
DRILLING FOR TRUTH AND COMING UP EMPTY

AN ANALYSIS OF THE MAJORITY STAFF ENERGY REPORT

COMPILED BY MINORITY STAFF OF THE COMMITTEE ON NATURAL RESOURCES

"THIS REPORT HAS NOT BEEN OFFICIALLY ADOPTED BY THE COMMITTEE ON NATURAL RESOURCES
AND MAY NOT THEREFORE NECESSARILY REFLECT THE VIEWS OF ITS MEMBERS."

October 2008

**"The greatest dangers to liberty lurk in insidious encroachment by men of zeal,
well-meaning but without understanding." Louis D. Brandeis**

SUMMARY

In June of this year the Majority Staff of the Committee on Natural Resources issued a report titled "The Truth about America's Energy: Big Oil Stockpiles Supplies and Pockets Profits." The report has provided the basic talking points on energy issues for the Majority since its release.

The report includes unsupported extrapolations regarding the oil and gas resources contained within the non-producing acres under lease. It also illustrates a lack of knowledge about the onshore and offshore leasing process, the costs to the lessee to acquire the lease or leases, the nature of oil and gas deposits, and the time required to explore, and if a discovery is made, develop a lease.

Ultimately the Majority's document misleads Members of Congress and the American public. This analysis provides context for questions and issues raised in the report regarding the Federal onshore and offshore oil and gas leasing program that will help Americans understand the complexity of the issue and more importantly explain exactly why the U.S. is **60%** dependent on foreign sources of oil.

THE FEDERAL ENERGY STOCKPILE

Under the Mineral Leasing Act of 1920, the Mineral Leasing act for Acquired Lands of 1946, the Outer Continental Shelf Lands Act of 1953, the Naval Petroleum Reserve Production Act of 1976, and the Federal Oil and Gas Royalty Management Act of 1982, the Federal government leases to private companies the right to explore, develop and produce energy from public lands. These energy sources include oil, natural gas and coal, in addition to non-fuel mineral commodities. Revenues to the Federal treasury from these programs are significant: **\$12.99 Billion in FY 2007.**¹ These federal revenues are second only to taxes collected by the Internal Revenue Service.

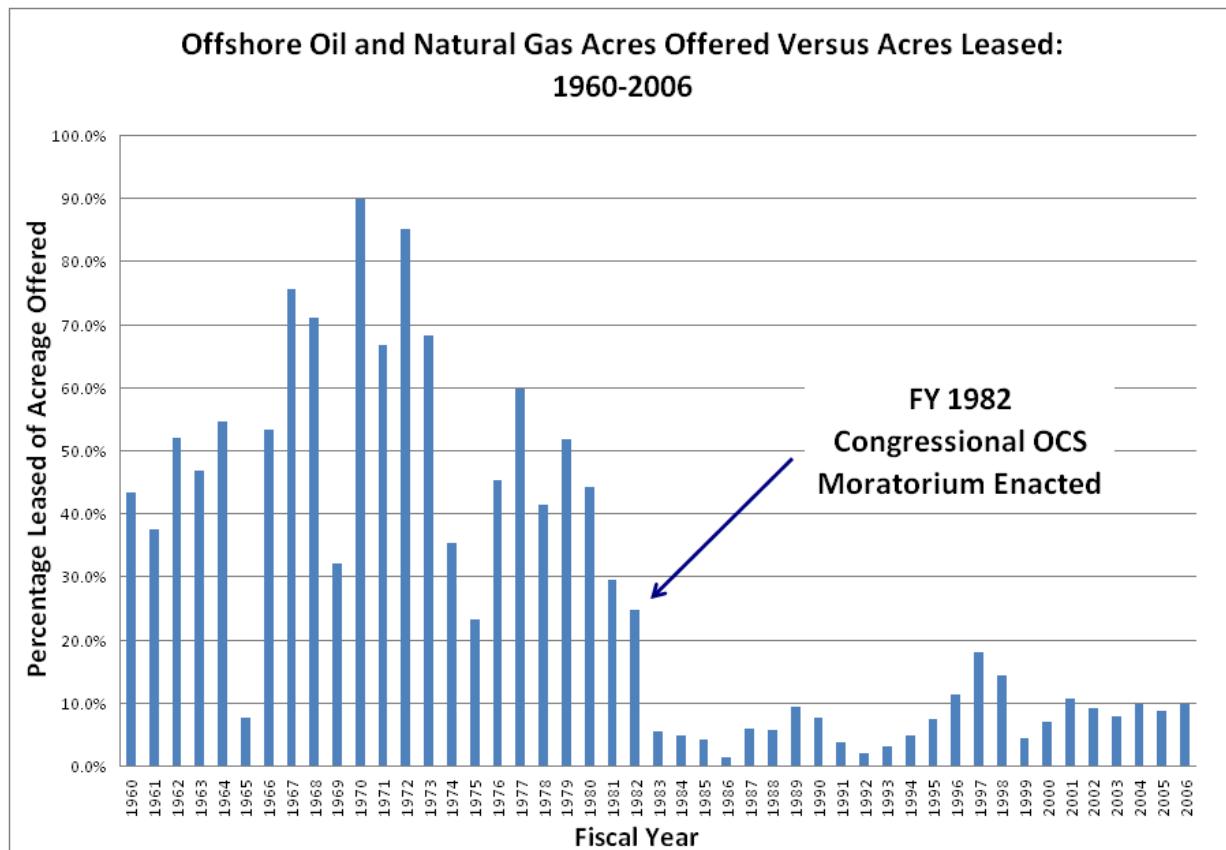
FEDERAL MINERAL ESTATE: The Federal government owns 700 million acres of onshore minerals and 1.76 billion acres of offshore minerals on the OCS. Recent oil and gas resource assessments completed by agencies within the Department of Interior (DOI) have estimated the mean undiscovered technically recoverable conventional oil and natural gas resources to be 147 billion barrels of oil and 872 trillion cubic feet (TCF) of natural gas within the OCS,²

¹ <http://www.doi.gov/budget/2009/09Hilites/N001.pdf>

² <http://www.mms.gov/offshore/>

the onshore Federal estate,³ and Arctic Alaska.⁴ Current domestic “proved reserves”⁵ located on private, State and Federal lands are 22 billion barrels of oil and 204.4 TCF of natural gas.⁶ Currently **ONLY 4%** of the Federal mineral estate is leased for oil and gas development.

OUTER CONTINENTAL SHELF MORATORIUM: Beginning in Fiscal Year (FY) 1982, Congress has included an annual spending prohibition in appropriations acts preventing the Minerals Management Service (MMS) from spending money to plan for and conduct oil and gas lease sales for significant portions of the OCS. In addition, an overlapping Presidential moratorium for these activities was issued in 1990 and extended to 2012 in 1998. These moratoria have placed the MMS in the awkward position of trying to lease the same areas over and over again with limited success (Figure 1).



Institute for Energy Research

Source: U.S. Department of Interior, Bureau of Land Management

Figure 1: When the Congressional OCS moratorium was adopted in 1982, the Department of the Interior could only offer for lease those areas that had largely been offered previously and found to be lacking in energy potential. The exception was when Congress provided incentives to invest in “Ultra Deep Waters” in 1995 to attract interest to areas that had been available, but out of economic and technological reach (Source: DOI, Bureau of Land Management).

³ http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/EPICA_III.html

⁴ <http://energy.usgs.gov/arctic/>, http://energy.usgs.gov/flash/CARA_slideshow.swf Some of the resources in Arctic Alaska lie under Russian Waters and some lie under Canadian waters.

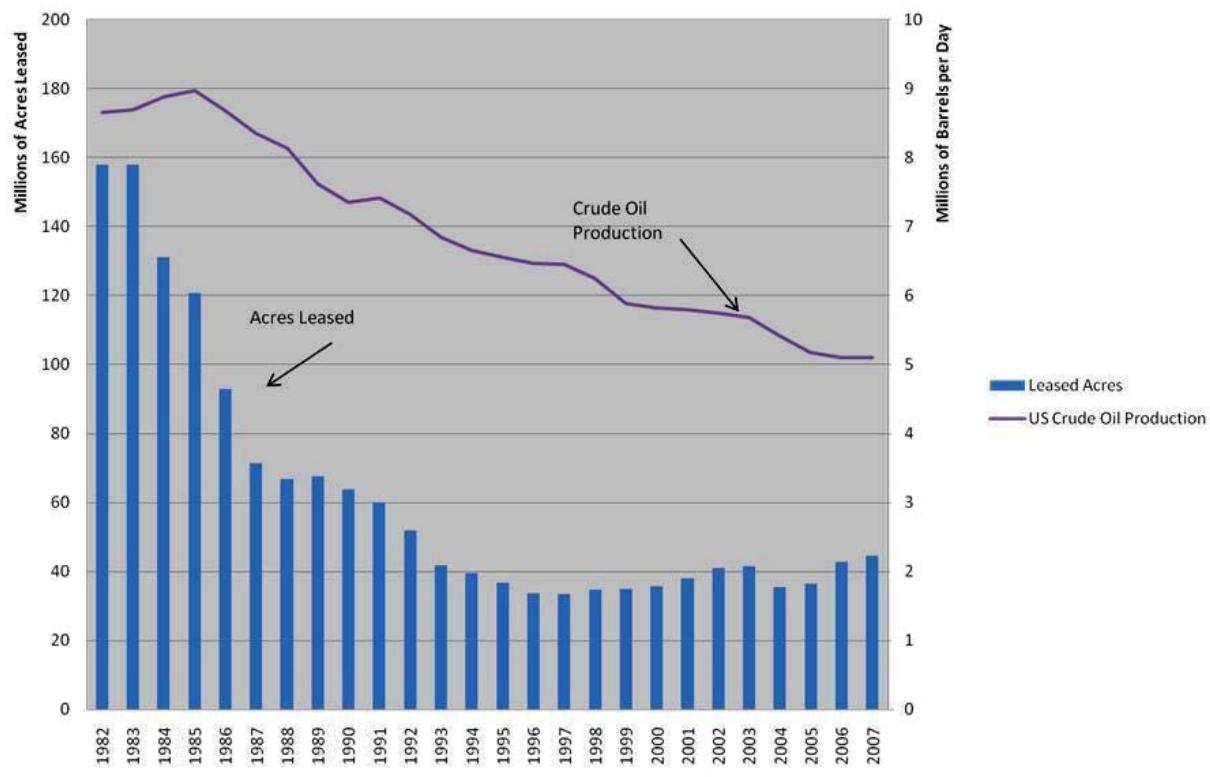
⁵ http://www.eia.doe.gov/glossary/glossary_p.htm

