

**OCS Scientific Committee Meeting
November 6 - 7, 2008
Fairfax Marriott at Fair Oaks
Fairfax, Virginia**

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OFFICIAL PROCEEDINGS

Thursday, November 6, 2008

Introduction

The Outer Continental Shelf (OCS) Scientific Committee (SC) is chartered under the Federal Advisory Committee Act to advise the Minerals Management Service (MMS) on the feasibility, appropriateness, and scientific value of the MMS Environmental Studies Program (ESP). Its November 2008 meeting was called to order by Vice Chair, Dr. Richard Hildreth and Dr. James Kendall, Chief of the Environmental Division and Executive Secretary of the OCS SC.

MMS Director's Presentation and Discussion with the Committee

Presentation by Mr. Randall Luthi

Dr. Kendall introduced Mr. Luthi. Prior to coming to MMS, Mr. Luthi was the Deputy Director for the Fish and Wildlife Service (FWS).

Mr. Luthi thanked the members of the SC for the opportunity to meet with them. He explained that he has been the Director of the MMS since July 2007 and that it has been a fantastic journey. He welcomed the four new members and said that he appreciates the effort and the fact that they are willing to serve on this Committee and wanted the Committee to recognize the important contributions that it has made to the MMS.

He announced that Offshore Minerals Management is now known as Offshore Energy and Minerals Management (OEMM), which is an effort to better describe the mission of the MMS. The OEMM mission is to provide the American public with ocean energy, mineral resources, and resulting economic value in a safe and environmentally sound manner. Its vision is to be a model of excellence in ocean energy and minerals management.

The MMS gets its authority from the OCS Lands Act: "It is hereby declared to be the policy of the United States that . . . *the Outer Continental Shelf is a vital national resource* held by the Federal Government for the public, which should be made *available for expeditious and orderly development, subject to environmental safeguards*, in a manner which is *consistent with the maintenance of competition* and other national needs".

Mr. Luthi explained that although this was written years ago, it is the same language that MMS lives by today. It affirms how important the OCS is to the Nation's people.

He added that Congress, in August of 2005, passed the Energy Policy Act (EPAAct), which actually expanded MMS's authority and now includes alternative energy/alternative use (AEAU) on the OCS. Alternative energy projects may include wind, wave and ocean current. Alternative uses also provide an opportunity to look at different ways to use the existing structures that are in the OCS which could include activities such as research and aquaculture. Although aquaculture is a use that might be allowed at some time, MMS would not be the agency responsible for permitting related to that activity. The responsibility of the MMS would be to determine whether or not it is appropriate for that type of use on the OCS.

He stated that the core objectives of MMS's mission are:

- **Safe Offshore Operations**
Promote incident free operations during exploration and development on Federal offshore lands.
- **Environmental Protection**
Ensure that all activities on Federal offshore lands are conducted with appropriate environmental safeguards.
- **Fair Market Value**
Assure receipt of fair market value for the lands leased and the rights conveyed by the Federal Government.

He continued that he is personally disappointed that he won't be around to help and watch what MMS does in the next 5 years. Largely due to high gas and oil prices, the President lifted the presidential withdraw that had

been on the OCS for over two decades. This gives the MMS the opportunity to revive its 5-Year Plan. A notice had been published in the Federal Register for requesting information on whether or not MMS should revise its 5-Year Plan and if so, what areas should be of concern. Over 150,000 individual comments and almost 20,000 duplicate comments have been received.

In early January, it is hoped that the MMS will submit a draft proposed program indicating the new 5-Year Plan. This would give the new administration, should they decide to do so, basically a 2-year head start on what can be done in terms of oil and gas leasing in the next 5 years. He continued that it is MMS's goal to have a final ruling on AEAU by the end of the year or early January which will provide the framework for actually starting a whole new industry for MMS. Mr. Luthi said that using the OCS for alternative energy is an energy force that needs to be developed quickly. The Nation needs to develop its traditional forms of energy such as coal, oil, and gas, as well as alternative energy. There is a need to have all the energy available for this Nation and its economy. It needs to be done with the proper and appropriate amount of knowledge that is needed. The science work being done at MMS, the science work that the SC is advising on is actually the underpinning of MMS's entire program.

Associate Director Presentation, New Opportunities and Challenges

Presentation by Mr. Robert LaBelle

Mr. LaBelle, Deputy Associate Director, OEMM, represented the Associate Director. He, too, thanked the Committee for helping the MMS meet its challenges. As with any new administration, the first objective is to establish credibility and MMS's credibility is assisted by the fact that there is an independent scientific review committee that gives good and independent advice on the ESP.

He announced that Dr. Kendall is now the Chief of the Environmental Division and Dr. Rodney Cluck is now the Chief of the Environmental Sciences Branch (ESB)/ESP.

He said that part of MMS's mission is to have lease sales and provide access to the resources offshore which can and does bring in a lot of money for the Treasury. For example, last year there were three lease sales – two in the Gulf of Mexico and one in Alaska, and the total of the high bids that came into the Treasury was \$6.4 billion dollars.

The preparation of the next 5-Year Plan has begun and it will go to 2012. In an effort to open some options for the incoming administration, the first steps are being taken now so MMS will be ready if the moratorium off most of the coast is lifted.

Alternative Energy Program

The rule on the Alternative Energy Program will soon be completed. The rule is cradle-to-grave on establishing an effective offshore program for development of wind resources, wave, tidal, and marine current in Federal waters. Once the rule is released, the MMS will be in the position of soliciting industry as to what areas are of interest to them for commercial leasing for offshore energy, wind, etc. A healthy response is expected based on the amount of pressure received from industry to complete the rule.

Coastal Impact Assistance Program (CIAP)

The CIAP is a grant program legislated in 2005 that charges MMS with providing a total of a billion dollars over the next 4 years to the coastal states that have offshore activity in Federal waters. The money will fund a lot of much needed restoration, conservation, and protection in the coastal states. He explained that although the SC will have little or no interface with the CIAP, the Committee should be aware that the CIAP is starting to play a key role in states' protection for environmental impacts.

Closing Remarks

Mr. LaBelle stated that there have been several reviews by the National Academy of Sciences and that the input from the SC and the work that was done through the SC was very, very helpful in making those reviews successful.

Another area that the SC has been very helpful in is supporting the very expensive physical oceanography studies the MMS needed over the years to try to develop good oil spill tracking systems. Although there are still large oil spills, in most cases, they are from tanking imported oil into the country. There are some small pipeline spills that occur, but over the years, the statistics speak for themselves about how much oil and gas has been produced offshore and exactly how much oil has been spilled.

The last comment Mr. LaBelle made related to Ms. Johnnie Burton who was the MMS Director 7 years ago. He recalled that there was a reporter down in the Gulf States that had written about the perils of mercury contamination in seafood, and this particular reporter was postulating that mercury contamination was coming from offshore platform discharges. For over a year, the MMS worked to address that and a Mercury Subcommittee of the SC was formed. This Subcommittee concluded and MMS published the results that the mercury was not coming from offshore platforms.

He wanted the Committee to know that its role has helped and will continue to help the MMS get to the truth of those types of situations and thanked the Committee members for their help.

Overview of the Different Functions within MMS and the OEMM Program

Presentation by Dr. Mary Boatman

Dr. Boatman mentioned other presentations that would be given throughout the day and introduced the speakers:

- For the Alternative Energy Program, Dr. Rodney Cluck will be speaking extensively about the program on behalf of Ms. Maureen Bornholdt.
- For the Offshore Regulatory Programs which deals with MMS's field operations, the technology that's used by the oil industry, Mr. Elmer "Bud" Danenberger will be giving a presentation about the various platforms and such that the industry uses.
- Mr. Michael "Mik" Else will be presenting the Technology Assessment and Research (TAR) Program and Ohmsett, the National Oil Spill Response Test Tank Facility which is the only facility that has full-scale oil spill response equipment testing, research, and training that can be conducted in a marine environment with oil under controlled environmental conditions (waves, temperature, and oil types). The facility provides an environmentally safe place to conduct objective testing and to develop devices and techniques for the control of oil and hazardous material spills. He will also discuss MMS's Offshore Technology Research Center in College Station, Texas, which was created in 1988 to conduct basic engineering research and develop systems for the economical and reliable recovery of hydrocarbons and other energy sources at ocean depths of 3,000 feet or more.
- Dr. Kendall will address the Committee on the Environmental Division, the ESP, and the Environmental Assessment Program.
- Mr. Harold Syms will present the Resource Evaluation Program.
- Drs. Fred Piltz (Pacific OCS Region), Pat Roscigno (Gulf of Mexico OCS Region), and Dee Williams (Alaska OCS Region) will discuss their regional issues.

Dr. Boatman explained the Outer Continental Shelf Lands Act: (OCSLA):

- 1954 Congressional Mandate – Basic Structure and
- 1978 Amendments:
 - Requirement for a 5-Year Lease Sale schedule
 - Allow opportunity for State comment
 - Environmental studies in affected areas
 - Use of best available and safest technology
 - Regulatory enforcement authority and civil penalties
 - Development and production plans
 - Interface with the Coastal Zone Management Act (CZMA)
 - Access to company data and information
 - Prohibition against exports of OCS oil and natural gas
 - Oil spill liability fund

She further explained that OEMM must also meet other environmental requirements as mandated by a series of environmental laws. Information collected through the ESP assists MMS in meeting the requirements of these laws.

Environmental Laws Affect Program

NEPA	▶ Includes environmental analysis and protection in project planning
Federal Water Pollution Control Act	▶ Regulates discharges from O&G activities into marine waters
Clean Air Act (CAA)	▶ Regulates air emissions from industrial activities
Coastal Zone Management Act	▶ Assures compliance with State coastal area protection plans
Endangered Species Act (ESA)	▶ Protects threatened and endangered species
Marine Mammal Protection Act	▶ Protects marine mammals
Fishery Conservation and Management Act	▶ Protects essential fish habitat
National Historic Preservation Act (NHPA)	▶ Protects archaeological resources including those on the ocean floor
Oil Pollution Act	▶ Oil Spill Financial Responsibility

The MMS also partners with other Federal agencies, both as a part of doing business and through joint funding of research efforts to meet mutual information needs:

- U.S. Coast Guard
 - Oil-spill response, port and vessel security and inspections (Memorandum of Understanding (MOU))
- Environmental Protection Agency
 - Air and water quality (MOU)
- National Oceanic and Atmospheric Administration
 - Coastal programs
 - Marine mammals/endangered species
- Fish and Wildlife Service
 - Marine mammals/endangered species
- U. S. Geological Survey (USGS)
 - Cooperative research efforts

Environmental studies information is exchanged between state departments and local communities with the MMS:

- Coastal Commissions Departments of Fish and Wildlife
- Air Resource Boards
- Departments of Water Resources
- Departments of Conservation and Natural Resources
- Departments of Environmental Regulation

Departments of Culture, Recreation, and Tourism She detailed OEMM's Oil and Gas Program which is responsible for about 1.71 billion acres on the OCS extending from about three nautical miles out to 200 nautical miles.

Everything from lease to decommissioning is managed and, on a basis right now, about 8,300 leases involving 44 million acres are being administered. Other responsibilities include:

- producing approximately 27 percent of the domestically produced oil,
- producing 15 percent of the domestically produced natural gas for the Nation,
- ~3,900 production platforms,
- ~33,000 miles of pipeline,
- ~42,000 OCS personnel, and
- ~125 operating companies.

The Gulf of Mexico currently has 7,335 leases, (~22% producing), the Pacific has 70 leases (36 undeveloped and 23 platforms); and Alaska has ~750 leases (3 producing).

