SEA
Southeast Energy Alliance

Potential Job Creation, Economic Benefits and Revenue Sharing from Oil and Natural Gas Exploration and Production in North Carolina

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Introduction

In January 2009, the Department of the Interior (DOI) published a Draft Proposed Outer Continental Shelf (OCS) Oil and Gas Leasing Program for 2010-2015 that (if implemented) would allow three lease sales in the Mid-Atlantic Region — which includes North Carolina. As a potentially affected state, the input from North Carolina into the development of the Five-Year Plan will play a significant role in whether these lease sales are included in the final version of the OCS Oil and Gas Leasing Program for 2010-2015.

In deciding whether to support inclusion of North Carolina in the 2010-2015 program, state officials need to consider the tremendous economic impacts and potential revenues that could be generated for North Carolina should offshore exploration and production take place. By going forward with offshore Atlantic oil and gas leasing, and with North Carolina participating in the development of offshore Atlantic resources, a recent report[1] estimates that the state's activity could:

- Create more than 6,700 new jobs in North Carolina;
- Add $659 million annually to the Gross Domestic Product; and
- Generate almost $150 billion in government revenues at all levels of government (federal, state and local).

In addition to the direct and economic impacts of offshore energy exploration and development, the state may be able to receive tens of millions of dollars annually in royalty revenue-sharing receipts that would be generated by OCS exploration and production.

Under current laws, all revenue (except for certain leases in the Gulf of Mexico covered by the Gulf of Mexico Energy Security Act of 2006) generated from offshore oil and gas production goes to the federal government. Some revenue is returned to the states for land and water conservation efforts and coastal impact assistance, and the rest is channeled into the federal government's general operating budget.

However, if current laws were amended to allow North Carolina to receive the same royalty revenue-sharing treatment that is currently granted to the Gulf Coast states, the state could receive up to $577 million annually from offshore exploration and production revenue-sharing receipts.

1 The ICF International report is discussed below and can be found at http://www.api.org/Newsroom/icf_study.cfm.

North Carolina OCS Resources

The Atlantic OCS Region is made up of an area of 269.13 million acres, which cover the Atlantic offshore area from Canada to the offshore territorial waters of the Bahamas and Cuba. The area begins 3 miles off the coastal states, where water depths range from approximately 80 feet to more than 10,000 feet. The Atlantic OCS area is divided into four planning areas — the North Atlantic, the Mid-Atlantic (which includes North Carolina), the South Atlantic and the Straits of Florida.

In 2006, the Minerals Management Service (MMS) conducted a regional assessment of the entire US Outer Continental Shelf, including the Atlantic OCS Region. According to MMS, the assessment represents the results of a thorough investigation of the petroleum geology of each area within the OCS (based on available data) to estimate hydrocarbon potential.

The 2006 assessment provides estimates of the undiscovered, technically recoverable (UTRR) oil and natural gas resources located outside of known oil and gas fields on the OCS. The assessment considered recent geophysical, geological, technological and economic information and utilized a probabilistic play-based approach to estimate the UTRR of oil and gas for individual plays. The UTRR estimates are presented as a range of estimates and include the mean estimate and the 95th and 5th percentile level — considered reasonable minimum and maximum values for the estimated level of UTRR resources.

Estimates of UTRR for the entire OCS range from 66.6 billion barrels of oil at the 95th percentile to 115.1 billion barrels of oil at the 5th percentile with a mean of 85.9 billion barrels of oil. Similarly, gas estimates range from 326.4 trillion to 565.9 trillion cubic feet of gas (tcf) with a mean of 419.9 tcf.

The estimates of the UTRR for the Atlantic OCS range from 7.57 billion barrels of oil at the 5th percentile to 1.12 billion barrels of oil with a mean estimate of 3.82 billion barrels of oil, and from 66.46 to 14.30 trillion cubic feet of natural gas with a mean of 36.99 tcf.

Based on the current MMS maps and the analysis of the OCS Assessment, the NC adjacent waters — which make up approximately 23 percent of the total Atlantic Resource base — are projected to contain as much as 1.74 billion barrels of oil and 15.29 trillion cubic feet of natural gas.

Although MMS notes that “it is important to recognize that estimates of undiscovered oil and natural gas resources are just that: estimates,” the 2006 Resource Assessment represents the government scientists’ best estimate of what quantities of oil and natural gas remain undiscovered given the current state of geologic knowledge and reasonably foreseeable technology.