⁶ http://tonto.eia.doe.gov/country/country_energy_data.cfm?fips=US

LIFTING THE OCS MORATORIA: At the request of the Alaska delegation, the spending moratoria for the North Aleutian Basin was dropped from the FY-2004 and subsequent appropriations acts. Secondly, the Gulf of Mexico Energy Security Act of 2006 lifted the Congressional moratoria for the “181 South Area” in the Gulf of Mexico. President Bush lifted the Presidential moratoria for these areas only in January of 2007. In July of 2008 President Bush revoked the Presidential moratorium for the OCS with exceptions for the Eastern Gulf of Mexico and designated Marine Sanctuaries. Congress did not include the annual spending moratorium for leasing activities on the OCS in the Continuing Resolution that will fund the Government from October 1, 2008 through March 6, 2009.

LIMITATIONS ON ONSHORE OIL AND GAS LEASING: During the early 1980s approximately 158 million acres of the onshore Federal mineral estate was leased for oil and gas development (Figure 2). At the end of FY 2007 only 45.1 million acres was leased for this purpose. The dramatic drop in onshore acres leased is in part due to the expansion of areas set aside for conservation (preservation) purposes through Presidential and Congressional action, and administratively by Federal land management agencies.

**Federal Onshore Acres Leased and U.S. Crude Oil Production:
1982-2007**



Institute for Energy Research

Source: U.S. Department of Interior, Bureau of Land Management

Figure 2: Federal On-Shore Acres Leased and U.S. Oil Production FY 1982 – FY 2007

In 1964, 51 million acres (9% of Federal lands) were managed for conservation (preservation) purposes. The figure grew to 131 million acres (19% of Federal lands) through 1979. By the end of FY 1994, 271 million acres or 43.7% of Federal lands, were managed for conservation (preservation) purposes.⁷ These designations include: Areas of Critical Environmental Concern; National Park System lands; National Wilderness Preservation System lands;

⁷ GAO/RCED-95-73FS Federal Lands: Information on Land Owned and on Acreage with Conservation Restrictions.

National Monuments; Wild and Scenic Rivers; National Recreation Areas; National Conservation Areas; Outstanding Natural Area; National Scenic Trails; National Historic Trails; and, National Wildlife Refuges.

Since FY 1994 additional acres originally managed for multiple use have been added to the National Wildlife Refuge System⁸ (some lands were acquired from private land owners) or designated a National Monument, Wild and Scenic River, National Wilderness Area, or National Park. Other areas have been restricted for oil and gas leasing and other resource development activities by President Clinton's roadless area rule affecting National Forests (approximately 58 million acres), designation of endangered species habitat and environmental litigation.

Figuring out what percentage of the Nation's oil and gas resources have been put off limits to development for other purposes is challenging. In an effort to understand the extent of the limitations on access to these important resources Congress included a provision in the Energy Policy and Conservation Act (EPCA) of 2000 requiring DOI to inventory all onshore Federal lands and identify the conventional oil and gas resources underlying the Federal onshore mineral estate. This provision of EPCA was amended by Section 364 of the bipartisan Energy Policy Act of 2005 (EPAct-2005). The amendment required the Secretary of the Interior to include an analysis of any restrictions or impediments to the development of the inventoried onshore oil and gas resources.

Recently the Bureau of Land Management (BLM), the DOI agency responsible for the management of the onshore Federal mineral estate, issued the Congressionally mandated EPCA Report. The authors of the report identified 279 million acres of Federal onshore mineral estate (developed and undeveloped) that lie within areas mapped as having oil and natural gas potential. The inventoried areas are estimated to contain 31 billion barrels of oil and 231 TCF of natural gas. The salient findings are summarized in the following statement from BLM's press release accompanying the study:⁹

The inventory found that 60 percent of the onshore Federal lands that have potential as domestic sources for natural gas and oil are presently closed to leasing, making 62 percent of the oil and 41 percent of the natural gas inaccessible for development. An additional 30 percent of onshore Federal oil and 49 percent of onshore Federal gas may only be developed subject to restrictions over and above standard environmental lease terms, including seasonal timing limitations. The study found that in the inventory areas just 8 percent of onshore Federal oil and 10 percent of onshore Federal gas are accessible under standard lease terms.

Environmental organizations continue to lobby for additional wilderness and other special land use designations that would remove additional Federal lands from multiple use management, including energy development. Many of these organizations actively support the "Wildlands Project" which seeks to place 50% of the North American continent in the most restrictive Wilderness status to protect biodiversity.¹⁰ There are currently 48 Wilderness Bills pending in Congress encompassing an additional 56.5 million acres of Federal land. One bill, S. 2739, included the "Wild Sky Wilderness" and has become law (P.L. 110-229).¹¹ There are 704 designated wilderness areas totaling 107,514,938 acres in the National Wilderness Preservation System.¹²

⁸ Oil and Gas development exists on some Wildlife Refuges where the subsurface mineral estate is privately owned.

⁹ http://www.blm.gov/pgdata/content/wo/en/info/newsroom/2008/may_08/NR_052108.html

¹⁰ Mann, C., Plummer, M., The High Cost of Biodiversity, *Science*, Vol. 260, June 25, 1993, p. 1868-1871

¹¹ CRS Report RL33792, *Federal Lands Managed by the Bureau of Land Management (BLM) and the Forest Service (FS): Issues for the 110th Congress*, by Ross W. Gorte, Carol Hardy Vincent, and Marc Humphries – Resources, Science and Industry Division; and, Kristina Alexander – American Law Division.

¹² <http://www.wilderness.net/index.cfm?fuse=NWPS&sec=fastFacts>

A BOUT OF SCHIZOPHRENIA FOR THE MAJORITY

Last year, the price Americans paid for a gallon of gas nearly doubled. In the meantime, the Chairman of the Natural Resources Committee held hearings “to examine the rapid oil and gas development that has taken place on our nation's public lands in recent years,”¹³ driving an agenda intended to slow the “[r]ampant, nearly unfettered energy development on Federal lands.”¹⁴

These hearings were used to justify legislation designed to slow oil and gas development on the Federal mineral estate by extending “the timeline for processing permits to drill . . . from 30 to 90 days,”¹⁵ by repealing provisions of the bipartisan EPAct-2005 designed to help the regulatory agencies coordinate and facilitate permitting of oil and gas projects and the development of the Nation’s rich oil shale deposits, and by increasing the costs to industry to do business with the government and to DOI to administer the oil and gas leasing and royalty collection programs.

The majority was caught flat footed when gasoline prices doubled and the American public experienced firsthand the negative ramifications of the frivolous restrictions Congress placed on domestic energy development. Americans recognize that opening more federal lands and waters to oil and gas development will increase the supply of American energy and lead to lower gasoline prices.

Not skipping a beat, the Majority placed the blame for high gasoline prices squarely on their favorite scapegoat, “*Big Oil*,” claiming they were stockpiling drilling permits and leases.

So, after spending 17 months accusing the Administration of leasing too much and allowing the rapid development of oil and gas leases, the Majority issued a report titled, “The Truth about America’s Energy: Big Oil Stockpiles Supplies and Pockets Profits.” This report concluded that oil companies were doing just the opposite.

ANALYSIS OF THE REPORT

Majority Report – Introduction: “While the oil industry and some Members of Congress argue that opening more federal lands and waters would lead to lower gasoline prices, the facts prove otherwise. The fact is that the Nation simply cannot drill its way to lower prices at the pump. Other options, from greater energy efficiencies to the development of alternative fuels, are essential to reducing dependency on petroleum fuels and lowering fuel costs.” (Majority Report, page 1)

FACTUAL CRITIQUE: No matter how hard they try, the Majority cannot suspend the law of supply and demand.

During the first quarter of 2008, **70%** of the cost of a gallon of gasoline was the price refiners paid for crude oil. By May it had jumped to **75%.**¹⁶ In actuality the law of supply and demand continues to work, demand for petroleum has gone up, constraining the available supply: This means a corresponding increase in price for crude oil and the products made from it, including gasoline.

DEMAND: Worldwide demand for crude oil and other commodities has been increasing and is largely driven by the industrialization and modernization taking place in China and India. China doubled its consumption of petroleum products between 1995 and 2005 (Figure 3), and India doubled its consumption between 1993 and 2005 (Figure 4).

¹³ http://resourcescommittee.house.gov/index.php?option=com_content&task=view&id=113&Itemid=1

¹⁴ http://resourcescommittee.house.gov/index.php?option=com_content&task=view&id=340&Itemid=1

¹⁵ http://resourcescommittee.house.gov/index.php?option=com_content&task=view&id=124&Itemid=1

¹⁶ <http://tonto.eia.doe.gov/oog/info/gdu/gaspump.html>

Their economic growth and industrialization has put significant upward pressure on prices for all commodities since 2004.

