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EXECUTIVE SUMMARY

Review and recommend a position on offshore the Florida drilling for natural gas and oil

<u>**OBJECTIVE:**</u> Recommend a tourism industry position on offshore drilling for natural gas and oil off the coast of Florida.

CONSIDERATIONS: There has been a great deal of discussion both nationally and within the State of Florida on the merits of drilling for gas and oil in the Gulf of Mexico. As a coastal tourism destination, this issue has major impact on our current and future ability to promote our most important visitor amenity- our award-winning beaches.

The Florida Association of Convention and Visitors Bureaus (FACVB) held a workshop on the subject in September with representatives of the oil and environmental community. The FACVB Board has now adopted a position on this subject that is attached to this Executive Summary.

In short, FACVB endorses state and federal energy policies allowing the production of oil and natural gas from existing leases within the Gulf of Mexico out of sight of Florida's coast - at least 30 miles offshore - under the following conditions:

- 1. Any Florida offshore drilling must be a component of a comprehensive energy policy dedicated to reducing America's dependence on foreign oil.
- 2. Production facilities must incorporate the most advanced zero discharge natural gas and oil production systems.
- 3. The Federal revenue sharing plan affecting Gulf of Mexico resources, which currently does not include revenue to the state of Florida, must be changed by the U.S. Congress to include significant revenue to Florida.
- 4. A five-year moratorium on new leases in the eastern Gulf of Mexico must be established so State officials can evaluate oil production safety and impact on Florida's natural resources. This moratorium should permit exploration by seismic and geophysical scientific testing to identify potential future oil and natural gas reserves.
- 5. The military mission of the U.S. Department of Defense must have first priority in the Gulf of Mexico.

<u>COUNTY ATTORNEY FINDING:</u> A County Attorney finding is not required for this discussion.

<u>FISCAL IMPACT</u>: There is no immediate fiscal impact to this discussion. However, possible environmental damage to our beaches and inlets from an offshore oil disaster could have enormous financial impact on tourist tax funds in the future.

<u>GROWTH MANAGEMENT IMPACT</u>: There is no impact to the Growth Management Plan related to this action.

<u>RECOMMENDATION</u>: Staff requests TDC discussion and support of the FACVB position on offshore drilling for natural gas and oil.

PREPARED BY: Jack Wert, Tourism Director

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Contact: Robert Skrob Phone: 850/222-6000 For Release October 29, 2008

FACVB Endorses Limited Oil and Gas Production within the Gulf of Mexico off Florida's Coastline

Tallahassee, FL - After carefully considering all factors, the Florida Association of Convention and Visitors Bureaus (FACVB) endorses state and federal energy policies allowing the production of oil and natural gas from existing leases within the Gulf of Mexico out of sight of Florida's coast (at least 30 miles offshore), with the following conditions imposed by state and federal lawmakers:

- 1. Any Florida offshore drilling must be a component of a comprehensive energy policy dedicated to reducing America's dependence on foreign oil.
- 2. Production facilities must incorporate the most advanced zero discharge natural gas and oil production systems.
- 3. The federal revenue sharing plan affecting Gulf of Mexico resources, which currently does not include revenue sharing to Florida, must be changed by the U.S. Congress to include significant revenue dedicated to the state.
- 4. A five-year moratorium on new leases in the eastern Gulf of Mexico must be established so state officials can evaluate oil production safety and evaluate any impact on Florida's natural resources. This moratorium should permit exploration by seismic and geophysical scientific testing to identify potential future reserves.
- 5. The military mission of the U.S. Department of Defense shall have the first priority in the offshore in the Gulf of Mexico.

The FACVB has been monitoring impacts on Florida's tourism industry associated with recent trends in energy affordability and reliability. The FACVB recognizes that a comprehensive, long-term energy policy, including conservation, efficiency, renewable and alternative fuels as well as increased U.S. domestic oil and natural gas production, is essential to maintain a healthy, vital Florida tourism industry.

- more -

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"Florida's beaches are our most precious natural resource, and their vitality is essential to the health of our state's tourism industry and our state's economy." said Robert Skrob, executive director of the FACVB. "After considering the environmental impacts and risks associated with offshore oil drilling as well as the importance of energy resources to Florida's tourism industry, with today's technology, our government should permit oil production within existing leases out of sight, beyond the horizon as part of a comprehensive strategy for the United States to achieve energy independence."

The FACVB serves as the single unifying voice for all of Florida's convention and visitor bureaus, providing leadership, insight and direction as we enter a new millennium marked by an increasingly competitive tourism marketplace. Organized in 1996, FACVB strives to increase the overall effectiveness of Florida CVBs' destination management efforts. Its stated mission is to provide cooperative action to enhance and encourage the growth of Florida's convention and visitor industry through promoting tourism industry education, enhancing professionalism, facilitating the cooperative exchange of information between Florida CVB's, developing an awareness of legislative issues and unifying the state's CVB industry through public relations.

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The full 3-page position statement of the Florida Association of Convention and Visitors Bureaus is available at www.FACVB.org

The Florida Association of Convention Visitors Bureaus published an analysis of the impacts of offshore oil production for its members titled, *Comprehensive Analysis of Offshore Oil Drilling Debate - A Discussion Tool for Florida's Communities*. FACVB is making that available to the public at www.FACVB.org.



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Position on Offshore Oil Drilling

Introduction

Serving as the single unifying voice for all of Florida's convention and visitor bureaus, the Florida Association of Convention and Visitors Bureaus (FACVB) strives to provide insight and direction on emerging trends that may impact the effectiveness of Florida CVBs' destination management efforts. Energy availability is a key factor in Florida's tourism industry. Affordable and available fuel makes it easier for consumers to consider Florida as their vacation destination.

The FACVB has been monitoring impacts on Florida's tourism industry associated with recent trends in energy affordability and reliability. The FACVB recognizes that a comprehensive, long-term energy policy, including conservation, efficiency, renewable and alternative fuels as well as increased U.S. domestic oil and natural gas production, is essential to maintain a healthy, vital Florida tourism industry.