Support for Mid-Atlantic Lease Sales in the Five-Year Plan Development Process

The process for the development of a five-year plan includes the sequential publication of four different documents (a Call for Information, a Draft Proposed Plan, a Proposed Final Plan and a Proposed Environmental Impact Statement), each of which triggers a period for public comment. Once public comments have been accepted on the Proposed Final Plan, the plan will be implemented upon Secretarial approval and submission of the plan to the president and Congress.

The current five-year plan, for 2007-2012, includes 21 lease sales in eight areas, including eight lease sales in four areas of Alaska, 12 lease sales in three areas of the Gulf of Mexico and one lease sale in Virginia's adjacent waters. The 2007-2012 program was developed while federal moratoria were in place, prohibiting any leasing (or pre-leasing) activities in the Atlantic or Pacific Oceans.

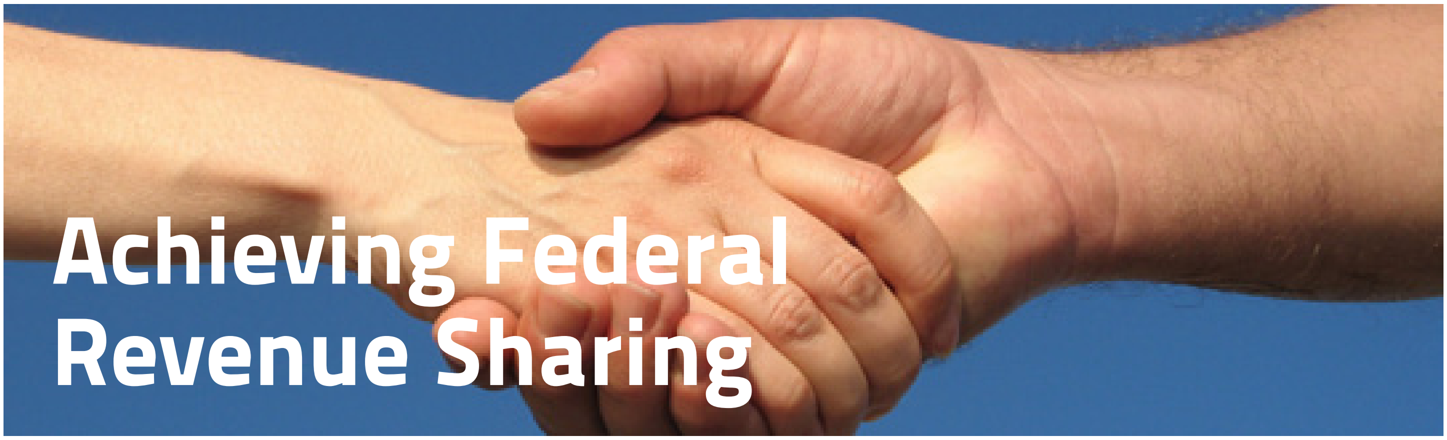
In response to high crude oil, gasoline and diesel prices, President Bush lifted the Executive Moratorium on July 14, 2008, and instructed Secretary of the Interior Kempthorne to initiate the process to develop a new five-year plan that would cover 2010-2015 (if approved, this plan would supersede the current Five-Year Plan). Two months later, Congress chose not to renew the Congressional Leasing Moratorium, meaning that lease sales could take place in the Atlantic and the Pacific for the first time since 1983.

Pursuant to President Bush's directive, DOI published a Call for Information on Aug. 1, 2008, soliciting comments from interested and affected parties on whether to begin a new five year program for 2010-2015. The notice specifically requested comments on areas that had been restricted from leasing prior to the revocation of the Executive Moratorium on July 14, 2008. DOI received more than 152,000 comments during the comment period — with more than 60% of the comments supporting the creation of a new five-year plan.

On Jan. 21, 2009, DOI published a Draft Proposed Outer Continental Shelf (OCS) Leasing Program for 2010-2015 (DPP) that proposed a total of 31 lease sales in 12 areas, including 14 lease sales in three areas of the Gulf of Mexico, nine lease sales in four areas offshore Alaska, three lease sales in two areas offshore California and five lease sales in three areas of the Atlantic — including three in the Mid-Atlantic Region (which includes North Carolina).

DOI opened a 60-day comment period and requested comments from states, local governments, Native groups, tribes, the oil and gas industry, federal agencies, environmental and other interest organizations, and all other interested parties. On Feb. 10, 2009, Secretary Salazar announced that DOI was extending the comment period for the DPP by 180 days — meaning the Department will accept public comments through Sep. 21, 2009.

As in previous comment periods, DOI has specifically requested comments from governors and other state officials from potentially affected states, which will be given great deference as the final five-year plan is developed. The Secretary will consider the recommendations of the governor (and may accept the recommendations of any executives of affected local governments) if he determines that they provide for a reasonable balance between the national interest and the well-being of the citizens of the affected state.