She stated that the OEMM's Oil and Gas Program brings in approximately \$8 billion dollars annually in revenue. The Gulf of Mexico's production for 2008 was 1.3 Million Barrels per Day and about 1.7 billion cubic feet (bcf) of gas per day. The Pacific's production is 63,000 Barrels Per Day (BPD) and about 130 Million Cubic Feet of Gas (MMcfe) per day and Alaska's production is about 28,000 BPD with 5,000 BPD Federal share (Northstar).

The ESP provides information on all aspects from pollutant transport, marine environmental monitoring, socio and economic effects, invasive species, etc., along with OEMM's TAR Program, which looks at things like blow-up prevention, special removal, leak detention, and oil spill response.

The most recent 5-Year Plan (2007-2012) is aggressive compared to the previous few programs. It includes 22 scheduled lease sales, 2 new areas – the North Aleutian Basin (NAB) and off the coast of Virginia – the Eastern Gulf sale (held in March 2008), and larger acreage in the Beaufort and Chukchi Seas .

She mentioned the AEAU program which MMS was granted authority by the EPAct in 2005. The MMS will be responsible for the following major regulatory elements:

- Lease Issuance
 - Competitive and Noncompetitive
 - Coordination
- Lease Administration
 - Bonding and Payments
- Project Plan Reviews
 - Site Assessment and Construction and Operations
- Conducting Approved Plan Activities
 - Installation, Production
 - Environmental and Safety Monitoring and Inspections
- Decommissioning

MMS and the Environment: An Overview

Presentation by Dr. James Kendall

Dr. Kendall presented highlights of the Environmental Assessment Branch, the Oil Spill Modeling Group, the ESP, and the CIAP. He also described the future direction of the MMS's Environmental Program, its responsibilities, and its critical elements.

Environmental Impact Assessment Process

Dr. Kendall explained that principles of the process are to:

- foster better decisions, not better documents,
- focus on what is important, what is affected,
- evaluate proposed activities and their impacts over time, and
- consider cumulative effects.

He explained that NEPA is a process that ensures regulations and compliance with several federal state regulations, such as the ESA, the MMPA, the CAA, etc.

An Environmental Assessment Impact Statement is needed to create the 5-Year Plan, lease sales, explorations plans, and development plans (specific platforms). The extent of these assessments look at a host of different things such as the London Convention, Law of the Sea, environmental safeguards forums, and the Department of the Interior's (DOI) Task Force on Global Climate Change. The environmental goals for offshore operations consists of improving environmental performance, reducing liability, improving compliance, improving credibility/public image, preventing environmental harm/damage, integrating environmental management, and making environmental protection an organizational priority.

Oil Spill Modeling

Dr. Kendall stated that the estimation of the oil-spill risks associated with offshore production, the likelihood of spill occurrence, and the transport and fate of spilled oil. The Oil-Spill Risk Analysis model, developed in 1975 by the DOI, is a tool that evaluates offshore oil-spill risks. This model is used to develop probabilistic estimates of oil-spill occurrence and contact. The MMS developed and maintains oil-spill databases on U. S. OCS spills and tanker spills which are used to support these estimations. Not only is this model used within the DOI, but states use it in terms of their coastal zone consistency determinations and to review Environmental Impact Statements (EIS's,) the public looks at it, it's connected with the ESA for biological opinions for the FWS and other federal agencies.

Environmental Studies Program

Dr. Kendall explained that the mission of the ESP is to provide the information needed to predict, assess, and manage impacts from offshore energy and marine mineral exploration development and production. This includes marine mammals, off-shore safety, deep sea monitoring, and marine environment.

Each year, the ESP determines what information is needed and consults with internal and external stakeholders; develops regional studies plans, meets with the SC as well as its subcommittees, and develops a National Studies List (NSL).

Coastal Impact Assessment Program

The CIAP was established under Section 384 of the EPA Act of 2005 and authorizes the Secretary of the Interior, through MMS, to distribute \$250 million dollars annually to six states: Alabama, Alaska, California, Louisiana, Mississippi, and Texas. The Act requires that all of the CIAP funds be used for projects and activities for the conservation, protection, and restoration of coastal areas, including wetlands, the mitigation of damage to fish, wildlife, and natural resources, the implementation of federally-approved marine coastal or a comprehensive conservation management plans, or the mitigation of the impacts of OCS activities through the funding of onshore infrastructure projects and public service needs.

Ocean Action Plan

On December 17, 2004, President Bush signed Executive Order 13366, creating the Cabinet Committee on Ocean Policy chaired by the Council of Environmental Quality. This Committee released the U. S. Ocean Action Plan (OAP) in response to the Final Report of the U. S. Commission on Ocean Policy, "An Ocean Blueprint for the 21st Century." The OAP provided 88 actions and a set of principals to guide those actions for strengthening and better coordinating U. S. ocean policy by:

- enhancing ocean leadership and coordination,
- advancing our understanding of oceans, coasts, and Great Lakes,
- enhancing the use and conservation of our ocean, coastal and Great Lakes resources,
- managing coasts and their watersheds,
- supporting maritime transportation, and
- advancing international ocean science and policy

The important take-home message here is that the oceans now had a voice in the White House and it wasn't all about science but also about the use of the science.

Hot Topics

- Leasing in areas no longer under moratoria/supporting environmental studies – Virginia Workshop
- Incorporating climate change considerations into environmental studies
- Alternative energy prospects/supporting environmental studies
- Seismic activities on the OCS
- Environmental studies to support Alaska leasing/development (Polar Bears and Bowhead/Right Whales)

Report from the last OCS Policy Committee Meeting

Presentation by Dr. Victor Carrillo

Dr. Carrillo, Chair of the OCS Policy Committee, presented a summary of the last meeting, discussed how the Policy Committee operates, and welcomed interactions between the two OCS Committees. He announced that the next Policy Committee meeting is being held December 9-10, 2008, in Herndon, Virginia, and invited Committee members to attend.

Dr. Carrillo explained that he is a geologist and is a Commissioner of the Texas Railroad Commission which oversees the Texas energy sector, oil and gas, pipe lines, pipe line safety, surface mining, natural gas, and utilities.

The charge of the Policy Committee, broadly speaking, is to advise the Secretary through MMS on all aspects of leasing, exploration, development, and protection of OCS lands. Mr. Luthi opened the Committee's last meeting which was held March 5-6, 2008, and he emphasized the importance of the OCS to the Nation's energy supply. There were reports from the various subcommittees, including the report on the status of the 5-Year OCS Leasing Program set for 2007-2012 which was effective July 1, 2007. This report included public comments that stated 75 percent were in favor of OCS access.

A resolution presented by the 5-Year Leasing Subcommittee recommended that the DOI introduce legislation amending the OCSLA to reduce the process for preparing and developing the 5-Year Oil and Gas Leasing by eliminating public comment in both the draft proposed program and then again in the proposed program. The Committee thought this would streamline the multi-year process and adopted this resolution.

There had also been an update from on the Marine Minerals Program, as well as the Hard Minerals Subcommittee that relates to that program, wherein there was a second resolution adopted. That resolution was that the OCS Policy Committee urges the DOI to consider the Sand and Gravel Program be a part of the core mission of MMS and that this program should be adequately funded at a level not less than \$5 million dollars for Fiscal Year (FY) 2010 and that this .

The Committee was presented with a report on the OCS Alternative Energy Program and a report from the Alternative Energy Subcommittee.

The Alaska, Pacific, and Gulf of Mexico OCS Regions also reported to the Committee.

Gulf of Mexico

Chevron and Petrobras, a Brazilian energy company, gave presentations on ultra-deep water advances. One important key of those presentations described the lower tertiary trend that has been explored over the last couple of years and has the potential of up to 15 Billion Barrels of Oil Equivalent in that deepwater area. This area is waters of depth 5,000 to 10,000 feet and with drilling to a total depth of 20,000 or 30,000 feet.

Another excellent presentation given by an economist from the American Petroleum Institute was in regards to the importance of the OCS to the Nation's future energy security. This presentation was followed by a round table discussion involving offshore energy issues with each member of the Committee describing what is going on in their particular state and what the policy implications are of opening up additional areas, etc. Other key topics discussed during the roundtable discussion included whether additional access for oil and gas and alternative energy exploration should occur in the areas that were then under congressional moratoria. As a result of these discussions, the Committee established the Moratoria Areas Study Working Group to address revenue-sharing.

Dr. Carrillo then read to the SC an excerpt of a letter that Governor Perry submitted to the MMS in response to a public comment request on initiating the new 5-Year Program. Below is the excerpt of that letter:

".....as Governor of Texas, I strongly encourage the MMS and the Department of the Interior to immediately begin the process on a new five-year OCS oil and gas leasing program for 2010 to 2015. This represents a historic moment -- in reflecting on the lifting of the moratorium, this represents a historic moment in the nation's history and a unique window of opportunity to advance the cause of domestic energy security. From our perspective, Texas is committed to aggressive, yet responsible domestic on-shore and off-shore hydrocarbon exploration and development. Texas remains the number one oil and gas-producing state in the nation producing percent of domestic oil, and 33 percent of domestic natural gas production. Making these areas available for energy exploration and production is a national imperative, and I strongly encourage the Interior Department to be steadfast in its resolve to produce an off-shore leasing program that will serve the national good and will maximize the OCS's contribution to future energy supplies. The more oil and natural gas that we produce domestically "in our own back yard", the less we have to import from foreign sources, many of which are in unstable regions with unfriendly regimes. ...just to encourage the Department to move with all due haste in this new development...."

Alternative Energy Programs: Current status and next steps

Presentation by Dr. Rodney Cluck

Dr. Cluck, newly-appointed Chief, ESB, represented Ms. Bornholdt, Program Manager, Office of Alternative Energy Programs, and provided an update on its developments, including the Alternative Energy rulemaking effort and the anticipated issuance of limited leases for alternative energy resource data collection and technology testing activities under the Interim Policy.

He explained that the Programmatic EIS was completed in November 2007 with a Record of Decision in January of 2008. For the Interim Policy for limited leasing, 45 nominations were received and several of those are currently under review. Promulgation of Regulations was submitted to the Office of Management and Budget on November 3, 2008.

For the Cape Wind Project, he announced that the public hearings and the draft EIS have been completed and the final EIS would be due on December 5, 2008, along with a Record of Decision on the project in early January 2009.

The major elements of the alternative energy regulations includes compliance with Federal statutory requirements, e.g., NEPA, CZMA, ESA, MMPA, CWA, CAA, etc. These elements are:

- Coordination with state/Federal Task Forces.
- Lease Issuance.
 - Competitive and Noncompetitive Leasing. (If there are multiple interests in the area, it has to have competitive leasing)
 - Commercial and Limited Leases. (For technology testing or research)
- Lease Administration. (Bonding and payments)
- Alternative Energy Plan Reviews. (Site assessment, construction, and operations)
- Conducting Approved Plan Activities. (Environmental and safety monitoring and inspections)
- Decommissioning.

However, he continued, in the interim, a policy for limited leasing has been developed and implementation of the policy is anticipated in the first quarter of 2009. This policy will apply to any type of resource data collection or technology testing, not to wind turbine installation, and will give authorization of 5 years. After the 5 years, there would be a need to recompute for this area should there be other interests in that area.