Tourism Trends in Florida

During 2007, Florida tourism generated \$65.5 billion in revenues from 84.5 million visitors and was responsible for directly employing 991,300 Floridians, according to VISIT FLORIDA research. Over the five-year period between 2003 and 2007, revenues increased 21.4 percent and visitors increased 11.7 percent. Effective marketing efforts combined with Florida's attractions and natural resources continue to make Florida a favored destination throughout the world and tourism a prime contributor to Florida's growing economy. However, the five-year growth trend statistics also indicate a flattening of the growth trend between 2005 and 2007. In particular, visitor and revenue growth grew only 0.8 percent during 2007, and visitors arriving via automobile actually declined 2.3 percent during 2007. It is important to note the correlation between the flattening growth in Florida tourism and the concurrent rise in energy costs. Energy in Florida

Florida's tourism industry heavily relies on consistently affordable energy from dependable sources. The state's residents and visitors consume approximately 23 million gallons of gasoline per day, more than 8 billion gallons per year. In addition to meeting the transportation needs of Floridians, products are necessary to fuel vehicles for more than 40



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million tourists arriving via automobiles; to fuel cruise ships, fishing and recreational watercraft; and to fuel the airplanes servicing Florida's numerous airports.

While U.S. demand has slowed over the past decade, global demand for crude oil, the raw material of most refined transportation fuels, has increased dramatically due to emerging markets in Asia and other parts of the world. This has led to a tightening of supplies. Many of the congressional and presidential moratoria that prevented domestic oil and natural gas exploration and production were either recently withdrawn or expired; however, the long-term status of the moratoria will probably remain unclear for some time after the elections in November. During the duration of the various moratoria over the previous three decades, our country's dependence on imported oil has increased from 40 percent to 60 percent of our total consumption.

Significant state and federal legislation and efforts of the Governors Climate Action Team are designed to address global climate change and have established aggressive renewable fuel mandates for transportation fuels. Florida has been a leader in recognizing the importance of alternative fuels, and this year has mandated that by December 31, 2010, all gasoline must contain at least 10 percent ethanol. Additionally, federal mandates dictate that 9 billion gallons of renewable fuels must be blended with transportation fuels in 2008, expanding to 36 billion gallons by 2022. Further, increasing amounts of the renewable fuels must originate from cellulosic sources beginning in 2011; however, it is questionable as to whether adequate commercial cellulosic fuel refining plant production will be available to meet the mandate. No commercial cellulosic product is available in Florida or the United States at this time.

Florida is committed to taking a new direction in energy production, requiring utilities to meet stringent air emission guidelines amid concerns about global climate change. Florida utilities have always been more reliant on natural gas for power generation than our surrounding states; this commitment to clean-burning natural gas will only grow stronger through the next decade. According to Florida Public Service Commission statistics, total utility generation capacity that uses natural gas will increase from 29 percent to 44 percent by 2014. Many sources for natural gas fall under the same moratoria that had been issued for oil production; therefore, the industry has had to rely more on imported natural gas to meet growing demand. Recent tightening of supplies in the natural gas markets, evidenced by the increased price of natural gas and the subsequent rise in utility rates, ultimately increases operating costs of airlines, cruise ships, attractions, convention centers and hotels.

FACVB Position on Offshore Oil and Natural Gas Production

The state and federal governments, along with entrepreneurs and major energy companies, have made a long-term commitment to the development of alternative energy sources; the FACVB endorses the diversification of energy sources, particularly lower carbon alternative and renewable fuels, as a means to address global climate necessities. However, petroleum products will remain a key energy source for our country as we make necessary



technological advancements so alternative energy sources become cost efficient. Recognizing that affordable and reliable energy is essential to nourish the future growth of Florida tourism and the state's economy, the FACVB evaluated domestic oil and natural gas access, including off Florida's coasts. The FACVB conducted an Offshore Oil Drilling Summit on October 2, 2008, allowing members to discuss issues in depth with representatives from the environmental community and the petroleum industry. The discussions covered long-term energy projections, the local and global environmental impacts of drilling, impacts to fishing industries, advanced drilling and production technologies, mitigation of risks through redundant systems, regulatory oversight, revenue sharing, impacts of hurricanes, and the availability of oil and natural gas based on previous seismic and geophysical data.

After carefully considering all factors, the Florida Association of Convention and Visitors Bureaus (FACVB) endorses state and federal energy policies allowing the production of oil and natural gas from existing leases within the Gulf of Mexico out of sight of Florida's coast (at least 30 miles offshore), with the following conditions imposed by state and federal lawmakers:

- 1. Any Florida offshore drilling must be a component of a comprehensive energy policy dedicated to reducing America's dependence on foreign oil.
- 2. Production facilities must incorporate the most advanced zero discharge natural gas and oil production systems.
- 3. The federal revenue sharing plan affecting Gulf of Mexico resources, which currently does not include revenue sharing to Florida, must be changed by the U.S. Congress to include significant revenue dedicated to the state for 1) beach renourishment projects; 2) alternative energy investments for the state of Florida; 3) tourism promotion to attract more visitors to Florida to bolster the state's economy and tax collections; and 4) a catastrophe fund to reimburse Florida for expenses related to any oil release into the environment as a result of these oil production activities;
- 4. A five-year moratorium on new leases in the eastern Gulf of Mexico must be established so state officials can evaluate oil production safety and evaluate any impact on Florida's natural resources. This moratorium should permit exploration by seismic and geophysical scientific testing to identify potential future reserves.
- 5. The military mission of the U.S. Department of Defense shall have the first priority offshore in the Gulf of Mexico.

Conclusion

Changes in global energy markets have affected the price and supply of oil and natural gas and subsequently may have a future impact on Florida's tourism industry. The FACVB recommends that environmentally responsible exploration and production of domestic oil and natural gas from current leases be an essential element of state and federal energy policies. Experts expect production from existing leases could commence as early as within 2 years from the date leaseholders are permitted to proceed.