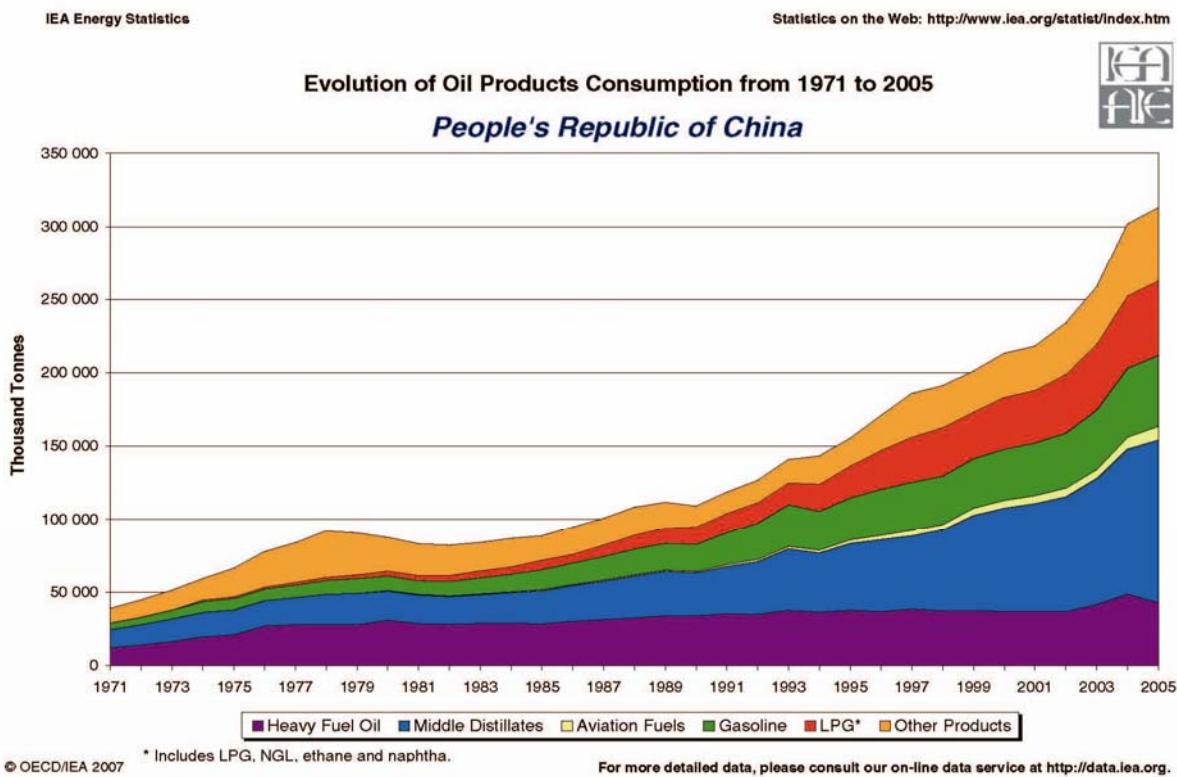


Figure 3: Evolution of Oil Products Consumption from 1971 to 2005 in China

China and India's growing consumption of oil and other commodities should come as no surprise to the Majority. Since 2004, numerous stories detailing China and India's rapid economic growth and increasing demand for natural resources have appeared in newspapers, magazines, and broadcast news programs. Other news reports have documented China's worldwide effort to secure access to the energy and mineral resources needed for its industrial development and the modernization of its infrastructure.

In late 2004, the U.S. Geological Survey published "China's Growing Appetite for Minerals,"¹⁷ documenting its consumption of mined materials and energy resources and projecting future trends based on models developed on the raw material needs of Japan and Germany after World War II and the industrialization of South Korea.

In the 109th Congress, the Resources Committee Subcommittee on Energy and Mineral Resources held an oversight hearing on "U.S. Energy and Mineral Needs, Security and Policy: Impacts of Sustained Increases in Global Energy and Mineral Consumption by Emerging Economies such as China and India."¹⁸ The hearing was part of a continuing series designed to examine the state of our Nation's energy and minerals policy with the aim of supporting policy and legislative changes that would allow the U.S. to produce more domestic energy and mineral resources. These are the very resources that are integral to every American's daily life and allow for the Nation's economic and national security and general well being.

¹⁷ <http://pubs.usgs.gov/of/2004/1374/2004-1374.pdf>

¹⁸ <http://republicans.resourcescommittee.house.gov/archives/ii00/archives/109/emr/031605.htm>

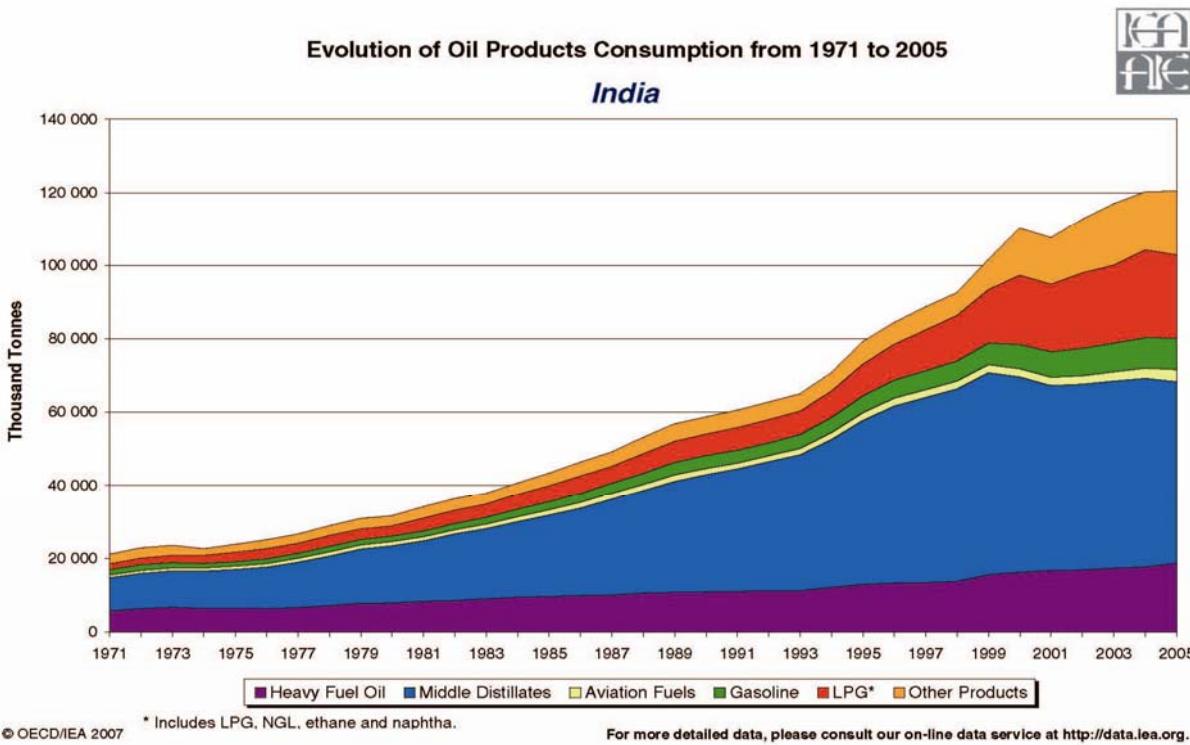


Figure 4: Evolution of Oil Products Consumption from 1971 to 2005 in India

SUPPLY: Today **ONLY 4%** of the Federal mineral estate is under lease for oil and gas exploration and development. Opening new Federal areas in the United States for leasing (the jurisdiction of the Natural Resources Committee) will lead to the discovery of new domestic oil and gas resources adding to the world-wide supply. This would likely drive down the costs of the feed stock (crude oil) for gasoline. As noted earlier the decline in domestic oil production mirrors the decline in the Federal onshore and offshore acres available for oil and gas leasing (Figures 1 & 2). Increasing refinery capacity and building new refineries (the jurisdiction of the Energy and Commerce Committee) would also contribute to lowering the price of gasoline and other transportation fuels.

CONSERVATION AND ENERGY EFFICIENCY: Unfortunately the Majority does not acknowledge the tremendous positive change in energy efficiency that has already taken place in the U.S. and will continue to improve with advances in technology. The Environmental Protection Agency (EPA) compared growth areas with decreased air emissions from 1970 through 2007 illustrating, what our Nation has positively accomplished over time (Figure 5).¹⁹

The Nation's growth in energy consumption has closely paralleled its population growth. The percentage increases in these categories are significantly lower than the Nation's growth in vehicle miles driven and Gross Domestic Product, which have also paralleled one another. During this same time period the Nation has achieved a significant decrease in six criteria air pollutants. In other words, inexpensive energy has contributed to the Nation's overall economic growth, well being and environmental stewardship.

