Presentation to
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Many critical issues, some of which are mentioned below, face the future development of oil and gas development in the Outer Continental Shelf (OCS), particularly if the full potential of the OCS is to ever be realized. In particular, natural gas is touted as the fuel of the future. Current demand for natural gas is approximately 22 trillion cubic feet per year. The National Petroleum Council projection for 2010, just eight years away, is for a demand of 30 trillion cubic feet. Where is all of this gas going to come from? Natural gas is a wonderful fuel, feedstock, and energy source, but it has to be produced from somewhere. The OCS is relied on as a major source of future U.S. natural gas supply, but action is needed if the OCS is to supply its proportionate share of this future resource base. Something has to be done to reverse the current decline rate. Deep water slope production is not adding to the production base as quickly as shelf production is declining.

Nationwide, drilling has increased significantly over the past eight years, but gas deliverability is not keeping up with demand. As Figure 1 shows, between 1993 and 2000, the number of gas wells drilled in the U.S. increased more than 50% from about 10,000 per year to 15,000, but average daily natural gas production grew by only a little over 10% from about 61 billion cubic feet per day to 67.5 billion cubic feet per day.

Figure 1
U.S. NATURAL GAS DELIVERABILITY CAPACITY HAS NOT KEPT PACE WITH ECONOMIC GROWTH AND DEMAND

Source: "Monthly Energy Report", EIA.

For the full potential of the OCS to be realized, all areas of the OCS must be opened up to exploration and production. The U.S. cannot keep pretending to have a comprehensive OCS development policy when most of the coastal waters of the U.S. are off limits to exploration. The Louisiana OCS territory is the most extensively developed and matured OCS territory in the U.S. Louisiana OCS territory has produced 88.1% of the 12.8 billion barrels of crude oil and condensate and 82.9% of the 139 trillion cubic feet of natural gas extracted from all OCS territories from the beginning of time through the end of 2000. But, Louisiana OCS gas production peaked at 4.16 trillion cubic feet in 1979 and was at 4.1 trillion cubic feet in 2000. It is illogical to continue to limit the future OCS contribution to the nation's energy supply almost entirely on production in the central and western areas of the Gulf of Mexico, while keeping the eastern Gulf, the entire Atlantic coast, and the Pacific Coast off limits to future exploration and development.

Not only is the Louisiana (Central Gulf) a mature producing area, but the infrastructure is aging and in need of attention. Much of the offshore and onshore pipeline and processing infrastructure is old, with some of it deteriorating. There is a need to expand the capacity of pipelines to handle hoped for increases in production volumes of oil and gas. The onshore support infrastructure is in need of substantial improvement and modernization

To fully develop the OCS potential, we must develop the deep reservoirs. Deep here refers to deep subsurface rather than deep water. Shallow subsurface deposits have been widely exploited; whereas the deep deposits have gone almost untouched. An immense resource base lies at subsurface depths of 20,000 feet or more as shown in Figure 2.

Figure 2
ESTIMATED NATURAL GAS RESERVES IN THE
15,000 - 30,000 FOOT DEPTH RANGE, LOWER 48 AND ALASKA

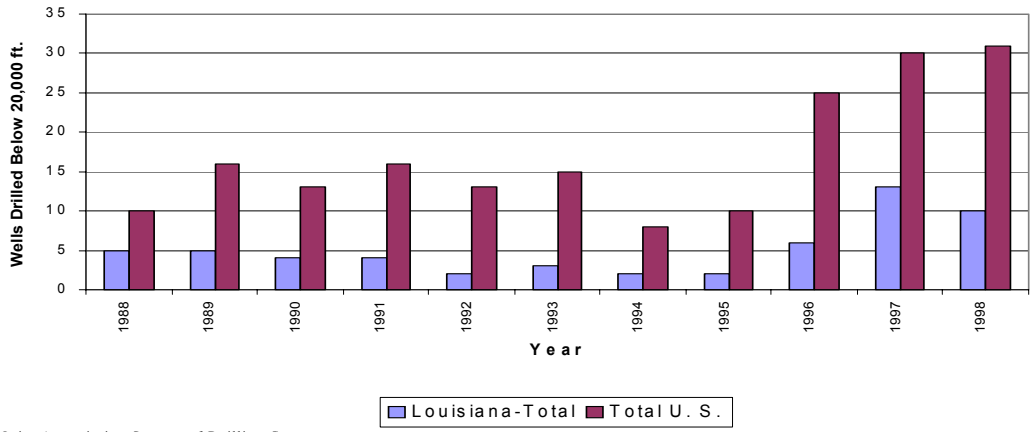
Lower 48	Drilling Depth	Probable Resources	Possible Resources	Speculative Resources	Total Resources	Louisiana Most Likely
On shore	15-30,000 ft	26,005	42,315	49,403	117,723	30,275
	Water Depth					
Offshore	0-200 m	10,295	27,580	14,650	52,525	35,810
Sum - Lower 48		36,300	69,895	64,053	170,248	66,085

