selected Comments. The State of Georgia supports environmentally sound efforts to increase the domestic oil and gas reserves of the United States. Given the current high cost of oil and natural gas, as a result of Hurricanes Katrina and Rita, and the need for greater energy security in the United States, Georgia supports an effective state and federal partnership that explores options for new energy resources. Florida opposes any activity within 100 miles of the entire State, including in the South Atlantic Planning Area. The State of North Carolina continues to support the moratorium, although it is no longer adjacent to this planning area. Numerous environmental groups opposed any consideration of leasing in areas currently withdrawn and one specifically asked that sales be excluded in the South Atlantic. About 15 businesses/ organizations supported opening the Atlantic OCS to consideration of leasing; none specifically mentioned the South Atlantic. One company expressed interest in the South Atlantic.

NORTH ATLANTIC

Background. One sale was held in 1979. There were eight exploratory wells drilled with no commercial discoveries. There are no existing leases. The area has been under annual congressional restrictions since FY 1984 and under presidential withdrawal through June 2012.

Key Comparative Results. This area has an estimated NSV of about \$9.3 billion, ranking it 8th of the 15 planning areas with some economic value. It is in the middle group for relative environmental sensitivity and total primary productivity and in the high group for normalized primary productivity. Three companies expressed interest in this area in response to the August 2005, Request for Comments.

Selected Comments. The States of Maine and Massachusetts strongly support the existing moratoria on exploration and development in the North Atlantic. Both are particularly concerned about the Georges Bank area. The City of New Bedford, Massachusetts, expressed opposition to any potential exploration for oil at Georges Bank. Over 40 environmental groups opposed lifting the moratoria in any area. One such group and the New England Fishery Council specifically mentioned the North Atlantic. About 15 businesses/organizations supported opening the Atlantic OCS to consideration of leasing, with one specific mention of this area. Three companies expressed interest.

STRAITS OF FLORIDA

Background. One sale was held in 1959. There were three exploratory wells drilled with no commercial discoveries. There are no existing leases and the area has not been included in a 5-year program since 1987-1992. It is not under any congressional or presidential restrictions on activity.

Key Comparative Results. This area has no development value, although it is estimated to have oil and gas resources. It is in the high group for relative environmental sensitivity, in the lowest group for total primary productivity, and the low group for normalized primary productivity. There was no industry interest expressed in response to the August 2005, Request for Comments.

Selected Comments. The Governor of Florida opposes any activity within 100 miles of the entire State, including in the Straits of Florida. One environmental group requested that this area be excluded from leasing.

Options (for the 3 areas discussed – (South Atlantic, North Atlantic, and Straits of Florida)).

- (1) No sale.
- (2) Other.

Discussion. None of these areas is proposed for leasing consideration. The Straits of Florida has not been included in a 5-year program since 1987-1992 and no interest has been expressed in this area. The North Atlantic and South Atlantic are under presidential withdrawal through June 2012 and have been subject to annual congressional moratoria. No state expressed interest in further consideration of leasing off its coastline.

B. Fair Market Value Options

Part IV.D discusses measures taken to assure the receipt of fair market value for OCS leases as required by section 18(a)(4) of the Act.

Minimum Bid

The options considered for the Draft Proposed Program, subject to sale-by-sale reconsideration, are to maintain the current minimum bid levels or to establish alternative minimum bid levels. In the GOM, the current minimum bid levels are \$25 per acre in water depths of less than 400 meters and \$37.50 per acre in water depths of 400 meters or greater, the water depths in which leases have a 10-year primary term. On the Alaska OCS, recent minimum bid levels differ by planning area and are \$25 per hectare (about \$10 per acre) in the Cook Inlet and in Zone B of the Beaufort Sea, and \$37.50 per hectare (about \$15 per acre) in Zone A of the Beaufort Sea.

Maintaining the current minimum bid levels allows the MMS to use parameters with which the bidders are familiar. Through experience, these levels encourage bidding at lease sales but are high enough to prevent widespread speculative bidding. Also, as conditions warrant, the minimum bid levels could be modified on a sale-specific basis to achieve identified policy objectives.

If an alternative minimum bid level is selected that is lower than those currently in use, more tracts would receive bids, but total government receipts likely would not increase proportionately or even at all. This is the case because a lower minimum bid level would lead to more bids, but on lower-valued tracts. At the same time, this policy might cause some bidders to lower bids on other tracts that would have received bids anyway. Thus, bids on marginal tracts would tend to group around the new minimum bid level rather than the level that previously was used. Nevertheless, a lower minimum bid level could assist in the accomplishment of program objectives like increasing leasing and perhaps exploration activity in frontier areas.

Regardless of the minimum bid level chosen, bids received must exceed the government's estimate of the tract's fair market value for high bids to be accepted. Merely submitting a bid in an amount equal to the minimum bid does not mean that it will be accepted. Established bid adequacy criteria are applied to all high bids at each offering to ensure that fair market value is received for all leases awarded.

In addition to the minimum bid level, other lease policy parameters affect bidding behavior. Rental rates, length of lease term, and royalty relief provisions can be used to achieve various policy objectives. The size of the parameters varies among planning areas, as well as among water depth zones within a planning area. Varying these parameters allows us to address particular policy goals, such as encouraging deepwater production or the production of natural gas from deep wells in shallow water depths, while preserving the existing leasing framework. The Energy Policy Act of 2005 also established new deepwater royalty relief zones with associated royalty suspension volumes, which were implemented first in the August 2005, Western GOM sale.

Bid Adequacy

The current bid adequacy process is a two-phase procedure that was instituted in 1983 with implementation of the areawide leasing policy. Subsequently, revisions were made to the process to address specific fair market value concerns. The most recent revision was announced in the *Federal Register* on July 12, 1999 (64 FR 37560), and established a new criterion for awarding leases under the number-of-bids rule in the first phase of the bid evaluation process and

a new averaging rule in the second phase for multiple-bid tracts that do not satisfy first-order bid acceptance criteria.

The bid adequacy process consists of two phases for identifying those bids that clearly reflect receipt of fair market value and those that require further analysis. The first phase includes market-oriented criteria to accept the high bids on tracts that meet specified competitive standards and on tracts that are judged to be economically non-viable. High bids that are not accepted in the first phase pass to the second phase which applies criteria designed to assess bid adequacy on a tract-specific basis. This phase uses government evaluations of the tracts as well as bid data to determine the acceptability of high bids.

Prior to areawide leasing, a pre-sale evaluation process was used. However, this process is not practical with a large number of tracts and absent information about which tracts will receive bids. The post-sale process has important efficiencies and fair market value properties because it allows us to focus only on tracts that receive bids. It also permits more detailed mapping and analysis of the most recent data needed to make an informed bid acceptance or rejection decision, thus assuring receipt of fair market value.

The bid evaluation is a dynamic process and as conditions change the Leasing team looks for opportunities to improve the process. Thus, in this 5-year program, revisions may be made to the OCS bid adequacy procedures to incorporate knowledge gained from their use or if there are basic structural changes identified in the leasing process.

Options

Minimum Bid

- (1) Set minimum bid levels using the parameters in place at the end of the 2002–2007 program, subject to sale-by-sale reconsideration,
- (2) Set minimum bid level(s) using different parameters, subject to sale-by-sale reconsideration, and
- (3) Other.

Bid Adequacy Review

- (1) Continue use of the current, two-phased bid adequacy process, subject to revision as appropriate.
- (2) Other.

IV. DRAFT PROPOSED PROGRAM ANALYSES

A. Analysis of Energy Needs

Introduction

Section 18 requires the Secretary to formulate an OCS leasing program to "best meet national energy needs for the five-year period following its approval or reapproval" [18(a)]. In formulating the program the Secretary must consider "the location of such [OCS] regions with respect to, and the relative needs of, regional and national energy markets" [18(a)(2)(C)]. The long lead times that are involved in OCS oil and gas leasing and permitting of exploration, development, and production activities, along with the extended life of oil and gas projects, dictate that the analysis of energy needs look at projections for a period of time in the future that is longer than 5 years.

Forecast National Energy Needs

Petroleum and natural gas currently supply almost 65 percent of the Nation's energy needs. Furthermore, the EIA forecasts that the Nation is poised to become even more dependent on oil and natural gas in the next two decades. The EIA projections, shown in Table 1 below, indicate that while the *share* of energy obtained from other sources is likely to increase slightly, the actual *amount* of oil and gas needed to meet the Nation's energy needs is expected to grow 29 percent by 2030.

	2004	2010	2015	2020	2025	2030
Petroleum	40.13	43.14	45.69	48.14	50.57	53.58
	(40.1%)	(40.0%)	(40.0%)	(39.9%)	(39.8%)	(40.0%)
Natural	22.99	24.04	26.67	27.70	27.78	27.66
Gas	(23.0 %)	(22.3%)	(23.4 %)	(23.0%)	(21.9%)	(20.7%)
Other	36.88	40.61	41.75	44.74	48.59	52.60
	(36.9 %)	(37.7%)	(36.6 %)	(37.1%)	(38.3%)	(39.3%)
Total	100.00	107.79	114.11	120.58	126.94	133.84

 Table 1: U.S. Energy Consumption (Quadrillion Btu)

Source: EIA Annual Energy Outlook 2006 - Early Release

http://www.eia.doe.gov/oiaf/aeo/consumption.html - January 4, 2006

Note: Numbers in parentheses are percentages of total.

As the Nation continues to move towards even greater reliance on oil and natural gas to meet its energy needs, Federal lands can supply some of the needed resources. For remaining U.S. technically recoverable oil and gas resources, U.S. Geologic Survey estimates for Federal onshore and State offshore lands and the MMS estimates for Federal offshore lands, indicate that most of the Nation's remaining resources lie on Federal lands. Federal lands can play a central and increasing role in supplying the oil and natural gas needs of the nation. There is a clear need for a continued high level of leasing activity for oil and gas in the GOM, the primary OCS region currently available for energy production and development activities. Increased exploration and

Btu means British thermal unit.

new production from frontier areas such as off Alaska and the Atlantic coast could further reduce our dependence on imported energy.

Table 2 summarizes EIA's forecast of U.S. crude oil production from 2004 to 2030. It shows projected GOM crude production increasing from 1.52 million barrels (MMbbl) per day in 2004 to 2.47 million barrels per day by 2015, and then declining through 2030. Just as important to consider is a consistent predicted decline of other domestic production after 2004. As a result, GOM the crude production is expected to reach and exceed a 40-percent share of total domestic crude production within 5 years. From a national energy and economic security standpoint,¹ the Gulf's production takes on even greater importance as the United States tries to maintain domestic oil supplies as a hedge against rising imports of both crude oil and refined products, which are projected to increase from 58 percent in 2004 to 68 percent of U.S. consumption by 2025.

	2004	2010	2015	2020	2025	2030
Gulf of Mexico	1.52 (28.1%)	2.42 (41.2%)	2.47 (42.3%)	2.37 (42.7%)	2.16 (43.3%)	2.03 (44.4%)
Other	3.88 (71.9%)	3.46 (58.8%)	3.37 (57.7%)	3.18 (57.3%)	2.83 (56.7%)	2.54 (55.6%)
Total	5.40	5.88	5.84	5.55	4.99	4.57

 Table 2: U.S. Crude Oil Production (MMbbl/Day)

Source: EIA Annual Energy Outlook 2006 - Early Release (reference case aeo2006.d111905a)

Note: Numbers in parentheses are percentages of total.

Table 3 summarizes EIA's forecast of U.S. natural gas production from 2004 to 2030. It shows projected GOM gas production increasing to 5 trillion cubic feet (Tcf) in 2015, then decreasing through 2030. While production from other supply regions is expected to grow over the next two decades, Gulf production will continue to be an important and stable source of natural gas for the Nation. Offshore natural gas production is projected to spike in 2014 due to the expected development of several deepwater fields, including Mad Dog, Entrada, and Thunder Horse.

	2004	2010	2015	2020	2025	2030		
Gulf of Mexico	4.21 (22.8%)	4.31 (23.1%)	5.08 (24.9%)	4.71 (21.9%)	4.25 (19.7%)	3.97 (18.5%)		
Other	14.26 (77.2%)	14.27 (76.9%)	15.29 (75.1%)	16.73 (78.1%)	16.92 (80.3%)	16.86 (81.5%)		
Total	18.47	18.58	20.37	21.44	21.17	20.83		

Table 3: U.S. Natural Gas Production (Tcf/Year)

Source: EIA Annual Energy Outlook 2006 – Early Release (reference case aeo2006.d111905a)

Note: Numbers in parentheses are percentages of total.

¹ While oil prices are set on the world market, making it difficult to insulate the nation's economy from price changes, maintaining secure supplies of petroleum can help avoid temporary supply disruptions (or threats thereof), and consuming domestic supplies limits the amount of dollars sent overseas, reducing the balance of payments deficit.

The *Annual Energy Outlook 2006* forecasts increases in domestic energy production, energy imports, and energy consumption over the next 25 years. It also predicts a larger gap between domestic production and consumption than previous EIA forecasts. While there are many factors that simultaneously affect these forecasts, the primary engine behind the projected increase in this production-consumption gap are assumptions about economic growth. The growth rate for the U.S. economy projected in *Annual Energy Outlook 2006* is 3 percent of Gross Domestic Product (GDP). Although the ratio of final energy expenditures to GDP generally falls over time as the ratio was 0.07 in 2004 and is projected to be 0.05 in 2030, higher long-run economic growth would result in increased assumptions of energy consumption. World oil demand is projected to increase as a result of strong demand in developing economies; therefore, world crude oil prices are projected to be about \$56.97 in 2030, as opposed to \$40.49 in 2004. This projection has already been surpassed.

Petroleum demand is projected to grow from 20.8 million barrels per day in 2004 to 27.6 million barrels per day in 2025—an average rate of just over 1.1 percent per year—led by growth in the transportation sector, which accounts for almost two-thirds of U.S. petroleum consumption and is 97 percent reliant on liquid fuels. The growth rate in petroleum demand is lower than in previous forecasts, due to much higher prices than expected over the last year or two. If current high prices abate, consumption growth projections could be too low. The U.S. crude oil production is projected to decline at an average annual rate of 0.7 percent from 2004 to 2030, to 4.6 million barrels per day. Projected production is higher in the earlier years of the forecast when projected prices are higher, contributing to lower production later. Projected increases in natural gas plant liquids production and refinery gains generally offset the decline in crude oil production in the first part of the forecast, but neither these gains nor advances in exploration and production technologies offset declining oil production in the latter part of the forecast.

The U.S. natural gas production is projected to increase from 18.5 trillion cubic feet (Tcf) in 2004 to 21.6 (Tcf) in 2019 before beginning a slow decline. The estimate of 21.2 trillion cubic feet in 2025 is much lower than the Outlook 2004 estimate, which was 24.0 trillion cubic feet of domestic natural gas production in 2025. These estimates include Alaska natural gas, assumed to begin flowing through a new pipeline to be completed by 2015. Net pipeline imports of natural gas, primarily from Canada, are projected to decline from 3.1 trillion cubic feet in 2003 to about 1.2 trillion cubic feet in 2030, due to reserve depletion effects and growing domestic demand in Canada. Net imports of liquefied natural gas (LNG) are expected to increase to 4.4 trillion cubic feet by 2030, although there are several applications to construct new LNG import terminals not included in the Outlook 2006 reference case assumptions.