Alternative energy studies that are planned for FY2008 are:

- compendium of avian information and comprehensive Geographical Information Systems geodatabase,
- effects of pile driving sounds on auditory and non-auditory tissues in fish,
- evaluation of visual impacts on historic properties,
- potential for interactions between endangered and candidate bird species with wind facility operations on the Atlantic OCS,
- energy market and infrastructure information for evaluating Alternative Energy Projects for the OCS Atlantic and Pacific Regions,

- update of Summary of Knowledge: selected areas of the Pacific Coast,
- effects of electromagnetic fields (EMF) from transmission lines on elasmobranchs and other marine species,
- OCS alternative energy and space-use conflicts and related mitigation,
- survey of digital geographic datasets on benthic habitats and species distribution and methodologies for data viewing,
- inventory and analysis of archaeological site occurrence on the Atlantic OCS,
- characterization and potential impacts of noise producing construction and operation activities on the OCS, and
- surveying for marine birds in the Northwest Atlantic.

The alternative energy studies portfolios for FY2009 and beyond are:

- recreation and tourism,
- archaeological baseline,
- economic impact of OCS wind development on commercial fishing,
- impacts from lighting,
- evaluation of soundscape, and
- survey of bats.

In order to have standards across the industry and inspection of turbines, the TAR Program has begun some studies and, in the near future, will be examining these same kinds of designs, standards, and inspection for wave and current issues. Its topics for FY2009 are:

- recommend designs standards to ensure structural safety/reliability/survivability of offshore wind farms on the OCS,
- study of wind farm/turbine accidents (a review of accidents could potentially determine some general trends; mitigation measures; recommended industrial safety management programs, etc.),
- options for dampening construction noises for offshore wind farms, and
- proposals received and TAR anticipates contract awards in 1st quarter FY2009.

In addition, the MMS, the Department of Energy, and Federal Energy Regulatory Commission have joined efforts in leading a new international annex entitled, “*Assessment of Environmental Effects and Monitoring Efforts for Ocean Wave, Tidal, and Current Energy Systems*” under the International Energy Agency’s Implementing Agreement on Ocean Energy Systems.

Including the U. S. and involving 27 countries, there is a 3-year research effort underway to collect data and share information on environmental impacts, monitoring, and mitigation strategies that will highlight the best practices and lessons learned. This will culminate into an expert workshop and a key-word searchable database which can be accessed by any of these countries.

Methods of Resource Evaluation, Data Collection and Usage

Presentation by Mr. Harold Syms

Mr. Syms, Chief, Resource Evaluation Division, covered the types of data and information available to MMS for resource evaluation, provided an overview of MMS’s methodology for assessing undiscovered oil and gas resources, and introduced MMS’s latest assessment results.

He explained in detail to the Committee that data and resource information available to the MMS is derived from public data sources, proprietary data sources, pre-lease data under MMS permit, post-lease data, and geological and geophysical data budget.

As to resource evaluation itself, Mr. Syms covered two basic definitions:

- resources (including undiscovered resources such as hydrocarbons estimated on the basis of geologic knowledge and theory to exist outside of known accumulations and discovered resources such as which are hydrocarbons whose location and quantity are known or estimated from specific geologic evidence), and

- play, which is a group of geologically related hydrocarbon accumulations that share a common history of hydrocarbon generation, accumulation, and entrapment.

He presented a summary publication for MMS's latest assessment, 2006, which discusses in greater detail the methodology of the commodity assessed and the results of this, both economic and technically recoverable. These studies are fairly time-consuming and are done in the regions and coordinated by the TAR and headquarters. One study has just begun in anticipation of the 2012 program.

Overview of the Oil and Gas Industry Offshore

Presentation by Mr. Elmer "Bud" Danenberger

Mr. Danenberger, Chief, Office of Offshore Regulatory Programs, described the types of mobile drilling rigs and production facilities used by industry, the existing oil and gas infrastructure in the Gulf of Mexico, Beaufort, and Pacific, trends in OCS development and technological advances that will influence future development scenarios, maintaining aging infrastructure, and safety and pollution prevention systems. He described in detail the types of rigs needed in order to find gas and/or oil:

- a drilling rig,
- a semi-submersible rig, or
- a jack up rig.

Once a commercial discovery is made, a production platform is set in place.

He further explained the number of platforms and their daily production in the Pacific, Gulf of Mexico, and Alaska OCS Region.

He said that the next development project off of Alaska will be Liberty which is going to be with directionally drilled wells and are going to go as far as 40,000 feet. Drilling in the Chukchi, 50 miles from shore, is going to be a real challenge due to the potential ice conditions.

In the Gulf of Mexico, there are 3,800 platforms; however, not much production anymore, and really diminishing productions, especially on the natural gas side. In deepwater, there have been huge discoveries. The average production rate on the shelf is about 200 BPD. Average production, or common production rate, for a lot of the deepwater fields is 20,000 plus BPD.

In closing, he stated that the regulatory program is pretty sophisticated and that thousands of safety devices are on all major platforms. Particularly important, subsurface safety valves are located at least 100 feet below the sea floor on every well that can float. These devices have held very well during hurricanes, when there have been fires, or explosions which cause production to be shut down. Weather permitting; MMS does an inspection every day offshore.

Overview of the Studies Program: Where we have been, where we are, peer review, studies development plan

Presentation by Mr. James Cimato

Mr. Cimato, Acting Chief, ESB, presented an overview of the MMS Headquarters ESP that highlighted accomplishments during the past 2 years and outlined the overall process for developing the annual research agenda and managing the program.

He explained that the ESP provides the information necessary to support sound management and decisionmaking. The MMS's responsibilities are increasing, both in geographic area with the removal of the moratoria from the OCS and with the addition of authority over offshore renewable energy development. As these developments occur, the priorities for information needs shift to meet them. The increased land area available for leasing creates new information needs in those areas. Existing information must be evaluated and updated to provide the best possible basis for decisions on lease sales, plans, and permits. Studies information contributes to the MMS environmental program which includes compliance with environmental laws and consultations with other agencies, for example.

He stated that back in the late 1970's, the ESP supported some of the early physical oceanography work on the OCS that was extremely highly regarded. Some platform monitoring work had been conducted during the exploratory stages on Georges Bank, but over 30 years of MMS sponsoring research, there has been a widespread area of work from physical oceanography to early marine mammal work up in Georges Bank. The ESPM covered all of the OCS areas back in the late 1970's and early 1980's, and with the moratoria once again lifted at this moment, there may be the possibility for oil and gas activities once again in those areas that were studied so many years ago.

Mr. Cimato summarized the major ESP themes since its inception. He also mentioned, in terms of research management activities, there are 29 to 35 new research projects started annually. In addition to the ESP, some biological research is undertaken by the USGS Biological Resources Division (BRD) in support of the MMS OCS Energy and Minerals Program.

For FY2009, the budget is about \$20 million dollars and an increase of \$5.5 million dollars has been requested in the President's Budget for additional research in Alaska. It is projected that there will be on the order of 28 to 35 new projects which includes the projects that would be started through the Coastal Marine Institute (CMI). The CMIs affords an opportunity to work with the University of Alaska, Fairbanks and Louisiana State University in Louisiana. In addition to providing needed scientific information, these cooperative efforts serve to develop research capabilities and to grow the talent to continue to meet the research needs in future years.

The ESP priorities for FY2009 are:

- new OCS areas (NAB, Chukchi, mid-Atlantic),
- old topics (marine mammals, circulation, deep sea coral, environmental monitoring, hurricane impacts, noise, socio-economics), and
- new topics (alternative energy, avian issues, EMF).

In preparing for the Mid-Atlantic lease sale scheduled for 2011, a Virginia workshop would be held in December to assist in planning for environmental studies that would support off-shore Mid-Atlantic Virginia oil and gas activities. In addition, an ocean circulation modeling study will focus on the Virginia Mid-Atlantic area and another study will focus on developing a database of infrastructure that would support onshore activity such as location of ports and perhaps fabrication facilities up and down the coast.

In terms of outreach, the ESP sponsors a variety of symposia, conferences, Information Transfer Meetings (ITM), and the highly regarded National Ocean Science Bowl, as well as journal publications. News releases are also published that announces recent awards and research opportunities.

Mr. Cimato described the types of procurement vehicles and how they are awarded:

- Contracts
 - competitive – set-asides and sole source
 - advertised on the FedBizOpps website - www.fbo.gov
- Cooperative Agreements
 - advertised on the federal website www.grants.gov
 - available to State entities including public universities
- Interagency Agreements
 - research performed by other Federal agencies

He described the ESP's annual management process:

- information needs assessed internally/externally,
- ESP and senior management work to balance needs with resources,
- regional and annual Studies Development Plans are developed,
- annual meeting with the SC review:
 - relevance,
 - scientific merit,
 - objectives,
 - relationship to other research,

- feasibility, and
 - timing
- determine the appropriate procurement mechanism,
- annual development of the NSL – the proposed research agenda for the year, and
- NSL briefing - approval by the Associate Director, OEMM annually

In determining priorities for the NSL, the following are topics are considered:

- mission relevancy,
- technical feasibility,
- scientific merit,
- timing,
- applicability, and
- affordability.

Overview of Technology Assessment and Research Program and Recent Research Initiatives

Presentation by Mr. Michael “Mik” Else

Mr. Else, Petroleum Engineer, Engineering and Research Branch, presented a snapshot of MMS’s TAR Program including the key focus areas, recent changes at the Ohmsett Oil Spill Response Test Facility, and examples of recent and current research, as well as TAR’s near-term plans.

Mr. Else explained that there are two parts of the TAR Program:

- the engineering and safety side of the offshore operations that MMS is doing:
 - design,
 - performance,
 - human factors, whatever type of activity might involve the safety the MMS is overseeing, and
 - how technology can be further advanced with research, i.e., how MMS oversees oil spill response.
- Oil spill response:
 - Ohmsett facility
 - a. test response and remote sensing equipment:
 1. in situ burning technology and
 2. chemical treating agents
 - b. training in oil spill response - 90% use rate,
 - c. conducting meso-scale research and development for oil spill response, and
 - d. alternate energy wave power testing.

He further explained that the TAR Program was established from the OSCLA of 1978 Amendments and its objectives are to:

- provide support for MMS regulatory decisions,
- ensure the best available and safest technology,
- provide leadership and support for industry research, and
- support international cooperation in research.

Four of the recently completed projects done by the TAR Program are:

- post-hurricane fixed platform assessment,
- underwater structural repair,
- pipeline flow assurance, and
- steel cantenary riser touchdown solutions.

Currently, the TAR Program is involved in the following active research:

- floating platform stability and anchoring,
- extreme sea states analysis,

- Arctic assessment, and
- sensing oil under ice.

Also, there had been a broad agency announcement to address oil spill data gaps which closed in August. White Paper topics have been received and the TAR Program is in the process of prioritizing which proposals are going to be funded. These oil spill response research topic areas are:

- mechanical technologies to improve oil spill containment and recovery including Arctic conditions,
- research on the use of chemical herders for oil spill response,
- improve in situ burn residue cleanup,
- oil spill chemical dispersant research, and
- Ohmsett testing of technologies to detect and recover submerged oil, mechanical recovery and containment, and testing of wave energy technologies.

Overview of the Gulf of Mexico OCS Region Environmental Studies Program and Current Issues

Presentation by Dr. Pat Roscigno

Dr. Roscigno, Chief, Environmental Sciences Section, Gulf of Mexico OCS Region, presented summaries of accelerated OCS activities in deepwater, essential environmental functions, in-house monitoring and research studies, and collaborative studies.

He told the Committee that for the longest time, accelerated deepwater activity had been the Region's biggest driving force. As industry was drilling deeper and deeper, the program had to expand into a more multi-disciplinary integrated-type of program. Challenges also became more severe in terms of how to integrate the ESP studies into a coherent program when industry moved further and further offshore. With the new challenge regarding the Virginia lease sale, the Region is now conducting studies and workshops.