Alaska	Drilling Depth	Probable Resources	Possible Resources	Speculative Resources	Total Resources
On shore	15-30,000 ft	0	0	0	0
	Water Depth				
Offshore	0-200 m	2,400	12,700	50,350	65,450
Sum - Alaska		2,400	12,700	50,350	65,450
Totals		**38,700**	**82,595**	**114,403**	**235,698**

Table 59. Potential Gas Committee estimates of traditional natural gas resources by Area, December 31, 1998 (Most Likely Values, billion cubic feet)

To tap this vast deep resource base, we need to be drilling something in the range of 300 wells per year below 20,000 feet rather than the current 30 shown in Figure 3.

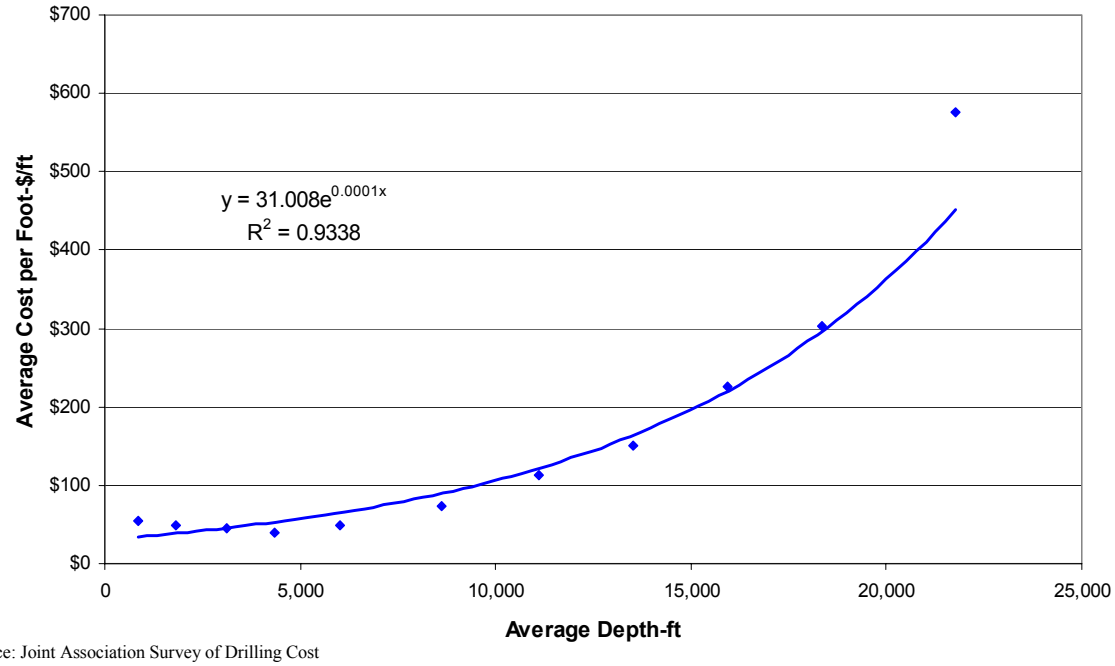
Figure 3
DEEP DRILLING IN THE U.S. AND IN LOUISIANA



Source: Joint Association Survey of Drilling Cost

Unfortunately deep drilling costs increase exponentially with the subsurface depth as shown in Figure 4.

