

Good afternoon. It is a real pleasure to be here today with all of you at this Special Institute on Royalty Valuation and Management.

This is the 7th such Special Institute. We have always found these forums to be invaluable opportunities to learn and jointly share information with State partners; the Indian community; the minerals industry; and additional stakeholders. I thank the Rocky Mountain Mineral Law Foundation and the Program Committee for their outstanding efforts in this regard.

This Special Institute is very timely. As many of you know the topic of royalty management and offshore mineral leasing has been a relatively public one recently. Without doubt, it will continue to be so. So, our efforts here are important to this public dialogue – as we all seek to continually improve the management of our Nation’s mineral resources.

But, my remarks here today are concerned less with the current debate than with a topic that gets too little attention in the press – the remarkable record of successes achieved by the MMS in its short history and the even more remarkable professionalism and dedication of the MMS employees.

The occasion for this discussion is the 25th anniversary of MMS, a milestone we are proudly recognizing in MMS offices around the country. Indeed, looking back on the MMS history, it has been fascinating.

The Reagan Administration established a blue-ribbon commission to review the thousands of government-owned oil and gas leases and

recommend actions that the government should take to ensure proper royalty collection.

The Linowes Commission, as it was called, recommended the formation of an agency within Interior that pulled other sections of the Department into one oil and gas agency. Personnel originally came from the USGS, BLM, BIA, Bureau of Mines, DOE, and the GAO. Thus, the MMS was born and grew into the solid agency it is today.

Since our formation in 1982, MMS has:

- overseen the production of 11 billion barrels of oil and 116 trillion cubic feet of natural gas;
- Collected and remitted to the U.S. Treasury, the Indian Tribes and the States their shares of nearly \$165 billion dollars.
- Conducted thousands upon thousands of audits and reviews of American oil companies; and
- Collected valuable scientific information on oceans and marine life.

There have been literally thousands of dedicated civil servants who helped build this agency. Today, there are still hundreds of employees who have been with MMS since the beginning.

Clearly, we can look back on the past 25 years with pride. We have come a very long way, as I will describe in three major areas:

1. Minerals Revenue Management – focusing on valuation issues and RIK. These are clearly topics close to this particular audience.
2. Offshore Minerals Management – focusing on technology, safety, and the power of imagination in the regulation of this vast area and resource
3. Science – focusing on the little known role of MMS in the science of oceans and associated ecosystems

Before discussing each of these, I want to say that the many successes we have had would not have been possible if not for the array of partnerships we have had with our stakeholders over the years. In 4 primary categories.

1. **Our coastal and onshore State partners** in the regulation of offshore minerals and management of onshore Federal royalties. We have disagreed and fought – yes. But, we have also taken the long view and solved many, many difficult problems.
2. **The Indian mineral owners.** We have resolved many issues and legal cases working shoulder-to-shoulder. Many more exist and will provide more opportunities to do the same.
3. **The minerals industry.** An agency can not regulate and manage these resources without extensive interaction with the industry developing the resource and creating the wealth. Our record in jointly addressing issues with the industry is quite good. **And, I will add my thanks to the minerals industry for the manner in which they contribute to the energy and economic security of our great country,**
4. **Other Federal agencies.** We rely extensively on the supportive efforts of NOAA, Fish and Wildlife Service, Coast Guard, BLM, BIA, FERC, and DOE.

Mineral Revenues.

When MMS was formed, responsibilities for managing the mineral revenues from Federal and Indian land had been dispersed within several agencies at many remote locations across the country, and supported by numerous manual accounting practices and tools.

Indeed, one of the primary reasons for the creation of MMS was to centralize, standardize, and modernize the accounting and verification of Federal royalties, a task that the newly-created Royalty Management Program, as it was known then, undertook zealously.

Large information management systems were procured. Business practices were developed and implemented. The first computer used by the new royalty program in 1983 – a Digital Equipment Corporation mainframe – executed 1 million instructions per second: this was impressive then but, now, this is less processing power than today's common laptop computer. By comparison, today's computers at MRM are comprised of a series of large scale servers operating sophisticated commercial databases and financial systems.

The Federal Oil and Gas Royalty Management Act was passed in January 1983, and brought about a new future for Federal royalty management. MMS began using the new enforcement authorities to enforce royalty provisions; MMS entered into numerous cooperative agreements with Indian Tribes and delegated agreements with States for audits and other reviews. Interest was now pursued on late payments. But, the two issues most illustrative of MRM achievement are valuation and RIK.