Comprehensive Analysis of the Offshore Oil Drilling Debate

A Discussion Tool for Florida's Communities

October 27, 2008

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Executive Summary

With our state and national economy facing challenges caused in part by soaring gasoline prices, offshore oil drilling has become an increasingly important topic for Floridians. The intent of this report is to serve as a comprehensive and unbiased analysis of the offshore oil drilling debate, focusing on the issues that affect Florida and tourism.

Oil and gas have been valuable to the state of Florida throughout its seventy-year production history. Since 1983, when the last well in Florida was drilled on a state lease in Pensacola's East Bay, Florida laws and federal drilling moratoria have prevented exploration in state and federal waters. Florida's existing oil fields are declining in production. However, there are an estimated 3.88 billion barrels of oil and 21.51 trillion cubic feet of natural gas located in the Eastern Gulf of Mexico, according to Minerals Management Services.

The U.S. Energy Information Administration projects that U.S. demand for refined petroleum products will grow by over 35 percent in the next two decades. A rapidly growing world will require large increases in energy supplies over the next quarter-century. On September 30, 2008, the federal moratorium on offshore drilling expired. It is now up to Congress to decide if individual states will get the authority to approve or reject new drilling.

The potential economic benefits of offshore drilling are significant. If the Energy Information Administration's estimate of projected total recoverable oil off Florida's coasts is correct, Floridians could generate billions of dollars in revenue. Historically, coastal states have resisted new offshore drilling. There are concerns about the impact of oil spills on tourism and coastal industries and the "visual pollution" of oilrigs looming off the coast. Environmental action organizations maintain that offshore oil and gas operations have detrimental effects onshore because these operations require roads, pipelines, and processing facilities on America's beaches, wetlands and coastal areas.

Significant advances in oil exploration and production technology has greatly reduced the risk of oil spills. Through new seismic exploration and extended reach drilling technologies, geologists can see and survey underground oil and natural gas deposits more effectively than in days past. Oil exploration and production companies cite advancements in technology as the main reason why over the last decade, more than 99.9 per cent of oil delivered by tankers has reached its destination in the U.S. without incident.

Florida's 70-Years of Onshore Oil Production History

Florida has a 70-year history of oil and natural gas exploration and production. Florida's first oil field, Sunniland, was discovered by the Humble Oil & Refining Company (later known as Exxon-Mobil) in Collier County in 1943. The 11,800-foot well was the first of nine wells drilled in South Florida, and has since produced over 18 millions barrels of oil. Subsequently, eight more fields were found to lie along the northwest-southeast trend through Lee, Hendry, Collier, and Dade counties. The highest producing of these fields were the three Felda fields: Sunoco Felda (1964), West Felda (1966), and Mid-Felda (1977) in Hendry County. Although these fields are relatively small, production has been significant. The three Felda Fields together, have produced more than 54 million barrels of oil since the Sunoco Felda was discovered in 1964. These fields, together with the Lake Trafford, Bear Island, Lehigh Park, Racoon Point and Corkscrew fields, came to be known as the "Sunniland Trend", extending from the Everglades National Park through the Big Cypress Swamp in the Gulf of Mexico.

North Florida Dominates Onshore Oil Production

The Florida Panhandle has also been an excellent source of oil. Production in the western panhandle began in 1970, when Exxon discovered the largest oil field east of the Mississippi River near Jay in Santa Rosa County and then discovered Blackjack Creek just south of Jay in 1972. Since then, an additional six oil fields have been discovered in the western panhandle including Sweetwater Creek (1977), Bluff Springs (1982) and McLellan (1986). The discovery of these fields, known as the "Jay Trend," established North Florida as the dominant force in oil production in Florida, and propelled Florida to the ninth largest oil producing state in the country for a short period of time.¹

The production of oil and gas has been valuable. In 1945, Governor Millard F. Caldwell urged the Legislature to pass regulations that would allow exploration to continue with "thoughtful and orderly planning." The venture was so successful that

¹ Florida Department of Environmental Protection, Florida Geological Survey, 1994

several million acres offshore in the Gulf of Mexico between Apalachicola and the Keys were leased. The last well in Florida waters was drilled in 1983 on a state lease in Pensacola's East Bay.² Since then, Florida laws and federal drilling moratoria have prevented exploration in state and federal waters.

Oil Production in Florida on the Decline

Throughout Florida's production history, more than 585 million barrels of oil (almost 25 billon gallons) have been extracted from our state. This oil would be valued at around \$30 billion at \$50 per barrel. As of July 2008, only Jay Field and Blackjack Creek in Northwest Florida's Jay Trend, and a handful of fields in South Florida's Sunniland Trend are still producing. According to Steve Spencer of the Department of Environmental Protection's Bureau of Mining and Minerals Regulation, "The fields are old. Many of the wells are plugged and abandoned; we're down towards the end." In 2007, Florida oil wells produced 5,600 barrels per day, down from 7,800 in 2004 and 12,000 in 2001.³

² Information provided by David Mica, executive director, National Petroleum Council

³ Florida Department of Environmental Protection, Mining & Minerals, *Florida Oil and Gas Report, 2001-2007*

Where Oil Companies Want to Explore for Oil

The continental Shelf is the shallow extension of landmass that surrounds nearly all continents and extends to the continental slope, where the deep ocean truly begins. The term "Outer Continental Shelf" (OCS) is a political term. Title 43, Chapter 29 "Submerged Lands," Subchapter III "Outer Continental Shelf Lands" of the U.S. Code governs the OCS. The term "Outer Continental Shelf" refers to all submerged lands, the subsoil and seabed that belong to the United States and are lying outside of the states' jurisdiction (nine nautical miles off the Florida coast), the latter defined as the "lands beneath navigable waters."⁴

The OCS supplies more than 25 percent of the country's natural gas production and more than 30 percent of total domestic oil production. The offshore areas of the United States contain the majority of future oil and gas resources. It is estimated that 60 percent of the oil and 59 percent of the gas yet to be discovered in the United States is located in the OCS. Estimates from the Minerals Management Services *Annual Energy Outlook* indicate that technically recoverable resources currently off-limits in the lower 48 OCS total 18 billion barrels of crude oil and 77 trillion cubic feet of natural gas.⁵

There are four separate regions of the OCS, including the Gulf of Mexico OCS Region, the Atlantic OCS Region, the Pacific OCS Region, and the Alaskan OCS Region. The Gulf of Mexico OCS Region is currently divided into three separate offshore drilling areas: the Western Planning Area, the Central Planning Area, and the Eastern Planning Area. The Eastern Planning Area starts on the western coastline of Florida and extends west to a line that is south of Pensacola, Florida into the Gulf.

