# Report to Congress: Minerals Management Service Royalty in Kind Operation

**Energy Policy Act of 2005 -- Section 342** 

September 2006



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# **Executive Summary**

The Minerals Management Service (MMS) prepared this report to Congress as required by Section 342 of the Energy Policy Act of 2005. The report is responsive to the requirement that the Secretary of the Interior submit to the Congress, not later than September 30, 2006, a report that addresses:

- (A) actions taken to develop business processes and automated systems to fully support the royalty-in-kind capability to be used in tandem with the royalty-in-value approach in managing Federal oil and gas revenue; and
- (B) future royalty-in-kind business operation plans and objectives.

# **Today's Royalty in Kind Operation**

After nearly ten years of development, MMS' royalty in kind (RIK) operation is now a steady-state business operation fully engaged in the competitive sale of oil and gas commodities in the domestic marketplace. In fiscal year 2005, some 82 million barrels of oil equivalent, valued at \$3.75 billion, was taken in kind. With the successful

"... revenue receipts to the Federal Treasury in fiscal years 2004 and 2005, were increased by \$18 million and \$32 million, respectively through the use of the RIK option." establishment of RIK as a permanent business operation, MMS is able to achieve the full benefits of its mineral royalty asset management strategy. With the strategy, the Government is now effectively exercising its option of collecting mineral royalties either in cash or in kind and thereby realizing substantial benefits in the form of increased revenues and administrative efficiencies. With

respect to revenues, receipts to the Federal Treasury in fiscal years 2004 and 2005 were increased by \$18 million and \$32 million, respectively, through the use of the RIK option. Regarding increased efficiencies, the RIK operation incurred administrative costs at a rate nearly 50 percent less than the cost to manage royalties received in value. This translates into a cost avoidance benefit of approximately \$3.74 million for fiscal year 2005. Lastly, the RIK business operation achieved a markedly shortened business cycle through closure of virtually all accounting periods in fiscal year 2005 within six months of the month of oil/gas delivery. This translates into increased certainty of financial obligations for the government and industry.

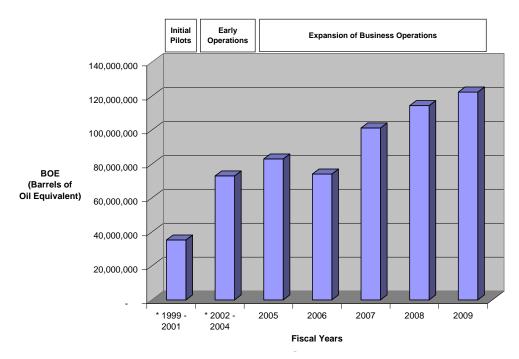
Development of the RIK component of the royalty asset management strategy is increasing MMS' overall performance in the management of the Nation's mineral royalty assets. In addition to increasing revenues and reducing administrative costs, the MMS is leveraging energy industry knowledge gained from its RIK operations to improve the performance of its royalty in value (RIV) operations. Further, the MMS' RIK capability effectively responds to the energy security needs of the Nation. This capability was utilized in the recent completion of an initiative, conducted in partnership with the Department of Energy, to use RIK crude oil to fill the Nation's Strategic Petroleum Reserve. Additionally, the RIK operation's knowledge base of the country's energy

infrastructure gained through contractual relationships with producers, pipelines, refiners, processors, marketers, and end users, proved advantageous in formulating Federal energy supply actions taken after Hurricanes Katrina and Rita in 2005.

"MMS has successfully developed and implemented business processes and information technology solutions to support the Government's RIK operation...." MMS has successfully developed and implemented business processes and information technology solutions to support the Government's RIK operation, including three automated systems with comprehensive internal controls and performance measurement capabilities. Importantly, today's RIK operation fully

incorporates recommendations made by the Government Accountability Office (GAO) in its reports issued in 2003/2004. In recognition of successful RIK implementation, the Congress included language in the Energy Policy Act of 2005 authorizing funding for the permanent Federal RIK program from RIK receipts, rather than appropriated funds.

Today's RIK operation manages a significant portfolio of the Nation's oil and gas royalty assets which are primarily produced from Federal leases in the Gulf of Mexico. This portfolio has been carefully expanded in concert with development of the RIK capability and the application of an asset management strategy. The following Exhibit portrays the expansion of RIK commodity sales from 1999 to present, including a projection of continued expansion of the RIK sales portfolio through fiscal year 2009. The future expansion projections represent planning scenarios for the Gulf of Mexico and onshore for optimal levels of RIK volumes and maximized benefits to the public.



\* Annual RIK volume averaged over 3 year period

# **Developing the RIK Concept**

Development of MMS' RIK capability from concept to operating program spanned nearly ten years and involved a broad spectrum of MMS' internal and external partners including all segments of the industry, State governments, other Federal agencies, the Congress and other stakeholders. The approach to building RIK capabilities has required careful and deliberate strategic business planning, rigorous management of business plan execution, and extensive partnering and communications with industry and State governments. It also focused on benchmarking for best practices and the engagement of expert consultants to support critical aspects of the development including the installation of supporting automated systems.

In 1997, MMS initiated a feasibility study to explore the concept of the Federal Government using its statutory authority to collect oil and gas royalty payments in kind and competitively selling the in kind production in the marketplace. Up to this time, the MMS had collected the majority of its oil and gas lease royalty payments in the form of cash, called the RIV approach. The one exception was certain oil royalties collected in kind and sold to small refiners. The feasibility study report, published in September 1997, concluded that the concept of collecting Federal oil and gas royalty payments in kind for competitive sale was feasible and, under the right circumstances, could be revenue neutral or positive, and administratively more efficient for the MMS and industry. Based on this finding, the MMS took the action to proceed with a series of pilot projects to test the workability of the RIK approach. Each of the following pilots, as further detailed in this report, was specifically designed to test various approaches for the use of RIK as well as the circumstances under which the approach would be used to the benefit of the government.

- Wyoming Crude Oil RIK Pilot.
- Texas 8(g) Natural Gas RIK Pilot.
- General Services Administration Natural Gas RIK Pilot.
- Greater Gulf of Mexico Natural Gas Pilot.
- Gulf of Mexico Crude Oil RIK Pilot.
- MMS/State of Louisiana Oil and Gas Pilot.

These pilots demonstrated the viability of the RIK approach and the significant revenue and operational benefits that can be realized from its use where appropriate.

"Importantly, the pilots confirmed that the RIK approach, if used in tandem with the RIV approach, would contribute to the realization of the mineral royalty asset management strategy developed through the MMS' Program Reengineering Initiative."

Furthermore, the pilots advanced MMS' knowledge of the oil and gas markets and its experience base in using commercial approaches to competitively sell production in those markets. Importantly, the pilots confirmed that the RIK approach, if used in tandem with the RIV approach, would contribute to the

realization of the mineral royalty asset management strategy developed through the MMS' Program Reengineering Initiative. Based on the successes of the pilots, MMS

proceeded with evolving the RIK approach to an operational activity beginning in January 2001. MMS assigned responsibility for the development of the RIK operation to its Minerals Revenue Management (MRM) program.

#### **Building the RIK Operations Capability**

In January 2001, MMS published its *Road Map to the Future: Implementing Royalty in Kind Business Processes and Support Systems*. The Road Map was prepared to advance the RIK approach from its pilot phase to an operational activity over a 3-year period ending December 2003. The Road Map set forth the strategic direction for the design and development of the future RIK asset management process and the basic infrastructure needed to support an ongoing RIK operation. It provided 28 actions to implement key RIK infrastructure components including:

- Commercial business processes designed and implemented within an internal control environment to manage a significant portfolio of RIK sales.
- Information technology systems that support RIK operations and are fully integrated with MMS' Financial and Compliance systems infrastructure and internal control environment. The RIK systems were completed on schedule and within authorized funding.
- A new organizational structure with enhanced human resource capability to effectively manage a sizeable RIK operation.

Implementation of the Road Map actions was accomplished in concert with the management of the continuing and expanding operational pilots and the Small Refiner Program. Pilot expansions were made using budgetary authority first granted in 2001 by the Congress in MMS' Budget Authorization. This authority allowed the MMS to pay transportation and processing costs incurred in developing RIK sales programs in market centers located away from producing leases.