At this time, the Region has about 100 active studies, has completed about 300 studies, and currently has \$47 million dollars in terms of active study management.

He informed the Committee that he is proud of the Region's collaborative studies. With the move into deeper water, a bigger science program had to be developed in order to deal with multi-disciplinary studies that have to be well-integrated. Some of these studies have been completed and the Region has been awarded three DOI Cooperative Conservation Awards, one award from the National Oceanographic Partnership Program Excellence in Partnering Award, and two awards from the National Oceanic and Atmospheric Administration (NOAA) Fisheries.

Dr. Roscigno then described the Region's mandates for socioeconomic sciences, biological sciences, and physical sciences.

He described the Region's emerging issues:

- hydrates:
 - potential energy source,
 - understanding hydrates and seafloor stability, and
 - understanding hydrates and chemosynthetic communities
- hurricane impacts on the OCS,
- offshore alternative energy,
- air quality on the Atlantic OCS, and
- endangered species on the Atlantic OCS.

Overview of the Alaska OCS Region Environmental Studies Program and Current Issues

Presentation by Dr. Dee Williams

Dr. Williams, Chief, Environmental Studies Program, Alaska OCS Region, provided a brief orientation on the Alaska OCS Region's ESP and covered highlights including historical context, programmatic themes, special regional challenges, and notable current study projects.

Alaska, north to south, is well over 1,000 miles, and east to west it is well over 2,000 miles; it is a very extensive shoreline with more than 33,000 linear miles with a never ending call for information.

He informed the Committee that the Alaska OCS Region operates in the Beaufort Sea, Chukchi Sea, Bristol Bay of the Bering Sea, and Cook Inlet. All four of these areas have very distinctive characteristics that drive different and unique physical oceanography and biological resources, and indeed community aspirations are different in each of these areas.

Dr. Williams announced the current lease schedule:

- Chukchi Sea Sale 193 2008
- Beaufort Sea Sale 209 2010
- Chukchi Sea Sale 212 2010
- Beaufort Sea Sale 217 2011
- NAB Sale 214 2011
- Cook Inlet Sale 219 2011
- Chukchi Sea Sale 221 2012

The Chukchi lease sale occurred in February and brought in \$2.6 billion dollars in high bids. One key consequence of this very successful lease sale has been a change in allocation to Alaska through the CIAP. The 4-year allocation of \$1 billion dollars for MMS to manage this project dramatically changed for Alaska with this lease sale. The allocation was raised from just over \$1 million dollars to more in the order of \$30 to \$40 million dollars for the last 2 years of the program.

Prior to MMS being an agency, the DOI began holding leases in and conducting studies on the north slope of Alaska since 1973, so in terms of length of time, breadth of study and longevity, the ESP on the north slope of Alaska is the most comprehensive environmental impact assessment data collection effort anywhere in the world with over \$300 million dollars being spent on studies in Alaska.

He specified that Alaska holds special challenges such as:

- lack of infrastructure (roads, ports, lodging, general services),
- travel distance,
- short field season (climate/weather), and
- safety issues (extra equipment, personnel, planning).

He explained that the Region spends a lot of extra money that adds to the cost of a new project, i.e., logistical expenses, ethnic diversity/language translation, environmental complexity, and public sensitivity that requires highest quality contractors, public burden, subsistence priority, and stakeholder involvement/capacity building.

Overview of Pacific OCS Region Environmental Studies Program and Current Issues

Presentation by Dr. Fred Piltz

Dr. Piltz, Senior Environmental Scientist, Office of Environmental Evaluation, Pacific OCS Region, explained that offshore oil and gas activities are still active from 23 offshore platforms in Federal waters in southern California. The Region is very involved in the Alternative Energy Program via proposed projects in northern California, Oregon, and Washington and participated and assisted in the planning of a west coast Alternative Energy workshop in Portland, Oregon, which was attended by representatives from the three coastal states, tribes, and public.

He gave the Committee an overview of not only just the Studies Program, but with regard as to what the Region's interests and priorities are:

- safety/enforcement,
- production,
- multiple-use management, and
- EPAct implementation.

Safety/Enforcement

The MMS has a civil penalties program in which its inspectors inspect offshore operations and if something is not being done according to regulation or appropriate oil and gas procedures, an incidence of non-compliance is issued and can rise to the level of assessing a civil penalty. These incidents are subsequently reviewed by him since he is the civil penalties reviewing officer for the Pacific Region.

Production

There are currently 23 platforms producing 13 fields. Peak oil production occurred in 1995 when there was over 200,000 BPD. Recent daily production is about 63,000 BPD of oil and .130 MMcfe of gas. He reported that cumulative production is greater than 1 Billion Barrels of oil and 1 Trillion Feet of gas.

Multiple Use Management

This is certainly an issue area for Southern California and actually along the entire Pacific Coast because it has a narrow shelf compared to some of the other areas. There are sand issues that currently MMS is not actively involved in, but have come up in the past about using federal sands offshore of San Francisco to replenish beaches near San Francisco. Renewable energy is also an obvious multiple use management issue. He mentioned aquaculture as a potential multiple use explaining that California does not currently have a rigs-to-reef program. He explained that about 8 years ago, the California legislature had passed a rigs-to-reef program which made it to the desk of then-Governor Gray Davis who vetoed it. The State is still considering it and the Ocean Protection Council of California, which is the Governor's body to oversee offshore issues, and the Ocean Protection Trust issued a request for a proposal to do a study of the potential roles and future roles of platforms in future fish production.

Partnerships

Partnerships are very big for the Region which is currently cooperating with a number of Federal agencies: the Channel Islands National Marine Sanctuary which is NOAA; the Channel Islands National Park; California Coastal Management which is the Bureau of Land Management; the USGS BRD; the USGS Western Coastal and Marine Geology Center; and the West Coast Governor's Agreement on Ocean Health which is a partnership working with California, Oregon, and Washington.

EPAct implementation

Dr. Piltz explained that there are three environmental informational needs that have been expressed as strong interests and desires by people along the Pacific Coast: monitoring emphasis in the context of the regional changes and the regional operations of oil and gas; the role of platforms in the southern California marine eco systems; and alternative energy, wind, wave, and tidal.

To emphasize Director's Luthi's comment that the MMS has done a lot of great research but does not get the credit that it deserves, he said that since 1973, the Pacific Region has funded 274 studies at \$127 million dollars. However, in some areas, the MMS has pioneered research in the ocean and in many cases no other agency has done this. The MMS needs to do more to get that information out and make people aware that the DOI is an ocean agency, that there is a lot of value in this program, and that there is potentially a lot of value in the program in the future.

One of the studies that started as an in-house study was a shore bird study done in Ventura County, and last year the MMS partnered with California State University, Channel Islands (CSUCI). Students from the university are surveying beaches each month to document shorebird use. Discussions have recently begun with Channel Islands National Park to expand this research effort with CSUCI to the Park Islands.

In conjunction with scientists at the University of California Santa Barbara, MMS has funded a number of studies demonstrating the importance of platforms as fish habitat. One of the more important results from these studies is that platforms contribute to the rebuilding of overfished rockfish species, such as bocaccio, by acting as a nursery. This study will be important in determining the fate of offshore structures during decommissioning.

The largest and longest term monitoring program is the MARINE, the Multi-Agency Rocky Inter-Tidal Network, which has over 40 partners. Because of these partners, inter-tidal from the U. S./Mexico border all the way to Canada's border is being monitored and that is being expanded now that the Canadians are working with MARINE to do similar monitoring using the same protocols in British Columbia.

Alternative Energy Studies

Currently, there are two alternative energy studies in the Pacific OCS Region. One of these studies, Update of Summary Knowledge, has been awarded and is in progress. This study will update MMS's environmental information along the entire Pacific Coast, not only focused on the southern California where oil and gas activities are, but potentially in areas up the coast where there might be alternative energy. The second one is the Electromagnetic Effects study which will look at whether cables which might transmit energy from offshore alternative energy projects to onshore and will have effects on the biota that may be near or come into contact with it. The only research found so far has been done in Europe and the Pacific is ideally suited for this since there are a number of offshore platforms that derive their power from onshore electrical cables.

Also in regard to alternative energy studies, the Region has been actively involved in a number of workshops along the Pacific Coast. At one workshop, it was recommended that a large number of studies be related to potential wave energy devices. Most recently, the MMS supported the workshop in Portland, Oregon, where the attendees were from state and other agencies at the Federal level. This workshop was to educate them about the varieties of technologies that exist for offshore energy. On the second day of that workshop, there were discussions on about how everyone could work together.

Friday, November 7, 2008

The meeting was called to order by Vice Chair, Dr. Hildreth.

My Experiences with MMS and the OCS SC

Presentation by Dr. Robert Diaz

Dr. Diaz, former OCS SC Chair, was first appointed to the Committee in December 2001 and was appointed as Vice Chair in April 2003 and Chair in May 2006.

He said that he had been a graduate student of the Bureau of Land Management's (now the MMS) studies off the Atlantic Coast in the 1970's – the first round of leases that were up and down the coast. The MMS has changed its interests throughout this time, first with just oil and gas, then sand for beach nourishment, and now alternative energy and other things other than oil and gas.

He commented that although MMS is a small agency compared to other Federal agencies, he feels that the MMS relies on and listens to the SC, and that the Committee is integral in terms of the long view of the MMS environmental studies.

He mentioned that a couple of years ago, due to the Committee's suggestions, the MMS studies won a series of awards for science content and interagency cooperation. The Committee encouraged the MMS to do interagency agreements because, as time goes on, the oil and gas is going deeper and bringing more oceanographic issues. This requires big money science and studies and MMS is good about spreading around the responsibility for some of the costs of these studies.

He feels that, in general, the Committee needs to strive for:

- the composition of the proposed studies,
- making the information available,
- the continuity of information that MMS collects needs to be maintained, and
- the technical evaluation of proposals.

He finished by telling the Committee that its challenge is to keep up with the shifting requirements that are being placed on the MMS. Although MMS started out as an oil and gas program, it is basically 95 percent plus oil and gas. The new responsibilities that the MMS is taking on need to be worked into the structure of oil and gas in terms of environmental studies.

Subcommittees

Five subcommittees were identified to assist the MMS and DOI:

- Deepwater – Dr. Joseph Smith, Chair
- Alaska – Dr. Michael Castellini, Chair
- Marine Minerals – Dr. John Trefry, Chair
- Decommissioning – Dr. Mary Scranton, Chair
- Alternative and Renewable Energy – Dr. D. Michael Fry, Chair

Committee Business


New officers were elected:

- Chair – Dr. D. Michael Fry
- Vice Chair – Dr. Lorrie Rea
- Parliamentarian – Dr. Tyler Priest

Based on the Committee's discussions with MMS staff and public comments, and in its scientific advisory role, the Committee offered the following recommendations to the MMS and DOI:

- **Regarding Expanded MMS ESP Reporting.** Dr. Williams had distributed four very helpful hard copy spread sheets summarizing past, ongoing, and proposed ESP projects in the Alaska OCS Region. The SC recommended that headquarters and the other regions prepare and distribute similar information to Committee members and other attendees prior to each meeting starting with the next meeting tentatively planned for the second half of April 2009. The Committee also requested similar summaries of OCS scientific research projects carried out under MMS's various cooperative and partnership agreements with states and other federal agencies.
- **Regarding MMS's ITM's.** The members would find it very helpful to receive ITM agendas, abstracts, presentations, and proceedings.
- **MMS's expanding roles regarding alternative and renewable energy uses of the OCS.** Regarding the increasing industry interest in developing the renewable energy resources of the OCS such as wind and wave energy the OCS uses such as mariculture, the Committee has two specific recommendations
 - one or more technical and industry experts in those fields be invited to speak at the next meeting tentatively planned for the second half of April 2009, and
 - MMS ESP socioeconomic research related to those emerging OCS uses be expanded in all three OCS regions.
- **This Committee supports a Significant Increase in the MMS ESP Budget.** The Committee believes that the current ESP budget of \$20 million dollars should at least be doubled and that appropriate additions should be made to MMS personnel to manage that increased budget. As noted at the meeting, the ending of Presidential and Congressional moratoria approximately doubles the OCS area available for oil and gas leasing. The ESP research will now encompass alternative and renewable energy OCS uses in addition to the development of oil, gas, and other minerals. In 2008 dollars, the 1980 ESP budget was approximately \$100 million dollars. Thus, in an era of increasing and diversifying OCS activities to be managed by MMS based on information developed through the ESP, the ESP funds available are 20% of what they once were. The SC recommends that the highest priority be given to a significant ESP budget increase in upcoming MMS, DOI, Presidential, and Congressional budgeting processes.