⁴ U.S. Code Collection: Title 43, Chapter 29 "Submerged Lands"

⁵ U.S. Department of the Interior <u>http://www.mms.gov/offshore/</u>



The MMS estimates that there are 3.88 billion barrels of oil and 21.51 trillion cubic feet of natural gas located in the Eastern Gulf of Mexico Planning Area.⁶

from tens of meters to over 3,000 meters (9,900 feet). Seaward of the State/Federal boundary (3 leagues or roughly 9 miles off the Florida coast) the area extends southward for more than 300 miles.

Chevron loses leases for Destin Dome in the Gulf

Drilling for natural gas and oil has been occurring in the Eastern Gulf of Mexico offshore Alabama and Florida for more than three decades. The first of 13 natural gas and oil lease sales held offshore Florida occurred in 1959 and resulted in the issuance of 23 leases. Currently, there are 241 active leases in the Eastern Gulf of Mexico Planning Area. To date, over 81 exploratory wells have been drilled in the Eastern Gulf of Mexico. Thirteen wells discovered natural gas, condensate, and crude oil. Exploratory drilling started in the Eastern Gulf of Mexico in the mid-1970's with the drilling of Destin Dome

⁶ http://www.mms.gov/5-year/PDFs/MMSProposedFinalProgram2007-2012.pdf

Block 162 40 miles south of Panama City, Florida. After two years of drilling and 15 dry holes, exploration ground to a halt. The 1980's ushered in three Eastern Gulf lease sales and renewed industry interest in this area. Finally, in the late 1980's, Chevron U.S.A. and Gulfstar made natural gas discoveries in the area.



Legend 1. Destin Dome Block 56, Chevron Well No. 001 2. Destin Dome Block 56, Chevron Well No. 002 3. Destin Dome Block 97, Chevron Well No. 001 4. Destin Dome Block 1, Gulfstar Well No. 001 5. Destin Dome Block 2, Gulfstar Well No. 001 6. Pensacola Block 881, Gulfstar Well No. 001 7. Desoto Canyon Block 133, Amoco Well No. 001 8. Destin Dome Block 111, Amoco Well No. 001 In October 1995, 73 oil and gas leases were returned to the Federal Government as part of a litigation settlement. Consequently, no active Federal natural gas and oil leases exist off southwest Florida. Likewise, no active leases exist in the Straits of Florida Planning Area or off Florida's east coast (South Atlantic Planning Area).

In the latter part of 1996, a development plan was filed by Chevron U.S.A. and partners on the Destin Dome 56 Unit. On July 24,

2000, Chevron U.S.A. and partners filed a lawsuit against the U.S. government for denying the companies "timely and fair review" of plans and permits, and an appeal concerned with its Destin Dome

56 Unit.⁷ On May 29, 2002, Chevron and Conoco relinquished seven of nine leases in the unit that were the subject of the litigation, in exchange for \$115 million. The remaining two leases, Destin Dome Blocks 56 and 57 are to be held in suspension until at least 2012, under the terms of the agreement. Under the terms of the agreement, the leases cannot be developed unless approved by both the Federal Government and State of

⁷ http://www.gomr.mms.gov/homepg/offshore/egom/eastern.html

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Florida. MMS estimates that there are 2.7 trillion cubic feet of natural gas in the Destin Dome.

Twenty-seven Year Ban on Offshore Drilling Lifted

In 1981, Congress adopted the Outer Continental Shelf (OCS) Moratorium, which prevents the leasing of coastal waters off the Atlantic and Pacific coasts for fossil fuel development. In 1989, after the Exxon Valdez oil spill, Alaska's fishery-rich Bristol Bay was added to the nearly nationwide moratorium on offshore oil and gas development. In the 1990's, President George H.W. Bush, Sr. used his power under the Outer Continental Shelf Lands Act to withdraw the majority of the eastern Gulf Coast of Mexico as well as areas offshore California, the North Atlantic states, Washington and Oregon from leasing consideration until 2002. President Bill Clinton extended those executive protections until June 30, 2012. Thus, Florida's authority to regulate offshore leasing in the Gulf of Mexico OCS Region is limited by the authority designated to it by Congress; within nine nautical miles in the Gulf of Mexico.⁸

President Bush Signs Gulf of Mexico Energy Security Act (GOMESA)

In December 2006, Congress passed and President Bush signed the Gulf of Mexico Energy Security Act (GOMESA). Instead of affecting all coastal states, GOMESA applied to areas within the Gulf of Mexico. This law bans leasing in some areas of the western Gulf of Mexico, partly because of the potential impact on environmentally sensitive areas along Florida's coastline. It temporarily halts leasing for oil or natural gas drilling in any Gulf of Mexico region east of the Military Mission Line, which is 234 miles off Tampa Bay and 300 miles off Naples, Florida.⁹ The 181 South Area was included in the 2007-2012 OCS Oil and Gas Proposed Program. In January 2007, President Bush removed the 181 South Area from presidential withdrawal. The area will be included in the 2009 Central Gulf Sale scheduled for March 2009.

GOMESA opens up 8.3 million acres in the Gulf of Mexico for oil and gas leasing, which the Minerals Management Service estimates contains at least 1.26 billion barrels of oil and 5.8 trillion cubic feet of natural gas. Revenue sharing on new areas of

⁸ See U.S. v. Louisiana, et al. 363 U.S. 1, 129 (1960)

⁹ U.S. Department of the Interior, Minerals Management Services, OCS Five Year Oil and Gas Leasing Program, January 2008

production made available by the agreement appropriates 37.5 percent to the producing Gulf States, 12.5 percent to the Land and Water Statewide Conservation Fund and 50 percent to the Federal Treasury.¹⁰

Presidential Ban on Offshore Drilling Lifted

On July 14, 2008, President Bush lifted the Executive Order banning the drilling of offshore oil wells in the United States. At the time, the move appeared to be largely symbolic and having no effect on the current regulations because of the prohibitions imposed by Congress and the executive order signed by George W. Bush, Sr. in 1990. The Supremacy Clause of the United States Constitution prevented Florida from interfering with federal drilling prohibitions.