With the action elements of the RIK Road Map nearing completion, MMS senior leadership aggressively pursued a strategic planning effort to further advance the future RIK business activity as a permanent part of the MMS' royalty asset management strategy. In May 2004, MMS published its *Five Year Royalty in Kind Business Plan* (Five Year Plan) to guide the future RIK operation for fiscal years 2005 through 2009.

#### **Developing the Permanent RIK Infrastructure**

The Five Year Plan, which is closely linked with the Department of the Interior Strategic Plan and the President's Management Agenda, describes how the MMS will be expanding its business capabilities to actively manage the Federal oil and gas royalty asset stream in a manner which optimizes returns for the taxpayer, while, at the same time, reducing administrative costs of this management activity.

The Five Year Plan is built on proven business principles, a revenue enhancement goal, additional measurable program objectives, routine measurement of program

performance, and emphasis on strong internal controls. It provides a clear purpose and context for the RIK operation as a component part of MMS' royalty asset management strategy to be used in tandem with the RIV option to efficiently manage and optimize the value of mineral royalty assets.

The Five Year Plan identifies the following seven focus areas to be addressed through 46 discrete action elements.

- Policy Oversight Function.
- Performance Measurement.
- Organization and Human Resources.
- Expanding Marketing Strategies.
- Information Systems Improvements and Process Controls.
- Business Plan Performance Monitoring.
- Communications and Outreach.

The action elements of the Five Year Plan are sequenced to first systematically build and continuously enhance RIK operational policy oversight, internal controls, organization/human resources, and performance measurement, and then expand the RIK business model and scale of operations.

The MMS RIK operation is nearing the end of its second full year of implementation of the Five Year Plan. All performance objectives and completion dates have been met. Notable accomplishments include:

- Completion of all Policy Oversight Function action elements including the development and implementation of the Risk Management Policy, Risk Management Procedures Manual, structured risk metrics, and a refined credit policy. Associated systems development action elements were also completed.
- Completion of all Performance Measurement action elements including the development and implementation of a revenue performance measurement and metrics program, an administrative cost performance measurement and metrics program, and a structured methodology and procedures for the comparison of administrative costs of the RIK and RIV approach. The GAO closely reviewed the revenue and administrative metrics and concluded in January 2006 that the implementation of these measurement systems satisfied recommendations made in their 2003 and 2004 audits of the RIK program.
- Completion of nearly all Organization and Human Resources action elements including the establishment of the permanent RIK organization which features an industry-standard structure with clear separation of duties and strong internal controls. Additionally, an RIK presence was established in the Houston area to provide local access to industry counterparts. Significant progress is being made in recruiting personnel in key positions with commercial experience in crude oil

and natural gas marketing, transportation, economic analysis and contract administration in the Gulf of Mexico and Rocky Mountains.

# **Future Plans and Objectives for the RIK Operation**

The remaining three years of the Five Year Plan will be devoted to achieving a commercial scale and quality of operations. Many challenges will be addressed including the expansion of marketing strategies; strengthening human resource skill sets; increasing the numbers and types of business relationships; and advancing analytical capabilities to support royalty asset management decision-making. MMS is confident that it will be successful in timely accomplishing the remaining action elements of the Five Year Plan and achieving its defined business goals and objectives. Areas of particular focus include:

- Expansion of marketing strategies and capabilities. This will include a series of enhancements to marketing strategies designed to capitalize on market trends, manage uncertainty, and optimize contracting opportunities. Several of the strategies require increased analytical capabilities and will evolve over the planning period as market opportunities develop. The enhancements include increasing the numbers and diversity of purchasers of RIK production, and diversifying terms of transportation and sales contracts.
- Significant expansion of the natural gas RIK portfolio. Since publication of the Five Year Plan, MMS has increased its natural gas RIK sales from 500,000 MMBtu/day to 700,000 MMBtu/day. The Five Year Plan calls for future natural gas RIK volumes of up to 1.3 billion cubic feet per day by fiscal year 2009.
- Opportunities for onshore natural gas RIK operations. MRM strategic planning for RIK operations also includes the continued examination of opportunities for natural gas RIK in onshore locations. Although the Gulf of Mexico is the core business location for RIK activities, certain onshore locations display similar attributes necessary for RIK success.

"Future RIK business operational plans and objectives will be designed and implemented to ensure continuation of a top-tier, steady-state RIK operation of the highest commercial quality, and ensure optimal value is received for mineral royalty assets." Future strategic business planning for RIK will occur within the context of a comprehensive mission-based planning initiative that is now addressing all aspects of the MRM program. The *MRM Strategic Business Plan*, issued in December 2005, charts the course and direction of the future MRM program. It calls for the development

of discrete mission area business plans that will set forth operational strategies and improvement actions for the period 2007 through 2012. RIK is a component of the asset management mission area planning effort and is scheduled to release the next generation business plan in August 2009, with a planning horizon covering the three fiscal year period 2009-2012. Future RIK business operational plans and objectives will

be designed and implemented to ensure continuation of a top-tier, steady-state RIK operation of the highest commercial quality, and ensure optimal value is received for mineral royalty assets. The future RIK operation will continue to serve as an important catalyst in furthering MRM's achievement of its program vision of excellence in mineral revenue services.

## Section A. Introduction

#### 1. Purpose of Report

This report is in response to the requirement of Section 342 of the Energy Policy Act of 2005, that the Secretary of the Interior submit to Congress, not later than September 30, 2006, a report that addresses:

- (A) actions taken to develop business processes and automated systems to fully support the royalty-in-kind capability to be used in tandem with the royalty-in-value approach in managing Federal oil and gas revenue; and
- (B) future royalty-in-kind business operation plans and objectives.

# 2. Background

The Minerals Management Service (MMS), a bureau of the Department of the Interior, is responsible for the management of the Nation's energy and mineral resources on the Outer Continental Shelf (OCS) and for ensuring that all revenues from Federal and Indian mineral leases are effectively, efficiently, and accurately collected, accounted for, and disbursed to recipients. These substantial revenues, which average more than \$8 billion annually, are disbursed to 38 States, 41 Indian Tribes, the Department's Office of Trust Funds Management on behalf of some 30,000 individual Indian royalty owners, and to U. S. Treasury accounts.

The Minerals Revenue Management (MRM) is the program component of the MMS responsible for managing revenues derived from leases issued for the development of mineral resources from onshore Federal and Indian lands and the OCS. Royalties paid for mineral production removed from leased lands represent the principal source of revenues managed by MRM. For oil and gas leases, these production royalties are paid either in value or in kind. Royalties in value (RIV) are paid in cash to the MRM. Royalties in kind (RIK) are paid, at the discretion of the Government, by delivery of oil and gas to MRM for competitive sale in the marketplace. The OCS Lands Act of 1953, as amended, and the Mineral Leasing Act of 1920, as amended, authorize the collection of production royalties either in value or in kind for Federal lands leased for development onshore and on the OCS. Furthermore, the terms of virtually all Federal oil and gas leases provide for royalties to be paid in value or in kind at the discretion of the lessor. The Energy Policy Act of 2005 provides additional statutory requirements to support the operation and funding of a program for managing Federal oil and gas royalties in kind.

This report has been structured to meet the Congress' requirements for a comprehensive description of the actions taken by the MMS to develop business processes and automated systems to fully support its RIK capability, which is used in tandem with its RIV approach, and MMS' future RIK business operation plans and objectives. The MMS has devoted nearly ten years to the development of its capability

to support a robust RIK business operation that, when fully integrated with the RIV approach, forms the consummate asset management strategy for Federal oil and gas revenues. This report provides an introductory overview of the initial pilot phase beginning with a discussion of the 1997 RIK Feasibility Study and then detailing a series of key RIK pilot projects designed to assess the benefits of the RIK approach and to further develop an understanding of the business requirements for managing a Federal RIK operation. The results of these pilots shaped MMS' understanding of the RIK approach and provided the basis for proceeding with the development of the *RIK Road Map to the Future* published in January 2001.