I certify that the above proceedings are an accurate account of the November 6-7, 2008, OCS Scientific Committee proceedings. The Proceedings may be released to OCS SC members and made available for public inspection.

A handwritten signature in black ink, appearing to read 'DMF', with a stylized flourish extending to the right.

Dr. D. Michael Fry
Chair, OCS Scientific Committee

Minerals Management Service (MMS) Outer Continental Shelf (OCS) Scientific Committee (SC) Meeting Agenda

MEETING DATES: November 6-7, 2008

LOCATION: Fairfax Marriott at Fair Oaks
Fairfax, Virginia 22083

Thursday, November 6, Morning Session

- 8:30 a.m. Welcome and Introductions
(please turn cell phones off or set to silent) Dr. Richard Hildreth, Vice Chair, OCS SC and
Dr. James Kendall, Executive Secretary of the OCS SC,
MMS
- 8:35 a.m. MMS Director's Welcome, Overview of MMS, and Presentation of Awards to Retiring Members [Mr. Randall B. Luthi](#), Director, MMS
- 9:00 a.m. Associate Director's Welcome, New Opportunities and Challenges [Mr. Robert LaBelle](#), Deputy Associate Director for Offshore Energy and Minerals Management (OEMM) and [Dr. Mary Boatman](#), Oceanographer, Environmental Sciences Branch, for Mr. Chris Oynes, Associate Director, OEMM, MMS
- 9:35 a.m. MMS and the Environment: An Overview [Dr. James Kendall](#), Executive Secretary of the OCS SC, MMS
- 10:00 a.m. Report From the Last OCS Policy Committee Meeting [Dr. Victor G. Carrillo](#), Chair, OCS Policy Committee
- 10:15 a.m. – 10:30 a.m. Break
- 10:30 a.m. Alternative Energy Programs: Current Status and Next Steps [Dr. Rodney Cluck](#), Representing Alternative Energy, for Ms. Maureen Bornholdt, Program Manager, Office of Alternative Energy Programs, MMS
- 10:55 a.m. Methods of Resource Evaluation, Data Collection and Usage [Mr. Harold E. Syms](#), Chief, Resource Evaluation Division, MMS
- 11:15 a.m. Overview of the Oil and Gas Industry Offshore Infrastructure [Mr. Elmer "Bud" Danenberger](#), Chief, Office of Offshore Regulatory Programs, MMS
- 11:45 noon – 1:30 p.m. Lunch

Thursday, November 6, Afternoon Session

- | | | |
|-----------------------|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| 1:30 p.m. | Overview of the Studies Program: Where we have been, where we are, peer review, studies development plan | Mr. James Cimato , Acting Chief, Environmental Sciences Branch, MMS |
| 2:00 p.m. | Overview of Technical and Assessment Research (TAR) Program and Recent Research Initiatives | Mr. Michael Else , Petroleum Engineer, Engineering and Research Branch, MMS |
| 2:30 p.m. | Overview of the Gulf of Mexico OCS Region Environmental Studies Program and Current Issues | Dr. Pat Roscigno , Chief, Environmental Science Section, Gulf of Mexico OCS Region |
| 3:00 p.m. – 3:30 p.m. | | Break |
| 3:30 p.m. | Overview of the Alaska OCS Region Environmental Studies Program and Current Issues | Dr. Dee Williams , Chief, Environmental Studies Program, Alaska OCS Region, MSS |
| 4:10 p.m. | Overview of Pacific OCS Region Environmental Studies Program and Current Issues | Dr. Fred Piltz , Senior Environmental Scientist, Office of Environmental Evaluation, Pacific OCS Region, MMS |
| 4:30 p.m. | Recess | |

Minerals Management Service (MMS) Outer Continental Shelf (OCS) Scientific Committee (SC) Meeting Agenda

Friday, November 7

8:45 a.m. Plenary Session - Opening Comments Dr. Richard Hildreth, Vice Chair, OCS SC, and Dr. James Kendall, Executive Secretary of the OCS SC, MMS

9:00 a.m. My Experiences with MMS and the OCS SC [Dr. Robert Diaz](#), former OCS SC Chair

Dr. Robert Diaz was first appointed to the OCS SC in December 2001 and was appointed as Vice Chair in April 2003 and Chair in May 2006. He has experienced many changes not only within the Committee, but also within MMS. He is delighted to share his experiences.

9:30 a.m. [Subcommittee introductions and discussions:](#) Dr. James Kendall, Executive Secretary of the OCS SC, MMS

- Deepwater
- Arctic
- Alternative and Renewable Energy
- Marine Minerals
- Decommissioning

Why does the MMS need Subcommittees? How have they advised the MMS in the past? How were they formed? Are they still needed? What role will they play in the future?

Procedures, Protocols, and Philosophy of Discipline Breakout Sessions Dr. James Kendall, Executive Secretary of the OCS SC, MMS

10:00 a.m. – 10:30 a.m. Break

10:30 a.m. Discipline Break-Out Group Sessions

- Ecology/Biology
- Physical Oceanography
- Socioeconomics

11:30 a.m. – 1:30 p.m. Lunch

1:30 p.m. Reports From Discipline Break-Out Group Sessions

2:00 p.m. [Committee Business](#)

- Election of Officers
- Items for Letter to the Director
- Emerging Issues/Topics of Interest
- Other Business
- Dates and locations for the next meeting

3:00 p.m. Public Comments

3:30 Final Comments

4:00 p.m. Adjourn

ATTENDEES

OCS Scientific Committee Members

Dr. Ralph Browning Brown, Brigham Young University
Dr. Ken Dunton, The University of Texas at Austin
Dr. D. Michael Fry, American Bird Conservatory
Dr. Richard Hildreth, University of Oregon
Dr. Michael P. Kosro, Oregon State University
Dr. Tyler Priest, University of Houston
Dr. Lorrie Rea, University of Alaska Fairbanks
Dr. Eugene Shinn, University of South Florida
Dr. Joseph Smith, ExxonMobil Upstream Research
Dr. John Trefry, Florida Institute of Technology

Minerals Management Service

Ms. Olivia Adrian, Procurement Division
Dr. Tom Ahlfeld, Environmental Sciences Branch
Ms. Carolyn Beamer, Offshore Minerals Management
Dr. Mary Boatman, Environmental Sciences Branch
Ms. Debbie Bridge, Procurement Division
Ms. Elizabeth Burkhard, Environmental Sciences Branch
Ms. Kim Butler, Procurement Division
Mr. Joe Christopher, Gulf of Mexico OCS Region
Mr. James Cimato, Environmental Sciences Branch
Ms. Phyllis Clark, Environmental Sciences Branch
Dr. Rodney Cluck, Environmental Sciences Branch
Dr. Cleve Cowles, Alaska OCS Region
Mr. Elmer "Bud" Danenberger, Office of Offshore Regulatory Programs
Mr. Winston deMonstbert, Environmental Assessment Branch
Mr. Michael "Mik" Else, Engineering and Research Branch
Dr. Deborah Epperson, Gulf of Mexico OCS Region
Mr. Gerald Garnett, Procurement Division
Dr. Walter Johnson, Environmental Sciences Branch
Dr. James Kendall, Environmental Division
Ms. Emily Kennedy, PMI
Mr. Robert LaBelle, Offshore Minerals Management
Dr. Ron Lai, Environmental Sciences Branch
Ms. Caroline Laiken, Procurement Division
Mr. Randall Luthi, Minerals Management Service
Dr. Harry Luton, Gulf of Mexico Region
Dr. Fred Piltz, Environmental Evaluation Pacific OCS Region
Dr. James Price, Environmental Sciences Branch
Dr. Pat Roscigno, Environmental Sciences Section, Gulf of Mexico OCS Region
Ms. Celeste Rueffert, Procurement Division
Ms. Kim Skrupky, Environmental Assessment Branch
Mr. Harold E. Syms, Resource Evaluation Division
Ms. Christy Tardiff, Procurement Division
Dr. Sally Valdes, Environmental Assessment Branch
Ms. Barbara Wallace, Environmental Sciences Branch
Dr. Dee Williams, Alaska OCS Region
Mr. James Woehr, Environmental Assessment Branch

Invitees

Mr. Victor Carrillo, OCS Policy Committee Chair
Dr. Robert Diaz, Virginia Institute of Marine Science
Dr. Michael Rex, University of Massachusetts
Dr. Denise Stephenson-Hawk, The Stephenson Group, LLC

Others

Mr. Bob Gisiner
Ms. Nicolette Nye
Dr. Paul Stang
Dr. Ian Voparil, Shell Global Solution

DISCIPLINE BREAKOUT GROUPS

Ecology/Biology	Physical Oceanography	Socioeconomics
Kenneth Dunton	Jim Coleman	Ralph Brown
D. Michael Fry	Mark A. Johnson	Richard Hildreth
Lorrie Rea	Mike Kosro	Richard B. Howarth
Gene Shinn	Mary Scranton	Tyler Priest
John Trefry	Joe Smith	Peter Schweitzer

SUBCOMMITTEES

Deepwater	Alaska	Marine Minerals	Decommissioning	Alternative and Renewable Energy
*Joe Smith	*Peter Schweitzer	*John Trefry	*Mary Scranton	*Mike Fry
Jim Coleman	Ken Dunton	Jim Coleman	Richard Hildreth	Ralph Brown
Mike Kosro	Mike Fry	Robert Diaz	Eugene Shinn	Richard Hildreth
Tyler Priest	Duane Gill	Richard Hildreth	Joseph Smith	Mike Kosro
Mike Rex	Richard Howarth	Denise Stephenson- Hawk		Mary Scranton
William Schroeder	Lorrie Rea			Lynda Shapiro
	William Schroeder			Eugene Shinn
	Lynda Shapiro			

*Chair

PUBLISHED OCTOBER 24, 2008

DEPARTMENT OF THE INTERIOR Minerals Management Service

Outer Continental Shelf (OCS) Scientific Committee (SC); Announcement of Plenary Session

AGENCY: Minerals Management Service (MMS), Interior.

ACTION: Notice of meeting.

SUMMARY: The OCS Scientific Committee will meet at the Fairfax Marriott at Fair Oaks in Fairfax, Virginia.

DATES: Thursday, November 6, 2008, from 8:30 a.m. to 4:30 p.m.; and Friday, November 7, 2008, from 8:30 a.m. to 4 p.m.

ADDRESSES: Fairfax Marriott at Fair Oaks, 11787 Lee Jackson Memorial Highway, Fairfax, Virginia, telephone (703) 352-2525.