Figure 4
DRILLING COSTS INCREASE EXPONENTIALLY WITH SUBSURFACE DEPTH



Source: Joint Association Survey of Drilling Cost

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To counteract this extremely high cost, MMS should consider expanding the Deep Gas Initiative introduced for Central Gulf Lease Sale 178 and Western Gulf Sale 180, which eliminates royalty for the first 20 billion cubic feet of gas production from leases at greater than 15,000 foot depth until a gas price trigger limit of $3.50 per million Btu's is reached. Expanding the price limit to something like $5.00 - $7.00 per million Btu's is warranted for this expensive drilling domain. It would also provide industry stability in the planning and budgeting to maintain the incentive during those excursion periods when the price rises above $3.50 per million Btu's.

The unconventional gas incentives program for coal bed methane and tight sands gas production is an excellent precedent for establishing a deep gas incentive for onshore and offshore drilling. The 1979 Section 29 Federal Tax Credit bill generated a $60 billion investment in the recovery of coal bed methane.

Development of new technology and greater penetration of existing state of the art technology in the field is needed to fully develop the potential of the OCS. Some of this new technology that is still expanding its application and capabilities include:

Directional drilling
3-D seismic
4-D seismic
Slimhole drilling
Horizontal drilling
Measurement-while-drilling techniques
Improved drill bits
Advanced synthetic drilling fluids
Corrosion resistant alloys
Improved completion and simulation technology
Improved offshore and deepwater drilling and completion technology
Better reservoir management
Non-damaging fluids
Advanced hardware for high efficiency directional drilling with quicker penetration and lower cost

Finally, but not least important, addressing environmental impacts and perceptions of offshore development on onshore ecosystems and life needs to be adequately addressed by placing more attention and funding for impact assessment and amelioration. Resource development, including oil and gas exploration and development, is not without environmental impact. Current technology, practices, and awareness in the U.S. oil and gas industry, however, have dramatically reduced these impacts to levels that are often significantly less than impacts of numerous other activities the public readily accepts such as urban sprawl, highway and bridge construction, etc.

Unfortunately, much of the coastal and offshore activity off Louisiana's coast was done before the evolution of modern technology, practices, sensitivities, and enlightened attention to environmental issues. Hence, Louisiana's long and early role in offshore mineral development has caused Louisiana's coastal ecology to suffer much in the way of damage such as erosion, salt

water intrusion, diversion of land building sediment, and loss of nutrients. Many things caused these effects, including past bad practices in the widespread dredging for navigation canals and laying of pipelines throughout Louisiana's fragile marshes and wetlands. This has significantly increased the sensitivity of the coastal areas to further damage from natural storm damage.

Additionally, Louisiana has incurred substantial public safety, public works, public health and other expenses in building and sustaining the infrastructure that makes possible the offshore development activity, including the significant onshore processing facilities for offshore production. State and local governments have borne the costs of significant investments in roads, port facilities, police and fire protection, hospitals, water supply, sewage treatment, and numerous other services and facilities necessitated by offshore development.

The State of Louisiana does not share in the massive wealth from offshore development by receiving any of the federal mineral revenue produced off its coasts other than its 27% share from the narrow 3-mile wide Section 8(g) transition zone. It is only fair and appropriate that future U.S. Ocean Policy address the restoration and amelioration of the environmental damage and address sharing the costs of the infrastructure support services and facilities. This would also send a strong signal to states resisting any development off their coasts that the federal government does not expect the adjacent states to bear all of the environmental, economic, and social costs. States that support U.S. mineral development off their coasts, which is a critical and essential component of U.S. energy supply, should share in the bounty from offshore to offset the costs previously mentioned.

It is inevitable that, some day, mineral resources will have to be developed off of more than just the Alabama, Mississippi, Louisiana, and Texas coasts which is the only area open to new leasing. For that to occur, the message must get out that these resources can be developed in a safe and environmentally sound manner without undue risks to the adjacent coastal surroundings, and that the federal government will share the revenue with the coastal producing states as it does with onshore mineral development on federal lands.