As further discussed in this report, the Road Map set forth the strategic direction and presented actions to develop the capability needed to transition the RIK approach from pilot projects to an operational activity over a 3 year period. With the completion of the Road Map implementation actions described in this report, the MMS prepared for a transition of the RIK pilot program to a permanent operational activity. Senior MMS management engaged the Lukens Energy Group of Houston, Texas to perform an independent assessment of the RIK capability that had been installed, and to provide recommendations for improvement. With the benefit of this assessment, the MMS senior management proceeded with a strategic planning effort to develop the *Five Year Royalty in Kind Business Plan* (Five Year Plan) which was published in May 2004. The Five Year Plan provides the management framework and a series of actions that will evolve the Federal RIK program for fiscal years 2005 through 2009.

This Report to Congress provides a detailed discussion of the Five Year Plan including:

- Key action elements and the current status of implementation.
- Progress on expansion of commercial operations.
- RIK program performance metrics and the substantial benefits realized by the Government.
- Future RIK business operations plans and objectives.

The report concludes with an overview of a recently issued MRM program-wide *Strategic Business Plan* that addresses RIK operations through fiscal year 2012.

# Section B. Development of the RIK Operations Capability

The Department of the Interior has used the RIK approach in its Small Refiner Program since the 1970s. This Program was designed to support the domestic small refiners by providing a reliable source of supply of crude oil at equitable prices. In the mid-1990s, the MMS began exploring the potential for a more broadly applied RIK operation to increase efficiencies, decrease conflict and enhance revenues generated from oil and gas production royalties.

#### 1. Initial Pilot Phase

In 1997, the MMS initiated a feasibility study of the U. S. Government taking its oil and gas royalties in kind rather than in value and competitively selling the commodities in the marketplace. The study was conducted to evaluate the merits of an RIK approach and was included in the MRM Program Reengineering Initiative. The study was also responsive to a Congressional directive, included in MMS' Fiscal Year 1997 Budget Appropriations Committee Reports, to consider additional pilot projects for both onshore and offshore oil and gas leases. The final report, titled 1997 Royalty-in-Kind Feasibility Study was issued in August 1997.

The study aimed to determine if the implementation of a Federal RIK program would be in the best interest of the United States, and, if so, under what circumstances. The scope of the study included an examination of other governmental RIK programs, public workshops and a survey of natural gas marketing companies. The RIK Feasibility Study Team concluded that, under the right circumstances, RIK could be workable, revenue neutral or positive, and administratively more efficient for the MMS and industry. As recommended by the Study Team, MMS established a series of pilot projects to test these conclusions.

# **Wyoming Crude Oil RIK Pilot**

In 1998, MMS and the State of Wyoming collaborated in the design and implementation of the first major RIK pilot project. The pilot involved the sale of crude oil of different qualities produced from Federal leases in the Powder River and Big Horn Basins of Wyoming. The first competitive sale was for a six-month period beginning October 1998 and involved Federal lease RIK production. Subsequent sales involved increasing volumes of production, reaching over 6,000 barrels per day, and also included the addition of RIK production from State of Wyoming leased lands. An interim evaluation of the pilot results conducted by the State of Wyoming and MMS for the period October 1998 through March 2000 concluded that the pilot had successfully demonstrated that taking crude oil production in kind at the lease and selling it through a competitive bid process is a viable alternative to the historical method of taking royalties in value in some circumstances. Further, the pilot observed that the RIK approach reduced the period of value uncertainty for MMS and lessees from years to months; increased royalty receipts over what would have otherwise been received if collected in value; and

provided for streamlined processes that would yield administrative savings for MMS and industry. This pilot has evolved into a steady-state operation jointly managed by the MMS and State of Wyoming.

## Texas 8(g) Natural Gas RIK Pilot

In 1998, MMS in partnership with the Texas General Land Office (GLO) initiated the second RIK pilot project involving natural gas production from Federal oil and gas leases in the Texas "8(g)" zone of the Gulf of Mexico. [The "8(g)" zone refers to the area within three miles seaward of state waters, where approximately 27 percent of oil and gas lease revenues are shared with the coastal state] The pilot goals included exploration of methods to market RIK natural gas and learning from GLO's long-standing RIK experience. Competitive sales began in June 1999 and reached volume deliveries of approximately 55,000 MMBtu per day. An interim evaluation of the pilot results conducted by the State of Texas and MMS for the period June 1999 through December 2000 concluded that the RIK approach was viable in the administration of natural gas royalties and that the selective use of RIK provided modest increases in revenue to the MMS and additional administrative benefits for the government and industry. This pilot was later incorporated into a broader Gulf of Mexico RIK gas pilot.

#### **General Services Administration Natural Gas RIK Pilot**

Under this pilot, the MMS and General Services Administration (GSA) entered into an agreement in 1999 to take RIK natural gas from several Federal leases off the Texas coast. The gas was provided to the GSA for use in its facilities. The pilot involved a series of gas-exchange transactions between the MMS, an exchange contractor, and the GSA. Natural gas deliveries under the pilot spanned the period December 1999 through March 2001. An evaluation conducted by MMS concluded that the GSA Pilot was successful in several ways. It provided MMS with experience in initiating and managing RIK gas contracts and insights into which types of sales and transportation agreements were beneficial to the government. Importantly, the pilot demonstrated the need for MMS to seek authority to enter into and pay for transportation contracts to successfully manage RIK volumes. This authority was subsequently sought and first granted by the Congress in MMS' Fiscal Year 2001 Budget Authorization.

#### **Greater Gulf of Mexico Natural Gas Pilot**

In April 2000, MMS initiated its first sales of RIK production under the Greater Gulf of Mexico Natural Gas Pilot. Ultimately this pilot involved sales of approximately 500,000 MMBtu per day of Federal RIK natural gas transported on nine pipeline systems in the Gulf of Mexico. During this pilot, the MMS implemented and refined many aspects of its strategy and processes for selling RIK natural gas from offshore leases. Specific areas of focus included the management of base load and swing gas volumes; monitoring of gas imbalances and gas balances available for sale; and economic considerations for retention of gas processing rights The pilot also provided an important baseline of market understanding needed for the development of MMS's defined business model

for its future RIK operations. Many of the leases involved in this pilot were incorporated into MMS' current steady-state RIK gas sales portfolio.

#### **Gulf of Mexico Crude Oil RIK Pilot**

In August 2000, MMS commenced this pilot which involved two sequential competitive sales of RIK crude oil from Federal leases in the Gulf of Mexico. This pilot, which reached sales of approximately 60,000 barrels per day, provided MMS RIK staff with important insights into the broader Gulf Coast crude oil markets, the pipeline infrastructure for serving those markets, and the processes for competitively selling crude oil from offshore leases. The pilot was terminated prematurely in order to respond to a Presidential directive issued in November 2001 to use Federal RIK oil to fill the remaining capacity of the Strategic Petroleum Reserve (SPR).

#### **Small Refiner Program**

The MMS and its predecessor agency, the U. S. Geological Survey, have, for many years, operated a Small Refiner Program whereby RIK crude oil is taken from Federal leases and sold to qualified small refiners. The objective of this program is to help assure adequate supplies of crude oil are available at equitable prices to eligible refiners. While not considered a pilot project, the Small Refiner Program has benefited from a number of improvements that were generated from the pilot projects. These improvements included increasing competitiveness in the program to enhance fair market value realizations, and instituting new processes for nomination and delivery of crude oil volumes to small refiners. The improvements were successfully implemented and the Small Refiner Program continues to be an important part of MMS' RIK operations. In recent years, RIK sales to small refiners have averaged between 40,000 and 60,000 barrels per day with deliveries being made from Federal OCS leases in the Gulf of Mexico and Pacific.

In conclusion, the initial Pilot Phase advanced MMS' knowledge of the oil and gas markets and experience in using commercial approaches to competitively sell production in those markets. Furthermore, the pilots provided the MMS with an in-depth understanding of the implications of utilizing the RIK approach and the significant revenue and operational benefits from its use where appropriate. Significant advances were made in the development of MMS':

- Business model and risk exposure criteria.
- Analytical techniques to identify candidate properties where it was advantageous to the Government to convert from RIV to RIK.
- Operational processes including billing and collection, production scheduling, volumetric imbalance reconciliations, and gravity bank adjustments.
- Recordkeeping requirements.
- Competitive sales approaches.
- Contracting strategies and legal instruments.

- Contract force majeure and closeout procedures.
- Credit modeling and monitoring.