Meeting Energy Needs

Contribution of OCS Oil and Gas

The OCS leasing and development program continues to play a very important role in meeting the Nation's energy needs. Natural gas from the OCS supplies about 21 percent of the Nation's domestic gas production. Offshore oil also accounts for about 30 percent of the Nation's domestic oil production. According to the *Annual Energy Outlook 2006*, net petroleum imports met 58 percent of demand in 2004 and are expected to increase to meet 60 percent of demand in 2025. Production of oil and gas from the OCS directly reduces the amount of oil that must be

imported from abroad, much of it from politically unstable regions, thereby lessening the threat to the U.S. economy posed by supply disruptions and higher prices.²

Natural gas is the predominant hydrocarbon produced on the OCS when compared on a unit energy basis. In 2004, the natural gas from the OCS produced 5.344 quadrillion Btu more energy than OCS crude oil. Natural gas is the clean burning, environmentally preferred source of energy for electricity generation. As many coal-fired generating facilities have switched to burning gas, demand has risen significantly. This increase in demand, as well as growing residential demand, has raised concerns that the volumes of natural gas available from traditional sources, involving both domestic production and imports from Canada and Mexico, will have to increase dramatically to maintain adequate supplies in the future. The MMS report entitled, *Future Natural Gas Supply From the OCS: An Assessment of the Role of the OCS as Supplier of the Nation's Future Energy Needs (April 2000)*, concluded that in 2020, Mexico will not be more than a minor supplier and Canada's ability to export at the rate projected by EIA will depend heavily on future gas discovery and development on its eastern seaboard. The GOM OCS is commonly cited as a major source for the additional gas production that will be needed to meet the expected demand, and its role could be relatively greater if other sources do not meet expectations.

Since 1994, oil production in the GOM has increased by more than 50 percent. The OCS is the second largest supplier of crude oil for the U.S. market, surpassed only by imports from Saudi Arabia. From 1994-1998, deepwater production of both oil and gas from the Gulf almost tripled, and without this increase, declining domestic production in recent years would have been almost twice as severe. The trend of increasing deepwater production from the Gulf is attributable to the recent contribution of very large fields with high flow rates located in over 1000 feet of water that have been discovered and developed using new technology. This trend is expected to continue, aided by incentives provided by the Deep Water Royalty Relief Act (DWRRA) of 1995, which was followed by record-setting levels of leasing activity in deep water.

Alternatives to the Contribution of OCS Oil and Gas

If OCS oil and gas lease sales were not held during the period to be covered by the new 5-year program, there would be no reduction in the Nation's demand for energy equal to what would have been provided by the oil and gas resources anticipated to be discovered and produced as a result of those lease sales. Given increasing world demand for oil and gas, prices would be expected to rise over time should supply be cut by an amount equal to production anticipated to result from the new 5-year program. This would lead to some reduction in oil and gas consumed in the United States, but most of the foregone production would be replaced by other sources.

The MMS uses its Market Simulation Model to estimate the amount and percentage of alternative sources of energy the economy would adopt in the unlikely case a particular 5-year program were not approved and implemented. The Model is based on estimates of price elasticities of demand and substitution effects. In this case, elasticity of demand is the extent to which consumers purchase less of a product when the price increases by a certain amount.

² Because oil prices are set on the world market, domestic production cannot prevent large swings in price. However, as demonstrated in the aftermath of Hurricanes Katrina and Rita, when OCS oil and gas production was disrupted, decreased domestic production can lead to higher prices. Increased domestic production can contribute to lower prices, especially during times of crisis.

According to the research supporting the model, oil lost from OCS production would be replaced by 88 percent greater imports, 4 percent increased onshore production, 3 percent switching to gas, and 5 percent reduced consumption. Gas lost from OCS production would be replaced by 64 percent onshore production, 22 percent switching to oil, 5 percent imports, and 9 percent reduced consumption. A detailed discussion of the model and alternative sources of energy is given in *Energy Alternatives and the Environment (MMS 2001-096)*. That publication will be updated for analysis conducted for the proposed program. In addition, this analysis will contain specific estimates of production and quantities of other energy sources substituted for oil and gas in the absence of a 5-year program.

Many alternative sources will contribute to the U.S. energy future. This prediction is buoyed by the fact that the President signed the Energy Policy Act of 2005 into law. That Act grants the DOI new responsibilities for renewable energy projects and other alternative uses of the U.S. OCS. Section 388 of that Act gives the Secretary, through the MMS, the authority to: (1) grant leases, easements or right-of-ways for renewable energy-related uses on Federal OCS lands, (2) act as a lead agency for coordinating the permitting process with other Federal agencies, and (3) monitor and regulate those facilities used for renewable energy production and energy support services.

On December 30, 2005, the MMS published an advanced notice of proposed rulemaking in the *Federal Register* (70 FR 77345) as the first step to promulgating rules and implementing the type of program authorized by the Energy Policy Act. However, no new anticipated energy technology is likely to make a significant contribution over the next 10 to 15 years. Even after that, the present sources of energy in the Nation's economy, especially natural gas and oil, are expected to continue to be important contributors to its energy mix throughout the foreseeable future.

The Federal or state governments might use taxes, subsidies, or specific measures, like requiring non-gasoline powered vehicles, to encourage or mandate a different mix of energy alternatives than the market would choose. Such government actions would most likely be directed at vehicle or electric generating plant fuels and fuel consumption. Any of these measures favoring a particular energy alternative probably would have important environmental consequences, some of which might be negative.

Regional Energy Considerations

For 2004, table 4 shows proportional petroleum and natural gas production and consumption by Census Division in the United States. It also shows total energy consumption as a percentage of total U.S. energy consumption for each Census Division.

Census Division*	Produ (Mbbl;	iction MMcf)	Consu (Mbbl;	Total Energy Consumption (MMBtu)	
	Crude Oil % of U.S. total	Natural Gas % of U.S. total	Petroleum** % of U.S. total	Natural Gas % of U.S. total	% of U.S. total
New England	0.00	0.00	4.42	3.34	4
Middle Atlantic	0.14	1.29	10.83	10.78	11
East North Central	1.26	1.86	13.50	16.08	14
West North Central	3.48	2.21	7.00	5.93	7
South Atlantic	0.21	1.84	15.82	9.76	14
East South Central	1.39	2.81	6.42	5.02	6
West South Central	54.32	62.23	22.64	26.95	24
Mountain	8.97	23.79	5.64	7.29	6
Pacific	30.24	3.97	13.73	14.84	14

Table 4: Proportional Petroleum and Natural Gas Production and
Consumption by Census Division in 2004

* The nine census divisions are as follows:

New England – Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont Middle Atlantic – New Jersey, New York, and Pennsylvania

East North Central – Illinois, Indiana, Michigan, Ohio, and Wisconsin

West North Central – Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota

South Atlantic – Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia

East South Central – Alabama, Kentucky, Mississippi, and Tennessee

West South Central - Arkansas, Louisiana, Oklahoma, and Texas

Mountain - Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming

Pacific - Alaska, California, Hawaii, Oregon, and Washington

** This includes all petroleum-related products except natural gas. Mbbl means thousand barrels; MMcf means millions of cubic feet; and MMBtu means one million barrels.

Table 4 Sources:

- "Crude Oil Production" http://tonto.eia.doe.gov/dnav/pet/pet_crd_crpdn_adc_mbbl_a.htm, December 22, 2005
- EIA Monthly Energy Review Thermal Conversion Factors, Tables A3 and A4, http://www.eia.doe.gov/emeu/mer/append_a.html
- Natural Gas Annual 2004, Table 3 and Table 15 http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/natural_gas_annual/nga.ht ml, January 4, 2006

Table 4 compares regions of the country regarding oil and gas production and consumption. One general theme is that the western part of the United States produces more hydrocarbons than it consumes, while the opposite is true for the eastern United States. The West South Central Census Division (Arkansas, Louisiana, Oklahoma, and Texas) produces and consumes more oil and gas, as well as overall energy than any other Census Division in the country.

Conclusion

The Nation's current energy situation is similar to the situations faced during the preparation of previous 5-year programs. Domestic petroleum production is continuing to decline and imports are continuing to increase. The *Annual Energy Outlook 2006* and forecasts by the National Petroleum Council and others, project that domestic consumption over the next 5 years and beyond will increase substantially. While alternative sources are expected to contribute a growing portion of the Nation's domestic energy production, no new technology is forecast to make a paradigm-shifting contribution to domestic energy production in the next 15 years. Crude oil and natural gas are expected to provide the lion's share of the Nation's energy for the foreseeable future. The OCS is the second largest supplier of crude oil for the United States, surpassed only by imports from Saudi Arabia, and is the second largest supplier of natural gas, after Texas. Without the tripling of deepwater oil and gas production from the GOM OCS between 1994 and 1998, the recent decline in domestic production would have been twice as severe. The Nation's current and projected energy situation will require continued leasing, exploration, and development of OCS lands in an environmentally sound manner.

B. Analysis of Environmental Concerns

Introduction

The Act, as amended, includes provisions for considering environmental protection in managing the Nation's offshore oil and gas resources. The law's amendments contain policies pointing to the importance of applying safeguards to help limit the risks of environmental damage and to protect the human, marine, and coastal environments. Section 18 of the Act mandates that decisions on managing the mineral resources of the OCS strike a proper balance between the potential for discovery and development of oil and gas resources, and the potential for adverse environmental impacts. It is therefore important in developing a 5-year program to solicit comments relating to environmental concerns, to consider and analyze carefully the comments received, and to make use of that information in the development of the EIS prepared for the program.

Comments Relating Environmental Concerns

Appendix A is a summary of the comments the MMS has received in response to the August 2005, Request for Comments that deal with program issues. Comments dealing with the EIS will be used for scoping purposes. A number of the comments expressed concerns related to the possible environmental affects of the OCS program. Many repeated issues were identified during the preparation of previous 5-year programs and are very similar to the concerns raised and analyzed during preparation of the 5-year program for 1997-2002 and its accompanying EIS. The primary concerns are identified and discussed below.

Risks of Accidental Oil Spills

It has been many years since any substantial environmental impacts have been observed as a result of an oil spill caused by the OCS production and transportation activities. Concerns continue to be expressed that OCS-related oil spills will result in unacceptable impacts to the marine and coastal environment. Although the location and timing of a serious oil spill cannot be known with any certainty, the EIS that will be prepared for the new 5-year program will analyze potential risks and impacts based on pertinent historical data. As in previous analyses, the EIS will show that the risk of an oil spill taking place varies from OCS region to region proportional to the amount of oil that is expected to be produced and transported. While analysts generally can calculate the risk of an oil spill occurring, it is not possible to predict the location of a spill or its path, and therefore it is not possible to predict which ecological, social, or economic resources would be affected and to what extent. Due to variables such as ocean currents, which could carry a spill out to sea and away from sensitive coastal resources, and the different sizes of spills that could occur, it is reasonable to assume that the actual risk of a particular resource being contacted and harmed will be smaller than the risk of a spill taking place. Concern was also expressed about the ability to recover oil spilled in an ice covered area.

The MMS requires that all drilling or production operations on the OCS have an approved oil spill contingency plan that describes where the nearest equipment is located, where the trained personnel are, and how everyone is notified. Additional site-specific information as to response capabilities specific to a worst case spill will be required. During drilling operations, a company can be required to have equipment staged on a dedicated vessel located at the rig, which can immediately contain and clean up a spill. There is also oil spill equipment available at onshore bases. The MMS conducts frequent inspections of all OCS activity--both at the drilling stage and at production. It also requires the use of subsurface safety valves that shut-in the flow of oil even if the entire rig or platform is lost.

Ecological Issues

While most concerns about ecological effects are linked to the risk of oil spills, many commenters also expressed concerns related to the effects that routine OCS activities resulting from the new 5-year program could have on elements of the natural marine and coastal environments. Such concerns include effects on air quality resulting from the use of internal combustion engines offshore; the impacts to water quality caused by disturbance of ocean bottoms or the release of drill cuttings, chemicals, or wastes; the effects of noise, moving vessels, and structures on marine mammals, fish, and birds; and the impacts to OCS related coastal construction on beaches, wetlands, and rocky coastlines.

Social and Economic Issues

Concerns cited most often about the OCS development are aimed at the economic and social effects that might occur in coastal communities. They include the possibility of adverse impacts to tourism from oil spilled on beaches or from the sight of platforms offshore; the effects on commercial fishing from damaged gear or the occupation of fishing grounds by platforms; and the impacts to local land use and public facilities from the construction of service bases and the influx of new workers into an area. In Alaska, there are additional concerns about the effects of offshore activity on subsistence hunting and the impact to Native culture values and traditions from the introduction of new jobs and workers.

Environmental Analyses

The OCS Record

The 2003 report of the National Academy of Sciences (NAS) entitled *Oil in the Sea III* indicated that only 3 percent of the oil in the world's marine waters is the product of offshore oil and gas operations. Production and transportation from the U.S. OCS contributes less than .01 percent of the oil in global marine waters. The primary source of oil in marine waters is natural seepage. Seeps in North American marine waters introduce about 50 times more oil than OCS oil and gas activities. The oil and gas industry's efforts, in conjunction with research, inspection, and enforcement programs implemented by the MMS, have contributed significantly to keeping the amount of oil introduced by OCS activities as low as possible.

Since the Santa Barbara Channel OCS oil spill in 1969, measures have been underway continuously to improve the technology of offshore operations, and the Federal government has developed more stringent regulations governing OCS operations. Each OCS facility is subject to an announced inspection for compliance with environmental and safety regulations at least once a year and the MMS also conducts periodic unscheduled inspections. The result of all of these efforts is an excellent record that has been documented in detail in previous 5-year program analyses and in several MMS publications. The record shows that from 1980 through 2004, the OCS operators produced approximately 10.4 billion barrels of oil while spilling less than 0.001 percent of that total, or less than 1 barrel spilled per every 120,000 produced.

Findings of EIS's Prepared for Previous 5-Year Programs

The EIS for the 5-year program for 2007-2012 will not be completed until 2007, so the program's potential impacts will not be completely assessed until that time. However, some general indications of the potential impacts of the program may be derived from the extensive analyses included in the EIS's that have been prepared for past 5-year leasing programs. The most recent is the April 2002 final EIS that was prepared for the current 5-year program. Each of the previous EIS's has examined environmental issues and concerns and presented relevant information on the geographical, geological, socioeconomic, cultural, and ecological characteristics of many of the 26 planning areas. Most of the issues and concerns addressed in those past EIS's are similar to those that likely will be analyzed in the EIS prepared for the 5-year program for 2007-2012. A summary of the principal findings of EIS's prepared for past 5-year programs is presented in the following paragraphs.

Water Quality. No permanent degradation of water quality is expected. Sediment disturbance from the emplacement of anchors, platforms, and pipelines should result in localized, temporary increases in turbidity. Rapid dilution of discharged materials, controls on the kinds of material discharged, and the effects of currents and dispersion can be expected to limit the extent of measurable water quality degradation to within a few hundred meters of the source. Water quality will recover quickly from small spills, but large oil spills will require clean up operations to hasten the restoration of water quality to pre-spill conditions.

Air Quality. No substantive degradation of onshore air quality should take place. Emissions associated with routine offshore activities could cause small increases in onshore concentrations of some air pollutants, but will not result in exceeding national or state air quality standards. Accidental oil spills could cause rapid and possibly dramatic increases in volatile organic carbon concentrations near and downwind from a spill, but the duration of these concentrations should be short, generally a few days.