Valuation. In MMS's 25 year history, the valuation of oil and gas has been one of the thorniest problems encountered. It is worth noting that, though we are not yet where we need to be regarding this issue, significant progress has been made. We have maneuvered through warranty contracts, contract settlements, posted prices, deregulation of the natural gas industry, demise of the mega gas marketers, marketable condition, and affiliate sales, on and on. All within a domestic oil and gas market of significantly increasing absolute prices and short-term volatility.

When MMS was created, regulations governing valuation of oil and gas were monolithic, vague, broad, and open to second-guessing. Broad language applied to both oil and gas as well as production from Federal and Indian lands. Discretion to set value was entirely in the hands of the Secretary. Uncertainty existed for all parties to the royalty equation.

Since that time, MMS has moved the regulatory framework for valuation to be increasingly more sophisticated and responsive to market conditions. The 1988 valuation rules separated oil valuation regulations from gas. Transportation deductions were specifically addressed. Arm's length and non arm's length situations were separately addressed in the rules. Valuation rules and principles for Indian leases were later established as different from Federal production. Concepts of differing valuation methods for different geographic areas were included in valuation rulemaking beginning in 2000, and are now important considerations. And, with the Indian gas rule and Federal oil rule, published index prices became

important benchmarks of value. I urge you all to continue this course of increasing refinement and improvement of our valuation regulations.

Royalty in Kind. I do not think that anyone involved in the formation of MMS or the development of FOGRMA back in the early 1980s could have imagined the size, scale, success, or importance of the Federal RIK program as it exists today. The program has signaled a new era in the management of Federal mineral revenues – that of an active royalty asset manager deciding on which method will be used as business cases dictate.

The RIK program's origins were as an alternative to the chronic disputes over valuation existing in the 1980s and 1990s. Early promises of reduced conflicts and increased efficiencies from RIK have proven true. It is just easier to monitor volumes and sell on transparent indices than to audit or review thousands of sales and transportation and processing contracts. What has been surprising is that the revenues received under RIK have been greater than estimates of RIV proceeds, by some \$78 million over the past three fiscal years.

We have been careful to build substantial internal controls into the RIK program, and have placed comprehensive executive governance and a risk management policy on the program.

The RIK Program has greatly contributed to our achievement of 72% compliance coverage of royalty revenues; reduction of appeals and litigation to record lows; fill of the Strategic Petroleum Reserve to a 700 million barrel capacity; and nearly 50% efficiency improvements.

We are proud of this program and grateful for the entrepreneurial efforts of those MMS employees who have worked long hours to build something brand new in government, and make it such a success.

The future of Minerals Revenue Management is strong as we build on the past 25 years. The revenues collected constitute a critical revenue source for our country: \$12. billion in FY 2006 and who knows how much in the future. Seeing how much progress was made since MMS was formed brings me great confidence that our future challenges will be met straight on with even more success than I have just described.

Does it mean we're perfect? Heck no! It means that we have a very respectable track record showing that we can assess our performance and take corrective action when needed.

Offshore Minerals Management

When MMS was formed 25 years ago, technology for offshore oil and gas production was still in its infancy. Production in 600 feet of water was considered a deep water operation. Most platforms were located in waters of less than 100 feet depth. Production was generally centered within 20 miles of the coasts. Drilling and producing platforms were rigid frames and were firmly attached to the seafloor.

Boy, was that about to change.

Area-wide leasing, in which vast offshore areas were offered, began in the Reagan Administration and was extraordinarily successful in stimulating

exploration and production throughout the central and western Gulf of Mexico. Dramatic advances in 3-D seismic capabilities enabled expansion of geologic models and numerous new discoveries throughout the OCS. The increasing importance of natural gas to the Nation's economy began to raise its commodity value, encouraging further drilling and production.

Today companies have successfully drilled in over 10,000 feet of water and drilled to a total depth of over 34,000 feet. We now have oil being produced from areas covered by over a mile of water; the deepest production is now coming from a field that is in water that is over 7,500 feet deep. The rapidly advancing technology that keeps opening areas that are further offshore and deeper in the earth keep the Gulf of Mexico a significant contributor to our nation's energy needs.