Most importantly, the pilots confirmed the viability of the RIK approach and its use in tandem with the RIV approach to realize the mineral revenue asset management strategy developed through the MRM's Program Reengineering Initiative. Through the implementation of its asset management strategy, MRM expected to achieve its vision of being a consummate asset manager in the pursuit of fair market value and cost effective mineral revenue collection and disbursement services. Based on the successes to date, senior MMS management made the decision in January 2001 to proceed with evolving the RIK approach from its pilot phase to an operational activity.

# 2. RIK Road Map – Development of the RIK Capability to Support the Royalty Asset Management Strategy

In January 2001, MMS published the Road Map to the Future: Implementing Royalty in Kind Business Processes and Support Systems. The Road Map was prepared to advance the RIK approach from its pilot phase to an operational activity over a 3-year period ending December 2003. The Road Map set forth the strategic direction for the design and development of the future RIK asset management process and the infrastructure needed to effectively support an ongoing RIK operation. It provided for a total of 28 actions to be taken by MMS to build core business processes within an internal control environment, acquire technology solutions, develop organizational structures and human resource capabilities, and conduct ongoing outreach and communications with customers, stakeholders and the Congress. For implementation of the Road Map, the MMS established an RIK Office within its MRM organization and formed an Operational Model environment to manage pilot operations, the Small Refiner Program and other RIK initiatives together with the planning and execution of the Road Map action elements. With this organizational approach, the MMS provided focused management of ongoing RIK operations and assured full integration of the pilot program experience base with the development of the future business model and core operational processes, information technology support systems, and organization structure and human resource requirements.

#### **Business model and core operational processes**

MMS' commercial business model and associated core operational processes were developed through the implementation of the RIK Road Map actions and conduct of expanded pilot operations. The business model, which was aligned with statutory authorities and the achievement of business objectives, positioned MMS as a conservative, price-taking seller of energy commodities into the wholesale, upstream market. MMS' business model featured the use of:

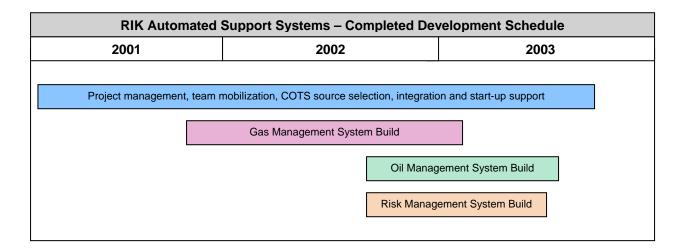
- Competitive sales, based on upstream physical spot market.
- Standard industry contracts for less than 1 year in duration.
- Competitively based short-haul transport/processing contracts.

- No fixed price, financial derivatives, or storage positions.
- Conservative credit risk assessments.

Core operational processes, including strong internal controls, were designed, developed and implemented to support this commercial business model. Wherever possible, industry best practices were incorporated into the process design to assure maximum benefit in reduction of transaction cycle times and administrative costs as well as a cost-effective implementation of industry-based commercial off-the-shelf systems to support the RIK enterprise. The design and development effort was guided by experiences gained from pilot operations, extensive collaboration with industry counterparts to identify commercial best practices, and technical input and support from energy sector contractors.

## **Information Technology Solutions**

With the Road Map implementation, automated systems were developed and installed to support the commercial business model, core operational processes and internal control environment. MMS engaged a major systems developer, Accenture, to install the needed information technology systems that would support the RIK business activity and also fully integrate with MRM's new Financial and Compliance systems, technical infrastructure and operations support used to manage RIV receipts. As displayed in the following Exhibit, the implementation was conducted in modular blocks which included the development of a gas management system, an oil management system and a risk management system. Rigorous project management oversight and controls were in place for the life of the development effort to assure the delivery of needed functionality within established project timeframes and budget authorizations.



Each of the delivered systems is based on commercial off-the-shelf - or "COTS" - software solutions used by the energy industry in managing oil and gas commodity sales programs. The systems development and implementation was completed on schedule in September 2003, and within budget at a total cost of \$12.1 million.

# **Organization and Human Resource Development**

A new RIK organizational structure was designed and implemented to manage the RIK operation. The organization was permanently placed in the MRM program with leadership being provided by a Program Director at the Senior Executive Service level. The organization is based on an industry-standard front office, mid office and back office structure and supports a strong internal control environment. The front office is responsible for managing crude oil and natural gas marketing and sales activities; the mid office provides credit, risk control and contract management services; and the back office provides supporting settlement and accounting services. The three-office structure ensures appropriate checks and balances and maintenance of data integrity, security and accountability. Additionally, an independent Chief Risk Officer (CRO) position at the SES level was established to provide independent review of operations, the internal control environment, and risks encountered in the RIK operation. The CRO reports to the MRM Associate Director and a MMS senior management Executive Committee. With the Road Map execution, substantial progress was accomplished in implementing the new organizational structure. Completion of the organizational implementation was achieved in December 2004 with follow-on actions included in the Five Year Plan.

Significant progress was made in increasing the MRM staffing levels committed to the RIK operation as well advancing the skill sets needed for successful program performance. While considerable knowledge was gained in the development and operation of the RIK pilot program, additional focus was placed on internal and industry-based workforce training initiatives to increase the MRM's program capability to support an expanding RIK pilot operation.

#### 3. Pilot Operations and Transition

The execution of the MRM RIK Road Map was highly dependant on the continuing and expanding Operational Model that encompassed all RIK pilot operations, the Small Refiner Program and an initiative to fill the SPR. The ongoing pilots and performance assessments provided an increased base of knowledge and experience to advance the business process design, systems implementation, and organization and resource development. The pilots also provided the operating experience to further refine MMS' business model, sales strategies, logistical capabilities, and understanding of the conditions under which use of the RIK option is advantageous to the Government as compared to the RIV option. This increased understanding translated into improved targeting of properties with RIK potential and analytical capabilities to determine suitability for conversion to the RIK option.

# **Expanded Pilot Operations**

The Operational Model focused its oil and gas pilot operations on Federal leases located in the Gulf of Mexico and the established crude oil pilot with the State of Wyoming. Continuing experience with and assessment of the pilots identified a variety of opportunities for potential use of the RIK option. Among these opportunities was the potential for the MRM to increase its competitive position and potentially its revenue receipts by transporting oil and gas production away from leased lands for sale at market centers. Additional advantages were also identified with the processing of natural gas prior to sale. In order to proceed with pilots to explore these opportunities, the MMS sought and received budgetary authority from the Congress to use RIK revenue receipts to pay for transportation and processing costs. [The Government incurs these costs in both RIK and RIV situations] Through use of the budgetary authority, MMS was able to significantly expand its natural gas pilot in the Gulf of Mexico and realize significant revenue uplifts and increased administrative efficiencies.

#### **SPR Fill Initiative**

In November 2001, the President of the United States made the decision to fill the remaining capacity of the SPR using royalty oil from Federal leases in the Gulf of Mexico. MMS had previously used this approach to supply 28 million barrels of royalty oil to the SPR commencing in 1999. In response to the Presidential directive of 2001, MMS, in partnership with the Department of Energy (DOE) and close consultation with the industry, developed and executed a strategy to accomplish the delivery of over 120 million barrels of RIK crude oil to onshore crude oil market centers for use by the DOE in filling SPR sites in southern Louisiana and Texas. The size, complexity of logistics, and duration of the initiative presented a variety of significant challenges for both the government and industry. The RIK deliveries for the fill initiative were successfully concluded in August 2005.

#### MMS/State of Louisiana Oil and Gas Pilot

In March 2003, the State of Louisiana and MMS entered into a cooperative agreement to undertake an RIK pilot involving Federal oil and gas leases in the Louisiana 8(g) zone of the Gulf of Mexico. The pilot involved the sale of both oil and gas which was bundled with larger RIK production volumes being transported on common service pipelines. The MMS and Louisiana realized significant revenue uplifts on both oil and gas. RIK volumes continue to the present to be managed under this cooperative agreement.

## Strategic Planning for the Future

In October 2002, the MMS had well advanced the completion of the action elements of the RIK Road Map and, in so doing, had established the internal capability to manage a sizeable RIK portfolio. Oil and gas pilot operations consistently demonstrated the viability of the RIK approach and yielded substantial benefits including revenue uplift, administrative savings, reduced accounting and compliance cycles and accelerated

cash flows. Additional benefits were being realized through the use of RIK crude oil to fill the SPR and the continuing support of the small refiner industry which served as an important fuel supply source for the Department of Defense. The MMS Executive Committee, composed of the bureau's Senior Executive Service leadership, identified the need for a strategic planning effort to further advance RIK business operations as a permanent part the MMS' future royalty asset management strategy.