Wildlife. Although some marine mammals could be harmed during OCS activities, no permanent change in the population of any species is expected to take place. In most cases, impacts to marine mammals from activities associated with the proposed program should not be lethal. Exposure to spilled oil may result in the loss of individual marine mammals. In Alaska sea otters, whales, seals, Steller sea lions, polar bears, and walruses may be injured or killed if exposed to oil. In the case of Steller sea lions, which are experiencing a declining population, a large oil spill could lead to permanent impacts to the population should one or more spills contact numerous or large rookeries. There is also a possibility of impacts to marine mammals in the Pacific from a tanker spill transporting OCS oil to west coast terminals. Such losses are not expected to result in permanent changes in species distributions or population numbers. Routine activities such as the operating and servicing of platforms may cause temporary behavioral changes in some marine mammal species, but no losses of individuals or permanent changes in populations should occur.

No measurable impacts are expected to endangered beach mice in the GOM. In Alaska, no long term impacts to terrestrial mammals are expected. Some displacement of caribou from onshore support areas and pipeline corridors could occur during the calving season but no long term impacts are expected. Large oil spills along coastal areas used by grizzly or black bears and otters could result in sublethal impacts and contribute to a decline in survival of exposed bears resulting in minor population impacts for a generation, particularly in the Cook Inlet area where there are high seasonal concentrations of bears along the coast.

In Alaska, impacts to birds from routine operations and oil spills should range from no measurable impacts to short term impacts. Impacts could be greater if constant ship traffic passed through prime feeding areas. The impacts from large oil spills range from no measurable impacts to potential effects on the viability of certain populations. Impact levels will depend on the size, location, and timing of the spills and the bird populations affected. For some birds, such as the Spectacled and Steller's eiders, a large oil spill contacting coastal wetlands in the Arctic where they breed, could affect a large number of these threatened birds. In the GOM, impacts to bird populations from routine operations and oil spills range from no measurable impacts to some short term effects. Impacts from oil spill contact and subsequent clean up operations could require mitigation to restore populations to pre-spill conditions, depending on the location, timing, and size of the spill.

No substantive reductions in finfish or shellfish populations should result from either routine offshore activities or accidental oil spills. Impacts in the form of population displacement or losses are expected to be of short duration. The wide dispersal of early life stages of fishes help to minimize the impacts of large oil spills to fish populations.

Marine turtles in the GOM could be affected by routine operations or oil spills, but no identifiable changes in the numbers or distribution of turtles are expected. Similarly, marine turtles along the Atlantic Coast could be affected by routine operations, with effects similar to those observed in the Gulf.

Shoreline and Seafloor Habitats. In the GOM, some wetlands may be lost to erosion from vessel traffic and canal maintenance. Large oil spills that contact wetland areas could result in direct temporary impacts on the vegetation and additional impacts from clean up operations. No long term impacts from exposure of wetlands and estuaries to spilled oil are expected. No long term effects are expected on coastal barriers, beaches, and dune systems from coastal construction because of low impact construction methods currently in use.

Existing lease stipulations and regulations controlling oil and gas activities near topographic features, pinnacles, and chemosynthetic communities in the GOM, and ongoing studies and investigations to locate and monitor these habitats, are expected to result in no long term or population level impacts to these habitats.

In Alaska, impacts from routine operations and oil spills to most seafloor habitats are expected to be short term and localized. Impacts to the Stefansson Sound Boulder Patch area from oil spills could result in some temporary disruptions to the kelp beds there and to the existing composition of benthic species.

If rocky intertidal communities are exposed to oil spills, reductions in plant and invertebrate animal abundance can be expected. The impacts are expected to be localized, and recovery to pre-exposure conditions would occur within several years.

Along the Atlantic coast, impacts to sensitive ecological areas such as barrier islands are a concern, particularly from oil spills and marine debris.

Coastal Communities. Some changes in coastal land use patterns could occur in localized areas, but no extensive land use impacts are expected in the GOM or along the Pacific coast. An exception is Port Fourchon, Louisiana where, because of heavy usage to support OCS oil and gas activities, there could be major impacts to existing infrastructure without mediating efforts to restore damaged infrastructure. Any OCS development in Alaska could result in new pipelines, onshore facilities, and roads. Employment demands will be met by locally available labor forces in the GOM area. In the Arctic area of Alaska, most offshore workers will commute from other areas, minimizing local employment and population impacts. Increased employment and population from Cook Inlet development would result in a small effect that would be absorbed by the large existing population. Since no infrastructure currently exists along the Atlantic, OCS development could result in new pipelines, onshore facilities, and roads.

Cultural and Subsistence Activities. The cultural and subsistence activities of Native American communities in Alaska could be affected by both routine development activities and oil spills. Increasing urbanization that could occur from OCS development may result in changes to Native culture that may be permanent. Noise and disturbance associated with routine OCS activities and oil spills could interfere with some subsistence hunting activities. An oil spill could render subsistence resources unavailable or undesirable for one or two years.

Environmental Justice. Alaska natives may be disproportionately affected by OCS activities because of their reliance on subsistence resources and harvest practices. However, these effects are expected to be mitigated substantially, though not eliminated, with the use of appropriate available mitigation measures. In other OCS areas, particularly the GOM, no disproportionate effects are expected on minority or low income populations.

Tourism and Recreation. Routine development activities should have no substantive impacts to tourism or recreation. The presence of offshore platforms may enhance recreational fishing in some areas, while they may be considered to detract from coastal aesthetics in others. Coastal construction related to OCS activity may interfere with tourism and recreation in a few locations, but the effect should be of short duration and have little long term economic effect. Recreational beaches and coastal areas exposed to oil spills would become unsuitable for use during the cleanup period, but the displacement of tourists is not likely to last more than one season, and those suffering economic losses may be compensated by responsible parties or from the Oil Spill Liability Trust Fund.

Fishing. Offshore activities could cause impacts to local fishermen. The placement of platforms and pipelines may displace fishermen from small areas that are normally used for fishing. Loss or damage to fishing gear may also result from contact with anchors, rigs, platforms or pipelines. Accidental oil spills may also result in the temporary closure of some fisheries and in a reduction of commercial and recreational fish resources. Losses of fisheries resources are not expected to be distinguishable from natural variations in abundance. Economic losses associated with accidental oil spills may be substantial, but impacts to fishing activities from accidental spills are not expected to persist for more than two seasons in any one region. Further, mechanisms exist for compensating fishermen who incur economic losses stemming from OCS activities or associated accidental spills.

Archaeological Resources. Assuming compliance with existing Federal, state, and local archaeological regulations and policies, most impacts to archaeological resources resulting from routine activities will be avoided. Some impacts could occur to coastal historic and prehistoric archaeological resources from oil spills. Based on experience gained from the previous oil spills, limited impacts are expected from direct contact with oil, but some impacts could occur during clean up operations.

Recent NEPA Documents

Lease Sale EIS's. Since the final EIS for the 5-year program for 2002-2007 was issued in 2002, the MMS has completed multi-sale EIS's analyzing the lease sales scheduled in the Central, Western, and Eastern GOM Planning Areas, and in the Beaufort Sea and Cook Inlet Planning Areas off Alaska. These lease sale EIS's have validated the conclusions of the 5-year program EIS concerning types and levels of environmental impacts for those areas. No Atlantic OCS lease sale EIS has been prepared since 1985.

Additional Relevant EIS's and Environmental Assessments (EA's): Final EIS's analyzing development and production plans in the Beaufort Sea were issued in 1999 for the Northstar Project and in 2002 for the Liberty Project. Additional relevant NEPA documents that have been prepared for GOM activity include an EA on deepwater operations and activities that was issued in June 2000 and a final EIS on the proposed use of floating production, storage, and offloading systems that was completed in February 2001. An EA was prepared for Beaufort Sea Sale 195 in 2004. The findings of those documents also are consistent with the conclusions of the final EIS prepared for the 5-year program for 2002-2007.

Cumulative Effects

In August 1997, the MMS issued a report concerning the cumulative effects of the OCS program for the period 1992 through 1994. That report, which is the most recent of a series prepared pursuant to section 20(e) of the Act, identifies and discusses various effects from OCS activities, both positive and negative. The report concludes that "[i]n general, the current OCS regulatory regime prevents identifiable significant adverse cumulative effects from OCS-related activities on the human, marine, and coastal environments. As the MMS is no longer required to prepare this cumulative effects report, this information and analysis are included in 5-year and lease sale EIS's.

The MMS has included a general discussion of global climate change in the 5-year EIS since 1985. The discussion was limited to a section entitled "Issues of Programmatic Concern." Because of the growing consensus that climate change is occurring and the observance in recent years of measurable effects of climate change, particularly in Alaska, the 2007-2012 five-year EIS will include climate change as an impact factor in some cumulative analyses. Climate change is included in the cumulative analyses of resources that either are already being affected by ongoing climate change, such as subsistence and marine mammals in the Arctic, or will directly be affected by warmer average global temperatures, such as coastal habitats in the GOM, which could experience increased inundation from accelerated rates of sea level rise. Impacts from secondary impacts of climate change will not be considered because they are too speculative at this time. For example, impacts of climate change on components of the hydrologic cycle, such as precipitation, evaporation, river runoff, and the salinity balance of estuaries, will not be included because the expected direction and magnitude of these changes is too speculative to predict at this time.

Preparation of an EIS for the New 5-Year Program

In addition to the analysis of environmental information required by section 18 of the Act, the MMS will prepare an EIS pursuant to NEPA that analyzes the environmental effects of the proposed 5-year program and reasonable alternatives. The EIS preparation process began with the Notice of Intent to Prepare an Environmental Impact Statement for the Proposed 5-Year Program that was published in the *Federal Register* on December 12, 2005 (65 FR 239). The Notice requested information from interested and affected parties that could be used to assist in developing the scope of the EIS.

Additional Environmental Considerations

In preparing the EIS and performing the environmental analyses required by section 18, the MMS has been able to draw on a substantial amount of information and analytic results obtained from its Environmental Studies Program (ESP), which has funded approximately \$700 million in studies since 1973. The ESP Information System (ESPIS) provides brief descriptions of the studies. The MMS is working to make full study reports available through ESPIS, and many are already accessible. The ESPIS search and retrieval system may be reached on the internet at mmspub.gov/espis.

In part IV.C, the analyses of social costs and environmental sensitivity and marine productivity are presented, and also provide useful information concerning the potential effects of oil and gas leasing and related activities under the proposed 5-year program.

C. Comparative Analysis of OCS Planning Areas

Introduction

This section presents the required comparative analysis of section 18 factors and considerations for the Draft Proposed Program decision. The analyses address the section 18 criteria that lend themselves to quantification, as well as those that do not. Factors that are quantified to facilitate comparison among the OCS planning areas include social benefits and environmental sensitivity and marine productivity. The other factors are addressed more qualitatively. The comparative analysis also takes into account comments received, other considerations pursuant to the Act and NEPA, and applicable judicial opinions.

Estimates of Hydrocarbon Resources and Anticipated Production

Resource estimates from the MMS National OCS Assessment 2005 form the basis for the MMS's evaluation of all 26 planning areas. The 2005 Assessment projects the undiscovered, technically and economically recoverable oil and natural gas resources located outside of known oil and gas fields on the U.S. OCS. The assessment considers recent geophysical, geological, technological, and economic information. The MMS estimates of total available economically recoverable resources in the various OCS planning areas provide the foundation for the relative ranking of the planning areas by NSV shown in table 5, along with a brief explanation of methodology. Any estimate of the full extent of undiscovered resources in a planning area is, by its very nature, a rough approximation, and the estimates for the Draft Proposed Program are intended to give decision makers a good approximation of the relative value of the various planning areas, as opposed to firm predictions of resource quantities.

Planning		Resources				
Area	Oil (BBO)	Gas (Tcf)	BBOE	NEV (\$ MM)	EnvCost (\$ MM)	NSV (\$ MM)
Central Gulf of Mexico	8.53	35.48	14.84	125,920	1,919	124,001
Western Gulf of Mexico	4.35	25.93	8.96	79,890	1,333	78,557
Eastern Gulf of Mexico	2.67	9.40	4.34	36,240	68	36,172
Southern California	3.74	6.62	4.91	18,510	641	17,869
Chukchi Sea	2.37	NA	2.37	12,780	215	12,565
Beaufort Sea	2.06	NA	2.06	11,610	201	11,409
Northern California	1.53	2.01	1.89	10,440	124	10,316
North Atlantic	1.16	6.92	2.39	9,470	170	9,300
Central California	1.90	2.01	2.26	9,460	272	9,188
Mid-Atlantic	0.81	5.10	1.71	6,830	105	6,725
North Aleutian	0.63	5.85	1.67	6,120	109	6,011
Cook Inlet	0.82	1.02	1.00	6,010	168	5,842
South Atlantic	0.27	1.68	0.57	2,340	18	2,322
Gulf of Alaska	0.31	1.88	0.64	600	107	493
Washington-Oregon	0.19	0.79	0.33	240	39	201
Straits of Florida	0.01	0.01	0.01	**	**	**
Hope Basin	0.02	NA	0.02	**	**	**
Norton Basin	Neg.	0.04	0.01	**	**	**
Navarin Basin	0.01	0.04	0.02	**	**	**
St. George Basin	0.04	0.06	0.05	**	**	**
Shumagin	Neg.	0.04	0.01	**	**	**
Kodiak	0.03.	1.19	0.24	**	**	**
Aleutian Arc	Neg.	Neg.	Neg.	**	**	**
Aleutian Basin	Neg.	Neg.	Neg.	**	**	**
Bowers Basin	Neg.	Neg.	Neg.	**	**	**
St. Matthew-Hall	Neg.	Neg.	Neg.	**	**	**

Table 5: Resources and Values by Planning Area(Available as of July 2007)

Price scenario: oil is \$46 per barrel and gas is \$6.96 per thousand cubic feet (Mcf).

BBO means billions of barrels of oil; Tcf means trillions of cubic feet of natural gas; BBOE

means billions of barrels of oil equivalent; and MM means one million.

NA means not applicable due to lack of infrastructure and/or market.

**Indicates no development value, exploration only at this time.

Net Social Value

Introduction

The NSV analysis provides the Secretary with estimates of net economic benefits and environmental costs associated with the ultimate recovery of all economically recoverable oil and natural gas resources thought to exist on OCS acreage expected to be unleased in each of the 26 OCS planning areas as of July 2007, when the 5-year program for 2007-2012 is expected to take effect. The purpose of such an analysis at this point in the process of creating a new 5-year program is to provide the Secretary with a concise, quantitative summary of the relative costs and benefits of exploring for and producing oil and gas resources in each planning area, in preparation for the Secretary's initial decision on size, timing, and location of future lease sales. This summary is presented in the form of a ranking of planning areas, based on estimated NSV. After the Draft Proposed Program is published and comments are received, a new analysis will be undertaken, examining the net social benefits of those areas proposed for leasing, based on the specifics of size, timing, and location in the proposal and in any alternatives to be considered for the next decision on the proposed program. The results of numerous other qualitative and quantitative analyses are, or will be, published in this document, in the proposed program decision documents, and in the draft EIS, which will be published concurrently with the proposed program.

The NSV of OCS oil and gas resources is calculated by subtracting environmental and social costs from NEV. The estimates of benefits and costs presented below have been obtained using the same methods as those used for the analyses for the 5-year programs for 1997-2002 and 2002-2007. The resource numbers on which these estimates are based have been revised to reflect changes in resource estimation technology, available information, and unleased acreage that have occurred since the 2002-2007 program was approved. The NSV is calculated through a scenario in which all resources are leased and produced in the initial year of the planning period (2007). This scenario avoids a circuitous logic by which the calculation of resource values presumes the size, timing, and location decisions that are to be based, in part, on those same resource value calculations. For this reason, it was endorsed by the court as the appropriate method of estimating planning area values for the ranking of planning areas required by the Act at this stage of the planning process. When the next round of analyses is prepared, it will exclude all planning areas and portions of planning areas not being considered for the proposed program, will include economic benefit and cost estimates associated with those resources anticipated to be discovered and produced as a result of the new program as opposed to total available resources, and will include an estimate of consumer surplus benefits for each program area.