FOR FURTHER INFORMATION CONTACT: A copy of the agenda may be requested from MMS by calling Ms. Carolyn Beamer at (703) 787-1211. Other inquiries concerning the OCS SC meeting should be addressed to Dr. James Kendall, Executive Secretary to the OCS SC, Minerals Management Service, 381 Elden Street, Mail Stop 4043, Herndon, Virginia 20170-4817 or by calling (703) 787-1656.

SUPPLEMENTARY INFORMATION: The OCS SC will provide advice on the feasibility, appropriateness, and scientific value of the OCS Environmental Studies Program to the Secretary of the Interior through the Director of the MMS. The SC will review the relevance of the research and data being produced to meet MMS scientific information needs for decision making and may recommend changes in scope, direction, and emphasis.

The Committee will meet in plenary session on Thursday, November 6. The Director will present an overview of MMS and the Associate Director will address the Committee on new opportunities and challenges. There will be an update on activities in the Gulf of Mexico, Alaska, and Pacific OCS Regions.

On Friday, November 7, the Committee will meet in plenary session to discuss Committee business and updates will be provided by the Deepwater, Arctic, Alternative and Renewable Energy, Marine Minerals, and Decommissioning Subcommittees.

The meetings are open to the public. Approximately 30 visitors can be accommodated on a first-come-first-served basis at the plenary session.

Authority: Federal Advisory Committee Act, Pub. L. 92-463, 5 U.S.C., Appendix I, and the Office of Management and Budget's Circular A-63, Revised.

Dated: October 15, 2008.

James J. Kendall

Acting Associate Director for Offshore Energy and Minerals Management.
[FR Doc. E8-25399 Filed 10-23-08; 8:45 am]

OCS SCIENTIFIC COMMITTEE

**MEMBERSHIP
INFORMATION**



Ralph Browning Brown

Dr. Brown is a Professor with the Department of Sociology and Director of the International Development Minor at Brigham Young University and his interests include: community satisfaction and attachment, including community-level impacts due to boom-growth most often associated with large-scale economic development; natural resource-human interface; persistent rural poverty and subsistence lifestyles, and effects of mass consumer economy on rural communities and their residents. He specializes in Social Impact Assessment and is versed in both quantitative and qualitative data collection and analysis techniques.

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Discipline: Socioeconomics (Development and Social Change;
Social Impact Assessment)

Appointed:
Reappointed Under New Charter:

April 28, 2006
June 24, 2008

James M. Coleman

Dr. Coleman is a Boyd Professor for the Coastal Studies Institute and recently served as Interim Vice-Chancellor for Research and Graduate Studies at Louisiana State University. He started his professional career as a graduate student at Coastal Studies Institute, LSU, and eventually serving as director of CSI, chairman of Geology and Geophysics, head of the School of Geoscience, and interim dean of Basic Sciences before being named Executive Vice-Chancellor in 1989. He has conducted worldwide research on deltaic sedimentation, riverine processes, marine geology, shallow structure of shelf sediments, and muddy coasts. He serves on numerous local, state, and national committees and is presently a member of the Ocean Studies Board, National Research Council, and has recently been appointed to the U.S. Commission on Ocean Policy.

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Discipline: Oceanography/Geology (Use of Science in Oil and Gas
Decision-Making)

Appointed:	March 30, 2004
Reappointed Under New Charter:	April 28, 2006
Reappointed Under New Charter:	June 24, 2008

Kenneth H. Dunton

Dr. Dunton is a biological oceanographer whose research is focused on estuarine and coastal processes. Although his work spans from the Arctic to the Antarctic, his continuous studies of the arctic coastal ecosystem has spanned three decades and over 3000 research dives. He has been funded by NSF's Arctic System Science's Shelf-Basins Interactions study since 1999. His component is focused on the distribution and biomass of benthic biota and the application of stable isotopic signatures to assess changes in trophic structure. He has also performed intensive studies of arctic benthic communities and kelp beds. Dr. Dunton has published more than 70 peer-reviewed papers and has supervised 18 graduate students and seven post-doctoral fellows. He obtained a B.S. from the University of Maine (1975), M.S. from Western Washington (1977), and Ph.D. from the University of Alaska-Fairbanks (1986) and is currently a professor in Marine Science at The University of Texas at Austin.

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Discipline: Biology (Oil and Gas Effects on Benthic Communities; Arctic Research; Seagrass in the Gulf of Mexico)

Appointed:	June 24, 2008
Eligible for Reappointment:	June 24, 2011

Michael D. Fry Chair

Dr. Fry is the Director of Conservation Advocacy and is an avian toxicologist with research interests in the effects of pollutants, pesticides, and oil spills on ecosystems, with a focus on wild birds. He received his doctorate at the University of California-Davis, followed by Postdoctoral fellowships in Australia and UC San Francisco before returning to UC Davis where he was a research physiologist in the Department of Avian/Animal Sciences for 23 years before joining Stratus Consulting in 2003 and American Bird Conservancy in 2005. Dr. Fry has been a panel member for the National Academy of Sciences on hormone active chemicals in the environment and has participated in toxicology reviews and international symposia for the Organization for Economic Cooperation and Development (OECD) and for the United Nations University in Japan. He has specialized in ecotoxicology of raptors and marine birds and served as Chairman of the Pacific Seabird Group. He has been a committee member for EPA and OECD in revising avian toxicity test methods and was a member of the EPA Ecological Committee for Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Risk Assessment Methods (ECOFRAM).

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Discipline: Ecology (Avian Biology & Alternative Use)

Appointed:
Reappointed Under New Charter:

April 28, 2006
June 24, 2008

Richard G. Hildreth

Dr. Hildreth is the author of three casebooks and many other publications on ocean and coastal law. He has consulted frequently with federal and state coastal management agencies in the U.S. and Australia and with Pacific Island governments on environmental legal matters. Dr. Hildreth served as the University of Queensland Law Faculty's 50th Anniversary Visiting Fellow. He has served on the National Research Council's Non-native Oysters and Coastal Ocean Committees, the Pacific Northwest Regional Marine Research Board, and the editorial advisory boards of the journals Coastal Management and Ocean Development and International Law. Dr. Hildreth practiced business law with Steinhart & Falconer in San Francisco before teaching law.

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Discipline: Socioeconomics (Ocean & Coastal Law; Law of the Sea)

Appointed:	March 30, 2004
Reappointed:	April 28, 2006
Reappointed Under New Charter	June 24, 2008

Richard B. Howarth

Dr. Howarth is an economist who studies the theory of environmental policy analysis with applications to topics such as energy use, climate change, and ecological conservation. His research and teaching emphasize themes that include the role of discounting and sustainability in evaluating long-term environmental policies; mathematical models of economy-environment interactions; and the interplay between economics and ethics in valuing and managing environmental resources. Dr. Howarth has held appointments at the Lawrence Berkeley National Laboratory and the University of California at Santa Cruz. He is currently the Pat and John Rosenwald Professor in the Environmental Studies Program at Dartmouth College and the Editor-in-Chief of *Ecological Economics*.

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Discipline: Socioeconomics (Environmental Economics and Policy Analysis)

Appointed:

June 24, 2008

Eligible for Reappointment:

June 24, 2011

Mark A. Johnson

Dr. Johnson's research interests include physical oceanography of the Arctic Ocean with a focus on its general circulation and variability. His approach is analysis of historical and model data sets and use of observational methods such as moored instruments. His present focus is assessment of the ice volume of the Arctic Ocean, especially thickness along the margins, and how this may be affected by climate change.

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Discipline: Physical Oceanography (Arctic Region and Sea Ice)

Appointed:	June 24, 2008
Eligible for Reappointment:	June 24, 2011

P. Michael Kosro

Dr. Kosro is a coastal physical oceanographer, and a Professor of Oceanography at Oregon State University. His group has installed and operates a large array of HF current mapping systems to continuously measure the time-varying surface circulation over the entire Oregon coast, while also using conventional moored and shipborne tools. Recent studies include interannual variability of the circulation, mesoscale features of the upwelling circulation, California Current and undercurrent, and spatial structure of tidal flows.

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Discipline: Physical Oceanography (Shelf-deep Sea Exchange/Pacific Coast)

Appointed:
Reappointed:
Reappointed Under New Charter

March 30, 2004
April 28, 2006
June 24, 2008

Richard "Tyler" Priest Parliamentarian

Dr. Priest is Clinical Professor and Director of Global Studies at the C.T. Bauer College of Business, University of Houston, and faculty affiliate of the Public History Program at the University of Houston. He is also a member of the Technology Pioneer Committee for the Offshore Energy Center (OEC) in Houston. He received his Ph.D. in history from the University of Wisconsin-Madison. He specializes in the history of offshore oil and gas in the Gulf of Mexico and is currently working on a study of the evolution of offshore exploration technology and leasing. He has served as chief historian on a Shell Oil corporate history project and chief historian for an MMS project to document the history of the offshore oil industry in the Gulf of Mexico (OCS Study MMS 2004-049). He has authored books on the offshore operations of Shell Oil and Brown & Root.

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Discipline: Socioeconomics (Historian-Social/Economic Effects
and the Oil and Gas Industry)

Appointed:
Reappointed Under New Charter:

April 28, 2006
June 24, 2008

Lorrie Rea Vice-Chair

Dr. Rea's general research interest encompasses the metabolism and nutritional physiology of terrestrial and marine mammals and is particularly interested in questions dealing with lipid metabolism in large mammals and how physiological processes are adapted to periods of food limitation and fasting in the wild. Most of her recent research addresses health, diet, and body condition assessment of Steller sea lions in Alaska. Dr. Rea earned her Ph.D. in Marine Biology from the University of Alaska Fairbanks (1995) after obtaining a B.S. from the University of Guelph (1987) and an M.S. from the University of California Santa Cruz (1990). She is currently a Wildlife Physiologist with the Alaska Department of Fish and Game, Division of Wildlife Conservation.

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Wildlife Conservation, Statewide Programs
Alaska Department of Fish and Game
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email: lorrie.rea@Alaska.gov

Discipline: Biology (Endangered Species; Arctic Marine Mammal Health)

Appointed:	June 24, 2008
Eligible for Reappointment:	June 24, 2011

Peter Paul Schweitzer

Dr. Schweitzer was born and raised in Austria where he became fascinated with the mysterious country that no longer exists, the Soviet Union, during the 1980s. A student exchange program enabled him to study in Leningrad for one academic year in 1986/87 and to begin ethnohistoric research about the Chukchi Peninsula in the Russian Far East, which led to Ph.D. degree awarded by the University of Vienna in 1990. Since 1990, he has had several opportunities for longer and shorter field trips to Chukotka and, more recently, to the Republic of Sakha (Yakutia). Since 1992, he has been conducting fieldwork in various communities on the Seward Peninsula in Alaska. He joined the faculty of the Department of Anthropology at UAF in 1991. His topical interests, in addition to the above-mentioned historical inquiries, encompass social organization (kinship, gender, politics), hunter-gatherer studies, the history of anthropology, transnationalism and other forms of interethnic contact, as well as practices and ideologies of colonialism and their local impacts. Since 2007, he has been serving as Director of Alaska EPSCoR (Experimental Program to Stimulate Competitive Research).