# Independent Assessment of RIK Capability

Prior to advancing a strategic planning initiative, the MMS senior leadership first sought commercial input and an assessment of MMS' RIK capability from a respected oil and gas consulting firm. In January 2003, MMS engaged the Lukens Energy Group to evaluate the capabilities and performance of the RIK operation, make recommendations for improvement, and provide advice on a five year strategic business plan for the RIK operation.

The Lukens Energy Group concluded in a series of reports, including the final assessment report issued in September 2003, that the MMS RIK business model had performed well in a volatile marketplace, and that the program had evolved from pilot projects to a well-developed operational program. Improvements in several areas were recommended prior to a significant expansion of the program. Specifically, MMS' level of commercial expertise was found to be improved, but thin to support an expansion. Capabilities in performance measurement, quantitative economic analysis, and more complex marketing and sales were found to need enhancement. Lastly, the consultant recommended specific program principles and measurable objectives for use by the MMS in guiding the RIK operation in future years.

With the input from the Lukens Energy Group, the MMS Executive Committee proceeded with a focused strategic business planning effort which fully involved MMS senior leaders, managers and technical staff; industry consultants; and program stakeholders. In May 2004, the MMS published for implementation the *Five Year Royalty in Kind Business Plan* (Five Year Plan) to guide RIK business development and operations through 2009.

# Section C. Five Year RIK Business Plan – Strategic Plan for the RIK Operation for Fiscal Years 2005 through 2009

The Five Year Plan provides a management framework that will evolve the RIK operation from FY 2005 through FY 2009. The Five Year Plan is guided first and foremost by statutory authorities, applied to the energy commodity market through a conservative business model. Cornerstones of the Five Year Plan are proven business principles, a revenue enhancement goal, measurable program objectives, routine measurement of program performance, and emphasis on strong internal controls.

Implementation of the Five Year Plan will result in an effective, steady-state RIK operation of the highest quality and integrity. Business plan segments, implementation steps and timelines are shown in the following Exhibit.

Business Plan Segment	Implementation Steps  Quarter	ar 1 3 4	ear 2 2 3 4	4 1	Year 3	Yea		ear 5 3 4
Policy Oversight Function	Develop & Implement RIK Risk Policy & Procedures Develop Internal Management Control Review ("IMCR") Guidelines							
Performance Measurement	Develop & Implement Rev. Perf. Measurement Metrics & Procedures Develop & Implement Admin. Perf. Measurement Metrics & Procedures Complete Administrative Cost Comparison for RIV/RIK							
Organization & Human Resources	Complete RIK Organizational Structure Acquire or Contract for Required Personnel and Skill Sets Ongoing Training Program for Mktg. & Scheduling Functions							
Expanding Marketing Strategies	Develop, Implement & Utilize Expanded Marketing Strategies Complete Initial WY Assessments Assess & Develop Specific Opportunities with Producing States							
Information Systems Improvements & Process Controls	Finalize/Develop Implementation of Perf. Measurement Modules Implement Pipeline Pool Scheduling Capabilities Assess/Improve Systems Capabilities to Reflect Expanded Marketing							
Business Plan Performance Monitoring	Measure Progress on 5-year Objectives Periodically Reevaluate Assumptions and Drivers of the Business Plan Develop New Five-Year Business Plan							
Communication & Outreach	Brief Congressional Members and Staff on RIK 5-year Plan Provide Presentations/ Feedback Sessions with States, Industry, and other Stakeholders Facilitate Review Session within MRM Organization Regarding Interrelationships and Synergies							

The Five Year Plan includes a set of guiding business principles that are driven by authorizing statutes and lease terms, pilot project experiences and commercial business practices. The RIK business principles arrayed in the Five Year Plan are:

- 1. Meet/exceed revenue benchmarks established in accordance with statute.
- 2. Maximize net revenue for RIK volumes consistent with the business model.

- 3. Continue to focus on the Gulf of Mexico as a strategic core area, and work with producing states to identify/develop onshore opportunities.
- 4. Efficiently manage administrative costs of the RIK program.
- 5. Maintain flexibility in responding to the Nation's strategic energy initiatives.
- 6. Maintain the highest ethical and professional standards.

To date, the following Five Year Plan segments have been completed or substantially completed.

#### **Policy Oversight and Internal Controls**

The development of a policy oversight function outside of the RIK direct line management is a critical component of the internal control framework for the RIK operation. This function provides direction on key policy decisions and has responsibility for developing and maintaining RIK risk guidelines. The policy oversight function is managed by a Chief Risk Officer that reports to the MRM Associate Director and the MMS Executive Committee.

Key internal controls envisioned in the Five Year Plan include a risk management policy, associated risk procedures, and risk metrics. The Risk Management Policy document was approved by the MMS Executive Committee in August 2005. The document arrays the principles and policies that drive risk management decisions and guide the day-to-day RIK operations. The principles and policies provide a framework aimed at balancing risk management controls and operational flexibility; mitigating exposure to and results of undesirable outcomes; assigning responsibilities and accountabilities for risk management; and monitoring and reporting on risk exposures.

In April 2006, the MRM Associate Director approved and issued the Royalty in Kind Risk Management Procedures Manual outlining the specific actions necessary to implement the Risk Management Policy. This manual arrays a series of delegations of authorities and procedures underlying RIK operations in transacting sales, accounting, invoicing, collecting debt, and monitoring/reporting. Importantly, the manual provides clear and detailed guidance on sales and contracting transactions allowed, those requiring further approvals, and those that are prohibited. Responsibilities for monitoring and reporting to executive management on RIK activities are outlined and include an attestation of compliance with risk management policies.

Lastly, MRM has collaborated with the Lukens Energy Group to develop a set of RIK risk metrics intended to quantify future risks expected to be encountered in energy commodity sales. The purpose of these metrics is to inform management of anticipated exposures and to guide the commercial decision making of the RIK operational team.

#### **Credit Policy**

A critical adjunct to the RIK policy oversight and internal control framework is the establishment of a sound RIK credit policy. Working from the first generation RIK credit

policy developed in pilot years, a refined credit policy was completed in June 2005, in collaboration with industry experts and consultants. The policy responds to credit risks inherent in energy commodity sales from exposure to outstanding accounts receivable balances on sales contracts. The policy provides guidance and direction for counterparty credit evaluation, requirements for secured vs. unsecured credit lines, provision of credit assurance, contract termination, and emergency procedures.

# **Organization and Human Resources**

Implementation of the Five Year Plan's organizational and human resource action elements will provide the structure and capabilities necessary to achieve a top-tier energy commodity sales operation capable of fully deploying a royalty asset management strategy.

With regard to the RIK organizational structure, design objectives called for increasing efficiencies and internal controls through implementation of the industry-standard front, mid, and back office environment, augmented by an independent risk office headed by a Chief Risk Officer. This organizational structure, fully implemented in December 2004, provides for clear separation of duties designed to focus and optimize functional expertise while instituting strong internal controls.

The human resource objective is to institute an internal commercial capability to expand the RIK business model to that of an active energy commodity producer/seller in upstream locations. The MRM is executing on the Five Year Plan's directive to recruit personnel for key positions with significant commercial experience in crude oil and natural gas marketing, transportation, economic analysis, and contract administration in the Gulf of Mexico and Rocky Mountains.

#### Establishment of a Houston RIK Office

The MRM RIK Office is headquartered in Lakewood, Colorado with almost all management and staff located in this office. Developing and managing the commodity bid-out packages, communicating with prospective customers, and negotiating transportation agreements has required frequent trips to Houston, where the majority of producers, purchasers and other counterparties are located.

To increase efficiencies and facilitate relationships with counterparties in the industry, MRM has created a presence for the RIK front office team in Houston. The Houston presence is predicated on the need for crude oil and natural gas marketers to have access to their counterparts in the industry and maintain the level of experience and expertise required for an expanded business model. Further, a front office presence in Houston, the epicenter of Gulf of Mexico production and marketing activity, is considered essential to attract the required level of expertise and experience to more fully staff the front office.