All inputs to the NSV estimates, including the resource estimates, are based on an identical price projection, assuming level, inflation-adjusted prices of \$46 per barrel of oil and \$6.96 per thousand cubic feet of natural gas for the life of the program. The experiences of the last few decades have shown that unanticipated events or economic changes can cause oil and gas price paths to deviate considerably from even the most respected forecasts, so the MMS uses the level-price-scenario approach to allow decision makers to more easily envision the effects on NEV of major swings in price, either upward or downward. The price scenario used in this analysis assumes prices that are perceived as low at this time, but which actually represent a historically high price level. In addition, bid levels at recent lease sales indicate industry expectations that prices will moderate in coming years.
Hydrocarbon Resources

The estimates of hydrocarbon resources and the economic analysis prepared for this 5-year program are based on all undiscovered, economically recoverable oil and natural gas resources on unleased blocks unless otherwise specified. Economically recoverable resources are accumulations of hydrocarbons that have a positive net economic value (NEV) under the economic conditions being considered. The location and extent of undiscovered oil and gas resources are unknown. Therefore, the MMS uses a method of analysis that yields estimates based on current knowledge of the geology of each area with consideration of existing engineering and economic constraints.

The economically recoverable oil and gas resources for the 26 OCS planning areas being considered in this analysis (refer back to table 5). They are fairly rough estimates developed from the just-completed 2005 Assessment. The anticipated production estimates developed for the proposed program will reflect further refinements in the numbers, but estimates of undiscovered resources will always be approximate.

It should be noted that economically recoverable resource estimates differ from technically recoverable estimates. For example, the 2005 Assessment reports undiscovered, technically recoverable natural gas resources of 76.77 Tcf for the Chukchi Sea Planning Area, while table 5 indicates no economically recoverable natural gas in that planning area. This is because the technically recoverable estimate does not take into account any economic feasibility. The resources are located in a formidable setting that lacks infrastructure and facilities, and they are not considered economic under current technological, pricing, and economic scenarios. The MMS recognizes the vast potential of this resource but also believes that extensive, time consuming, and expensive exploration and development plans will be necessary to identify and produce commercial gas fields in this planning area. This huge a discrepancy is most often found in the more remote frontier areas, but the quantity of technically recoverable resources will always be larger than the amount that is economically recoverable.

Net Economic Value

The NEV is the difference between the discounted gross market value of total resources and the discounted real cost of exploring, developing, producing, and transporting the product to market, except for transfers to the Government. The U.S. Government as the lessor collects a portion of the NEV as transfer payments in the form of cash bonuses, rentals, royalties, and taxes. The lessees as private firms retain the remainder of the NEV as economic profits that may be distributed to shareholders around the country.

The NEV for each planning area is calculated using a discounted cash-flow model called NEV. The NEV model calculates the gross value of producing the total resources in a planning area based on oil and gas price assumptions specified by the user. For this analysis, the gross value of the production is expressed in terms of a 2007 program starting date. Likewise, the costs of exploration, development, production, and transportation excluding transfer payments were calculated in 2007 dollars. The costs were then subtracted from the gross production value. This difference represents the NEV, as of 2007, for the planning areas. An estimate of the NEV of the resources available for leasing was made for each of the planning areas. Under the assumptions used, 15 planning areas have positive NEV, the North, Mid-, and South Atlantic; Eastern, Central, and Western GOM; Southern, Central, and Northern California; Washington-Oregon; Gulf of Alaska; Cook Inlet; North Aleutian Basin; Chukchi Sea; and Beaufort Sea (see table 5, it presents NEV estimates).

Environmental Costs

Beyond the private costs captured in the NEV estimates, society incurs environmental and social costs from the activities and facilities associated with OCS oil and natural gas exploration, development, and production. These costs take a variety of forms, and the MMS has organized the environmental and social costs associated with OCS activities into the following nine categories: Beach Recreation, Recreational Fishing, Ecology, Commercial Fisheries, Subsistence, Air Quality, Public Services, Property Values, and Water Quality

The MMS uses the Offshore Environmental Cost Model (OECM) for estimating environmental and social costs associated with OCS activities. The OECM, which was completed in 2001, is designed to model the impact of typical activities associated with OCS production and typical oil spills occurring on the OCS. The model uses economic inputs, anticipated production, and exploration and development scenarios as the basis for its calculations. This model is not designed to represent impacts from catastrophic events or impacts on unique resources, such as endangered species.

The OECM uses habitat equivalency analysis to overcome the problem of passive enjoyment value. Passive enjoyment value, also called passive use or non-use, is the benefit people derive from (1) knowing a natural resource continues to exist in a specific condition, (2) retaining the option to use that resource in the future, and (3) being able to pass the resource to future generations, which may be a subset of (2). Passive enjoyment value represents an important component of the value of natural resources; however, it is very difficult and extremely expensive to measure accurately. Some economists question whether it can ever be measured accurately. Exacerbating the difficulty and expense of estimating passive enjoyment is the complication imposed on measurement by the vast extent of territory, many planning areas, and great diversity of natural resources covered by this program. Habitat equivalency analysis avoids the passive enjoyment problem by estimating the cost of providing additional habitat equivalent to that lost from an environmental event such as an oil spill.

If OCS oil and, to a lesser extent, natural gas are not produced, imports of foreign oil will increase substantially. Most of this oil would be imported by tanker, entailing risks of oil spills and environmental costs. Subtracting the environmental costs associated with these increased imports from the environmental costs associated with OCS production leaves an estimate of the net environmental and social costs associated with OCS activities. To ensure consistency, the MMS employs the MarketSim2000 model to estimate imports that would substitute for OCS production. A more detailed explanation of the MMS expectations of realistic energy alternatives to the OCS program can be found in a paper posted on its website at *www.mms.gov* under Offshore Program, Leasing, Leasing Offshore Lands, Information on the 2002-2007 OCS Oil and Gas Leasing Program.

Estimates of the net environmental and social costs associated with the development of the economically recoverable resources in the OCS planning areas are under the heading "EnvCost" (see table 5). Table 5 shows only values for the 15 planning areas with positive NEV estimates.

Net Social Value

As noted above, the NSV is calculated by subtracting environmental costs from NEV. The NSV estimates are also provided in table 5. For a more detailed explanation of the methodology employed by the MMS for its net economic and social benefits analysis refer to "Offshore Program, Leasing , Leasing Offshore Land, Information on the 2002-2007 OCS Oil and Gas Leasing Program" posted on *www.mms.gov*. The paper will be updated for the proposed program.

Environmental Sensitivity and Marine Productivity

Introduction

Section 18 (a)(2)(G) of the Act requires the Secretary to consider the relative environmental sensitivity and marine productivity of the different areas of the OCS, as one factor in determining the timing and location of potential natural gas and oil lease sales. To satisfy this requirement, the MMS have ranked the planning areas in terms of their relative environmental sensitivity and marine productivity.

The marine productivity and environmental sensitivity analysis is not intended to reflect potential risks from offshore oil and gas activities, but is used by the Secretary as one of many considerations when developing the program. Analyses presented within this section are approximations using the best available information and will be further refined throughout the development of the 5-year program. Specific assessments of the potential risk from oil and gas development will be addressed in the 5-year program draft EIS, to be published with the proposed program.

Relative Environmental Sensitivity

Spilled oil presents the primary environmental risk from offshore oil and gas activities. The natural resources of coastal ecosystems face the most significant environmental consequences from contact with spilled oil. The Environmental Sensitivity Index (ESI), developed by the NOAA of the U.S. Department of Commerce (DOC), provides a systematic method for compiling data in standardized formats to map shoreline sensitivity to spilled oil. Coastal states and other Federal agencies, including the MMS, assist in ESI development efforts and use ESI products. The ESI ranking approach has a strong scientific basis, and it has proven to be effective as a planning and response tool for over two decades in the United States.

In developing the ESI, the NOAA has accumulated a large database identifying the location of sensitive resources for most coastal areas in the United States. This data is critical to establishing protection priorities and identifying clean up strategies in the event of a spill. Comparison of the standardized data over large areas can assist in identifying relative environmental sensitivity.

While a wide variety of factors contribute to the environmental sensitivity, the predominant factor is the physical characteristics of a coastal area. The ESI provides standardized definitions of shoreline characteristics and uses them to assign shoreline sensitivity rankings. These standards are uniform across all areas of the United States. This enables the MMS to compare OCS planning areas and assess their relative environmental sensitivity in accordance with the Act.

Shorelines are ranked according to their sensitivity to oiling, the natural persistence of oil, and the ease of clean up. The ESI assigns each shoreline segment of the coastal United States a ranking between 1 and 10, where 1 represents shorelines least susceptible to damage by oiling, and 10 represents the locations most likely to be damaged. Examples of shorelines ranked as "1" include steep, exposed rocky cliffs and banks, where oil cannot penetrate into the rock and will quickly be washed off by the action of waves and tides. Shorelines ranked as "10" include protected, vegetated wetlands, such as mangrove swamps and saltwater marshes (see table 6 for a complete description of each ranking). Oil in these areas will remain for a long period of time, penetrate deeply into the substrate, and inflict damage to many kinds of plants and animals. More detailed information on the ESI ranking system can be obtained at **www.response.restoration.noaa.gov/esi/esiintro.html**.

ESI No.	Description			
	Low Sensi-tivity			
1	Exposed rocky shores; Exposed, solid man-made structures			
2	Exposed wave-cut platforms in bedrock, mud, or clay; Exposed scarps and steep slopes in clay			
3	Fine to medium-grained sand beaches; Scraps and steep slopes in sand			
4	Coarse-grained sand beaches			
5	Mixed sand and gravel beaches			
	High Sensi-tivity			
6	Gravel beaches; Riprap			
7	Exposed tidal flats			
8	Sheltered rocky shores and sheltered scarps in bedrock, mud, or clay; Sheltered, solid man-made structures; Sheltered riprap; Vegetated, steeply-sloping bluffs			
9	Sheltered tidal flats; Vegetate low banks			
10	Salt – and brackish-water marshes; Freshwater marshes, swamps; Scrub-shrub wetlands.			

Table 6: ESI Rankings and Respective Description

The ESI data was obtained either directly from the NOAA or through the MMS's Coastal and Offshore Resource Information System. These ESI line data sets were aggregated or disaggregated as appropriate to represent respective planning areas. Each ESI value was weighted by the length of its line segment. An average rating for the planning area was calculated. For some planning areas, incomplete data sets were used as the best available data to represent that planning area.

The average index values for the planning areas ranged from a high of 9.6 for the Central GOM with its extensive wetlands to a low of 3.0 for the rocky coastline of the Aleutian Arc. Table 7 reflects the ordinal ranking of the 26 planning areas. An average index value for a planning area does not necessarily imply a high level of adverse effects from the OCS development. Even those areas ranked with lower index values have sensitive resources which will require consideration of specific environmental impacts at the sale stage.

Planning Area
Central Gulf of Mexico
North Aleutian Basin
Eastern Gulf of Mexico
St. Matthew-Hall
Western Gulf of Mexico
Straits of Florida
Gulf of Alaska
Mid-Atlantic
Washington-Oregon
South Atlantic
Northern California
Cook Inlet
North Atlantic
Central California
Southern California
Beaufort Sea
Chukchi Sea
Hope Basin
Norton Basin
St. George Basin
Kodiak
Shumagin
Aleutian Arc
Aleutian Basin (not ranked)
Bowers Bain (not ranked)
Navarin Basin (not ranked)

Table 7: OCS Planning Areas by Relative Environmental Sensitivity

Relative Marine Productivity

Productivity means the primary productivity of marine plants. Primary productivity is the amount of plant tissue produced through photosynthetic fixation of carbon during a standard period of time. The most common example is simply a plant using energy from the sun to make organic matter. It is the basis for growth in most ecosystems. Phytoplankton, microscopic marine plants, and fixed or rooted plants contribute to the primary productivity of most OCS planning areas. Phytoplankton can occupy all surface waters of a planning area and fix carbon as long as sufficient light and nutrients are available. Inshore waters typically have a much higher primary productivity than most open-ocean waters because of the presence of increased nutrients and light penetration possible to the sediment-water interface allowing for the establishment of fixed vascular plants on the ocean floor. Farther from shore, fewer nutrients, primarily of terrestrial origin, are available for use by phytoplankton, and surface mixing due to wave action, down-dwelling, fronts, and convergence may push some phytoplankton down into the water column where insufficient light allows for photosynthesis to occur.

The methods of measuring phytoplankton productivity are relatively standard and results are normally expressed in terms of chlorophyll-a or the amount of carbon fixed during photosynthesis per square meter of ocean surface per unit time. It is important to note that measurements of phytoplankton can vary greatly both spatially and temporally resulting in significant differences in measurements within and between planning areas. As a result, the reader must be aware of the highly variable mosaic pattern of productivity estimates.

There are two methods to provide an analysis for primary production-total estimated primary production and normalized or average per unit area production. In the first method, the size of the planning area is incorporated into the analysis and can greatly contribute to the overall relative rankings. Therefore, it is possible to have a highly productive on average, but small, planning area that would be lower ranked than a larger planning area with average productivity. In the second method, the sizes of the planning areas are not incorporated into the analysis and the planning areas with the highest average per square meter productivity would be higher ranked. To ensure a complete analysis of the primary productivity of each planning areas, as required under the Act, both methods have been used.

Table 8 shows the estimates for the total primary productivity of each planning area in metric tons (MT) per year. Estimates range from the highest in the South Atlantic Planning Area, yielding a total primary productivity of over 203 million metric tons of carbon per year to the lowest, 4.5 million metric tons of carbon per year in the Beaufort Sea. For the purposes of this analysis, the planning areas have been broken down into eight different classes of estimated total primary production, with the first and highest being the South Atlantic Planning Area.

Rank	Planning Area	Metric Tons/yr
1	South Atlantic	203,124,209
2	Mid-Atlantic	139,781,399
3	Shumagin	137,606,171
4	Kodiak	134,247,604
5	St. Matthew-Hall	134,067,143
6	Eastern Gulf of Mexico	117,466,816
7	St. George Basin	117,301,462
8	Central Gulf of Mexico	110,234,566
9	Gulf of Alaska	105,574,501
10	Norton Basin	84,262,675
11	North Aleutian Basin	84,251,465
12	North Atlantic	81,157,898
13	Navarin Basin	69,706,304
14	Bowers Basin	63,952,718
15	Washington-Oregon	45,742,749
16	Southern California	39,983,470
17	Hope Basin	38,728,168
18	Northern California	37,915,717
19	Aleutian Basin	33,569,865
20	Western Gulf of Mexico	31,331,220
21	Aleutian Arc	25,554,257
22	Cook Inlet	24,152,550
23	Central California	20,592,712
24	Chukchi Sea	8,237,533
25	Straits of Florida	6,850,743
26	Beaufort Sea	4,591,039

Table 8: Primary Production Estimates for Each Planning Area

Source: CSA (1990, 1991)

The second group consists of planning areas with total primary productivity values ranging from 140 million to 134 million metric tons of carbon per year. This group includes the Mid-Atlantic, Shumagin, Kodiak, and St. Matthew-Hall Planning Areas.

Four planning areas fall within the third category of estimated primary productivity which ranges between values of 117 to 105 million metric tons of carbon per year. This group includes the Eastern GOM, St. George Basin, Central GOM, and the Gulf of Alaska Planning Areas.

The fourth group consists of the Norton Basin, North Aleutian Basin, and North Atlantic Planning Areas. Values for this group range from 81 to 84 million metric tons of carbon per year.