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Discipline: Socioeconomics (Anthropology and Subsistence)

Appointed:
Reappointed Under New Charter:

April 28, 2006
June 24, 2008

Mary I. Scranton

Dr. Scranton received a BA in Chemistry from Mount Holyoke College and a PhD. in Oceanography from the Woods Hole Oceanographic Institution/MIT Joint Program in Oceanography. Her dissertation was on the marine geochemistry of methane. Following her dissertation work, she spent 2 years as a National Academy of Sciences/National Research Council Postdoctoral Fellow at the Naval Research Lab in Washington, D.C., working on analytical and geochemical aspects of hydrogen gas distributions in the ocean and atmosphere. Since 1979, she has been at the Marine Sciences Research Center of Stony Brook University. In recent years she has been interested in the factors controlling the cycling of organic compounds in sediments and in the water column, primarily as a part of the CARIACO (Carbon Retention in a Colored Ocean) program, a study of carbon cycling in the Cariaco Basin, Venezuela. She also maintained her long-standing interest in methane geochemistry and is investigating the role of seeps and vents, and possibly of destabilizing gas hydrates, in controlling water-column methane concentrations near the US North-East continental shelf.

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Discipline: Chemical Oceanography (Geochemistry/Hydrates)

Appointed:
Reappointed:
Reappointed Under New Charter

March 30, 2004
April 28, 2006
June 24, 2008

Eugene A. Shinn

Dr. Shinn received a BS in Zoology from the University of Miami in 1957. In 1958 he joined the Shell Development Company Field Station in Coral Gables, Florida, as a laboratory/diving technician specializing in modern carbonate sedimentation and limestone alteration. He has had an extensive career not only with Shell Development Company, but also with Royal Dutch Shell and the Environmental Affairs Department at Shell's Head Office in Houston where he advised the company on environmental issues. In 1974, Dr. Shinn, as a senior geologist, left Shell to set up the 4-person USGS research field station at Fisher Island, Florida, where he led the field station's research for 15 years where the mission was to do research on sedimentation and alteration of modern carbonates, especially coral reefs of the Florida Keys. With funding from USGS conservation division, which later became MMS, he supported a Texas A&M doctoral dissertation on the effects of drill mud on corals. In 1989, he transferred to St. Petersburg, Florida, where he worked as part of the USGS Coastal Program and initiated a study of sewage contamination and groundwater movement and seepage in the Florida Keys. In 1998 The University of South Florida awarded him a PhD in Earth Science. After 31 years of service, Dr. Shinn retired as a geologist from the USGS on January 3, 2006, and is now located at the University of South Florida Marine Research Center at St. Petersburg, Florida, where his title is Courtesy Professor. He currently serves on several committees including the AAPG Global Climate committee.

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Discipline: Zoology/Geology (Fate & Effects; Government & Industry
Science)

Appointed:
Reappointed:

April 28, 2006
June 24, 2008

Joseph Patrick Smith

Dr. Smith is group leader for environmental technology research at ExxonMobil Upstream Research Company. He holds a Ph.D. in physical chemistry from the University of California at Berkeley (1978) and a B.S. in chemistry from the University of Rochester (1972). He joined Exxon Production Research Company in 1981 and has been active in research on the environmental aspects of offshore oil and gas operations since 1990. His research interests include numerical modeling of offshore discharges, the environmental fate and effects of drilling and production discharges, and the environmental effects of seawater usage in liquefied natural gas processing. He is the chairman of the Offshore Operators Committee (OOC) Environmental Sciences Subcommittee and has also served on the steering groups for many joint industry environmental studies sponsored by organizations such as OOC, the American Petroleum Institute, and the International Association of Oil and Gas Producers.

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Discipline: Physical Oceanography (Oil and Gas Industry Technology
Contaminant Fate and Effects, Environmental
Management)

Appointed:
Reappointed:
Reappointed Under New Charter

March 30, 2004
April 28, 2006
June 24, 2008

John H. Trefry

Dr. Trefry is a Professor of Marine & Environmental Sciences at Florida Institute of Technology. He holds a Ph.D. in Chemical Oceanography from Texas A&M University. His research activities focus on the concentrations and cycling of trace metals in rivers, estuaries, oceans and deep-sea hydrothermal vents. Trace metals are studied for their natural value and for their potential as pollutants. Dr. Trefry's research activities are carried out in a wide variety of geographical settings including the Pacific and Atlantic Oceans, the Alaskan Arctic, the Gulf of Mexico and the Indian River Lagoon, Florida. He also has been active in studies of environmental issues related to offshore oil exploration and production in the Gulf of Mexico, the Beaufort Sea, the Sea of Okhotsk and other locations. He presently serves as an Associate Editor of the journal *Marine Chemistry*.

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Discipline: Chemical Oceanographer/Biology (Chemical Contaminants)

Appointed:
Reappointed:
Reappointed Under New Charter

March 30, 2004
April 28, 2006
June 24, 2008

Federal Ex Officio Member

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Executive Director & Designated Federal Officer

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Executive Secretary

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MINERALS MANAGEMENT SERVICE



OCS Scientific Committee Meeting Speakers

***Fairfax, Virginia
November 6-7, 2008***

Mary Boatman
Oceanographer, Environmental Sciences Branch

Dr. Boatman is an oceanographer in the Environmental Sciences Branch of the Environmental Division in Herndon, VA. She serves as a Contracting Officer's Technical Representative for a number of Environmental Studies Program contracts related to fates and effects, alternative energy issues, and methane hydrates in the Gulf. She is currently working on several projects including planning of the Virginia Workshop. She has a Ph.D. in chemical Oceanography from Texas A&M University.

Maureen Bornholdt
Program Manager, Offshore Alternative Energy Program

Maureen A. Bornholdt is responsible for developing the new program and regulatory regime covering outer continental shelf alternate energy resources for the Minerals Management Service. Prior to this appointment, she served as the Marine Minerals Program Manager. In that capacity Ms. Bornholdt managed the development of OCS marine minerals resources and oversaw leasing of Federal sand for use in repairing damaged shorelines and protecting critical military installations, National parklands, and billions of dollars of infrastructure. She has extensive experience in environmental regulation and compliance having worked offshore oil and gas issues for the Department of the Interior since 1983. Ms. Bornholdt has served as the MMS's technical expert on Coastal Zone Management and National Environmental Policy Acts and as the program analyst covering offshore environmental and regulatory issues for the Assistant Secretary for Land and Minerals Management.

Victor Carrillo
Vice Chair, OCS Policy Committee

Mr. Victor Carrillo serves as chairman of the OCS Advisory Committee to the U.S. Secretary of the Interior. This committee advises the Secretary by reviewing and commenting on all aspects of leasing, exploration, development and protection of OCS lands.

Commissioner Carrillo leads the state agency that oversees the Texas energy sector -- the oil and gas, pipeline and surface mining industries. Commissioner Carrillo has bachelors and masters degrees in Geology.

He earned his law degree from the University of Houston. He is a Texas licensed attorney and geoscientist. He was recently named to the America's Energy Coast Honorary Leadership Council – a group educating the public on the national importance of the energy producing states of Texas, Louisiana, Mississippi and Alabama. He formerly served as Vice Chairman of the Interstate Oil & Gas Compact Commission. He is on the Board of Advisors of the *Texas Journal of Oil, Gas & Energy Law* at the University of Texas School of Law.

Mr. Carrillo joined the Texas Railroad Commission in 2003 when Texas Governor Perry appointed him to fill the unexpired term of Tony Garza who became U.S. Ambassador to Mexico. Mr. Carrillo served as Chairman of the agency from September 2003 through September 2005. He was also Chairman of the Governor's Texas Energy Planning Council that created a comprehensive energy plan for the State of Texas. In 2004, Commissioner Carrillo received almost four million votes and won statewide election for Railroad Commissioner for a six-year term through 2010.

James Cimato
Acting Chief, Environmental Sciences Branch

Mr. Cimato is a senior staff analyst currently Acting Environmental Sciences Branch Chief. He is responsible for developing MMS-wide policies and procedures governing the formulation and implementation of the Environmental Studies Program. As an Oceanographer within the branch, Mr. Cimato coordinates many of the fates and effects studies within MMS and the Coastal Marine Institute program. He worked in the private sector in oil pollution prevention research before joining the Offshore Program in 1975.

Rodney E. Cluck
Representing Alternative Energy
Recently-selected Chief, Environmental Sciences Branch

Dr. Cluck holds a Ph.D. in sociology from Mississippi State University and a Masters Degree in Rural Sociology from the University of Arkansas, Fayetteville. For 6 years he served as the Headquarters' Social Scientist for the MMS/Environmental Division and then joined the Office of Offshore Alternative Energy Programs and was the Project Manager for the United States' first offshore wind facility. Dr. Cluck was recently selected as the Chief of the Environmental Sciences Branch and will report for duty November 10, 2008.

Elmer (Bud) P. Danenberger, III
Chief, Office of Offshore Regulatory Programs

Mr. Elmer "Bud" Danenberger has the responsibilities for safety and pollution-prevention research, engineering support, operating regulations, and inspection and enforcement programs. He earned a B.S. degree in Petroleum and Natural Gas Engineering and a Masters degree in Environmental Pollution Control, both from Pennsylvania State University. He has been employed as an engineer in the Department of the Interior's offshore oil and gas program since 1971. He served as a staff engineer in the Gulf of Mexico regional office; Chief of the Technical Advisory Section at the headquarters office of the U.S. Geological Survey; District Supervisor for MMS field offices in Santa Maria, California, and Hyannis, Massachusetts; and as Chief of the Engineering and Operations Division at MMS headquarters.

Michael (Mik) Else
Petroleum Engineer, Office of Offshore Regulatory Programs,
Engineering & Research Branch

Mr. Else earned a B.S. degree in Petroleum Engineering from the University of Montana, College of Technology in May of 1983. He accepted employment with Getty/Texaco Oil company in Bakersfield, CA following graduation and after serving 8 years in private industry, joined Minerals Management Service in 1991 as a petroleum engineer for the Pacific Region office. For the past 8 years Mr. Else has served as a petroleum engineer for MMS Headquarters in Herndon, VA within the Office of Offshore Regulatory Programs and is responsible for selection, funding, and management of MMS's safety and technology research.

James J. Kendall
Chief, Environmental Division and OCS SC Executive Secretary

Dr. James J. Kendall was appointed Chief of the Environmental Division for Offshore Energy and Minerals Management in June 2008. Previously he served as the Chief of the Environmental Sciences Branch responsible for coordinating the MMS Environmental Studies Program (ESP). The MMS ESP is tasked with providing the environmental and socioeconomic information necessary for MMS to make informed decisions concerning

offshore energy and marine minerals activities. Prior to joining the MMS Headquarters Office, Dr. Kendall served as the ESP Studies Chief for the MMS Gulf of Mexico OCS Regional Office in New Orleans, Louisiana. He received his bachelor's degree in biology from Old Dominion University, his Ph.D. in oceanography from Texas A&M University, and is a graduate of the Senior Executive Fellows program of the John F. Kennedy School of Government, Harvard University. Dr. Kendall has conducted marine research in the Gulf of Mexico, Caribbean, and Red Sea. He serves as Executive Secretary to the OCS Scientific Committee.

Robert P. LaBelle
Deputy Associate Director for Offshore Energy and Minerals
Management

Robert LaBelle, as the Deputy Associate Director for Offshore Energy and Minerals Management, serves as Chief Operating Officer for the management of all facets of the Offshore Program, including policy development, policy implementation, and program planning. He is responsible for directing the implementation of Offshore's Strategic Plan and serves as Executive Secretary for the Offshore Steering Committee, as well as Chairman of the Offshore Information Management Committee.

Previously, as Chief of the MMS Environmental Division, Mr. LaBelle was responsible for offshore oil and gas industry compliance with all environmental requirements, including water and air quality, endangered species, oil spill risk analysis, and archaeology in all U.S. Federal waters. He oversaw a large environmental research program and the preparation of Environmental Impact Assessments and other decision documents used for both offshore energy and mining activities.