#### Conversion of SPR Fill to Commercial Sales

In November 2001, following the events of September 11, 2001, President Bush directed that the SPR be filled using royalty crude oil. Working in collaboration with the DOE, MMS developed and executed, beginning April 2002, a coordinated series of crude oil exchanges from hundreds of producing platforms in the Gulf of Mexico for delivery to DOE at onshore market centers for the storage caverns. The four SPR sites were filled to the 700 million barrel capacity at the end of August 2005, concluding a highly successful 3½ year effort to increase the Nation's energy security.

Based on indications of good commercial potential, MMS decided to convert the hundreds of offshore Gulf of Mexico properties supporting the SPR fill effort to a commercial RIK crude oil sales program. This effort occurred in October 2005, and initial indications are that fair market value is being achieved.

#### **Performance Measurement**

MRM recognizes that a sustainable RIK operation must be able to support asset management decisions and demonstrate quantifiable results for internal and external stakeholders. Statutory requirements for the RIK operation require such measurement for revenue receipts. Responding to Government Accountability Office (GAO) recommendations to develop RIK performance metrics, the Five Year Plan includes action elements to fully implement both revenue and cost measurement systems.

In fiscal year 2004, MMS initiated development of a permanent RIK revenue performance measurement system. In conjunction with the Chief Risk Officer, the RIK management team completed and fully implemented this performance measurement system during the first year of the Five Year Plan. As a result, under the guidance and direction of the Chief Risk Officer, MRM now comprehensively and routinely (every 6 months) measures the revenue performance of all RIK sales packages against a series of fair market value benchmarks consistent with statutory requirements.

The following administrative metrics measuring operational costs/efficiencies were also completed in the first year of the Five Year Plan.

- Comparative costs of RIK and RIV operations: Comparative assessment of costs that vary as more/less royalty is taken in kind.
- Incremental earned interest: The interest earned due to RIK revenues being received generally 5 to 10 days earlier than RIV payments.
- Transaction cycle time: The elapsed time in days after the production month in which RIK closes out all accounting and reconciliation issues.
- Debt: The amount of uncollectible debt incurred by the RIK operation.

These performance measurements are reported to Congress annually; to MMS and MRM executive management semi-annually; and to stakeholders at least annually.

# Section D. Status of Implementing the RIK Operation and Benefits Realized

# 1. Status of the RIK Operation

This report to Congress coincides with the completion of the first two years of implementing the Five Year Plan. At this writing, action items designed to establish a permanent program infrastructure for commercial scale operations have been completed or are substantially in progress. Completion of these tasks culminates the implementation of the royalty asset management strategy that was started in the mid 1990s with RIK feasibility studies and early RIK pilot programs. MMS has now deployed this strategy on a commercial, operational scale.

MMS has received independent recognition of this accomplishment from both the GAO and the Congress itself. The GAO closely examined RIK revenue and administrative metrics and concluded in January 2006 that RIK efforts in developing and executing this measurement system satisfy and close recommendations from their 2003 and 2004 audits of the RIK program. Further, the Energy Policy Act of 2005, in recognition of the successful RIK development, included language that provides authority to permanently establish an RIK operation with administrative and business costs to be paid from royalty revenues generated by RIK sales. The Act also included the business principles MMS used to govern and manage RIK including limiting the use of RIK to only those situations where the benefit was a priori determined to equal or exceed the benefits from RIV; requiring the lessee to place the commodity in marketable condition; and allowing MMS to reimburse the lessee for certain transportation and processing costs.

#### 2. Benefits Realized from the RIK Operation

With the successful establishment of RIK as a permanent business operation, MMS is able to achieve the full benefits of its mineral royalty asset management strategy. With the strategy, the Government is effectively exercising its option of collecting mineral royalties either in cash or in kind and thereby realizing substantial revenue and administrative benefits. With respect to revenues, receipts to the Federal Treasury in fiscal years 2004 and 2005 were increased by \$18 million and \$32 million, respectively, through RIK use. Regarding increased efficiencies, the RIK operation incurred administrative costs at a rate nearly 50 percent less than the cost to manage royalties received in value. This translates into a cost avoidance benefit of approximately \$3.74 million for fiscal year 2005. Lastly, the RIK business operation achieved closure of virtually all accounting periods in fiscal year 2005 within six months of the month of oil/gas delivery. This shortened business cycle time inherent with the RIK approach translates into increased certainty of financial obligations for the government and industry.

Development of the RIK component of the royalty asset management strategy is increasing MMS' overall performance in the management of the Nation's mineral royalty assets. In addition to increasing revenues and reducing administrative costs, the MMS is now leveraging energy industry knowledge gained from its RIK operations to improve the performance of its royalty in value (RIV) operations, especially in the area of energy commodity markets and commodity valuation. Further, the MMS' RIK capability stands available to respond to energy security needs of the Nation. This capability was utilized in the recent initiative, conducted in partnership with the Department of Energy, to use RIK crude oil to fill the Nation's Strategic Petroleum Reserve. Additionally, the RIK operations' knowledge base of the country's energy infrastructure gained through contractual relationships with producers, pipelines, refiners, gas processors, midstream marketers, and end users, proved highly advantageous in formulating government energy supply actions taken in the aftermath of Hurricanes Katrina and Rita in 2005.

Today's RIK operation manages a significant portfolio of the Nation's oil and gas royalty assets which are produced primarily from Federal leases in the Gulf of Mexico. This portfolio is being carefully expanded in concert with the MMS' development of its RIK capability and the application of the royalty asset management strategy. Further expansion of the RIK business model and scope of operations is clearly justified and will leverage, optimize, and increase the demonstrated benefits described in this report.

# Section E. Future Plans and Objectives for the RIK Operation

Future plans and objectives for the RIK operation will be accomplished through continued implementation of the Five Year Plan and also within the context of overall strategic planning, integrated throughout MRM.

#### 1. Continued Implementation of the Five Year Plan

The remaining three years of the Five Year Plan will be devoted to implementing a manageable and sustainable commercial scale Federal RIK operation of the highest quality and integrity. The overall goal of this effort is to position the future RIK operation to efficiently and effectively manage a substantial RIK portfolio. Achieving this goal will optimize Federal mineral revenues and reduce costs - to the benefit of the Nation.

To measure achievement of this overall goal, the Five Year Plan includes a series of measurable commercial objectives and efficiency goals. These are:

- Realize maximum benefits by optimizing RIK volumes, projected to be:
  - RIK Gas Growth up to 1.3 billion cubic feet per day in fiscal year 2009.
  - RIK Oil Static volumes up to190,000 barrels per day to fiscal year 2009.
- Enhance net revenue by \$50 million over 5 years [This goal has since been increased to \$67.5 million net return over 5 years, reflecting the estimated effects of administrative cost avoidance and time value of money].
- Develop a high quality marketing portfolio by the following diversification:
  - Customers: Increase sales to utilities/industrials to 20 % of all gas sales.
  - Contract portfolio: Increase non-seasonal sales to 35 % of all gas sales.

The Five Year Plan outlines a series of goals for the administration of the RIK operation:

- Efficiently manage the RIK operation reduce per unit costs by 10 percent.
- Transaction cycle time reduce time to complete process by 10 percent.
- Revenue collection time collect 95 percent of RIK revenue within 25 days.
- Reorganize/staff key business functions to fully implement RIK capabilities.

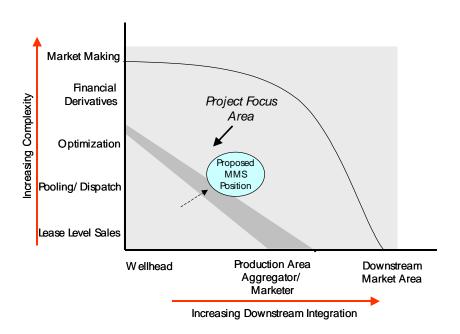
To achieve these objectives, many challenges will be addressed including the expansion of marketing strategies; strengthening human resource skill sets; increasing the numbers and types of business relationships; and advancing analytical capabilities to support royalty asset management decision-making. MMS is confident of success in timely accomplishing the remaining action elements of the Five Year Plan and achieving its defined business goals and objectives.