As a new agency in charge of facilitating, regulating, and managing this onslaught of offshore activity, MMS needed to learn and do much in a short time to keep up with the amount of work and the changing nature of the technology that industry was developing and utilizing. Inspection programs, safety operations, environmental regulation – all needed to be expanded and refined. The MMS capabilities in evaluating the offshore oil and gas resources for lease sales were impressively strengthened in the face of the increasing sophistication of the exploration activity. And, our employee's skills were refined and their knowledge increased so that MMS has become a model of professionalism and expertise in a government agency.

We are thankful for employee excellence because the challenges are many today. From modest beginnings in the OCS, today's offshore enterprise is vast.

- 270 million acres of submerged lands will be offered for leasing in the coming 5-year plan
- Up to 2,000 producing leases typically contribute about 1.5 million barrels of oil and 8.3 billion cubic feet of natural gas per day
- This production equals 30% and 20% of domestic oil and gas production, respectively.
- Over 3,950 production platforms and 33,000 miles of pipeline are located on the OCS.

Of course, the deepwater Gulf of Mexico OCS is the most dramatic story that has unfolded in the MMS 25 year history. Who would have foreseen this in 1982:

- 7 of the Nation's top 20 oil fields are in deep water OCS
- 90 deep water hydrocarbon projects are on line
- More than 100 deep water discoveries have been made
- GOM deep water may contain 56 billion barrels of oil equivalent, enough to meet U.S. demand for 7.5 years

This progress and scale of activity has made the Gulf of Mexico the focal point of deep water exploration and production in the world. It is primarily here in the Gulf of Mexico where technologies have emerged such as the progression of platform types from fixed to tension-leg, to SPARs, to

compliant towers, to semi-submersible platforms. We at MMS are justifiably proud of our role in regulating and managing this activity with such success.

Science at MMS

I want to also discuss a little known, but increasingly important fact: MMS is a first-class science agency. When MMS was formed in 1982, this aspect of the mission was not nearly as visible or extensive as it has turned out to be today.

As offshore operations have progressed toward deeper water, as interest in exploration and development has turned towards Arctic areas, and as concerns over coastal ecosystems has grown, so have the MMS mission, capabilities, and expertise in the associated scientific inquiries necessary to support these needs.

We welcome this expanded mission, and are excited by our now significant contribution to the collective body of scientific knowledge in these areas. Let me highlight several of these areas:

- **Chemosynthetic communities.** In the GOM, MMS gathers scientific information that has greatly expanded knowledge of these fascinating communities, which use chemicals rather than light to produce food. Scientists funded through the MMS Environmental Studies Program have studied these communities for over 20 years. Based on this sound science, MMS has developed rules requiring the oil and gas industry to

protect these communities and also allow for continuing energy development.

- **Drilling and production technology in deep water.** In September 2006, a record-setting production test occurred on a well approximately 175 miles offshore Louisiana. This well, Chevron's Jack #2, was completed and tested in 7,000 feet of water, and more than 20,000 feet under the sea floor, including approximately 10,000 feet of salt. This broke the record as the deepest successful well test in the Gulf of Mexico. More than a half a dozen world records for test equipment pressure, depth, and duration in deepwater were set during the test. For example, the perforating guns were fired at world record depths and pressures. Additionally, the test tree and other drill stem test tools set world records, helping conduct the deepest extended drill stem test in deepwater Gulf of Mexico history.

As you know, MMS is not setting these records – that accomplishment is to the credit of the oil and gas industry. But, in order to facilitate, regulate, and manage this activity, MMS personnel need to be – and are – at the top of their profession in knowledge of technology, engineering, and the underlying sciences supporting such dramatic applications.

- **Methane Hydrates.** Under the enormous pressures and cold temperatures at the bottom of the ocean, methane gas dissolves and becomes locked in a cage of water molecules to form

crystals. In some places a solid layer of crystals—called methane hydrate—extends from the sea floor down hundreds of meters. MMS is a partner in a Joint Industry Project aimed at increasing knowledge and technology advances through collaborative research so that a better understanding is achieved of the resource and safety hazards involved in drilling and producing oil and gas through hydrate-containing sediments in deepwater GOM.

Closing

In closing, I am very proud of the accomplishments of our little-known agency over the past 25 years. I am even prouder of the professionalism and dedication of the thousands of MMS employees over this same period. We know that the media does not generally focus on such success stories – but each of us in MMS knows our accomplishments and their importance in the management of our country’s mineral resources.

And we also know that we will use these accomplishments as a springboard to do even more in the next 25 years, as we are confident that our best days are ahead of us. Thank you very much.