Congress Moves to Lift Federal Ban

On August 1, 2008, a bipartisan group of senators calling themselves the "Gang of Ten" announced an energy proposal to allow offshore drilling near Florida, Georgia, South Carolina, North Carolina and Virginia. This legislation, the Security and Consumer Protection Act (H.R. 6899), exempts California and the Alaska National Wildlife Refuge.

On September 16, 2008, H.R. 6899 passed in the House. If passed in the Senate and signed by the president, the bill will allow drilling to be conducted 100 miles offshore, or 50 miles offshore if a state opts-in to allow leasing off its coastline by enacting a state law. H.R. 6889 requires oil companies to develop leases they already own or lose the opportunity, and strengthens requirements that oil companies produce oil on federal lands leased for drilling during the initial term of their lease. At the same time, HR 6899 calls for repealing tax breaks for large oil companies and using the money to create new credits for energy efficiency programs, clean coal and electric-hybrid vehicles.¹¹

Critics of H.R. 6899, which some refer to as the "drill nothing" bill, point out that although states could decide to drill between 50 and 100 miles, they would be offered no

¹⁰ Information provided by the office of Senator Bill Nelson

¹¹ GovTrack.us. H.R. 6899--110th Congress (2008): Comprehensive American Energy Security and Consumer Protection Act, *GovTrack.us (database of federal legislation)* <u>http://www.govtrack.us/congress/bill.xpd?bill=h110-6899</u> (accessed Sep 29, 2008)

financial incentives, such as a share of oil royalties, for taking the environmental risk of putting oil and gas rigs off their shores. The bill would let the federal government decide to drill more than 100 miles offshore, but drilling supporters note that the distant location of the areas would make it more difficult to drill and to deliver oil and gas to shore. According to John Hoffmeister, former president of Shell Exploration and Production Company, "taxing the oil companies and taking money away from the oil companies, meaning they cannot invest in new energy, is going to result in less supply."

Congress Will Decide if States Should Have the Authority to Approve or Reject Offshore Drilling

On September 27, 2008, the Department of Homeland Security Appropriations Act (H.R. 2638) passed. The continuing resolution to fund the government until next March did not include a moratorium on oil and gas drilling off the Atlantic and Pacific coasts. With the expiration of the moratorium on September 30, 2008 and the presidential ban on offshore drilling lifted, it is unclear what will happen next. It is up to Congress to decide if individual states will get the authority to approve or reject new drilling. If they do, there are many tough questions to address. This brings us to the heart of the offshore drilling debate:

Do the economic benefits of drilling for oil in the Gulf of Mexico outweigh the economic risks and environmental impact to Florida's natural resources?

As Energy Demands Rise, Should We Drill?

Trends in energy supply and demand are affected by many factors that are difficult to predict including energy prices, U.S. and worldwide economic growth, advances in technologies, and future public policy decisions in the United States and in other countries. Additionally, changing public perceptions on issues related to emissions of air pollutants and greenhouse gases and the use of alternative fuels, as well as the economic viability of various energy technologies all add to the uncertainty of our energy future. The Energy Information Administrations' forecast and analysis, Annual Energy Outlook 2008 (AEO2008), evaluates a wide range of trends and issues that could have major implications for U.S. energy markets between today and 2030.

EIA Projects Energy Demands Will Rise

The U.S. Energy Information Administration (EIA) projects that U.S. demand for refined petroleum products will grow by over 35 percent in the next two decades, increasing from 18.0 million barrels per day in 1996 to 24.6 million barrels per day by 2020. Natural gas demand is expected to rise even faster, by at least 45 percent, from 22 trillion cubic feet per year in 1996 to between 32 and 37 trillion cubic feet in 2020. Actual rates of growth will depend on the effects of ongoing electric utility restructuring, more stringent air emission controls, advances in transportation technology and infrastructure, and efforts to minimize the potential impacts of global climate change.¹²

In 2007, The National Petroleum Council conducted a comprehensive study considering the future of oil and natural gas to 2030 in the context of the global energy system. Oil and natural gas now provide nearly 60 percent of the world's energy, and the demand for energy is projected to grow by 50 to 60 percent by 2030 as populations grow and expand.

¹² Energy Information Administration (US Dept. of Energy) Energy Statistics, Data, and Analysis. Annual Energy Outlook, 2007 & 2008

A Rapidly Growing World Demands More Supply

Historically, energy consumption has been concentrated in the developed world, where economic activity has been centered. Today, the developed world, represented by the Organization for Economic Co-operation and Development (OECD)¹³, uses half of the world's total energy to produce half of the world's Gross Domestic Product. Many developing countries are just reaching the point where individual wealth and energy consumption are starting to accelerate. U.S. and global energy security depend on reliable, sufficient energy supplies freely traded among nations. This dependence will rise with the growth required in oil and natural gas trade, and may be increasingly influenced by political goals and tensions. With oil and natural gas resources increasingly concentrated in a handful of non-OECD countries, producers may increasingly leverage their assets when dealing with oil companies and consumer nations.

A rapidly growing world will require large increases in energy supplies over the next quarter-century. Over the next 25 years coal, oil and natural gas will remain indispensable to meeting total projected energy demand growth. Although the world is not running out of energy resources, according to the National Petroleum Council, "there are accumulating risks to the supply of reliable, affordable energy to meet this growth, including political hurdles, infrastructure requirements, and availability of a trained work force. We will need all economic, environmentally responsible energy sources to assure adequate, reliable supply."¹⁴

Our Dependence on Oil

John Hoffmeister, former president of Shell Exploration and Production Company, has been outspoken in his views on government policies that place domestic oil and gas resources off limits, which has caused oil and gas production to fall steadily for the last 35 years:

¹³ The OECD (Organization for Economic Co-operation and Development) includes Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, United Kingdom and the United States of America.