¹⁹ <http://www.epa.gov/airtrends/>

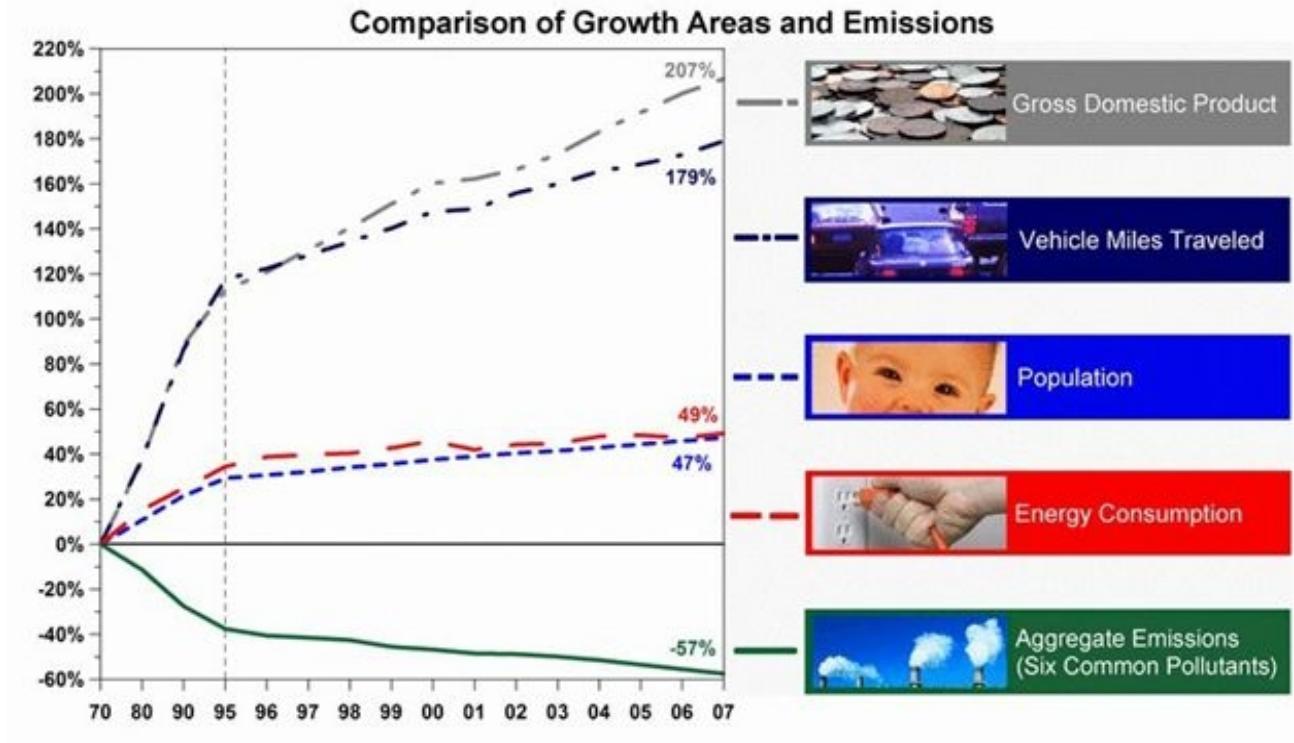


Figure 5: Comparison of Growth Areas and Emissions

Estimated Number of Alternative Fueled Vehicles in Use in the U.S., 2004-2006

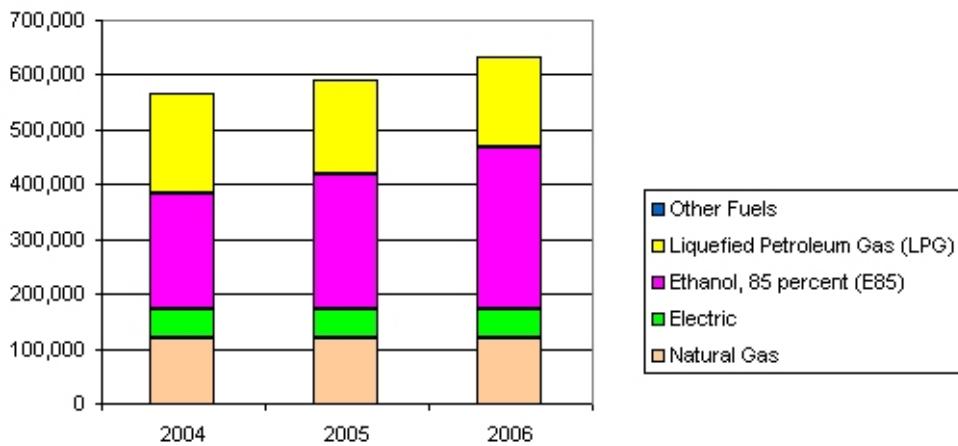


Figure 6: Notice that slightly more than 100,000 vehicles use natural gas for fuel (Source: Energy Information Administration (EIA))

ALTERNATIVE FUELS: The total number of registered highway vehicles in 2006 was 250,851,833.²⁰ Of those in use, 634,562²¹ were Alternative Fuel Vehicles (AFVs) (Figure 6), a paltry 0.253% of the U.S. fleet. The vast majority of these vehicles were part of a government or private sector fleet, entities that have the means and economic

²⁰ http://www.bts.gov/publications/national_transportation_statistics/html/table_01_11.html

²¹ http://www.eia.doe.gov/cneaf/alternate/page/atftables/afvtransfuel_ll.html#inuse

incentive to build and maintain the infrastructure needed to handle alternative fuels such as E-85, Natural Gas and Liquefied Natural Gas. In many parts of the country the infrastructure needed, distribution pipelines and filling stations, to support the widespread use by the general population of these alternative fuels does not exist.

The total number of AFVs and hybrid vehicles available, but not necessarily in use, during 2006 was 1,234,655²² (Figure 7) which increases the percentage to 0.49% of the U.S. vehicle fleet.

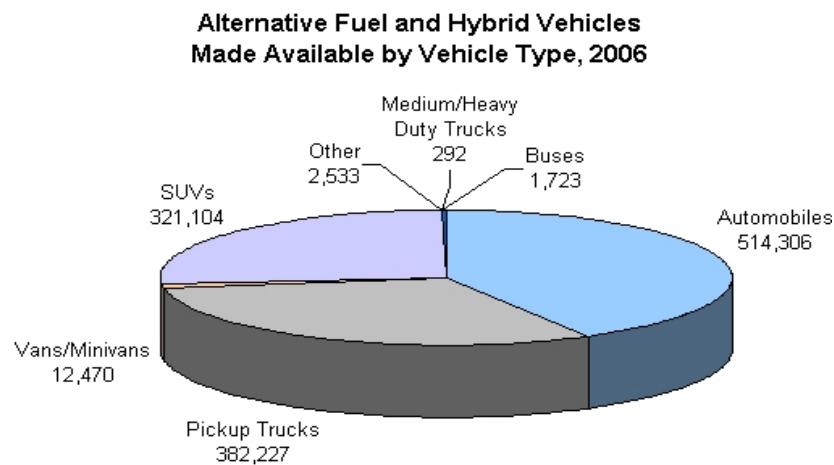


Figure 7: (Source: EIA)

Alternative fuels contributed 0.226% of the total U.S. transportation fuel consumption in 2006. When combined with replacement fuels (biodiesel, methyl tertiary butyl ether (MTBE) and ethanol in gasohol) these fuels equal 2.62% of total domestic consumption.²³

Gasoline-electric hybrid and diesel-electric hybrid vehicles are not considered AFVs because the input fuel is gasoline or diesel and not an alternative transportation fuel.

The Energy Policy Act of 1992 (EPACT-92) defined alternative [vehicle] fuels as:

methanol, denatured ethanol, and other alcohols; mixtures containing 85 percent or more (or such other percentage, but not less than 70 percent, as determined by the Secretary, by rule, to provide for requirements relating to cold start, safety, or vehicle functions) by volume of methanol, denatured ethanol, and other alcohols with gasoline or other fuels; natural gas; liquefied petroleum gas; hydrogen; coal derived liquid fuels; fuels (other than alcohol) derived from biological materials; electricity (including electricity from solar energy); and any other fuel the Secretary determines, by rule, is substantially not petroleum and would yield substantial energy security benefits and substantial environmental benefits²⁴

²² http://www.eia.doe.gov/cneaf/alternate/page/atftables/atf14-20_05.html (See S1.)

²³ http://www.eia.doe.gov/cneaf/alternate/page/atftables/afvtransfuel_ll.html#inuse (See Table C1.)

²⁴ Energy Policy Act of 1992; Public Law No:102-486

Under this provision of EPACT-92, the Secretary of the Department of Energy (DOE) ruled that diesel-electric and gasoline-electric vehicles were not “alternative fuel vehicles.”

Hybrid vehicles may be a great idea. However, they require 100% more copper than a full size Sports Utility Vehicle. There are supply and demand issues with copper and other mineral commodities utilized by the transportation sector. It is estimated that by 2016 there will be a 30% supply gap in available copper.²⁵ The same people who oppose domestic oil and gas development and the use of other fossil fuels also oppose domestic mining projects. This is a double energy independence whammy!

Our best opportunity for developing alternative transportation fuels from domestic sources does not involve using grains or other vegetable matter but does include coal-to-liquids, gas-to-liquids, and development of the Nation’s oil-shale resources. Unfortunately none of these programs are supported by the Majority party.

For example Section 369 of the EPAct- 2005 directed the Department of the Interior to complete a programmatic environmental impact statement for commercial leasing of oil-shale and tar-sands and to issue final regulations for a commercial leasing program for these resources. **In 2007, the Majority included a provision in the 2008 Department of the Interior Appropriations Act blocking the issuance of the final regulations for the commercial oil-shale leasing program.** This action only delays the commercial development of these resources and jeopardizes private sector investment in new technologies designed to harvest these important resources with minimal impact to the environment.