#### **Expanded Business Model**

Based on extensive assessment of the commercial viability of the RIK operations, the Five Year Plan includes a series of enhancements to marketing strategies designed to capitalize on market trends, manage uncertainty, and optimize contracting opportunities. Several of the strategies require increased analytical capabilities and will evolve over the five year planning period as market opportunities develop and MMS is in a position to identify and act on the opportunities. The enhancements are:

- Increase numbers and diversity of purchasers of RIK commodities.
- Aggregate volumes to pipeline pools or market centers.
- Optimize processing returns by increasing variety of contract types.
- Increase variety of transportation and sales contract types.
- Explore production exchanges.

The net result of the RIK business model extensions, as shown in the following Exhibit, will be to move the RIK operation to a more active producer/seller position in the wholesale energy markets, while still adhering to an overall conservative business model. These extensions will potentially increase revenues while continuing to meet statutory authorities and MMS' conservative risk profile.



### **Expansion of the RIK Natural Gas Operation**

Based on successes to date, the Five Year Plan includes a goal to substantially expand the RIK natural gas portfolio in the Gulf of Mexico. The Five Year Plan calls for RIK natural gas volumes to increase up to 1,300,000 MMBtu/day of natural gas per day taken in kind by FY 2009. Considerable progress in meeting this goal has already taken place as the business unit is now taking gas in kind of nearly 700,000 MMBtu/day, up from less than 500,000 MMBtu/day when the Five Year Plan was published. Challenges to meeting the volumetric goal include rapid declines in Gulf of Mexico shallow water production and the existence of substantial royalty relief on deepwater properties. Successful achievement of these goals will require concurrent, continued realization of human resource, business model, and office location goals of the Five Year Plan as well.

#### **Advancing Opportunities for Onshore Natural Gas Operations**

MRM strategic planning for RIK operations also includes the continued examination of opportunities for natural gas RIK in onshore locations. Although the Gulf of Mexico is the core business location for RIK activities, certain onshore locations display similar attributes necessary for RIK success that are so prevalent in the Gulf of Mexico.

In executing this element of the Five Year Plan, MRM identified specific opportunities for natural gas RIK in several areas of Wyoming after a comprehensive assessment collaboratively performed by MRM and an outside expert consultant, with input from the State of Wyoming. Consequently, in August 2005, the MMS Executive Committee approved an RIK project for natural gas produced from Federal leases in Wyoming, and the Wyoming State Land Board also voted to endorse the project. Initial deliveries began in April 2006. Examination of additional opportunities will occur consistent with willingness of individual States to participate.

#### 2. MRM Strategic Business Plan

Future strategic planning for the Federal RIK operation will take place in the larger context of the overall MRM mission through completion of the MRM Strategic Business Plan. The Strategic Plan, released in December 2005, charts the course and direction of the future MRM program. Designed with a MRM-wide perspective, the Strategic Plan provides the strategic approach and guidance to be used in developing and issuing individual, comprehensive business plans for all operational aspects of the MRM. The following five MRM strategic mission areas form the design framework for these future business plans.

- Asset Management.
- Financial Management.
- Compliance.
- Indian Trust.
- Resource and Information Management.

These mission area business plans will set forth operational strategies and improvement actions for the period 2007 through 2012. Implementation of the MRM program-wide Strategic Plan and the envisioned mission area business plans will prepare the MRM to meet its future challenges and deliver the best possible mineral revenue services. The five mission area business plans will be developed in a phased schedule and will be fully aligned with DOI and MMS strategic plans and the President's management improvement goals.

Strategic planning for the Federal RIK operation will occur as a primary component of the Asset Management mission area business plan. In addition to RIK, this mission area encompasses the regulatory framework for mineral royalty management and forward-looking agreements with mineral producers for royalty payments. The next generation RIK business plan to be developed within this context is scheduled for release in August 2009, with a planning horizon covering the three year period from Fiscal Years 2010 through 2012. At the end of this three year period, the MRM RIK operation will then be on the same business planning cycle as all other MRM operational areas.

Business objectives that will underlie development of the next RIK business plan include full realization of a top-tier, steady state RIK program of the highest commercial quality, and the goal of ensuring that the optimal value is received for mineral royalty assets. Importantly, there is also another, more tactical, reason for inclusion of the RIK strategic planning process in a larger context of regulations and royalty valuation agreements. The Asset Management business planning team is examining ways to leverage and integrate the knowledge gained from RIK operations into other facets of the MRM mission. For example, extensive market intelligence will be critical to any future regulatory changes and improvements in compliance strategies and operations. The concept underlying this future business planning is that the management of Federal mineral royalties will be market-based; agile, flexible, and responsive to changes in the regulated industry; and focused on early, conflict-minimizing certainty that royalty obligations have been fulfilled.

# **Section F. Summary and Conclusions**

This Report to Congress arrays a decade-long series of actions taken by MMS to develop and implement business processes and automated systems that fully support a RIK capability to be used in tandem with the RIV approach in managing oil and gas revenues. There is still work to be done. To that end, MMS and its MRM program have developed and are implementing strategic business plans to ensure continuation of a top-tier Federal RIK operation in the future.

The approach to building RIK capabilities has required a delicate balance in pacing operational decisions and implementation actions. Initial testing of the nascent RIK concept was conducted through a series of pilot projects. These pilots demonstrated the viability of the RIK approach and the significant revenue and operational benefits that could be realized from its use. The pilots confirmed that the RIK approach, if used in tandem with the RIV approach, would contribute to the realization of MMS' royalty asset management strategy.

Based on the successes of the pilots, MMS proceeded in January 2001 with the publication of its Road Map to the Future: Implementing Royalty in Kind Business Processes and Support Systems. The Road Map implementation advanced the RIK approach from its pilot phase to an operational activity over the 3-year period ending December 2003. Key RIK infrastructure components developed during this period included a commercial business model and associated core operational processes; automated systems to support RIK operations; and a new organizational structure with enhanced human resource capability to manage a sizeable RIK operation.

MMS is currently implementing its May 2004 Five Year RIK Business Plan to advance the RIK business operation as a permanent part of MMS' royalty asset management strategy. The permanent Federal RIK operation is being built on proven business principles, a revenue enhancement goal, measurable program objectives, routine measurement of program performance, and emphasis on strong internal controls. During the next three years, the MMS will be focusing on achieving a commercial scale and quality of operations. Many challenges will be addressed including the expansion of marketing strategies; strengthening human resource skill sets; increasing the numbers and types of business relationships; and advancing analytical capabilities to support royalty asset management decision-making. MMS is confident that it will be successful in timely implementing the remaining action elements of the Five Year Plan and achieving its defined business goals and objectives.

Future strategic business planning for RIK will occur within the context of a comprehensive mission-based planning effort that is addressing all aspects of the MRM program. The next generation business plan for RIK will cover fiscal years 2009-2012.

Today's MMS RIK operation is fully engaged in the competitive sale of oil and gas commodities in the domestic marketplace. The significant benefits of the RIK approach have been demonstrated in terms of substantial additional mineral revenue to the

Treasury and operational efficiencies for the Government and industry. These benefits are the direct result of MMS' measured, deliberate, comprehensive, and continuous process of strategic planning followed by diligence in plan execution. A hallmark of the MMS approach has been the collaboration with both internal and external partners in minerals revenue management, including all segments of the industry, State governments, other Federal agencies, the Congress and other stakeholders.

# **Annotated Bibliography**

 1997 Royalty in Kind Feasibility Study (MMS Office of Management and Policy Improvement -- August 1997)
 [http://www.mrm.mms.gov/StudyRepts/PDFDocs/Rikrpt.pdf]

Final report of the MMS describing the study conducted to determine the feasibility of a Federal RIK operation, conclusions reached and recommendations to proceed with a pilot program to test study report conclusions.

2. Reengineering Royalty Management Program Business Processes and Support Systems: Road Map to the 21<sup>st</sup> Century (MMS -- November 1998)

Strategic planning document prepared to guide a multi-year initiative to reengineer all core business processes, organizational structures and automated support systems of the MRM program. This strategic plan first advanced MMS' mineral royalty asset management strategy that included the strategic use of the Government's option to collect its oil and gas royalties either in cash or in kind.