¹⁴ National Petroleum Council, "Hard Truths: Facing the hard Truths about Energy", 2007

"There's an opportunity there, I think to get more revenue for the federal government, more revenue for state governments. Bring more oil to the American people, which the oil companies will make profit doing, so you can grow the oil business in the U.S., and you can lower prices because we'll have more supply. It's win-win-win."

"Very little is not touched by oil. The fact is we have chosen it. We have chosen it and it has created the world's greatest economy. It has created the world's leading country because of the infrastructure that has been built, the natural resources that have been put to work and we will continue to need it for decades to come. You can't fly a plane on wind power or solar power, not yet. And you can't really replace the trucking system in this country nor can you replace what the Department of Defense needs"

Opponents of offshore drilling, like Dr. Enid Sisskin of Gulf Coast Environmental Defense, believe that it would take years before we could reap any economic benefits -increased supply of oil and natural gas, lower prices at the gas pump, smaller utility bills and potentially thousands of new energy-related jobs. As Dr. Sisskin puts it, "It's not even going to help us. If it lowers [gas prices] at all, it will be by a few cents a gallon." Estimates from the Minerals Management Services' Annual Outlook Energy Analysis also indicate that access to the Pacific, Atlantic, and eastern Gulf of Mexico regions would not have a significant impact on domestic crude oil and natural gas production or prices before 2030.¹⁵ One reason for this is that oil exploration and development take years, not months.

Should We "Drill Here, Drill Now"?

Advocates of offshore drilling, like American Solutions, a grassroots organization run by former Speaker of the House Newt Gingrich, promote a "Drill Here, Drill Now" approach. According to Rick Tyler, a spokesperson for American Solutions, the idea that drilling will not provide any short-term relief in

¹⁵ For 2003, per the EIA's World Energy Outlook 2005 and the EIA's International Energy Outlook 2006

the price of oil is just one of several myths surrounding offshore drilling. Tyler believes it comes down to simple economics: "Drilling more now will increase supplies in the future, and higher supplies lead to lower prices." He maintains that because the world is currently operating near full capacity, there is very little slack in the system, so any disruption causes a spike in the price of oil. With the way the market is right now, oil investors recognize that demand will continue to increase and that current supply is limited, and thus they set prices higher. Tyler believes that opening up new oil fields in the United States, even if new supplies will not actually reach our gas tanks for several years, will cause oil prices to drop because "oil speculators will see a greater supply ahead and the future of oil is then less constrained on the supply side."

Offshore Oil Drilling Truths vs. Myths

Another myth, according to Tyler, is that oil companies currently have 68 million acres of leased public lands that contain large amounts of economically recoverable oil, which could generate 4.8 million barrels a day, so opening up more land is not necessary. He refutes this, saying, "The estimates on the amount of oil available in the 68 million acres assume that the unused area can produce the same amount as those acres being used. However, much of the land leased to oil companies has already been explored and determined not to carry enough recoverable oil to justify drilling."

Tyler also advocates drilling for unconventional sources, such as tar sands or shale oil. He says that the idea that the United States only has a small percentage of the world's oil supplies does not hold up to scrutiny. In oil shale alone, he says, "the U.S. has approximately 800 billion barrels of recoverable oil, over three times the proven reserves of Saudi Arabia. In the past oil shale was considered too costly to extract, but according to Tyler, "If the cost of a barrel of oil was as high as \$90, current technology would make oil shale competitive in the market."

The potential economic benefits of offshore drilling are significant. If the Energy Information Administration's estimate of 16 billion barrels of projected total recoverable oil off of the east and west coasts of Florida is correct, Floridians stand to generate billions of dollars in revenue from drilling. Tyler estimates somewhere between a low of \$35 billion and a high of \$147 billion.

Risks and Impact to Florida's Natural Resources

Historically, coastal states have resisted new offshore drilling. There are concerns about the impact of oil spills on tourism and coastal industries and the "visual pollution" of oilrigs looming off the coast. Environmental action organizations, like the Natural Resources Defense Council (NRDC), maintain that offshore oil and gas operations have detrimental effects onshore because these operations require roads, pipelines and processing facilities to be built on America's beaches, wetlands and coastal areas.

Natural Seepage Inputs More Oil Into the Marine Environment than Spills

The biggest pollution risk involved in offshore drilling is in transporting the oil back to shore -- by pipeline, barge or tanker. In 2002, the National Research Council (NRC) of the National Academy of Sciences completed its third examination of petroleum inputs into marine waters worldwide. The report found that marine transportation was responsible for one-third of worldwide petroleum spillage, about eight times the amount caused by drilling platforms and pipelines; however, only 3 per cent of inputs in North American waters are due to marine transportation.¹⁶

Total petroleum input estimates decreased from 43 million barrels per year in 1975 to 9 million barrels per year by 2002. According to the 2002 report, worldwide offshore oil and gas development is responsible for only 4 percent of the petroleum in the world's marine environment. The report goes on to say that natural seepage is the largest single source of petroleum in the worldwide marine environment, contributing more than 4 million barrels per year. In North America, natural seepage is the largest input, contributing 63 percent of total inputs to the marine environment. Municipal and industrial waste is responsible for 12 percent of worldwide petroleum inputs and 22 percent of petroleum inputs in North American marine waters.

¹⁶ U.S. Department of the Interior, Minerals Management Services, OCS Oil Spill Facts, September 2002

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Effects of Drilling off Louisiana's Shores

Louisiana has allowed offshore drilling since 1947. About 172 active rigs dot the Gulf of Mexico waters off the coast, producing about 79 percent of the oil and 72 percent of the natural gas that comes from drilling off the nation's coastlines. The state gets about \$1.5 billion annually in oil and gas revenue, a figure that will grow when it starts receiving part of oil companies' royalty payments in 2017 under federal law.