Majority Statement -- Increased Domestic Drilling Activity Has Not Led To Lower Gasoline Prices:

“Since the 1990s, the federal government has consistently encouraged the development of its oil and gas resources and the amount of drilling on federal lands has steadily increased during this time. The number of drilling permits has exploded in recent years, going from 3,802 five years ago to 7,561 in 2007. (Majority Report, page 1)

FACTUAL CRITIQUE: Saying the number of drilling permits has increased in recent years does not support the statement that the federal government ***“consistently encouraged the development of its oil and gas resources.”*** Onshore acres under lease during the 1990s to the present are less than one third the acres under lease during the early 1980s (Figure 2) and offshore acres under lease dropped dramatically after the annual Congressional spending moratorium for leasing activities on the OCS was enacted in 1982 (Figure 1). The decline in U.S. production is coincident with the decrease in the total acres available for oil and gas leasing (Figure 2). The average number of onshore acres leased between 1993 through the present is lower than the preceding 12 years (Figure 8).

²⁵ <http://republicans.resourcescommittee.house.gov/archives/ii00/archives/109/testimony/2006/robynstorer.htm>

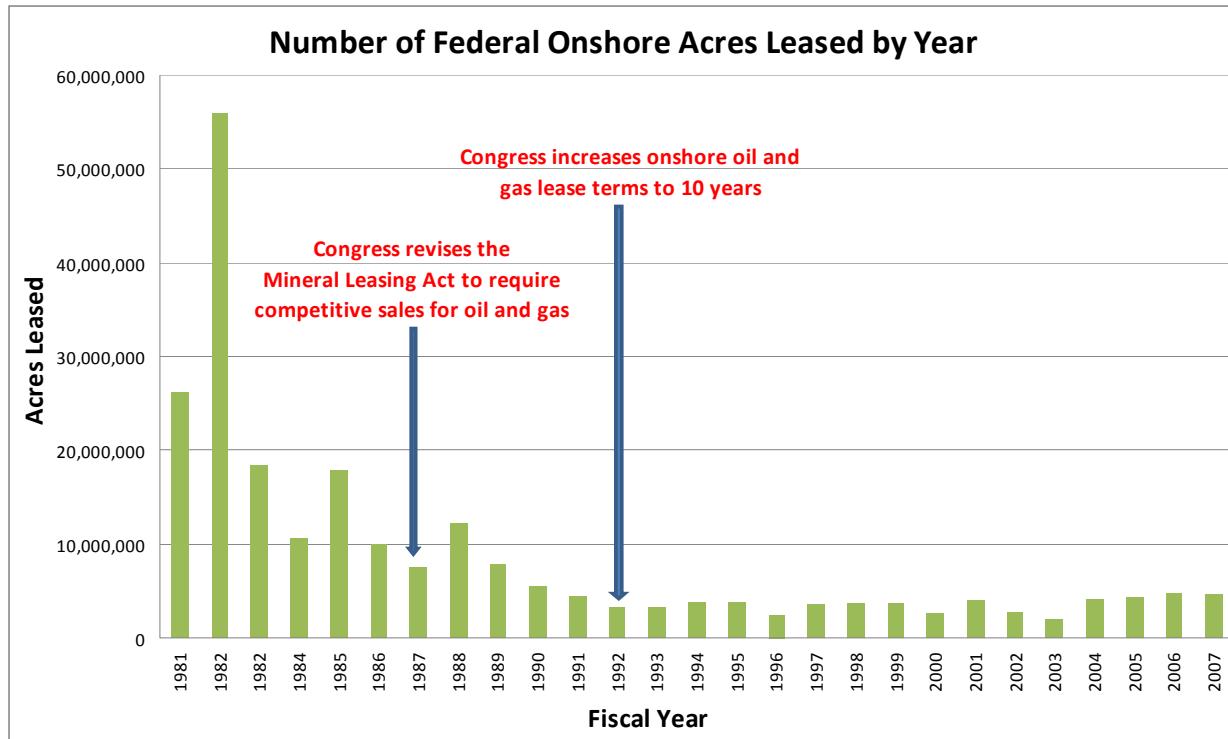


Figure 8: (Source: BLM data)

Drilling Permits: Onshore Applications for Permits to Drill (APDs) have increased significantly since 2004 and this growth most closely correlates with increased prices for oil and natural gas (Figure 9a, and 9b). The price incentive leads to more development, and try as they might the Majority cannot change this basic economic principle.

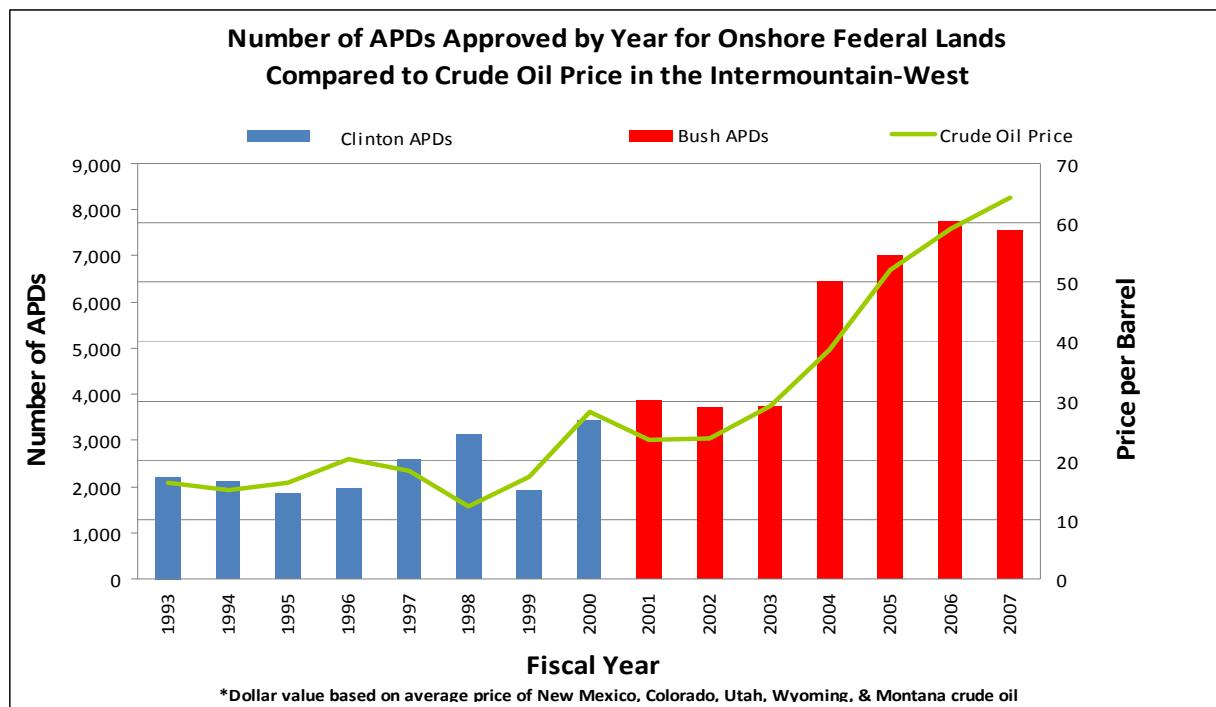


Figure 9a: Applications for Permits to Drill (APDs) approved v. the price of crude oil for the Intermountain-West Federal land States (Source: BLM & EIA data)²⁶

²⁶ http://tonto.eia.doe.gov/dnav/pet/pet_pri_dfp1_k_a.htm

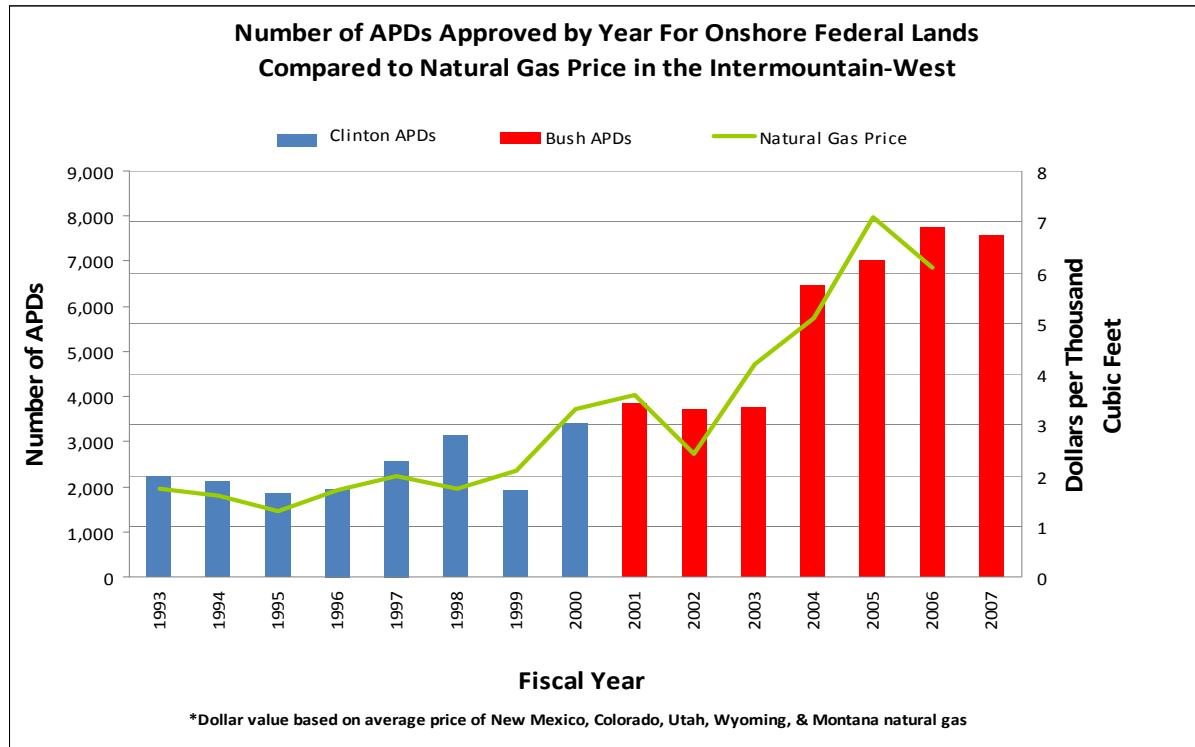


Figure 9b: APDs approved v. the price for natural gas in the Intermountain-West (Source: BLM & EIA data)²⁷

Most of the APDs issued were for leases in the Intermountain-West for the development of natural gas fields in Wyoming and New Mexico, principally coal bed methane and tight-sands deposits. These types of unconventional natural gas deposits require more production wells than traditional natural gas fields. This means there are more wells in a smaller area required for unconventional natural gas field development. BLM requires an APD for each hole drilled, including exploration wells, development wells, injection wells, and to refurbish an existing well. In this part of the country, due to the nature of the gas deposits, more wells drilled does not necessarily mean more or new acreage is being developed.