Achieving Federal Revenue Sharing

The federal government currently collects revenues from oil and gas leases on public lands in the form of bonus bids, annual rents and royalties. Bonus bids are upfront payments made to secure a lease in a competitive lease sale. Leases are awarded to the highest bidder. Royalties are based on the value of production. Annual rental payments are made by lessees on a per-acre basis. Once commercial production begins, rental payments are no longer required.

For offshore leases, the primary term is five years for shallow water (<400 meters), eight years for mid-depth water (400-800 meters) and 10 years for deep water (>800 meters). Leases continue as long as commercial production takes place. The Bureau of Land Management (BLM) administers the onshore leasing program and the MMS administers the offshore leasing program. The MMS collects and disburses all revenues from federal leases.

In FY2007, the MMS collected about $11.5 billion from leasing activity on public lands (both onshore and offshore). About 90 percent came from royalty payments. A royalty rate of 12.5 percent applies to onshore leases and up to 18.75 percent applies to offshore leases. Revenues from offshore leases are statutorily allocated among the coastal states, the Land and Water Conservation Fund (LWCF), the National Historic Preservation Fund (NHPF) and the General Treasury. Despite the statutory allocations, the vast majority of revenues from offshore leases go to the General Treasury.

Prior to passage of the Gulf of Mexico Energy Security Act of 2006 (P.L. 109-432), revenue sharing among all coastal states was limited to revenues generated within an area three miles beyond the state's boundary.

The Gulf of Mexico Energy Security Act (GOMESA) requires that 8.3 million acres be offered for oil and gas leases in the Central Gulf Planning Area and the Eastern Gulf Planning Area. Approximately 2 million acres in the Central Gulf were offered for lease after enactment of the law and were included in Lease Sale 205 in October 2007, and an additional 500,000 acres were offered in Lease Sale 224 in March 2008. The remaining 5.8 million acres in the Central Gulf are expected to be offered in Lease Sale 208 in 2009.

GOMESA also created revenue sharing provisions for four Gulf oil and gas producing states: Alabama, Louisiana, Mississippi and Texas, and their coastal political subdivisions. There are two timeframes involved in revenue sharing. From FY 2007 through FY 2016, 37.5 percent of all revenue including bonus bids, rentals and production royalty will be shared among the four States and subdivisions for those new leases in the .5 million acres in the Eastern Gulf and the 5.8 million acres in the Central Gulf. From FY 2017 and beyond, the four States and subdivisions will share 37.5 percent of revenues from all Gulf leases issued after Dec. 20, 2006.

In addition to the direct payments made to the Gulf Coast States, GOMESA also directs an additional 12.5 percent of the revenues to the LWCF State Assistance program for distribution to all states.

Because federal royalty collections are governed by federal law, Congress will need to enact legislation extending revenue sharing to North Carolina before the state will be eligible to receive any share of the revenues collected for exploration and production in its adjacent waters.

Potential Revenues for North Carolina

There are two key potential revenue streams for the State of North Carolina: tax revenues derived directly and indirectly from OCS exploration and production (and related jobs created and economic growth), and non-tax government revenues that could be directed to North Carolina if the state were granted the same revenue share that is currently given to Texas, Louisiana, Mississippi and Alabama for exploration and production in the Gulf of Mexico.

Economic Impacts and Tax Receipts

ICF International has recently completed a report that analyzes the potential impact on future US oil and gas production from opening offshore areas in the Eastern Gulf of Mexico, the Atlantic, and the Pacific, as well as ANWR in Alaska and a portion of the currently unavailable federal lands in the Rockies for exploration and development. The full ICF Report can be found at http://www.api.org/Newsroom/icf_study.cfm.

The ICF study summarizes the current federal government estimates of oil and gas resources in each of these areas and presents an alternative, higher resource scenario based upon analysis of how oil and gas assessments have evolved in the US over the past 30 years. ICF incorporates learning from the observed historical trend that government oil and gas assessments generally increase over time as more knowledge is gained in geological areas under development, such as the Gulf of Mexico, which indicates that initial government resource assessments are generally conservative.

As part of its report, ICF presents results for the amount of oil and gas production that would be expected from each producing state — including North Carolina — and the economic impacts in those states that would be expected to supply goods and services directly and indirectly to the oil and gas industry.

ICF also presents government sector impacts in terms of government revenue that would be expected by production in the State's adjacent waters. The estimated future government revenues are the sum of bonuses, severance tax, property tax and income tax at the federal, state and local levels. The revenue going to each level of government is combined, and ICF did not break out state versus federal revenues.