In 1996, he received the Citation for Meritorious Service from the Department of the Interior in recognition of his scientific accomplishments. He is an internationally recognized expert on the subject of oil spill trajectory analysis and risk assessment, with over 100 publications and technical reports on this and other environmental issues. His work has provided a key tool in addressing State and local community concerns about the effects that oil spills may have on coastal and local resources. He has also helped other agencies in risk assessment, including the 1989 Presidential Task Force on Outer Continental Shelf Leasing, the U.S. Coast Guard's analysis of "tanker-free zones" off U.S. coastlines, and the Domestic Energy Council's and the Dept. Of Commerce's 1996 environmental review of exporting Alaska North Slope oil. He has participated by invitation in international training sessions on ocean issues in Russia, Mexico, Norway, the UK, Venezuela, and Japan.

In prior positions, Mr. LaBelle was Chief of the MMS Technology Assessment and Research Branch where he led research on engineering and technical aspects of offshore production and development. Previous positions at MMS and USGS include Chief of the Environmental Operations and Analysis Branch and Chief of the Branch of Environmental Modeling. Prior to joining Interior, Mr. LaBelle worked for Martin Marietta Corporation as an environmental analyst on the siting of electrical power plants and on assessing the effects of nuclear power stations on aquatic species. He is a graduate of the University of Massachusetts (BS), the University of Maryland (MS), and Loyola College (MBA).

Chris Oynes
Associate Director of the Offshore Energy and Minerals
Management

On February 5, 2007, MMS Director Johnnie Burton named Mr. Chris Oynes as the new Associate Director of the Offshore Minerals Management Program. Until that time, Mr. Oynes had served as the Regional Director of the Gulf of Mexico Region for the past 13 years.

“Chris Oynes brings to the position of Associate Director a wealth of knowledge and experience about the practices and processes of the Offshore Program as well as impressive leadership skills,” said Burton. “His work has helped to make the OCS a major contributor to the Nation’s energy and economic security” she continued, “and his solid leadership was crucial to MMS Gulf of Mexico Region employees as well as Gulf OCS energy operators before, during and after the devastating hurricane seasons of 2004 and 2005.”

In the Gulf of Mexico Region, Mr. Oynes managed the leasing of OCS lands off five Gulf Coast states for oil, gas and other mineral development, and supervised the regulation of operations and protection of the environment on those leases, which involve more than 4,000 platforms. He managed a staff of 550, comprised of geologists, geophysicists, petroleum engineers, biologists and environmental scientists.

Mr. Oynes has more than 30 years of Federal Government experience with energy matters, including 11 years in Washington, D.C. with MMS in various capacities, most notably as Chief of the Lease Sale Planning Branch and the Leasing Division. He served for 7 years as the Deputy Regional Director in the Gulf of Mexico before being named the Regional Director in 1995.

He has received the two highest honor awards that the U.S. Department of the Interior bestows--the Distinguished Service Award and the Meritorious Service Award.

Fred M. Piltz
Regional Civil Penalty Review Officer and
Senior Environmental Scientist, Pacific OCS Region

Dr. Piltz serves as the Regional Civil Penalty Review Officer, the Regional Representative to the MMS Information Committee, and is the Senior Environmental Scientist, Pacific OCS Region. He is responsible for the planning, implementation, and management of the environmental studies for the Pacific OCS Region. Prior to his current position, he worked in applied environmental impact assessment research as both a taxonomic consultant and field scientist in Southern California and in the Straits of Magellan, Chile. His research experience includes laboratory work on the effects of heavy metals on marine organisms, effects of oil spills on intertidal invertebrates, and effects of municipal sewage outfalls on benthic invertebrate communities.

Pasquale (Pat) F. Roscigno
Chief, Environmental Sciences Section
Gulf of Mexico and Atlantic OCS Regions

Dr. Roscigno is the Chief, Environmental Sciences Section (ESS) for the Gulf of Mexico and Atlantic OCS Regions. He is responsible for managing the Regions' Environmental Studies Program and has over 20 years of experience in managing multi-disciplinary environmental projects. Previously, he held several different research and program management positions with the MMS and with the Department of Interior's U.S. Fish and Wildlife Service. He attended Fordham University in New York City.

Harold E. Syms
Chief, Resource Evaluation Division

Mr. Syms is the Chief of the Resource Evaluation Division, Minerals Management Service in Herndon, Virginia. He has held various positions in Los Angeles and Camarillo, California, as well as the Washington D.C. area. From 1988 through 2003, he served as the Chief of Reserves, Resources and Economic Analysis for MMS' Pacific OCS Region. His responsibilities included resource economic evaluations for reserves and resource assessments in Federal offshore California, Oregon, and Washington. He joined MMS' predecessor, the Conservation Division of

the U.S. Geological Survey, in 1977. His experience includes reservoir analyses, reserves determinations, well log analyses, and economic evaluations of fields and prospects in the Pacific OCS Region. He has also served as an expert witness on the petroleum geology and reserves of the Pacific OCS Region. Mr. Syms is a graduate of California State University, Northridge, with a B.S. Degree in Geology. Professional affiliations include membership in the American Association of Petroleum Geology, the Coast Geological Society, and the Society of Petroleum Engineers.

Dee Williams
Chief, Environmental Studies, Alaska OCS Region

Dr. Williams is responsible for managing and directing the activities of a multi-disciplinary staff in the planning, design, procurement, and conduct of environmental research and study products to serve MMS environmental information needs. He earned a Ph.D. in anthropology from Columbia University and previously worked in academics and resource management consulting. He has a broad international and intercultural background in development impact studies, with many publications in various academic journals and book presses. He sits on Technical Review committees for multiple federal/state agencies in Alaska.

ACRONYMS

AEAU	Alternative energy/alternative use
BPD	Barrels Per Day
BRD	Biological Resources Division
bcf	billion cubic feet
CAA	Clean Air Act
CIAP	Coastal Impact Assistance Program
CMI	Coastal Marine Institute
CSUCI	California State University Channel Islands
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
DOI	Department of the Interior
EIS	Environmental Impact Statement
EMF	electromagnetic force
EPAct	Energy Policy Act
ESA	Endangered Species Act
ESB	Environmental Sciences Branch
ESP	Environmental Studies Program
FWS	Fish and Wildlife Service
FY	Fiscal Year
ITM	Information Transfer Meeting
MMcfe	Million Cubic Feet
MARINe	Multi-Agency Rocky Intertidal Network
MMPA	Marine Mammal Protection Act
MMS	Minerals Management Service
MOU	Memorandum of Understanding
NAB	North Aleutian Basin
NEPA	National Environmental Policy Act
NOAA	National Oceanographic and Atmospheric Administration
NSL	National Studies List
OAP	Ocean Action Plan
OCS	Outer Continental Shelf
OCSLA	OCS Lands Act
OEMM	Offshore Energy and Minerals Management
SC	Scientific Committee
TAR	Technology Assessment and Research
U. S.	United States
USGS	U. S. Geological Survey

Outer Continental Shelf Scientific Committee Charter

- 1. Official Designation:** Outer Continental Shelf (OCS) Scientific Committee.
- 2. Scope and Objectives:** The Committee will provide advice to the Secretary of the Interior (Secretary) through the Director of the Minerals Management Service (MMS) on the feasibility, appropriateness, and scientific value of the OCS Environmental Studies Program. The Committee will review the relevance of the research and data being produced to meet MMS scientific information needs for decisionmaking and may recommend changes in scope, direction, and emphasis.
- 3. Description of Duties:** The duties of the Committee are solely advisory and are stated in Scope and Objectives above.
- 4. Duration:** The Committee's charter may be renewed in 2-year increments by the Secretary as long as the Offshore Minerals Management Program of the MMS requires the expertise and advice of the Committee.
- 5. Agency or Official to Whom the Committee Reports:** The Committee will report to the Secretary through the Director of the MMS.
- 6. Bureau Responsible for Providing Necessary Support:** The Minerals Management Service.
- 7. Estimated Annual Operating Costs:** The estimated annual operating costs associated with supporting the Committee's functions, including all direct and indirect expenses, are estimated to be \$75,000 plus the support of one full-time employee.
- 8. Allowances for Committee Members (compensation, travel, per diem, etc:** Members of the Committee serve without compensation. However, while away from their homes or regular places of business, Committee, subcommittee, or workgroup members engaged in Committee, subcommittee, or workgroup business approved by the Designated Federal Officer (DFO) may be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed intermittently in Federal Government service under Section 5703 of Title 5 of the United States Code (U.S.C.).
- 9. Estimated Number and Frequency of Meetings:** The Committee will meet at the request of the Director of the MMS, but not less than once annually.
- 10. Termination Date:** The Committee is subject to biennial review and will terminate 2 years from the date the charter is filed, unless renewed prior to that date. The charter is renewed in compliance with section 14(a) (2) of the Federal Advisory Committee Act (FACA). The Committee is subject to the provisions of the FACA, 5 U.S.C. Appendix 2, and shall take no action unless in compliance with the charter filing requirements of section 9 of FACA.

11. Committee Membership: The Secretary will appoint non-Federal members to the Committee to serve a 3-year term. There will be no alternates. Non-Federal members may not serve more than two consecutive terms. However, after a 2-year break in service, any such non-Federal member will again be eligible for appointment. The Secretary may revoke the appointment of the member if the appointed member fails to attend two consecutive meetings. All members serve at the discretion of the Secretary.

Non-Federal Members: To ensure fair and balanced representation in terms of technical skills and geographic location with consideration for the efficiency and fiscal economy of the Committee, the Secretary may appoint members based on the following criteria:

- Scientific competence,
- Reputation within their field of expertise, and
- Ability to represent important elements of the MMS's research and science information efforts.

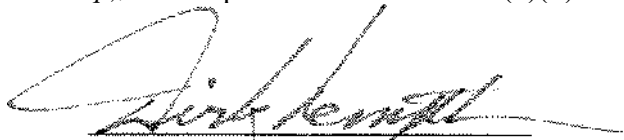
Federal Members: The Director of the MMS, or the Director's designee, is a nonvoting, ex officio member of the Committee.

12. Ethics Responsibility: The Committee's non-Federal members are designated special government employees and will comply with applicable ethics rules and regulations. The Department of the Interior (DOI) will provide materials to members who are appointed as special government employees, which will explain their ethical obligations. Consistent with the ethics requirements, members will endeavor to avoid any actions that would cause the public to question the integrity of the Committee's operations, activities, or advice. The provisions of this paragraph do not affect any other statutory or regulatory ethical obligations to which a member may be subject.

13. Designated Federal Officer: Associate Director for Offshore Minerals Management (ADOMM), or the ADOMM's designee.

14. Subgroups: The Committee may establish such subcommittees or workgroups as it deems necessary, subject to the approval of the DFO, for the purposes of compiling information or conducting research. The Committee Chair, with the approval of the DFO, will appoint subcommittee or workgroup members. However, the role of such subcommittees or workgroups is merely to provide information or recommendations for consideration b' the full Committee. Such subcommittees or workgroups shall not conduct business independent of the Committee and must report their recommendations to the full. Committee for consideration. Subcommittees or workgroups will meet as necessary to accomplish their assignments, subject to the approval of the DFO and the availability of resources.

15. Authority: This Committee is in the public interest in connection with the responsibilities of the Department of the Interior under the OCS Lands Act, as amended (43 U.S.C. 1331 *et. seq.*), and as provided in Section 9 (a)(2) of the FACA.



Secretary of the Interior

Date Signed

HB19208

Date Filed

MAR 10 2006

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