Fortunately BLM has encouraged industry to ‘bundle’ their APDs in a Master Development Plan to facilitate orderly development of the field and to allow for appropriate analysis of the cumulative effects of field development. This practice provides for a heightened level of environmental protection and stewardship as these resources are developed.²⁸

Most Importantly - Natural gas is not used for the production of gasoline and therefore should not be expected to impact the price Americans pay for gasoline or other transportation fuels used by business and industry or the military. This aspect of the majority report is a red herring.

Majority Statement: “Between 1999 and 2007, the number of drilling permits issued for development of public lands increased by more than 361%, yet gasoline prices have also risen dramatically contradicting the argument that more drilling means lower gasoline prices. There is simply no correlation between the two.” (Majority Report, page 1)

FACTUAL CRITIQUE: Analysis of this statement first requires three queries: what resources, where and its use:

²⁷ http://tonto.eia.doe.gov/dnav/ng/ng_pri_sum_a_EPG0_FWA_DMcf_a.htm

²⁸ http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/Onshore_Order_no1.html

WHAT -- Crude oil is the feed stock for our transportation fuels, including gasoline, and is also used to make plastics and other products. Natural gas is used to generate electricity (approximately 20%), for home energy use and as feed stock for fertilizer and other chemicals.

WHERE -- Some fields only produce natural gas while others primarily produce oil. For example of the 8 major producing basins in the Intermountain-West Federal land States, five are primarily natural gas basins and 3 are primarily oil producing basins.

Numerous leases in two of the onshore oil producing basins in the Intermountain-West are in suspended status awaiting a final Record of Decision (ROD) prepared under the National Environmental Policy Act on several Resource Management Plan (RMPs) revisions. The revisions to the RMPs delaying evaluation of these leases were required by court decisions resulting from litigation brought by environmental groups opposed to oil and gas development on Federal lands. This litigation has resulted in delayed development of an estimated 5.2 TCF of gas and 334 million barrels of oil, enough energy to heat 72.9 million homes and power 24.5 million cars.

More Drilling Does Yield More Resources!

NEW OIL AND GAS DISCOVERIES IN THE INTERMOUNTAIN-WEST from 2000 – 2006: All of those APDs issued in the last few years have yielded significant growth in gas reserves and increases in oil reserves. During this time frame gas reserves increased from 46 TCF to 61 TCF (Figure 10). Total lower 48 States proven reserves increased by 28% and the Rockies contributed 52% of these additional reserves, primarily from coal bed methane and tight-sands in Wyoming, New Mexico and Colorado. These unconventional gas resources require many more production wells than conventional natural gas fields; as mentioned earlier an APD is required for EACH well drilled.

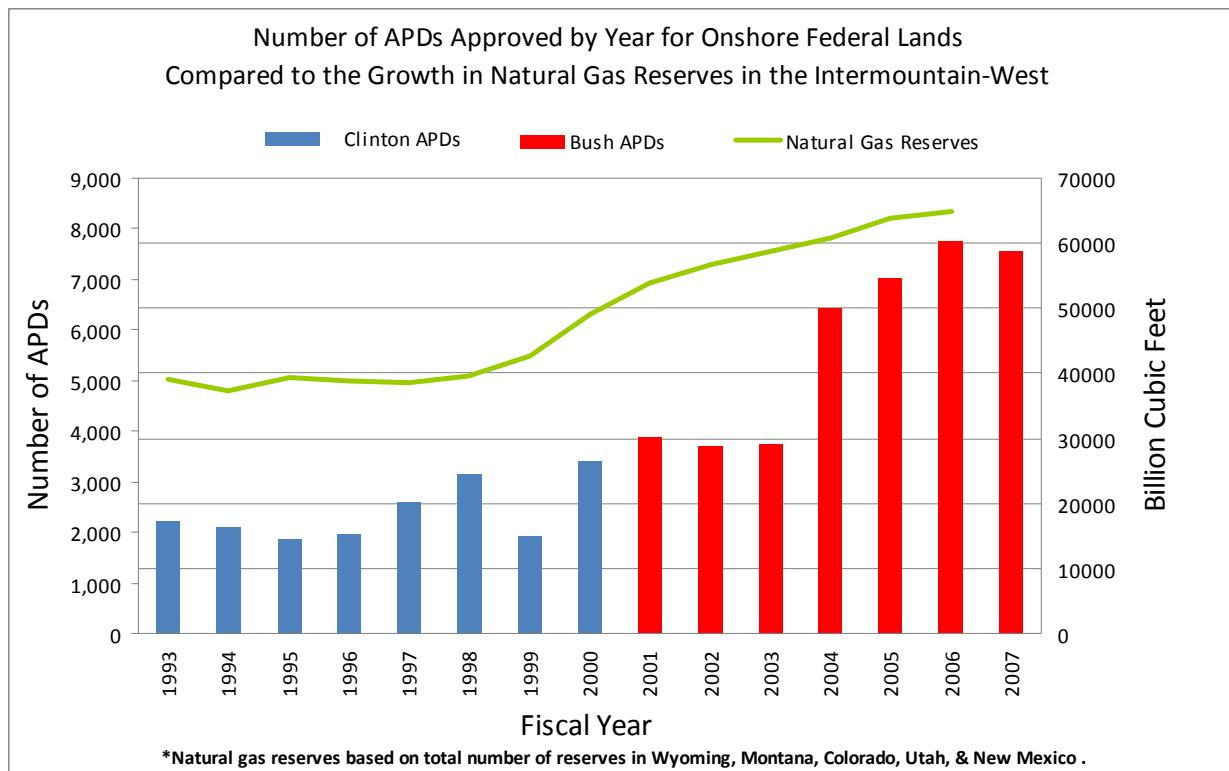


Figure 10: Growth of Natural Gas Reserves in the Intermountain West (Source: BLM & EIA data)²⁹

²⁹ http://tonto.eia.doe.gov/dnav/ng/ng_enr_sum_a_EPG0_R11_BCF_a.htm

Between 2004 and 2006, annual oil production from this region increased by over 31 million barrels (Figure 11). Currently oil production from the Rockies accounts for more than 9% of total U.S. production.

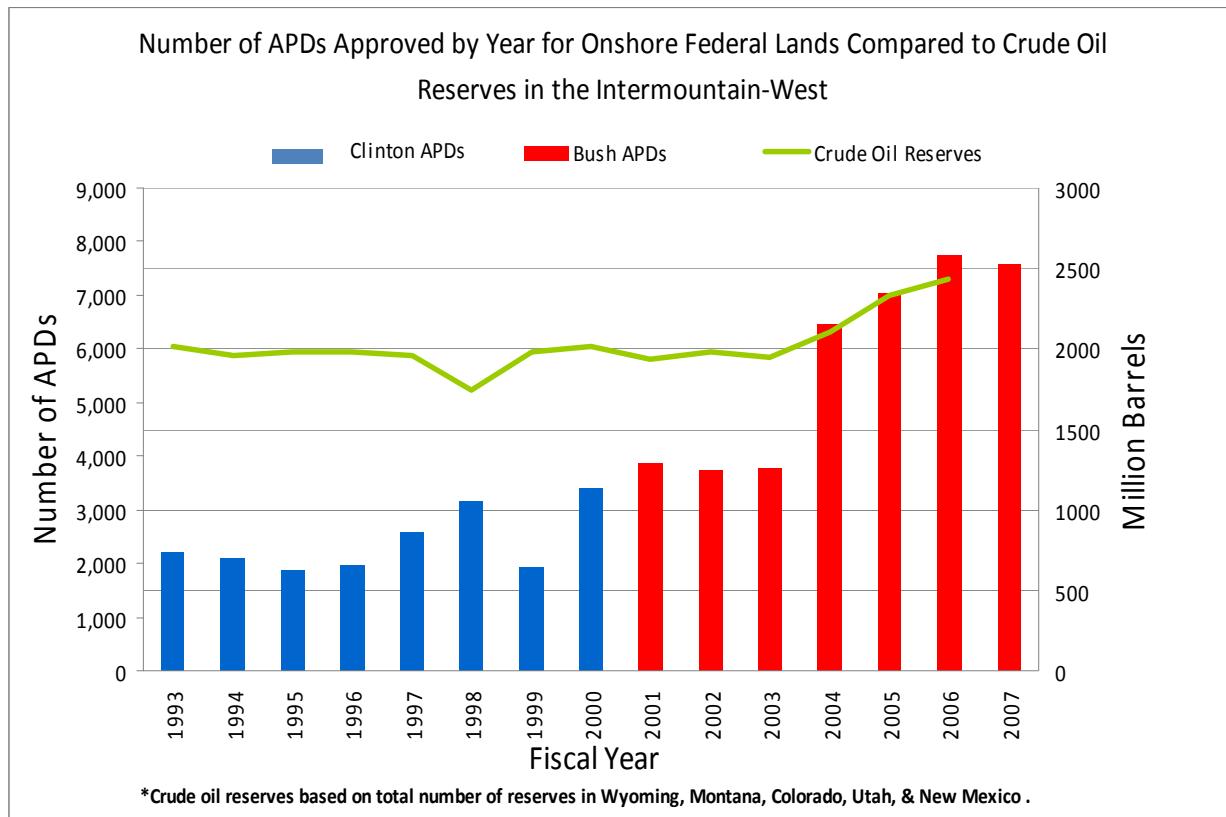


Figure 11: Growth of Oil Reserves in the Intermountain West (Source: BLM and EIA data)³⁰