According to the ICF study, new OCS exploration and production would provide the following economic impacts in North Carolina:

- Create more than 6,700 new jobs in North Carolina;
- Add more than $659 million annually to Gross Domestic Product by 2030; and
- Generate approximately $148 billion in federal, state and local revenues, including $9.68 billion in government revenues between 2010 and 2030 — an average of $484 million per year.

Royalty Share Revenues

As discussed above, the MMS 2006 resource assessment estimated that there are up to 7.57 billion barrels of oil and 66.46 trillion cubic feet of natural gas in the Atlantic Region. This evaluation does not include methane hydrates, which may be found in North Carolina waters and would add to these totals.

In order to assess the value of these resources, we use the same average forecast price from the Energy Information Administration's Annual Energy Outlook as used in the ICF International study. This price forecast in constant dollars was made before the price spikes of summer 2008 and projected a value for oil at $66.76 per barrel and natural gas at $6.99 per thousand cubic feet. We use this to estimate the following rough values for the total resources in the Atlantic [1]:

	Value of Oil	Value of Natural Gas	Total Value of Resources
95th Percentile	$74.8 billion	$100.0 billion	$174.8 billion
Mean	$255.0 billion	$258.6 billion	$513.6 billion
5th Percentile	$505.4 billion	$464.6 billion	$970.0 billion

Table 1 | Atlantic Region Resource Value

Under the OCSLA, there is an 18.75 percent royalty rate on the value of OCS production, meaning that the federal government would expect to receive from $32.8 billion to $181.9 billion in total royalty revenues for the Atlantic resource base over a 30 year period — with a mean of $96.3 billion, assuming that all resources were actually produced.

Historically, companies have paid bonus bids during a lease sale. For example, last year companies paid more than $10 billion in bonus bids for oil and natural gas leases. If we assume that the bonus bids will equal approximately 10 percent of the royalty revenues, then the federal government would expect to receive an additional $3.28 billion to $18.19 billion (with a mean of $9.63) for the Atlantic resources base over a 30 year period.

Based on current MMS maps, federally governed waters offshore of North Carolina contain approximately 23 percent of the total Atlantic resources base, providing the following values for the resources in NC waters:

	Value of Oil	Value of Natural Gas	Total Value of Resources
95th Percentile	$17.2 billion	$23.0 billion	$40.2 billion
Mean	$58.7 billion	$59.5 billion	$118.2 billion
5th Percentile	$116.3 billion	$106.9 billion	$223.2 billion

Table 2 | North Carolina Resource Value

Given the assumptions above, including the production of all resources, the federal government could receive $41.83 billion in royalty payments (18.75% x $223.11 billion) and $4.18 billion in bonus bids (10% x $41.83 billion) from production in waters offshore of North Carolina.

	Royalty Revenues	Bonus Bids	Total Federal Revenues
95th Percentile	$7.5 billion	$.8 billion	$ 8.3 billion
Mean	$22.2 billion	$2.2 billion	$24.4 billion
5th Percentile	$41.8 billion	$4.2 billion	$46.0 billion

Table 3 | Federal Revenues from Potential North Carolina Resources

If North Carolina were to receive the same 37.5 percent revenue share provided to the Gulf Coast States in the GOMESA legislation, the State could potentially receive:

	Royalty Revenues	Bonus Bids	Total NC Revenues
95th Percentile	$2.8 billion	$.3 billion	$ 3.1 billion
Mean	$8.3 billion	$.8 billion	$9.1 billion
5th Percentile	$15.7 billion	$1.6 billion	$17.3 billion

Table 4 | Potential North Carolina Revenue Share

MMS assumes that production will take place over a 30-40 year period once exploration and production is commenced. If we assume that production in waters offshore of North Carolina would be produced over 30 years, then we can estimate that North Carolina could receive up to $577 million annually in federal revenue sharing dollars.

1 Note — this is a rough estimate; the value of a resource ultimately depends on the market price and production costs at the time the resource is produced.

About the Southeast Energy Alliance

The Southeast Energy Alliance (SEA) is a non-partisan organization of businesses, trade associations and non-profit organizations — including Farm Bureaus, Electric Cooperative Associations, Chambers of Commerce and Manufacturing Associations — across the Southeastern United States that understand the importance of the development of sound energy policies to ensure the economic viability of their organization. Utilizing grassroots, grass-tops, public advocacy and education at both the state and federal levels, SEA is dedicated to projects and activities that will ensure access to affordable and reliable energy for families, farms and businesses across the Southeast. SEA is the Southeastern regional affiliate of the Consumer Energy Alliance.

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