 Implementing Royalty in Kind Business Processes and Support Systems: Road Map to the Future (MMS -- January 2001) [http://www.mrm.mms.gov/RIKweb/PDFDocs/RoadMap0101.pdf]

Strategic planning document prepared to evolve the RIK initiative from its pilot phase to an operational activity over a 3-year period ending December 2003. The Road Map sets forth the strategic direction to design the futures RIK asset management process and acquire the technology solutions and tools to effectively manage an ongoing RIK operation.

4. Wyoming Oil Royalty in Kind Pilot, 18 Months and Counting (MMS Office of Policy and Management Improvement -- March 2001)
[http://www.mrm.mms.gov/RIKweb/PDFDocs/WyoOilRIKMarchFinal.PDF]

Report prepared by the MMS, in coordination with the State of Wyoming, that summarizes an assessment of the results of the MMS/State of Wyoming Crude Oil Pilot for the period October 1998 through March 2000. The report concludes that the pilot had successfully demonstrated that taking crude oil production in kind at the lease and selling it through a competitive bid process is a viable alternative to the historical method of taking royalties in value in some circumstances. Further, the pilot observed that the RIK approach reduced the period of value uncertainty for MMS and lessees from years to months; increased royalty receipts over what would have otherwise been received if collected in value; and provided for streamlined processes that would yield administrative savings for MMS and industry.

5. The Texas General Land Office/MMS 8(g) Gas Royalty in Kind Pilot, A Report (MMS Office of Policy and Management Improvement – March 2002)

Report prepared by the MMS, in coordination with the State of Texas, that summarizes an assessment of the results of the MMS/State of Texas Gas Pilot. for the period June 1999 through December 2000. The report concludes that the RIK approach was viable in the administration of natural gas royalties and that the selective use of RIK provided modest increases in revenue to the MMS and additional administrative benefits for the government and industry.

6. Evaluation of Vulnerabilities to Underreporting: Royalty-in-Value versus Royalty-in-Kind (Department of the Interior, Office of Inspector General -- August 2002)

Report prepared by the Office of Inspector General as a result of its review of the MRM's RIK operation. The report concluded that the RIK approach to collection oil and gas royalties was less vulnerable to underreporting as compared to the royalty in value (or cash) approach. Further, the report made several recommendations to improve the administrative processes of the RIK operation. All recommendations were subsequently implemented by MMS.

7. Mineral Revenues: A More Systemic Evaluation of the Royalty-in-Kind Pilots Is Needed (Government Accountability Office -- January 2003)

Report prepared by the Government Accountability Office as a result of a review of the MRM RIK operation. The report concluded that the MMS had made significant progress in developing internal controls to manage the RIK program. Recommendations were made to clarify strategic objectives and gather additional information to measure program performance. All recommendations were subsequently implemented by MMS.

8. Assessment of the Federal Royalty-in-Kind ("RIK") Program and Development of RIK Business Plan (Lukens Energy Group -- September 2003)

Report prepared by the Lukens Energy Group which summarizes the results of their independent assessment of the MRM RIK program capability. Lukens found that the MMS RIK business model had performed well in a volatile marketplace, and that the program had evolved from pilot projects to a well-developed operational program. Improvements in several areas were recommended prior to a significant expansion of the program.

 Cost and Revenue Information Needed to Compare Different Approaches for Collecting Federal Oil and Gas Royalties (Government Accountability Office – April 2004)

Report prepared by the Government Accountability Office as a result of a review of the MRM RIK operation. The report provided information related to the MMS pilots and advanced a conclusion that more systemic and timely measurement of program performance is needed for the future. MMS subsequently completed its implementation of revenue and administrative cost metrics systems to address this conclusion.

10. Five Year Royalty in Kind Business Plan (MMS -- May 2004) [http://www.mrm.mms.gov/RIKweb/PDFDocs/rik5yrplan.pdf]

Strategic planning document prepared by MMS to provide the management framework that will be used to evolve the Federal RIK operation for the five-year period ending with fiscal year 2009. The Plan describes how the MMS will be developing full business capabilities to actively manage the Federal oil and gas royalty asset stream in a manner which optimizes returns for the taxpayer, while, at the same time, reducing administrative costs.

11. Review of MMS RIK Performance Measurement Process (Lukens Energy Group -- October 2004)

This report provides the results of the Lukens Energy Group's independent review and verification of MMS' measurement of the revenue performance of its natural gas and crude oil RIK operations for the period April 2003 to March 2004. In the report, the consultants concluded that the MMS' measurement of its RIK revenue performance reflects a reasonable comparison of its RIK proceeds against estimates of both fair market value and what a comparable royalty in value operation would achieve. Several suggestions were provided for MMS' consideration for future evaluation periods.

12. RIK Risk Assessment Report: A Review and Assessment of the Risk Profile for the Existing MMS Royalty in Kind Program (Lukens Energy Group – January 2005)

This report provides an array of observations and conclusions regarding MMS' risk profile. It identifies key risk drivers; introduces a risk measurement methodology; provides a review and assessment of the current RIK risk profile; provides an assessment of the risks inherent in the RIV program; and compares the RIK and RIV risks. This information was used in further evolving MMS' definition of its RIK risk profile and a risk management procedures manual.

13. Royalty in Kind Program Fiscal Year 2004 Report (MMS -- April 2005) h [http://www.mrm.mms.gov/RIKweb/PDFDocs/RIKPRPFY2004.pdf]

The first MMS annual report to the Congress that documents the status of the MMS' RIK operation as of the end of fiscal year 2004. The size, scope, and performance of the RIK operation are described as are measurements of the performance of the RIK operation for the fiscal year. Progress made in implementing the *Five Year RIK Business Plan* is also reported.

14. Royalty in Kind Credit Management Policy (MMS -- June 2005)

This document provides the formal MMS risk management guidelines for RIK credit risk. The Credit Management Policy is considered to be an extension of the MMS' RIK Risk Management Policy document, with a specific focus on monitoring and mitigating credit risk.

15. RIK/RIV Administrative Cost Team: Budget Requirements and Comparative Costs (MMS -- July 2005)

This document describes the processes and procedures used for capturing, documenting and allocating RIK and RIV administrative costs. Further, the document describes the methodology used in comparing RIK and RIV costs based on barrels of oil equivalent, and provides the actual cost experience for fiscal year 2004. Two performance goals of the Five Year RIK Plan are addressed in this report as well as recommendations of the GAO in its April 2004 report titled "Cost and Revenue Information Needed to Compare Different Approaches for Collecting Federal Oil and Gas Royalties."

16. Royalty in Kind Risk Profile Assessment (MMS -- August 2005)

This internal MMS document provides a description and assessment of the RIK risk profile as of June 2005. It links operating procedures and risk management policies to the risk profile for purposes of full understanding of MMS' RIK risk management policies.

 Royalty in Kind Risk Management Policy (MMS -- August 2005) h [http://www.mrm.mms.gov/RIKweb/PDFDocs/RIKRiskPolicy.pdf]

This document provides MMS' principles and policies that drive risk management decisions and guide the RIK day-to-day operations. The principles and policies provide a framework aimed at balancing risk management controls and operational flexibility; mitigating exposure to and results of undesirable outcomes; assigning responsibilities and accountabilities for risk management; and monitoring, quantifying, and reporting on risk exposures.

 Minerals Revenue Management Strategic Business Plan 2007-2012 (MMS – December 2005)

[http://www.mrm.mms.gov/StudyRepts/PDFDocs/MRMSP0712.pdf]

This strategic planning document sets forth the strategic direction and phased approach to be used in preparing comprehensive business plans for each of the five MRM strategic mission areas. Implementation of this strategic planning initiative will position MRM to meet future program challenges and performance expectations.

19. Royalty in Kind Risk Management Procedures Manual (MMS -- April 2006)

This document provides the delegations of authorities and procedures underlying RIK operations in transacting sales, accounting, invoicing, collecting debts, and operations monitoring and reporting to MMS executive management.

20. Royalty in Kind Program Fiscal Year 2005 Report (MMS -- April 2006) [http://www.mrm.mms.gov/RIKweb/PDFDocs/RIKPRPFY2005.pdf]

The second MMS annual report to the Congress that documents the status of the MMS' RIK operation as of the end of fiscal year 2005. The size, scope, and performance of the RIK operation are described as are measurements of the performance of the RIK operation for the fiscal year. Progress made in implementing the *Five Year RIK Business Plan* is also reported.