During this same time period, 2004-2006, overall U.S. production of crude oil fell by 10% (Figure 12). This is primarily a result of Hurricane Ivan in 2004 and Hurricanes Katrina and Rita in 2005 which impacted the oil and gas infrastructure in the Gulf of Mexico, including refineries, causing many producing oil and gas wells to be shut in. More than 100 production platforms were destroyed by the hurricanes. **Imagine, if we had not had the increase in oil production from the Federal leases in the West, what the cost of a gallon of gasoline would be?**

³⁰ http://tonto.eia.doe.gov/dnav/pet/pet_crud_pres_a_EPC0_R01_mmbbl_a.htm

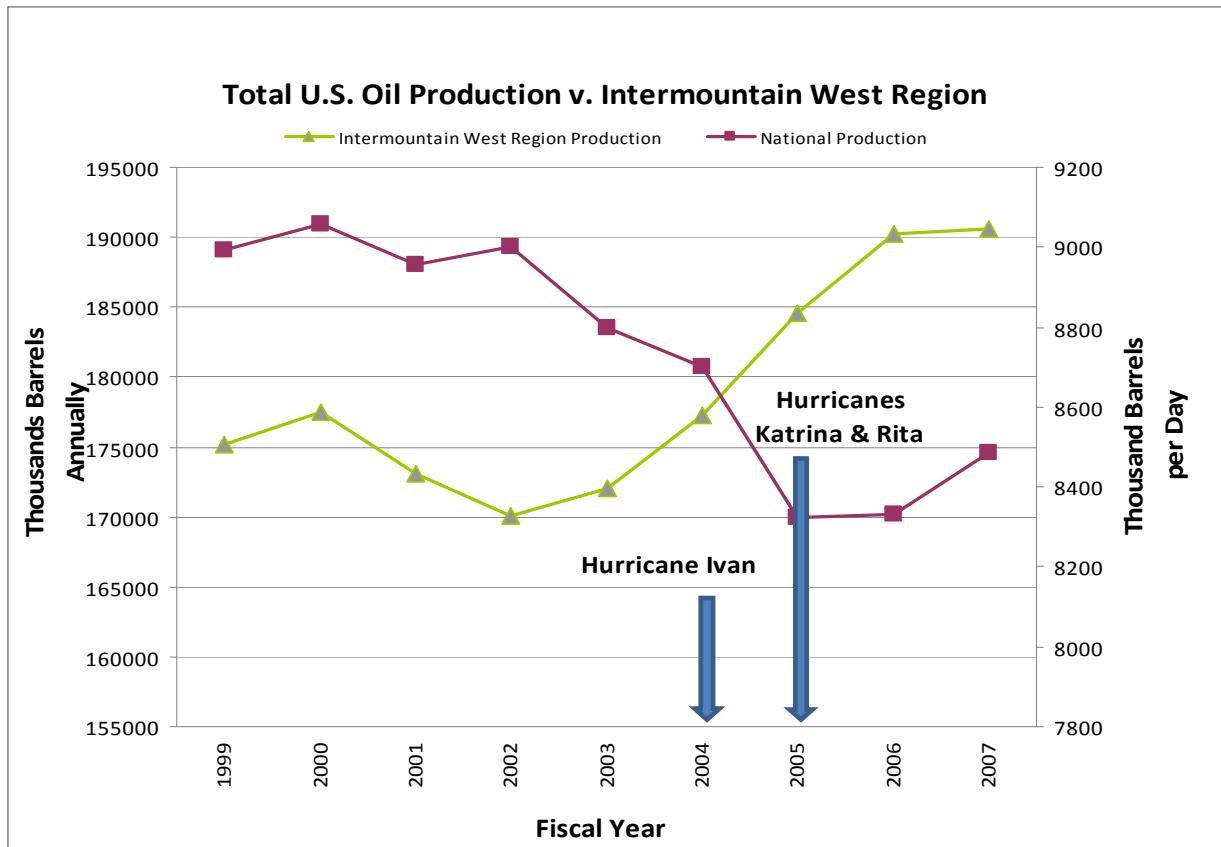


Figure 12: Total U.S. Oil Production v. Production Growth in the Intermountain-West. Note the significant drop in domestic production between 2004 and 2005³¹

It is worth noting that no oil-field workers were killed and no blowouts occurred even though many platforms were destroyed during these catastrophic storms (all the shut in valves worked). It is a testament to the coordination between the Minerals Management Service (MMS), the Coast Guard, and “Big Oil” that everyone was safely evacuated and the technology developed to prevent blowouts worked exceptionally well.

Majority Statement -- Energy Companies Not Using Federal Lands Already Open to Energy Development -- “Even if increased domestic drilling activity could affect the price of gasoline, there is yet no justification to open additional federal lands because oil and gas companies have shown that they cannot keep pace with the rate of drilling permits that the federal government is handing out.”

In the last four years, the Bureau of Land Management has issued 28,776 permits to drill on public land; yet, in that same time, 18,954 wells were actually drilled. That means that companies have stockpiled nearly 10,000 extra permits to drill that they are not using to increase domestic production.” (Majority Report, pages 1-2)

FACTUAL CRITIQUE: Until 2007 when revised Onshore Order No. 1 was issued, APDs (drilling permits) had a one to two year shelf life before they expired. **Any APDs that were issued in 2004 and 2005 and were not utilized have expired and therefore cannot be stockpiled. Those that were issued in 2006 will expire this year.** Anyone who

³¹ http://tonto.eia.doe.gov/dnav/pet/pet_crd_crpdn_adc_mbbl_a.htm

was unable to use an APD before it expired will have to reapply and wait for BLM approval before proceeding with drilling. So the life of an APD is limited and oil prices are high; there is no incentive or ability to “stockpile” APDs.

Today the shelf life of an APD is two to four years; this amount of time is necessary to deal with lease stipulations that limit when an area can be drilled primarily to accommodate wildlife mating, nesting, and migration periods. The following three graphs (Figures 13a, 13b & 13c)³² show what time periods are open (green blocks and sometimes white blocks) and closed (red blocks and sometimes blue blocks) to drilling for three different basins in the Intermountain West. Conditions for drilling are determined by the presence or activities of the wildlife species listed on the left side of the graphs.

Wildlife Restrictions Planning Table Overview – Powder River Basin

Only the Black Footed Ferret ruled Threatened or Endangered by DOI



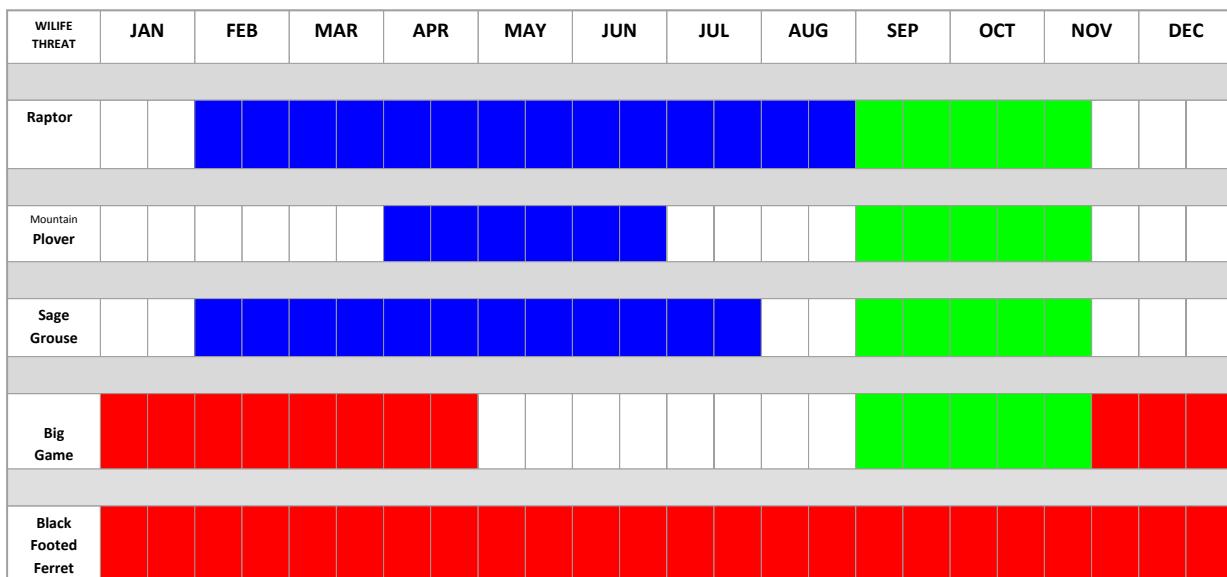
Figure 13a – Powder River Basin in Wyoming (white blocks are conditionally open and blue blocks are conditionally closed based on the presence or activities of species listed in the blocks to the left).