The fifth group consists of the Navarin Basin and Bowers Basin Planning Areas with estimated primary productivity values ranging from 64 to 70 million metric tons of carbon per year. The largest number of planning areas falls into the sixth category of primary productivity production with values ranging from 31 to 46 million metric tons of carbon per year. Washington-Oregon, Southern California, Hope Basin, Northern California, Aleutian Arc, and the Western GOM Planning Areas fall into this category.

The seventh primary productivity group ranges between 21 and 26 million metric tons of carbon per year and includes the Aleutian Arc and Cook Inlet Planning Areas.

The eighth and lowest category of estimated primary productivity includes those planning areas with less than 9 million metric tons of carbon per year, the Chukchi Sea, Straits of Florida, and Beaufort Sea Planning Areas.

Table 9 shows the estimates for the primary productivity per square meter in each planning area, broken down where possible in grams of carbon per meter square per year. The high productivity planning areas are those with 200-500 g $C/m^2/year$. Twelve planning areas are included in this category, including the South Atlantic, Mid-Atlantic, Shumagin, Kodiak, St. George Basin, North Atlantic, Washington-Oregon, Cook Inlet, Central California, Northern California, and Southern California. The confidence level associated with these estimates are poor to moderate with the exception of the Washington-Oregon and Mid-Atlantic Planning Areas where the confidence level is moderate to high. The variability of productivity levels within these planning areas is high with the exception of St. George Basin which is unknown.

The moderate productivity planning areas are those with ranging from 50-200 g C/m²/yr. The Western GOM, Central GOM, Eastern GOM, St. Matthew-Hall, North Aleutian Basin, Navarian Basin, Bowers Basin, Aleutian Basin, Hope Basin, and Aleutian Arc Planning Areas are in this category. The variability of productivity levels within these planning areas is overall high. For some planning areas in this category, St. Matthew-Hall and Aleutian Arc, the extent of the variability is unknown. Similarly, the confidence level associated with these estimates is fairly poor with the exception of the North Aleutian Basin.

Four planning areas, Beaufort Sea, Straits of Florida, Chukchi Sea, and the Gulf of Alaska, all fall in the least productive of the OCS planning areas where primary productivity is less than 50 g C/m2/yr.

Planning Area	Productivity Level		Variability	Confidence	
	High	Medium	Low		
South Atlantic	Х			High	Poor - Moderate
Mid-Atlantic	Х			High	Moderate - High
Shumagin	Х			High	Poor - Moderate
Kodiak	Х			High	Poor - Moderate
St. Matthew-Hall					
Coastal		X		Unknown	Poor
Outer		Х		Unknown	Poor
Eastern Gulf of Mexico					
Embayments	Х			Low-Moderate	Moderate
Coastal		Х		High	Poor
Offshore		X		Low-Moderate – High	Moderate
St. George Basin	Х			Unknown	Poor
Central Gulf of Mexico					
Coastal	Х			High	Poor
Offshore		Х		High	Poor
Gulf of Alaska		Х	Х	High	Poor - Moderate
Norton Basin					
Coastal/Sound		Х		Unknown	Moderate
Anadyr/Shelf	Х			Unknown	Poor
North Aleutian Basin		Х			
Coastal Domain		Х		High	High
Central		Х		High	High
Sea Ice			Х	High	Poor - Moderate
North Atlantic	Х			High	High
Navarin Basin		Х		Unknown	Poor
Bowers Basin		Х		Unknown	Poor
Washington-Oregon	Х			High	Moderate-High
Southern California	Х			High	High
Hope Basin					
Central		Х		Unknown	Moderate
Bering Sea	Х			Unknown	Moderate
Northern California	Х			High	Poor
Aleutian Basin		X		Unknown	Poor

Table 9: Relative Annual Water Column Primary Productivity, Variability, and
Confidence in Available Data for OCS Planning Areas

Planning Area	Productivity Level		el	Variability	Confidence
	High	Medium	Low		
Western Gulf of Mexico					
Embayments		Х		Unknown	Moderate
Coastal		Х		High	Moderate
Offshore		Х		Low	Poor
Aleutian Arc					
South		Х	Х	Unknown	
North		Х		Unknown	
Cook Inlet	Х			High	Poor-Moderate
Central California	Х			High	Moderate
Chukchi Sea					
Coastal (Lisburne)		Х		Unknown	Poor-Moderate
Coastal (Barrow)			Х	Unknown	Poor-Moderate
Ice Algae			Х	Unknown	Poor-Moderate
Straits of Florida					
Embayments			Х	Low-Moderate	Poor
Coastal			Х	Low- Moderate	Poor
Beaufort Sea			Х	High	Poor-Moderate

Table 9: Relative Annual Water Column Primary Productivity, Variability, and Confidence in Available Data for OCS Planning Areas (continued)

Source: CSA, 1990

*Relative Phytoplankton productivity categories: High (200-500 g C/m²/year), Moderate (50 - 200 g C/m²/yr), and Low (<50 g C/m2/yr).

References

- Continental Shelf and Associates. 1990. Comparison of Marine Productivity Among Outer Continental Shelf Planning Areas. U.S. Department of Interior, Minerals Management Service. Contract Number 14-35-0001-30487. Herndon, Virginia 20170.
- Continental Shelf and Associates. 1991. Comparison of Marine Productivity Among Outer Continental Shelf Planning Areas: Supplement – An Evaluation of Benthic Habitat Primary Productivity. U.S. Department of Interior, Minerals Management Service. Contract Number 14-35-0001-30487. Herndon, Virginia 20170.

Industry Interest

The MMS received comments from 43 companies and 10 trade associations in response to the August 2005, *Federal Register* notice. Table 10 shows how many companies identified a specific planning area as a candidate for leasing in the 2007-2012 program. In this table, 25 companies showed interest in the Eastern GOM, 11 in the North Aleutian Basin, 10 each in the Central and Western GOM, 9 each in the Chukchi and Beaufort Seas, 4 in the Mid-Atlantic, 3

each in Cook Inlet and North Atlantic, and 1 in the South Atlantic Planning Area. Additionally, 11 companies indicated interest in the Atlantic OCS without identifying a specific planning area. Four companies indicated interest in the Pacific OCS without identifying a specific planning area. Of the other 16 planning areas that received no specific interest, some are under presidential withdrawal and congressional moratoria and others are not.

Planning Area	Number of Companies Expressing Interest for a Specific Planning Area
Eastern Gulf of Mexico*	25
North Aleutian Basin*	11
Central Gulf of Mexico*	10
Western Gulf of Mexico	10
Chukchi Sea	9
Beaufort Sea	9
Mid-Atlantic*	4
Cook Inlet	3
North Atlantic*	3
South Atlantic*	1
Straits of Florida	0
Southern California*	0
Central California*	0
Northern California*	0
Washington-Oregon*	0
Gulf of Alaska	0
Kodiak	0
Shumagin	0
Aleutian Arc	0
St. George Basin	0
Bowers Basin	0
Aleutian Basin	0
Navarin Basin	0
St. Matthew-Hall	0
Norton Basin	0
Hope Basin	0

Table 10: Industry Interest

*All or parts of these planning areas are withdrawn under section 12 of the Act until 2012. All but the North Aleutian Basin, Alaska, are also subject to annual congressional moratoria. For a planning area to be offered for leasing in the 2007-2012 program, the withdrawal would need to be lifted and the moratoria discontinued.

Several companies and trade associations indicated interest in the Aleutian Basin Planning Area, which the MMS assume to mean the North Aleutian Basin Planning Area. Many companies and trade associations recommended that the MMS include areas under presidential withdrawal and/or congressional moratoria for NEPA analysis in this 5-year program so that the Department can be as flexible as possible if circumstances and energy needs of the country change. A summary of all industry comments is included in Appendix A.

Equitable Sharing of Developmental Benefits and Environmental Risks

Introduction

Section 18(a)(2)(B) of the Act requires that the Secretary base the timing and location of the OCS exploration, production, and development on a consideration of, among other things, "an equitable sharing of developmental benefits and environmental risks among the various regions." Because developmental benefits and many environmental risks often accrue outside the OCS regions, which are portions of land lying under the ocean, analysis of this factor usually goes beyond the strict requirements of the Act and considers the sharing of benefits and risks to the onshore U.S population, particularly in the coastal areas near producing regions of the OCS.

Section 18 does not require that the leasing program achieve an equitable sharing of developmental benefits and environmental risks, nor have the courts set a specific standard of equitable sharing that the Secretary is to achieve. As the court recognized in *California I* and *California II*, the degree to which a proposed 5-year schedule of lease sales might achieve an equitable sharing of benefits and risks must be considered in light of a number of other factors, many of which are not under the control of the Department and some of which greatly affect the options available.

The panoply of timing and location options available to the Secretary at the Draft Proposed Program stage require this analysis to be based on considerations that, while somewhat general, allow a fairly simple basis for judging the implications of programmatic decisions on equitable sharing of developmental benefits and environmental risks. The options are defined and presented in the Draft Proposed Program decision document. There will be a comparison of the implications of the decision and some sets of similar options grouped together as "alternatives." An analysis of the first such comparison will be included in the proposed program decision documents.

Benefits and Risks

Some benefits and risks of OCS leasing are shared widely while others are concentrated in regions adjacent to areas of OCS oil and gas activity. The benefits that accrue primarily to producing regions and nearby onshore areas are derived primarily from reduced risk of accidents involving tankers carrying imported oil and from expenditures on the factors of production, i.e., labor, land, materials, and equipment. Benefits flowing from Federal government revenues, e.g., royalties, obtained through OCS-related activities, tend to be widely distributed among the geographic onshore regions of the United States, including those near OCS oil and gas exploration and production. Financial rewards for profitable operations in the form of stock dividends and increased stock values also tend to be widely distributed, as owners live throughout the country. The benefits of an improved balance of trade are shared nationally as well. The immediate environmental risks of OCS oil and gas activities are borne primarily by

producing regions and nearby onshore areas, while some of the financial consequences of those risks, e.g., compensation by responsible parties for natural resource damage and payments into funds established to provide compensation for losses not attributable to specific parties, are shared by companies and individuals throughout the Nation.

The nature of developmental benefits and environmental risks associated with the OCS oil and gas program, as summarized in the previous paragraph, has been well documented in previous 5-year program analyses. Those analyses went on to conclude that the 5-year program has a certain innate equity in that the geographic areas bearing the greatest risks also receive a higher share of the benefits, while certain financial aspects of both benefits and risks are shared somewhat widely. However, the Secretary can consider those factors mentioned in the previous paragraph that do lead to greater benefits and/or risks for local areas when oil and gas activities occur nearby. Once the Secretary decides on the specifics of the Draft Proposed Program—size, timing, and location—there will be a more specific equitable sharing analysis of the decision and each alternative. The first such specific analysis will be included in the proposed program.

The previous equitable sharing analyses also have noted that there are actions that may be taken independent of the 5-year program to influence the equitable sharing of developmental benefits, environmental risks, or both. One such influential development that has occurred since the approval of the current 5-year program is the enactment of the Energy Policy Act of 2005, providing for distribution of additional Federal revenues as impact assistance to most coastal states and localities near OCS activity. The provision allocated \$250 million per year for each of the fiscal years 2007 through 2010 to Alabama, Alaska, California, Louisiana, Mississippi, Texas, and their coastal subdivisions for certain authorized purposes. The coastal impact assistance provisions of this Act are to be funded without being subject to annual appropriations legislation. The Congress can expand, extend, or otherwise revise these provisions to further the equitable sharing of developmental benefits and environmental risks during the period covering the next 5-year program.

The presidential withdrawal and congressional moratoria of large areas of the OCS, including all of the Atlantic and Pacific planning areas from disposition by leasing, severely restricts the Secretary's ability to make decisions that retain or enhance equitable sharing.

Conclusion

The general findings and conclusions of previous equitable sharing analyses are still valid. Since the distribution of benefits associated with factors of production is linked significantly to the location of OCS oil and gas support industries, which exist primarily along the GOM, Southern California, and Alaska coasts, and also the Secretary's decision on an OCS leasing schedule for the period 2007-2012 would not be expected to alter substantially the distribution of benefits and risks achieved under previous 5-year programs, unless the presidential withdrawal of Pacific, Atlantic, and Alaska planning areas were to be lifted and the annual congressional moratoria on leasing were discontinued. The exception among the three coastal areas mentioned above has been Southern California, whose exclusion from the three previous programs for 1992-1997, 1997-2002, and 2002-2007, has precluded it from sharing in direct benefits and risks resulting from those programs. The Atlantic OCS remains the only one of the four OCS regions without any oil and gas activities. It would be possible to further equitable sharing of the program by scheduling lease sales in all planning areas, assuming that current restrictions are lifted and no new ones are put in place.

The Federal revenues that traditionally have accrued to adjacent onshore areas as a result of the OCS oil and gas activities will be augmented by the newly enacted impact assistance program and are to be used for purposes related to mitigation of associated impacts. As noted previously, Congress could choose to extend the impact assistance provisions to include adjacent states that currently do not meet the definition of "producing states" under the new law. Also, measures such as the implementation of new lease stipulations and operating regulations remain available to reduce the risks borne by the affected areas and foster more equitable sharing, as appropriate.

If the presidential withdrawal and/or congressional moratoria of Pacific, Atlantic, GOM, and Alaska areas remains in place, the availability of OCS planning areas for leasing consideration in the new 5-year program is limited. Under these circumstances, the best attempt at achieving an equitable sharing of benefits and risks would be to continue to focus on the newly configured Central and Western GOM, as well as in promising areas of the Alaska OCS. The Draft Proposed Program focuses on offshore areas that have the highest oil and gas resource values, highest industry interest, or are off the coasts of states that have expressed interest in learning more about the impacts of energy exploration off their coasts, even though some of these areas are under withdrawal and/or moratoria. Only the lifting of the withdrawal and discontinuation of the moratoria could further the long-term equitable sharing of developmental benefits and environmental risks.

Balancing Considerations

Introduction

Section 18(a)(3) of the Act requires the Secretary to "select the timing and location of leasing, to the maximum extent practicable, so as to obtain a proper balance between the potential for environmental damage, the potential for the discovery of oil and gas, and the potential for adverse impact on the coastal zone." Striking this balance based on a consideration of the principles and factors enumerated in section 18(a) is essentially a matter of judgment for which no ready formula exists. Section 18 requires the consideration of a broad range of principles and factors rather than imposing an inflexible formula for making decisions. Thus, previous 5-year programs have scheduled as many as 37 lease sales in 22 planning areas and as few as 16 sales in 8 planning areas.

Some of the factors that section 18 specifies for consideration are embodied in the benefit-cost analysis, i.e., resource potential and certain environmental values. Others are not as readily quantifiable and are therefore described qualitatively. For example, environmental considerations, such as aesthetics or concerns for certain species are extremely difficult to translate into accurate economic estimates. In order to provide the Secretary full and appropriate information for the Draft Proposed Program decision, this document is supplemented by relevant NEPA documents and other analyses that present information relating to such environmental factors and other qualitative considerations. This supplemental information, which is identified in part II.A, is incorporated by reference.

Judicial Guidance

The U.S. Court of Appeals for the D.C. Circuit has elaborated in great detail on the statutory criteria for the balancing decision required by section 18(a)(3). Pertinent excerpts from the Court's opinions on litigation concerning previous 5-year programs are presented below. The Court has stated the following concerning the weight to be accorded the three elements of section 18(a)(3).