An estimated 10,000 miles of canals, dug by the oil and gas companies to transport oil and lay pipeline, crisscross the coastal wetlands of Louisiana. Environmentalists, like Dr. Enid Sisskin, say the canals and lack of marshland removed an important natural buffer against storms and amplified hurricane Katrina's damage.

Hurricanes Destroy Platforms and Spill Oil

In May 2006, the U.S. Minerals Management Service (MMS) issued a news release stating that as a result hurricanes Katrina and Rita together, the number of pipelines damaged was 457 and the number of offshore platforms destroyed was 113. At that time, the MMS reported that "Six spills of 1,000 barrels or greater were reported; the largest of these was 3,625 barrels of condensate. A total of 146 spills of one barrel or greater have been reported in the Federal OCS waters; 37 of these were 50 barrels or greater. No shoreline or wildlife impacts were noted from these spills.¹⁷ At the time, there were no major oil spills attributed to hurricanes Katrina and Rita because the MMS defines a "major oil spill" as more than 100,000 gallons.

However, on June 23, 2008, the MMS released a revised report of petroleum spills resulting from damages caused by hurricanes Katrina and Rita. In the revised report, the MMS identified 165 spills of petroleum products of one barrel or greater totaling 14,676 barrels (roughly three-quarters of a million gallons) that were lost from platforms, rigs, and pipelines on the federal OCS. Approximately 90 percent of the spillage, 13,214 barrels, was released during the hurricanes. An estimated 4,707 barrels were lost during Katrina, and 8,507 barrels were lost during Rita from damaged,

¹⁷ http://www.mms.gov/ooc/press/2006/press0501.htm

destroyed, and lost OCS facilities. The intensity of the hurricanes instantaneously forced the dispersion and dilution of the released petroleum into the open ocean, which precluded the formation of voluminous slicks. Approximately 10 percent of the spillage came from 1,462 barrels in small leaks and chronic seepage from damaged structures between October 2005 and December 2007. Damaged platforms were responsible for 1,455 barrels of this reported seepage, only 7 barrels were attributed to pipelines. The ongoing salvage efforts from hurricanes Katrina and Rita occasionally cause releases as structures are cut up and removed and the wells are being plugged and abandoned. These activities will continue throughout 2008 into 2009 and some final abandonments may not be completed until 2010.¹⁸

The MMS also reports that an estimated 8 million gallons of oil spilled from nine onshore facilities in the Louisiana Delta, where large holding tanks were breached by Katrina.¹⁹

On September 30, 2008, the same day the moratorium on offshore drilling expired, the MMS released details of drilling rigs destroyed by Hurricane Ike. According to the press release, 52 of the 3,800 offshore oil and gas production platforms and 4 drilling rigs were destroyed. However, it is important to make the distinction that there was only one confirmed offshore oil spill of 8,400 gallons (200 barrels). The larger spills came from onshore facilities, platform storage tanks on land and from tankers striking submerged drilling platforms -- but less than 10 percent of that came from federal offshore operations.

¹⁸ Minerals Management Service (MMS), Petroleum Spills of One Barrel and Greater from Federal Outer Continental Shelf Facilities Resulting from Damages Caused by 2005 Hurricanes Katrina and Rita Including Post-Hurricane Seepage through December 2007, Revised June 23, 2008 <u>http://www.mms.gov/incidents/PDFs/HurrKatrinaRitaSpillageRev23June2008Comb(2).p</u> df

¹⁹ Minerals Management Service, DNV Technical Report <u>http://www.mms.gov/tarprojects/581/44814183_MMS_Katrina_Rita_PL_Final%20Report%20Rev1.pdf</u>

Oil Companies: Technological Advances Have Greatly Reduced Spills

According to Lisa Flavin, Senior Policy Advisor for the American Petroleum Institute (API), "The oil and natural gas industry has worked hard to achieve a harmonious relationship with the environment and surrounding wildlife. In fact, the industry has invested nearly \$100 billion in emerging technologies that allow offshore operations to be cleaner, safer and more efficient."

Through new seismic exploration and extended reach drilling technologies, API's geologists can see and survey underground oil and natural gas deposits more effectively than in days past. This improves exploration success rates while reducing environmental impact. Electronic navigation and physical oceanographic systems also help safeguard our natural resources and are a large part of the reason why over the last decade, more than 99.9 percent of oil delivered by tankers has reached its destination in the United States without incident. Today's technology, such as automatic shutoff valves on the seabed floor and mechanical devices that can prevent blowouts caused by uncontrolled buildups of pressure, has greatly reduced the risk of oil spills.

Worth Risking Our Natural Resources?

Despite the improvements in technology and better government oversight, detractors of oil drilling remain unconvinced. According to Dr. Sisskin, "They make it sound as though there are no more accidents anymore, but that is not true. In 2006, there were 133 fires and explosions in the Gulf of Mexico. People say we won't have spills because we're using pipelines instead of tankers. That's not true because they will need tankers for deep sea drilling." The MMS predicts there will be no less than one oil spill a year of 1,000 barrels or more in the Gulf of Mexico over the next 40 years. A spill of 10,000 barrels or more can be expected every three to four years. Oil is toxic for most marine species and, according to the National Academy of Sciences, cleanup methods can only remove a small fraction of oil spilled in marine waters.

According to the NRDC, "Drilling muds and cuttings removed from wells contain toxic metals, including mercury, lead and cadmium. Each well creates 180,000 gallons of waste and most of it is dumped untreated into surrounding waters. Each well also

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discharges hundreds of thousands of gallons of 'produced water.' Studies show that this byproduct contains toxic and radioactive pollutants, which can contaminate fish and marine life consumed by humans. These activities can hurt local communities and damage economies that depend upon these resources for tourism, coastal recreation and fishing."²⁰

Scientist from Shell Oil Defends Drilling Practices and Procedures

Dr. Rick van Oort, a scientist for Shell Exploration and Production Company specializing in well control and drilling fluid application, refutes these assertions. According to van Oort, "The technology we are using today, rivals NASA and the technology they are using in space. We put emphasis on training and certification practices, particularly with respect to well control practices. We do extensive planning for our wells, and in planning we can mitigate a lot of risks. We use sonar and seismic surveys to map the seafloor, and we also look for sensitive benthic communities that we want to stay away from."

van Oort assures that all stages of drilling are monitored using sophisticated data sensors on the rigs that send data, in real-time, back to the operations center where there are experts that analyze it 24/7. "As soon as they see something that is not right, let's say we're entering into an area that has higher pressure, they'll start alerting the rig to take action."