That the Act has an objective—the expeditious development of OCS resources persuades us to reject petitioners' view that the three elements in section 18(a)(3) are "equally important" and that no factor is "inherently more important than another." The environmental and coastal zone considerations are undoubtedly important, but the Act does not require they receive a weight equal to that of potential oil and gas discovery. A balancing of factors is not the same as treating all factors equally. The obligation instead is to look at all factors and then balance the results. The Act does not mandate any particular balance, but vests the Secretary with discretion to weigh the elements so as to "best meet national energy needs." The weight of these elements may well shift with changes in technology, in environment, and in the Nation's energy needs, meaning that the proper balance for 1980-1985 may differ from the proper balance for some subsequent five-year period. (*California I*, 668 F.2d, p. 1317)

The following three statements of the Court pertain to the analysis of the section 18 factors and the Secretary's discretion in weighing the results of that analysis.

(1) The Act recognized the difficult burden the Secretary must shoulder by stating that the selection of timing and location of leasing must strike the proper balance "to the maximum extent practicable." The Secretary must evaluate oil and gas potential, which can be quantified in monetary terms, in conjunction with environmental and social costs, which do not always lend themselves to direct measurement. Because of this, they must be considered in qualitative as well as quantitative terms.

Although the secretarial discretion we have described is broad, as a result of both the general wording of the statute and the nature of the task the Secretary is asked to perform, the Secretary's discretion is not unreviewable. The policies and purposes of the Act provide standards by which we may determine whether the Secretary's decision was arbitrary, irrational, or contrary to the requirements of the Act. To do so, we consider "whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment." (*California I*, 668 F.2d, p. 1317)

(2) In deciding whether to include an area, the Secretary weighed qualitative factors as well as quantitative factors. The Secretary listed among qualitative factors "national security, industry interest, and equitable sharing of development costs and benefits." OCSLA specifically directs the Secretary to weigh such qualitative factors in his balance.

Taking qualitative factors into account implies that the inclusion of areas with a calculated NSV of zero may nonetheless be compatible with section 18(a)(3). (*NRDC*, 865 F.2d, p. 307)

(1) The Secretary must make a good-faith effort to balance environmental and economic interests. So long as he proceeds reasonably, however, his decisions warrant our respect. (*NRDC*, 865 F.2d, pp. 308-309)

The Decision on the Draft Proposed Program for 2007-2012

Programmatic balancing decisions must also take into account that development of a 5-year program represents a very early stage of planning in the overall process governing the OCS oil and gas activity, which entails preparing the leasing schedule, implementing that schedule with individual lease sales, and permitting of exploration and development and production. The Draft Proposed Program is followed by three more steps in the 5-year program preparation process—the proposed program, proposed final program, and ultimate approval of the new program.

In formulating the first 5-year programs, the tendency was to include more areas for consideration early in the process and reduce the scope of the program later in the process or even following its approval. The rationale for such an approach was that it would be better to defer decisions to exclude areas until later, because the information on which to base such decisions becomes more reliable and geographically focused as the planning process progresses. Further, this rationale held that as program activities progress, there are numerous occasions to refine areas under consideration when the program is implemented and as projections of hydrocarbon potential, levels of the OCS activities, and possible environmental effects become more specific.

It is likely that the Secretary will decide to make some substantive revisions before the new program is approved. For example, in developing the 5-year program for 1997-2002, the Secretary chose to analyze expansion of the program area of the Eastern GOM that was selected for leasing consideration in the Draft Proposed Program. After analyzing that expansion in the proposed program, draft EIS, proposed final program, and final EIS, the Secretary selected the expanded area in the approved program for 1997-2002. Any revisions or additional options considered will be the subject of a thorough analysis in the EIS accompanying the program, as well as the remaining stages of the section 18 process.

Other Considerations

Other relevant considerations that have implications for balancing environmental and socioeconomic issues and concerns with potential benefits of OCS activity are discussed in this document, the document and EIS prepared for the 5-year program for 2002-2007, and in other referenced documents. These have been summarized in the following paragraphs.

Findings and Purposes of the Act. Title I of the Act Amendments of 1978 sets forth a number of findings and purposes with respect to managing the OCS resources. Those principles generally pertain to recognizing national energy needs and related circumstances and addressing them by developing OCS oil and gas resources in a safe and efficient manner that provides for environmental protection; fair and equitable returns to the public, state, and local participation in policy and planning decisions; and resolution of conflicts related to other ocean and coastal resources and uses.

Industry Interest. Interest, as indicated in the comments responding to the August 2005, Request for Comments is summarized in table 12. Industry interest is a key criterion for deciding whether to propose an area for a lease sale. However, it is not the sole and absolute indicator of the potential of an area to contribute oil and gas resources for regional and national use. Therefore, as with all of the balancing information discussed in this part, industry interest should be weighed with other considerations in deciding where and when to propose OCS leasing. The presentation of size, timing, and location options, in part III, includes discussions of industry interest along with other significant considerations. Summaries of all industry comments are provided in Appendix A.

Information Incorporated by Reference. Documents pertaining to geographical, geological, and ecological characteristics, to local and national energy markets and needs, and to environmental and predictive information, as cited in part II, are incorporated by reference.

Laws, Goals, and Policies of Affected States. Relevant laws, goals, and policies identified by affected states are summarized in the options part of this document, as appropriate, in Appendix A.

Issues Raised in Comments. All comments received in response to the August 2005, Request for Comments are summarized in Appendix A. Those that correspond more specifically to program options are described in part III.

D. Assurance of Fair Market Value

The 5-year program includes general provisions for assuring the receipt of fair market value in accordance with section 18(a)(4). Those provisions pertain to setting a minimum bid level and to maintaining a process for reviewing the adequacy of bids received for OCS oil and gas leases. In addition to the minimum bid requirement and bid adequacy process, the MMS establishes lease terms and conditions to assure receipt of fair market value. Those more specific measures are designed and implemented based on ongoing reviews and evaluations that are independent of the 5-year program preparation process.

Minimum Bid Requirement

The minimum bid levels that currently apply to GOM OCS lease sales are \$25 per acre in water depths of less than 400 meters and \$37.50 per acre in water depths of 400 meters or greater, the water depths in which leases have a 10-year primary term. On the Alaska OCS, recent minimum bid levels differ by planning area and are \$25 per hectare (around \$10 per acre) in the Cook Inlet and \$25 per hectare in Zone B or \$37.50 per hectare (around \$15 per acre) in Zone A in the Beaufort Sea. The part III discussion of minimum bid options describes the effects of maintaining those requirements as well as the effects of adopting alternative minimum bid levels.

Bid Adequacy Process

The 5-year program for 2002-2007 continued the two-phase post-sale process for determining bid adequacy that essentially has been in effect since 1983. The process was instituted with the implementation of the areawide leasing policy and has undergone several refinements to address specific concerns pertaining to fair market value. The most recent revision was published in the *Federal Register* on July 12, 1999 (64 FR 37560).

The bid adequacy process now in effect consists of two phases for distinguishing those bids that reflect competitive market forces assuring receipt of fair market value and those that require further detailed analysis. Part III describes the current post-sale process and also briefly discusses the alternative of using a presale bid evaluation process to assure receipt of fair market value. A more detailed description of the existing bid adequacy process—"Summary of Procedures for Determining Bid Adequacy at Offshore Oil and Gas Lease Sales: Effective July 1999, with Sale 174"—is available on the internet at www.gomr.mms.gov/homepg/lsesale/fmv.

APPENDIX A

Summary of Comments to August 24, 2005, *Federal Register* Notice Concerning Preparation of the 5-Year OCS Oil and Gas Leasing Program for 2007-2012

Introduction

Section 18 of the Act, 43 U.S.C. 1344, requires the DOI to prepare a 5-year OCS oil and natural gas leasing program. To begin preparation of the 5-year program for 2007-2012, the MMS issued a *Federal Register* notice (70 FR 49669) soliciting comments. This appendix is a summary of all comments received in response to that notice. Due to the overwhelming response from energy companies, related industry associations and interest groups, and various private citizens, submittals have been condensed to express the most common ideas received by the MMS into (1) Number of Comments by Category, which displays the number of respondents represented in the different categories, and (2) Summary of Comments, which provides comments from each respondent categories.

1. Number of Comments by Category

Governors, State Elected Officials, and State Agencies	31
Local Governments, Tribes and Alaska Native Corporations	21
Members of Congress and Federal Agencies	12
Environmental and Other Related Interest Organizations	16
Oil and Gas Companies and Associations	53
Non-Energy Industry Associations and Business Groups	56
Interested Chambers of Commerce	8
General Public	. <u>11,177</u>
Total	.11,374

2. Summary of Comments

Governors, State Elected Officials, and State Agencies

- The Governor of Alabama writes that the state continues to support a balanced and environmentally sound Federal OCS leasing program carried out in full compliance with relevant Alabama laws. He urges the MMS to work with Congress to create a revenue sharing program to provide offshore revenue to affected states in a fair and equitable manner. The Governor continues to request that the MMS exclude the blocks south and within 15 miles of Baldwin County, that the MMS continue to work with both state and industry personnel to address viewshed and other technical issues, and that the MMS provide reasonable and adequate protections for sensitive benthic organisms and environments.
- The Alabama Department of Economic and Community Affairs states that they are in support of expanded leasing in the OCS.

- The Speaker of the House of Representatives for the State of Alabama is supportive of efforts to expand leasing, so OCS resources in the Central and Western GOM can be accessed.
- Alabama State Representative Craig Ford supports developing the Nation's domestic energy resources.
- Alabama State Representative Blaine Galliher supports increased exploration in the GOM.
- Alabama State Representative Rusty Glover supports additional development of the oil and gas resources in the GOM.
- Alabama State Representative William Thigpen supports a 5-year program that provides for the orderly development of all OCS areas.
- Alabama State Representative Cam Ward supports expanded leasing in the OCS, including the remaining Sale 181 area, and believes the plan should include flexibility for future inclusion of areas that are currently prohibited, should they be opened for use in the future.
- Alabama State Senator Pat Lindsey, the Chairman of the Alabama Legislature's permanent oil and gas study committee, supports a 5-year plan that provides for expanded leasing in the OCS.
- Alabama State Senator Hap Myers believes that the United States needs a national policy on offshore drilling that applies to each and every state, which should address state waters, as well as the OCS. He does not believe it is fair for states to abdicate their responsibility to provide critically needed and available resources to their own populace at the expense of the rest of the country.
- The Alabama State Senate Minority Leader J. T. Waggoner supports fully developing the OCS and urges the MMS to adopt as expansive a 5-year leasing program as possible. He supports opening the remaining Sale 181 area, expanding acreage offered for lease in the Alaskan OCS, and for the MMS providing a flexible and timely process for amending the plan to allow inclusion of areas that are currently prohibited should they be open to leasing in the future. In addition, he does not believe that the economic growth of Alabama and its hard working people should be held back because a limited number of other states (benefiting from the oil and natural gas already being produced in the OCS) simply refuse to participate in developing resource production from our Nation's OCS.
- Alabama State Senator Gary Tanner states that the next 5-year plan should provide for expanded leasing in the OCS to address the future needs of American consumers.
- The Governor of Alaska supports the MMS considering ways to diversify the sources of the Nation's oil and gas supply in light of the lessons learned from the recent hurricanes. He supports changes in federal law that would provide states and coastal communities with a fair percentage of direct revenues from royalties, bonus bids and rental fees derived from OCS activities off their coasts.

The Governor supports the inclusion of Beaufort Sea Lease Sales and asks companies to work with local communities to avoid conflicts with subsistence whaling and other stakeholder concerns. He supports continued leasing in the Chukchi Sea and asks that future lease sales and subsequent oil and gas activities only occur with adequate local stakeholder consultation, planning, and environmental analysis.

He supports continuation of the interest-initiated program for the Hope and Norton Basins. He supports the current program's approach for Cook Inlet, with lease sales included in the next five-year program, and recommends that the MMS continue to evaluate dropping the current bidding restrictions, particularly for Cook Inlet.

The Governor stated that "oil and gas discoveries in federal waters could make oil and gas development on lands offered in the state sale more commercially attractive.... [He] hope[s] that public and industry input will provide the secretary and the state with adequate information to decide whether or not to ask the President to lift the current withdrawal and allow a sale during the 2007-2012 program."

- The California Resources Agency, on behalf of the Governor, is opposed to any new leasing in the California OCS for the purpose of oil and gas exploration and production. The state also supports the federal moratoria through 2012 and beyond and stands opposed to inventory activities off its coast.
- California Coastal Commission reiterates its strong opposition to any new leasing of frontier areas on the California OCS for oil and gas extraction. They are in favor of the moratoria continuing and believe the Nation should be focusing on expanding renewable energy and energy efficiency.
- The California State Lands Commission supports the moratoria and believes the MMS should withdraw the OCS moratoria areas from further consideration in the 5-year plan.
- The Connecticut Department of Environmental Protection, on behalf of the Governor, supports the continuation of the Presidential withdrawal and current moratoria. The state is aware that there will be increased interest in exploring areas of the OCS that are currently off-limits due to recent events that have constrained the Nation's energy supply, but they believe that it is important to balance both environmental and energy policies. They are specifically concerned about the potential impacts of oil and gas leasing in the Mid-Atlantic's Hudson Canyon area.

Connecticut supports the investigation of alternative energy opportunities and methodologies in the OCS including gas-only leasing provided all proposals undergo a full environmental review. Connecticut advocates equitable sharing of OCS revenues with coastal states including a broader distribution system that recognizes the interdependent nature of ocean and coastal ecosystems.

• On behalf of the Governor, the Delaware Department of Natural Resources and Environmental Control states that while it recognizes the need for secure and reliable energy resources, it believes that potential lease sales in the Atlantic OCS Region for 2007-2012 are premature. They support the current moratoria. Delaware supports a comprehensive inventory of OCS resources including oil and gas, methane hydrates, sand and gravel, and sites for alternative energy. They would like the inventory to cover extent of the resource, feasibility of extraction, safety, environmental concerns, transport, marketability, and revenue sharing for all relevant offshore energy resources. In addition, they would like information on offshore military munitions sites and suitable locations for deepwater ports within their coastal boundaries.

• The Florida Department of Environmental Protection, speaking for the Governor, states the agency's support for codifying into law a buffer from oil and gas leasing of at least 100 miles around the entire Florida coastline and placing decisions concerning offshore development in the hands of the Governor and the Legislature to provide permanent protections for their natural resources. Without these legal assurances Florida will continue to oppose oil and gas drilling with the entire Eastern Planning Area, including the area outside the revised Lease Sale 181 areas.

Florida was pleased that the notice included DOI's intent not to offer areas within 100 miles of the coast of Florida in the Eastern Gulf Planning Area and would like this commitment to extend to 100 miles around the entire State of Florida including the Straits of Florida and South Atlantic Planning Areas.

In addition, Florida would like any OCS activities that would interfere with military defense or NASA activities to be prohibited in the 5-year program document. Florida opposes the inventory of OCS oil and gas resources as required by the Energy Policy Act of 2005 because they believe it violates the spirit of the current Presidential withdrawal. Finally, they would like to see DOI address development plans for existing leases in codified withdrawal areas, specifically those leases in the Eastern GOM Planning Area.

• The Georgia Department of Natural Resources expresses the State's support for environmentally sound efforts to increase the domestic oil and gas reserves of the United States.

Issues they wish to be considered in any leasing plan involving offshore Georgia waters include the impacts of hydrocarbon exploration and production on the physical environment, the biological environment, and the socio-economic environment of the State. Georgia says that future wind energy initiatives that have been proposed offshore are of interest to the State. Given the need for national energy security, Georgia supports an effective State and Federal partnership that explores options for new energy resources.

• The Louisiana Department of Natural Resources, on behalf of the Governor, regards the full exploration and development of offshore oil and gas resources off all coasts of the United States to be in the strategic and economic best interests for the Nation.

Based on the experiences and technologies developed off its coast, Louisiana is confident that oil and gas leasing can be safely expanded to other parts of the United States. The State recommends that the MMS acquire 2-D and 3-D seismic data in OCS areas under Presidential withdrawal and Congressional moratoria. They also encourage the MMS to make an estimate of the potential revenue that would be distributed to those states if oil and gas resources were developed.

Louisiana would like the MMS to describe how it will address the secondary and cumulative impacts of oil and gas development on coastal wetlands and waterways. The State would like the MMS to complete a review of adverse impacts on the coastal zone predicted in earlier 5-year plans as compared to the actual impacts which took place. It recommends including in that review the relevant data and analyses to demonstrate the validity of its previous predictions for adverse impacts.

Louisiana continues to recommend that it and other States with high oil and gas production activity share 50 percent of OCS revenues on a continuing basis. These funds are needed to address onshore impacts of OCS activities on their coastal communities and infrastructure.

The State believes that consideration should be given to the leasing terms for oil and gas production platforms to allow for continued use after mineral production is no longer economically feasible. Secondary uses for platforms could vary widely from research and aquaculture to alternative energy generation.

- The Chairman of the Louisiana Senate Natural Resources Committee, Max Malone, supports opening new areas of the OCS for leasing, including the remaining Sale 181 area and expanding acreage offered in Alaska. He encourages the MMS to provide a means and the flexibility to open for leasing, exploration, and development those OCS areas where such activities are currently prohibited. He believes the moratoria are restrictive and it is in our best interest to encourage more offshore exploration to increase our Nation's energy resources.
- The Governor of Maine writes that restoration, protection, and enhancements of commercial fishing stocks and Maine's commercial fishing industry are of primary interest in areas of the OCS proximate to Maine. He continues to strongly support the existing moratoria on exploration and development in the North Atlantic Planning Area, which encompasses the Gulf of Maine, including Georges Bank. The Governor thinks it is appropriate to use existing data to conduct the OCS inventory required by the Energy Policy Act of 2005.

The Governor recognizes the need to reduce energy use and points to his efforts to reduce Maine's consumption by establishing the Office of Energy Independence and Security. The State has untapped wind and tidal power resources and they are working with private companies on appropriate sites. The Governor would like to be notified if the MMS plans to conduct onsite inventory activities in the North Atlantic Planning Area, or if the law, or the Administration's views change regarding this area.

• The Office of Coastal Zone Management of Massachusetts conveys the Governor's continued opposition to oil and gas exploration or development in this region. The State declares that any exploratory or development work in the Georges Bank area could threaten the essential fish stock rebuilding that is underway.

- New Jersey's Acting Governor reiterates the staunch opposition to oil and gas lease sales in areas along their coastline. He is concerned that oil and gas development could have lasting damage to the state's coastal economy. The Governor comments that since both planning areas are off New Jersey's coast and are under Federal moratorium, the Midand North Atlantic should be excluded from the Draft Proposed Program.
- The North Carolina Department of Environment and Natural Resources, on behalf of the Governor, comments that North Carolina continues to support the moratorium. They do not want today's energy crisis to drive the U.S. toward oil and gas development that threatens fragile ecosystems and the local tourism economy.
- North Carolina State Representative Pryor Gibson, believes that it is time to open the remaining 89 percent of the continuous U.S. OCS acreage that remains "off-limits" and closed to moratoria. He says that North Carolina is learning the hard lessons of diversification since almost all of their oil and gas comes from the Gulf region. He urges the MMS to adopt as expansive a 5-year program as possible. He supports a generous revenue sharing formula with the Federal government because he believes that if states benefit more directly from production activities they would be more inclined to support them.
- North Carolina State Senator Robert Pittenger states that it should no longer be acceptable that a coastal state like North Carolina be dependent on a policy that ties them exclusively to the Gulf for their fuel while their own potential is "off limits" due to a moratorium. He is encouraging the State to do more research on the feasibility of producing natural gas offshore its coasts in an environmentally responsible manner. He encourages the practice of revenue sharing between producing coastal states and the Federal government as an incentive to generate support for local energy production.
- Oklahoma State Representative Dennis Adkins believes that it is important for additional acreage to be included in the 2007-2012 program if the United States is going to increase its domestic offshore production. While he believes that we should study the potential of all highly prospective areas, he is particularly interested in expanding acreage in Alaska's Beaufort and Chukchi Seas, Bristol Bay, and the Eastern GOM. He believes that local stakeholders should be consulted during the leasing and development process.
- The Oregon Governor supports continuation of the existing moratorium and opposes any OCS oil or gas development in or outside of its territorial sea. The State does not oppose non-invasive, ecologically benign inventorying activities. The Governor recommends that any proposals for OCS oil and gas leasing be approved by a Regional Ocean Council as part of a regional ocean management plan. He recommends that the MMS can benefit from the research and mapping work done by Oregon State University's College of Oceanic and Atmospheric Sciences.
- The Texas Governor states that it is critical that the MMS move aggressively to open all prospective Gulf OCS areas for leasing as soon as possible. He also believes that lease sales should be held in all prospective Alaska areas, including the North Aleutian Planning Area. New initiatives should be undertaken to open the Pacific and Atlantic planning areas for leasing and development as well.

- The Texas Railroad Commission states that all acreage in the Central and Western Gulf should continue to be offered. Available acreage in the Eastern Gulf should be expanded and lease sales should be held in all prospective Alaska planning areas, including the North Aleutian Basin. The Commission believes that new initiatives should be undertaken to open the Pacific and Atlantic Planning Areas as well. Finally, they believe that extensive stakeholder consultations and education in coastal states are essential to stress the importance of the OCS and to address lingering concerns regarding offshore development.
- The Virginia Department of Environmental Quality, on behalf of the Governor, stated the there is a need for geographic diversification of the Nation's oil and gas production. It is necessary to bolster the existing historical data with more recent data on the geographical, geological and ecological characteristics of the OCS planning areas on the Atlantic coast because the Department does not think enough data exists on the effects of ocean currents to determine the effect of potential oil spills on Chesapeake Bay. In addition, they are concerned with the effects of exploratory drilling and seismic work on fish, bird, turtle, and marine mammal populations in prospective areas. The Department feels that development of natural gas resources on local markets should be considered in making decisions on the future of the Atlantic OCS. They understand that historical data indicates the Mid-Atlantic region is more gas-prone than oil-prone. Recognizing that there are still issues to be resolved, they believe this area could serve as a testing ground for gas-only leasing or production.
- The Virginia Department of Historic Resources states that they are concerned that drilling on or near the OCS may adversely affect historic, architectural and archaeological resources listed on or eligible for listing on the National Register of Historic Places. They believe it is essential that the MMS work closely with them to identify known and previously unrecorded historic properties and to develop a mutually acceptable mitigation strategy for those properties. They believe it is essential and in keeping with the National Historic Preservation Act of 1966 that the public, interested parties, organizations and experts be allowed to comment and that their views be taken into account during an activity that may effect historic resources.
- The Governor of Washington looks forward to working with the MMS to conduct baseline environmental studies, evaluate ocean resources and uses, complete an inventory of oil and gas resources using environmentally sound practices, and evaluate renewable energy opportunities off their coast. These comments were received two months after the close of the comment period.

Local Governments, Tribes, and Alaska Native Corporations

• The Mayor of Alaska's Aleutians East Bay Borough provided a resolution stating the borough's support for oil and gas leasing in the North Aleutian Basin, provided the maximum protection be given to fishery resources and the exploration/development be conducted in an environmentally safe manner. In addition, they want lease stipulations included requiring oil and gas companies to provide employment and business opportunities to their residents.

- The Aleut Corporation submitted comments in support of the resolution adopted by the Aleutians East Bay Borough.
- The Aleutians Pribilof Islands Association has not yet considered and taken a position on the proposal to open exploration in the North Aleutian Basin. However, if exploration is allowed, they request consideration of development of an EIS for any OCS lease sale in the North Aleutian Basin, Federal funding for studies to effectively protect local fishery resources, and adequate lease stipulations to mitigate any potential adverse social and environmental affects.
- The Becharof Corporation of Egegik Village submitted a resolution that supports lease sales but requests that the North Aleutian Shelf be put on the 5-year schedule so that the requisite studies and plans can be evaluated for potential benefits and dangers to the environment and the local marine resources prior to any action taken towards a lease sale.
- Bristol Bay Borough presented a resolution in support of the current Presidential Withdrawal in Bristol Bay. The Borough does not support the Governor's assertion of local support for inclusion of the North Aleutian Basin in the 5-year plan.
- The Bristol Bay Economic Development Corporation is opposed to any offshore drilling in the North Aleutian Basin region.
- Choggiung Limited, an Alaska Native Village Corporation, is against offshore drilling. They sent a resolution in support of onshore oil and gas exploration and development.
- The Kenai Peninsula Borough presented a resolution stating their continued support for inclusion of Cook Inlet in the 2007-2012 program.
- The Kenai Peninsula Economic District Incorporated supports expanded offshore leasing that includes additional acreage, particularly in the Chukchi Sea and Bristol Bay, given the long lead time needed for development of resources in the harsh environment of Alaska. They are in favor of legislative proposals to provide a portion of the revenue from offshore production to local communities close to the offshore production.
- The Mayor of the Lake and Peninsula Borough submitted a resolution in support of exploration and development of oil and gas in the Bristol Bay Region.
- The Mayor of Nome, Alaska, supports increased access to the Alaska OCS in the Norton Sound Basin. Specifically, they are requesting that potential gas pockets located about 30 miles from Nome be available for lease. In addition, revenue from the OCS should be shared with the local community to help address local impacts.
- The Mayor of the North Slope Borough continues to believe that the federal and state governments should focus their arctic oil and gas leasing efforts on land, rather than offshore. It believes that onshore environmental mitigation and impact methods are more proven than offshore.

The Borough reiterates its frustration that most of the lower 48 states' OCS areas have been subject to annual congressional moratoria since the 1980's and will remain subject to presidential withdrawal through at least June 2012, while their waters remain open. The Borough wants all areas deferred from Beaufort Sea sales permanently removed from consideration for leasing and cites Senator Lisa Murkowski's support for the continuation of these deferrals. Specifically, they want the spring lead system and eastern Beaufort Sea deferred from leasing in the 2007-2012 program. They would like to see a defined deferral area around Cross Island for the subsistence whaling base in Nuiqsut.

The Borough supports the concept of gas-only leasing as an alternative to oil and gas leasing. They believe that all effort must be made to incorporate the traditional and contemporary knowledge of local residents who utilize the areas where leasing operations are proposed. Finally, the Borough would like to see equitable distribution of impact funding and royalty payments in the local area. They believe it is only fair and just that those who shoulder the greatest risks of industrialization in the Alaskan Arctic reap a commensurate share of the rewards.

- The Mayor of the Northwest Arctic Borough states that they have not had the opportunity to review, analyze or make determinations about OCS leasing proposals in the Chukchi Sea or other locations. However, the Borough works closely with the North Slope Borough on many issues and agrees with their position and comments that were submitted.
- The Alaska Eskimo Whaling Commission requests that for the 2007-2012 program the MMS retain the current deferral areas. They would also like the MMS to work with the Commission and the North Slope Borough to identify "areas of influence affecting the bowhead whale subsistence hunt" surrounding both the current deferral areas and Cross Island.

The Commission believes that the cost-benefit analysis must be modified for the arctic to include the nutritional, economic, and socio-cultural value of subsistence resources and activities to Arctic communities on par equal to that of monetary factors. They believe that it must be part of the MMS regional office's work, to a degree, to serve as advocates within the MMS for the local community residents who must bear the burden of exploration and development impacts.

• The Native Village of Point Hope, Alaska, opposes oil and gas leasing in the OCS waters of the Arctic Ocean and Bering Sea. The Tikigaqmuit people oppose oil, gas, and other fossil fuel exploration and development as they are concerned it will hurt their subsistence resources. On February 23, 2005, they passed a resolution that strongly opposes the development of oil and gas in the area of the Arctic National Wildlife Refuge and in the offshore waters of the Arctic Ocean, and the Chukchi and Beaufort Seas.

- The Mayor of Wasilla, Alaska, states that it is imperative that the United States seek additional fuel sources to support the economy and citizens and that responsible exploration and development will not only help Alaskans but the Nation. The Mayor says that the MMS should consider adding acreage in Bristol Bay, Chukchi Sea, and Beaufort Sea in the 2007-2012 program. She believes that seeking terms that are acceptable to the people that reside in those areas, as well as those who will explore and develop those resources is the best course of action. The Mayor says that opening a small section of Federal offshore waters in Bristol Bay could result in a LNG facility being constructed that would help generate needed jobs in that area.
- The Mendocino, California, Board of Supervisors presented a resolution confirming their opposition to oil or gas exploration and development off their coastline.
- The County of Santa Barbara, California's Board of Supervisors opposes any consideration of new leasing off their coast in the 2007-2012 plan.
- The Sonoma, California, County Board of Supervisors presented a resolution confirming their opposition to oil or gas exploration and development off their coastline and requests that DOI refrain from the inclusion of any OCS lease tracts offshore the California coastline in the 2007-2012 program.
- The City Commissioner of Gainesville, Florida, states that there is great debate in this city regarding the need for affordable energy and the need to minimize environmental impacts. They are certain not all areas of the OCS are appropriate for exploration, but some may be suitable. However, they do believe that it is in the best interest of this country to find ways to increase the supply of oil and natural gas.
- New Bedford, Massachusetts, stated that the City Council has recorded its opposition to any discussion or potential exploration for oil at Georges Bank.

Members of Congress and Federal Agencies

- Senator Lisa Murkowski, Alaska, urges the MMS to continue deferrals in the Eastern Beaufort Sea in deference to subsistence bowhead whaling hunts. She personally supports a slight expansion of the Eastern Beaufort Sea near shore deferral areas toward the Canadian border, especially off lands already placed in wilderness status. The Senator is asking that additional lease deferrals be used in the 2007-2012 plan to continue protections for Native whaling.
- Both Senators and 32 Representatives from California expressed their strong opposition to any proposal to lift the moratorium on new oil and natural gas development on the OCS, including areas off the coast of California. They specifically oppose proposals that would allow states to "opt-out" of the existing moratoria. The Congressional members also oppose any effort to meet the inventory requirements of Section 357 of the Energy Policy Act of 2005, citing concerns regarding seismic testing on marine mammals and the fishing industry.

- Twenty-one members of the Florida Congressional delegation expressed their continued support of the moratoria off of Florida's coastline.
- Senator Thad Cochran, Mississippi, would like the MMS to consider the impacts of seismic activity on the barrier islands of the Gulf Islands National Seashore. In addition, he would like the MMS to review the socioeconomic ramifications to the Mississippi Gulf Coast's tourism industry.
- Fourteen members of the New Jersey Congressional delegation, including both Senators, expressed their support that the areas under congressional moratoria and presidential withdrawal should not be included in the 2007-2012 program. The delegation requests, on behalf of their constituents, that the MMS institute a 60-day extension for public comments due to the MMS's public comment reception system going down during the established commenting period.

The delegation would also like the MMS to reject the drawing of proposed identification of "seaward extensions" of jurisdictional boundaries between coastal states. They are against gas-only leasing because of the environmental and legal difficulties it poses.

Finally, the delegation is against the inventory of all OCS areas because they feel it would weaken the moratoria that are in place and that it is duplicative of the five year oil and gas estimates of the OCS that the MMS already provides.