According to van Oort, the drilling fluids' primary functions are cooling and lubricating the drill bit and holding the oil, gas and produced water pressures back – away from the surface. There are three types of fluids: seawater-based mud, inhibitor-based mud, and synthetic-based mud. After a certain depth, seawater-based mud can no longer be used, and synthetic-mud becomes the primary fluid. Synthetic mud contains barite (barium sulfate), a natural mineral.

The EPA regulates the use of drilling fluids very strictly, says van Oort. "In order to discharge these muds, they must have very low toxicity to marine life. They cannot be contaminated by oil of any kind and the trace metals need to be strictly controlled to very

²⁰ The National Resources Defense Council, *Legislative Facts*, July 2008 www.nrdc.org/policy

low values. The EPA also monitors how many cuttings are discharged, "We cannot discharge cuttings in bulk; if we do, it counts as a spill and goes against our permanent record, and we are fined by the MMS."

In response to environmental concerns regarding barite, which contains mercury and cadmium, van Oort maintains that the allowable amount of mercury is strictly regulated. The maximum amount of mercury that can be present in barite is one part per million, and the maximum amount of cadmium is three parts per million. Lead and copper correlate to mercury and cadmium levels; therefore, if mercury and cadmium are low, so are lead and copper. Thus, according to van Oort, by regulating mercury and cadmium, we are regulating all the other trace elements as well. van Oort also maintains that "the mercury in drilling fluids is not converted to methyl-mercury, which is really dangerous to marine life. Methyl-mercury in the environment mainly comes from industrial run-off from power plants.

MMS: No Environmental Consequence from Recent Spills

According to the MMS, the loss of hydrocarbons from wells on the federal OCS during hurricanes Katrina and Rita was minimized due to the successful operation of the safety valves that are required to be installed at least 100 feet below the mud line in each wellbore. The check valves on pipeline safety joints automatically activated when pipelines were breached which limited the potential losses to the volumes within the damaged sections. All OCS facilities in areas threatened by the storms' approach were shut prior to the hurricanes so that oil losses were mostly limited to the oil stored on the damaged platforms and rigs or contained in damaged pipeline sections between the check valves. The hydrocarbons lost during the hurricanes were thoroughly dispersed offshore by the hostile sea conditions, which eliminated the potential for oil reaching the shores. The MMS maintains that there were no accounts of environmental consequence resulting from spills from OCS facilities: no spill contacts to the shoreline, no oiling of marine mammals, birds or other wildlife, no large volumes of oil on the ocean surface to be collected or cleaned up, and no identified environmental impacts from any OCS spills from Hurricanes Katrina or Rita.

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Seismic Surveys May Be Threatening To Marine Animals

There may be another environmental threat connected with drilling, noise-related injuries to marine animals. Seismic surveys record the vibrations of the earth. By recording the time interval between the source of the shock wave and the reflected or refracted shock waves from various formations, geophysicists are able to define the underground configurations. According to the NRDC, "Seismic work involves the use of underwater air guns that generate extremely loud noise -- a single blast is 10 times louder than a rocket launch, and the blasts occur every 10 to 15 seconds for days, weeks and even months at a time. These sounds carry through the water for hundreds of miles and have been known to cause permanent hearing loss in marine mammals. They can disrupt their feeding, migration, social bonding predator avoidance, and have been associated with stranded whales. This past June, Exxon-Mobil had to suspend exploration efforts near Madagascar after more than 100 whales beached themselves.²¹ The company has denied any link between its operation and the stranding.

²¹ BBC News online report, Whales stranded off Madagascar, June 9, 2008 <u>http://news.bbc.co.uk/2/hi/africa/7443559.stm</u>

Alternative Energy Sources for Florida

Solar energy is one of the richest sources of energy for the future. One of the reasons for this is that the energy from the sun is around 35,000 times the total energy used by humans. (However, about one-third of this energy is either absorbed by the outer atmosphere or reflected back into space.) Solar energy is presently used on a small scale for such things as heating homes and swimming pools. On a larger scale, solar energy could be used to run cars and power plants.

Geothermal energy is an alternative energy source, although it is not resourceful enough to replace more than a minor amount of our future energy needs. Geothermal energy is obtained from the internal heat of the planet and can be used to generate steam to run steam turbines. This in turn generates electricity. Geothermal energy systems are more inefficient than other alternative energy sources because of the costs required in upkeep and the shortage of potential sites.²²

Pickens Plan Advocates Replacing Natural Gas Use with Wind

Wind power is another alternative energy source that can be used to produce electricity. The power that could be produced when a windmill is facing a wind of 10 mi/hr. is around 50 watts. The fins of a windmill rotate in a vertical plane, which is kept perpendicular to the wind by means of a tail fin. As wind-flow crosses the blades of the windmill, it is forced to rotate and can be used to generate electricity. Another type of wind power generator is the two hollow half-drum-type wind collectors. This wind collector rotates on a single vertical axis, making this device independent of the wind direction, which may generate more electricity.²³

In 2008, T. Boone Pickens, an American businessman and advocate for alternative energy, announced an energy policy proposal, called the Pickens Plan. A major feature of the plan is replacing the 22 percent of the electricity that the United States gets from natural gas, which would then allow that natural gas to provide 38

²² Essay by University of Utah graduate student, P. Tran entitled, *Geothermal Energy as an Alternative Source for Energy* <u>http://www.cc.utah.edu/~ptt25660/geo.html</u>

²³ Winteringham, F. Peter W. Energy Use and the Environment, 1991

percent of the nation's fuel for transportation thus reducing dependence on foreign oil. The Pickens Plan calls for the United States to use its wind corridor in the middle of the country, which stretches from Texas through the Great Plains to the Canadian border.

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