- The Department of Defense (DOD) submitted comments supporting the exploration and development of the nation's offshore oil and gas resources in general. However, the DOD continues to discourage any oil and gas development that would interfere with military activities on the OCS.
- The National Aeronautics and Space Administration has reviewed the proposal and has no official comments for or against a new 5-year program at this time.
- The U.S. Environmental Protection Agency submitted comments pertaining to our shared regulatory responsibilities in the context of regional environmental impact studies and the 2007-2012 5-year plan.
- The U.S. Geological Survey has no comments or recommendations to offer.
- The U.S. Fish & Wildlife Service recommends that the Washington-Oregon Planning Area be excluded from the Draft Proposed Program because they believe any development in that region puts the natural resources present at risk. They support extending the current moratoria for that region.
- The NOAA expressed concern regarding the use of seismic technology to complete the mandated "comprehensive inventory of OCS oil and gas resources." They are concerned this activity will adversely affect the wildlife in sensitive marine environments. They recommend that the MMS coordinate with the coastal States on the inventory of the OCS oil and gas resources, on any rulemaking to implement alternate energy provisions of the Energy Policy Act of 2005 and on any discussions regarding a possible comprehensive ocean management initiative.

The NOAA believes that relevant Federal agencies should join with coastal States to develop a comprehensive ocean management regime in order to best plan the "other uses of the sea and seabed". They believe this would lead to greater predictability in determining appropriate and available locations for OCS activities, including the growing interest in LNG terminals and alternate energy uses of the OCS. They recommend that the 5-year plan state its intention to either include or exclude methane hydrates as an energy resource.

Environmental and Other Related Interest Organizations

- The Alaska Marine Conservation Council believes that the risks associated with offshore oil and gas development to the regional communities, traditions, economies, fisheries, and other rich ecological resources are too high; therefore, they support continued moratoria on the oil and gas industry for Bristol Bay. They are specifically concerned with the effects on the fisheries industry and provided detailed information on its benefits to the region.
- The Alaska Outdoor Council supports non-renewable resource development that conforms with strict adherence to habitat protection. They believe that by lifting the presidential moratorium in the North Aleutian Basin, Alaskans could participate in a public process to determine which types of resource development projects would be best for the area.
- The American Recreation Council believes that significant portions of the OCS, which are now unavailable for leasing and exploration should be carefully reviewed as part of the 5-year program and are particularly supportive of the inclusion of Alaska OCS and OCS tracts in the Eastern Gulf which are far enough from shore to minimize visual and societal conflicts. They are persuaded that review will not equate to automatic leasing and exploration and support a full NEPA review of these areas that will consider the impact on fisheries and other recreational activities.
- The Alaska Field office of the Cascadia Wildlands Project is against opening any offshore areas to oil and gas leasing, especially in the Gulf of Alaska, Bristol Bay, the Beaufort Sea and the Chukchi Sea.
- The Conservation Law Foundation is against including current congressional moratoria areas in the 2007-2012 program. It believes that seismic air gun inventories of Georges Bank and surrounding areas should be prohibited during the inventory required by the Energy Policy Act of 2005 and that areas included in congressional moratoria are precluded from these activities. The Foundation believes that the unique ecosystem of Georges Bank outweighs its potential contribution as a hydrocarbon source and would like DOI to move to ensure permanent protection of the area. In addition, they are against gas-only leasing in Georges Bank and all other OCS areas.
- The Cook Inlet Keeper believes that the region's earthquake prone nature makes it a poor fit for oil and gas production. For that reason, combined with industry's current lack of interest, the group believes lower Cook Inlet and Shelikof Strait should be excluded from the proposed leasing program.

- The Friends of Bristol Bay is concerned with the negative impacts of drilling on the wild salmon population. They provided attachments in support of not expanding offshore leasing in Alaska.
- The New England Fishery Management Council states that it is supportive of the moratorium on OCS oil and gas leasing and associated pre-leasing activities.
- The Resource Development Council supports increased OCS acreage being offered in the 2007-2012 program, specifically in the Beaufort and Chukchi Seas, Cook Inlet, and the North Aleutian Basin, as long as all new lease sales adhere to a strong regulatory framework.
- The Sierra Club, Manatee-Sarasota, Florida, is firmly opposed to lifting the ban on offshore drilling in the Eastern GOM. They do not want the 2007-2012 leasing plan to include OCS areas currently under congressional moratorium and oppose the development of gas-only leasing.
- The South Atlantic Fishery Management Council submitted their policy report titled, *"For the Protection and Restoration of Essential Fish Habitats from Energy Exploration, Development Transportation and Hydropower Relicensing."* In the report, the organization recommends that no further exploration or production activity be allowed in the areas subject to presidential task force review.
- Wild South would like the MMS to exclude lease sales in all areas subject to presidential withdrawal and congressional moratoria. Wild South stands with the State of Florida in voicing their opposition to any attempt to offer leasing within 125 miles of Florida's coast. The organization is concerned with the various environmental impacts associated with oil and gas leasing and urges a thorough review of all environmental impacts.
- The World Wildlife Fund urges the MMS to retain the presidential moratorium in the North Aleutian Basin planning area. It is concerned with the needed infrastructure, the effects on fisheries and sea creatures, and with potential environmental effects. The Fund points out that the fisheries in this area are integral to supporting sustainable, long-term economies for the Bering Sea.
- Twelve separate environmental groups together produced a resolution calling for exclusion of the entire Alaskan OCS and all other current moratoria/withdrawal areas from the 2007-2012 program. The Groups state that no permits or contracts for seismic air-gun inventory activities should be issued by DOI prior to the completion and consideration of several national-level studies concerning the impact of air-guns and other geophysical activities on fisheries, marine mammals, and the marine environment. They contend that a comprehensive NEPA process, including review of the previously mentioned studies, a full environmental impact statement, and requisite public review, must be completed prior to the issuance of any permit or regulations pursuant to the proposed seismic inventory of the OCS or the next 5-year leasing program.

• Twenty-nine separate environmental groups submitted a joint letter calling for all congressional moratoria and presidential withdrawal areas to be granted permanent protection from offshore oil and gas leasing. Absent permanent protection from industrialization, they are against the concept of the seaward extension of state boundaries, citing incompatibilities between different states regarding offshore development and the regional geographic nature and extent of possible adverse impacts from OCS activities. They are against gas-only leasing. They are against inclusion of the North Aleutian planning area. They believe that no future Cook Inlet sales need be scheduled due to lack of industry interest and believe that all Alaskan areas included in the 5-year plan be given a full environmental impact statement review. They believe that no royalty forgiveness should be granted for oil and gas production in Alaskan waters.

Oil and Gas Companies and Associations

• Many energy companies submitted comments. The following comprise the most common comments received.

Although they have varied areas of interest, the companies who chose to submit comments were largely in favor of expanding exploration and leasing of all areas of the OCS, including those areas where production is currently prohibited. They often cite the benefits increased production and development activity promises to future consumers as reason to open more OCS acreage to leasing.

The majority of companies who responded were not in favor of gas-only production leases. They cite the difficulty of predicting, with certainty, the amount and type of hydrocarbons located in frontier areas as a risk-factor that would have to be overcome before gas-only leases would be a viable investment.

Several companies and trade associations commented that the Secretary of the Interior should have the discretion to add or delete OCS lease sales from the 5-year program based on the level of industry interest in a particular area. They also commented that it may be beneficial to break up some of the larger planning areas off the Atlantic coast.

All companies were in favor of completing an inventory of OCS energy resources including in areas currently under moratoria. Some suggested completing an OCS-wide inventory and ranking planning areas based on estimated undiscovered resources, level of industry interest, and the area's ability to support production and delivery of the resources to the nation. Others urged the MMS to complete all needed advance environmental analyses OCS-wide, so leasing in restricted areas can begin as soon as possible should those areas become available.

Several companies professed their support for using a portion of the royalties generated from OCS-based production to directly benefit local communities and states affected by production activities. They also expressed the belief that a portion of OCS revenues should be directed, without being subject to annual appropriations, to DOI and state wildlife management agencies to fund environmental work necessary to support oil and gas development.

- The American Petroleum Institute (API) would like the MMS to offer more of the OCS for leasing, including areas in the Eastern GOM and offshore Alaska. They would like MMS to provide a timely process for amending an existing 5-year plan to allow inclusion of areas where production and development are currently prohibited. They are against the concept of gas-only leases.
- The International Association of Geophysical Contractors believes that the United States must start the evaluation of frontier regions of the OCS during this 5-year program for meaningful hydrocarbons to be available for its use in 2013-2018 and beyond. They believe it is inevitable that the United States will need to fully explore the majority of its OCS lands for strategic reasons and that we should begin that process now. The Association would like to see the states and localities with offshore production directly receive a portion of the revenue it generates.

The Association believes that the use of outdated seismic information could produce an inaccurate inventory of OCS. They point out the significant amount of time needed to gather and analyze this type of data and discuss various business models. They recommend that to entice oil and gas companies to support new geophysical programs, the MMS establish some form of incentive plan. Finally, they recommend breaking up some of the larger Atlantic planning areas into more manageable sections.

Non-Energy Industry Associations and Business Groups

- Comments were received from various agriculture industry associations and business groups from all across America. Most agricultural companies, trade groups, and industry associations support both the complete inventorying of potential OCS resources and opening new areas of the OCS for leasing. They are concerned about the effect rising energy costs are having on family farms and other elements of the agricultural industry.
- The fertilizer industry accounts for approximately three percent of the total amount of natural gas consumed in the nation. Increased costs are making U.S. companies less competitive and leading to more imported nitrogen fertilizer.
- The American Chemistry Council states that natural gas and petroleum supplies are critical to the long-term competitiveness and survival of the American chemical industry. They support expanded offshore leasing and a full inventory of all OCS areas. They believe that acreage should be expanded in Alaska and the Eastern planning area of the GOM; and they also want the program to provide as much flexibility as possible. They do not believe that importing LNG from abroad provides a long term solution to the predicted natural gas price escalation. They believe the best solution is increased availability of leasing areas on the OCS.

- The American Iron and Steel Institute, Steel Manufacturers of America, and Industrial Energy Consumers of America trade associations commented jointly. They state that one reason U.S. manufacturing industries have flourished historically was its substantial domestic supply of natural gas. That advantage no longer exists as natural gas prices have risen dramatically. The Institute claims the escalation in natural gas prices is driving manufacturing out of the United States. They support opening new areas of the OCS for leasing to increase supply and alleviate some of the pressure on natural gas prices.
- The Associated Industries of Florida commented that they believe it is necessary to fully develop the OCS. They state that expansion into the Eastern GOM will help to diversify our energy resources, so that the State are not solely dependent upon the production that now exists.
- The American Public Gas Association encourages the MMS to include the maximum amount of acreage in the 2007-2012 program. They encourage the MMS to develop the flexibility to open OCS acreage for various development activities in areas where such activities are now prohibited.
- The American Trucking Association points out that their industry serves a key position in the economy by hauling over two-thirds of the domestic freight transportation tonnage in the United States. Their industry is severely affected by rising fuel costs which in turn affects the U.S. economy. They support opening new areas of the OCS for leasing and encourage the MMS to provide a means and the flexibility to open for development activity OCS areas that are currently off-limits.
- The Air Transport Association of America states that significant increases in the cost of jet fuel have harmed the industry. They believe that were it not for the recent dramatic increases in fuel costs, the air transport industry would be enjoying a period of prosperity. They believe that allowing more production activity on the OCS will help lessen some of the price pressures facing the air transport industry.
- The American Forest and Paper Association urges the MMS to take aggressive action to increase the Nation's natural gas supply. Their manufacturers use large amounts of natural gas and the increased costs are putting pressure on their industry. The group supports allowing states to opt out of moratoria to explore for oil and gas off their own coastline.
- The Consumers Alliance for Affordable Natural Gas believes that it is critical that the MMS expand the offshore areas available for natural gas production. The Alliance believes that production has been limited to the Central and Western Gulf for too long and that it is vital to our economy to increase our energy supply.

They urge the MMS to not only conduct a full inventory of the OCS but to include consideration of potential broad economic and social impacts of energy shortages due to inadequate supplies. The Alliance would like the 2007-2012 program to include not only Central and Western Gulf leases, but also the remaining acreage in the Sale 181 area. They would like expanded acreage in Alaska and a flexible process to allow inclusion of areas currently withdrawn provided the necessary environmental reviews are completed.

• The Fisheries Survival Fund and the Garden State Seafood Association are concerned about the potential adverse environmental impacts from offshore oil and gas production activities. They fear consumers may perceive seafood products coming from locations near sites with industrial activity as being potentially contaminated. Therefore, they support continuation of all current withdrawal/moratoria.

Interested Chambers of Commerce

- The Chamber of Commerce of the United States urges the MMS to perform a full assessment of the resources available on the OCS and encourages expanded development of these resources. The Chamber believes the inventory required by the Energy Policy Act of 2005 must be completed because they believe expanding and diversifying the energy supply will lead to more energy stability. However, it does not support gas-only leasing. The Chamber believes the OCS can be a source of both renewable and non-renewable energy.
- The Mobile, Alabama Chamber of Commerce is supportive of increasing the availability of natural gas from the OCS.
- The Arkansas State Chamber of Commerce believes the 2007-2012 program should provide for expanded leasing, including the flexibility for future inclusion of areas where development is currently prohibited.
- Both the Indiana and Kansas State Chambers of Commerce support opening new areas of the OCS for leasing and encourage the MMS to provide a means and the flexibility to open for leasing, exploration, and development those OCS areas where such activities are currently prohibited. The Chambers believe the moratoria are restrictive and encourage more offshore exploration to increase the Nation's energy resources.
- The Greater Lafayette, Louisiana Chamber of Commerce urges its' congressional delegation, as well as the MMS to open more of the OCS to oil and gas exploration.
- The Greater Seattle and Tacoma-Pierce County, Washington Chambers of Commerce support responsible oil and gas development in Alaska, including the Beaufort and Chukchi Seas, Bristol Bay, and the Lower Cook Inlet.

General Public

• More than 11,000 comments from private citizens were received regarding the next 5-year program for oil and gas leasing on the OCS. Nearly all the respondents cited the effect of Hurricanes Katrina and Rita as the reason change is necessary. However, they did not all agree on the type of change they favored.

A majority of the commenters, about 75 percent, supported a 5-year plan that offers increased acreage for offshore oil and gas production and development. Others requested that the MMS maintain the current OCS leasing footprint, while focusing on alternative energy resource development. A smaller group expressed a desire for the MMS to do both.

Approximately 25 percent were concerned about the impacts of any activity, and were particularly opposed to any expansion of leasing.


The Department of the Interior Mission

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.



The Minerals Management Service Mission

As a bureau of the Department of the Interior, the Minerals Management Service's (MMS) primary responsibilities are to manage the mineral resources located on the Nation's Outer Continental Shelf (OCS), collect revenue from the Federal OCS and onshore Federal and Indian lands, and distribute those revenues.

Moreover, in working to meet its responsibilities, the **Offshore Minerals Management Program** administers the OCS competitive leasing program and oversees the safe and environmentally sound exploration and production of our Nation's offshore natural gas, oil and other mineral resources. The MMS **Minerals Revenue Management** meets its responsibilities by ensuring the efficient, timely and accurate collection and disbursement of revenue from mineral leasing and production due to Indian tribes and allottees, States and the U.S. Treasury.

The MMS strives to fulfill its responsibilities through the general guiding principles of: (1) being responsive to the public's concerns and interests by maintaining a dialogue with all potentially affected parties and (2) carrying out its programs with an emphasis on working to enhance the quality of life for all Americans by lending MMS assistance and expertise to economic development and environmental protection.