Only the Black Footed Ferret has been ruled Threatened or Endangered.

³² Graphics provided by the oil and gas industry.

Wildlife Restrictions Planning Table Overview – Green River Basin

Only the Black Footed Ferret ruled Threatened or Endangered by DOI



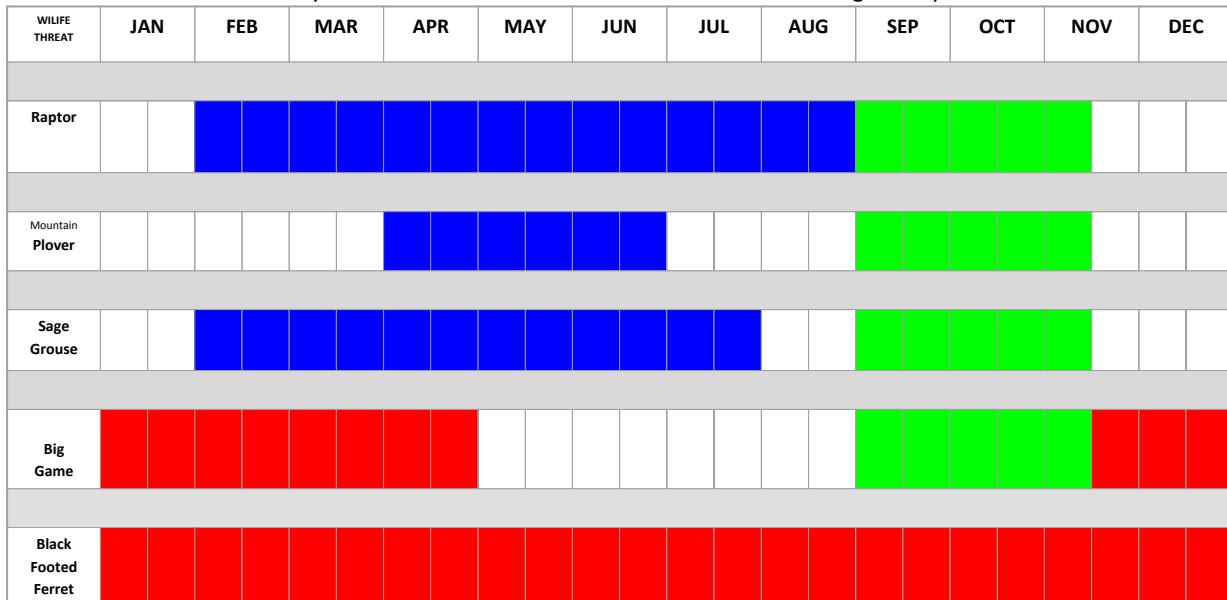
 Indicates available window for drilling operations  No production may occur if species detected

Figure 13b – Green River Basin – Wyoming, Colorado and Utah (white blocks are conditionally open and blue blocks are conditionally closed based on the presence or activities of species listed in the blocks to the left).

Only the Black Footed Ferret has been ruled Threatened or Endangered.

Wildlife Restrictions Planning Table Overview – Uinta-Piceance Basin

Only the Black Footed Ferret ruled Threatened or Endangered by DOI



 Indicates available window for drilling operations  No production may occur if species detected

Figure 13c – Uinta-Piceance Basin (white blocks are conditionally open and blue blocks are conditionally closed based on the presence or activities of species listed in the blocks to the left).

Only the Black Footed Ferret has been ruled Threatened or Endangered.

Majority statement -- "Further, despite the federal government's willingness to make public lands and waters available to energy developers, of the 47.5 million acres of on-shore federal lands that are currently being leased by oil and gas companies, only about 13 million acres are actually "in production", or producing oil and gas. Similar trends are evident offshore as well, where only 10.5 million of the 44 million leased acres are currently producing oil or gas."

Combined, oil and gas companies hold leases to nearly 68 million acres of federal land and waters that they are not producing oil and gas. Oil and gas companies would not buy leases to this land without believing oil and gas can be produced there, yet these same companies are not producing oil or gas from these areas already under their control." (Majority Report, page 2)

FACTUAL CRITIQUE: All non-producing oil and gas leases are in some stage of exploration and development (Figure 14). If a lease is not producing or does not contain commercial quantities of oil or gas at the end of the initial term of a lease, the lease expires.³³ The Bureau of Land Management (BLM) or MMS can include the expired lease area in subsequent lease sales; often an area will be leased several times before a deposit is found or the technology is developed to recover a known resource making the lease commercially viable.

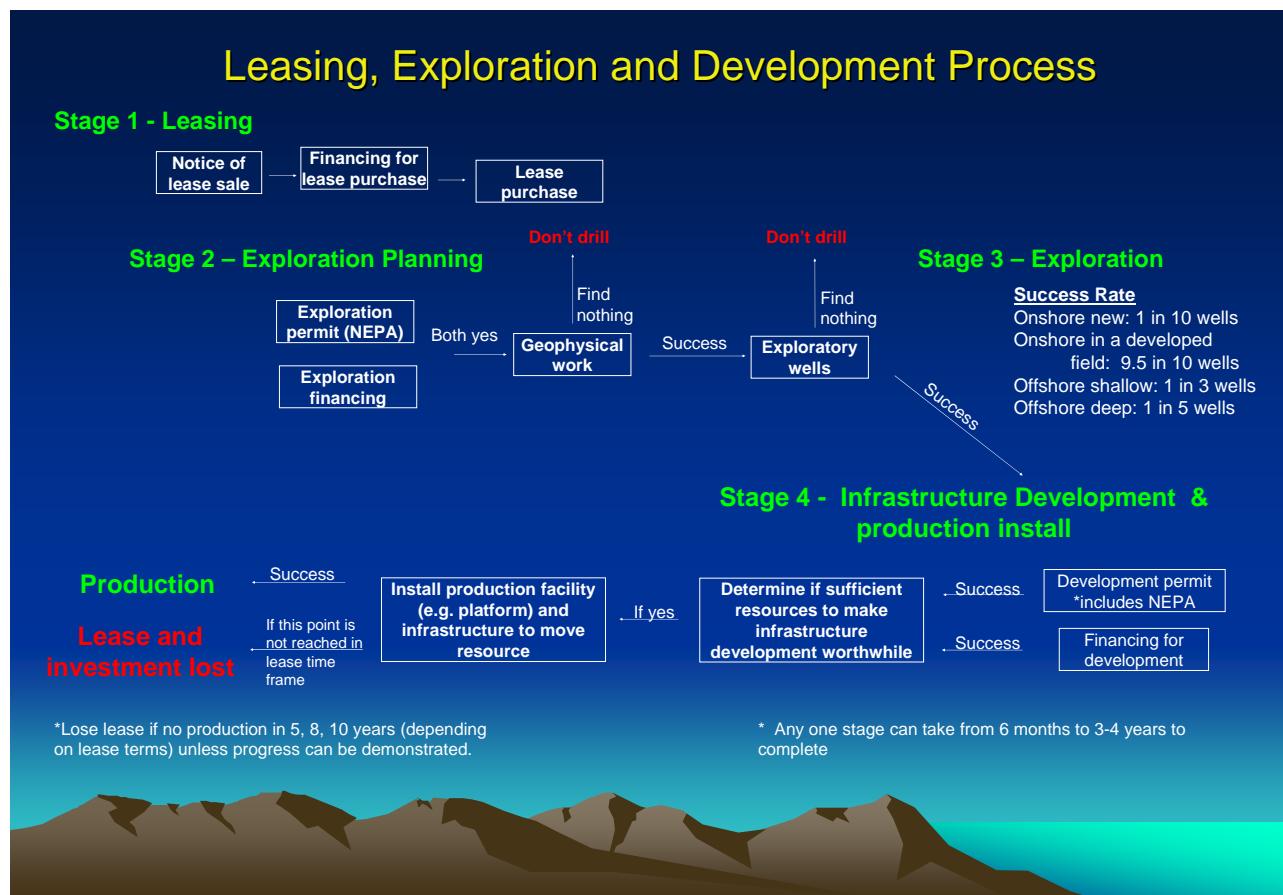


Figure 14: Summarizes the steps involved in exploring for and developing an oil and gas lease (Graphic provided by DOI)

Additionally, **there is no guarantee that a Federal oil and gas lease contains either oil or gas**. The company awarded the lease has to evaluate the area first. It must conduct seismic and other surveys to assess the potential for oil and gas being present in the lease and then drill to determine if there is actually any oil or gas within the lease area. All of this takes time, requires compliance with environmental laws and regulations and step-by-step approval from the BLM to drill an exploration well or the development and production wells needed to bring a

³³ http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/questions_and_answers.html

field into production. Often at the end of the day there is no oil or gas found. **For example between 2002 and 2007 47% of all the exploration wells and 8% of the development wells drilled were dry!**³⁴

Once a field is discovered and is determined to be economic to develop, it has to be put in production by drilling additional wells, completing the wells so they produce oil and/or gas, installing collection facilities, laying pipelines, etc. It may take several years to bring a field into production.

Another factor to consider when looking at the acres under lease compared to the acres in production is the age of the lease. A lease that was just issued would not be anywhere close to a producing status whereas a lease that is nearing the end of the initial lease term, if the lease holder was successful in finding an economic deposit of oil or gas, would be in development or actually in a producing status (Figure 15).

Federal Onshore Lease Exploration & Potential Production Time Line

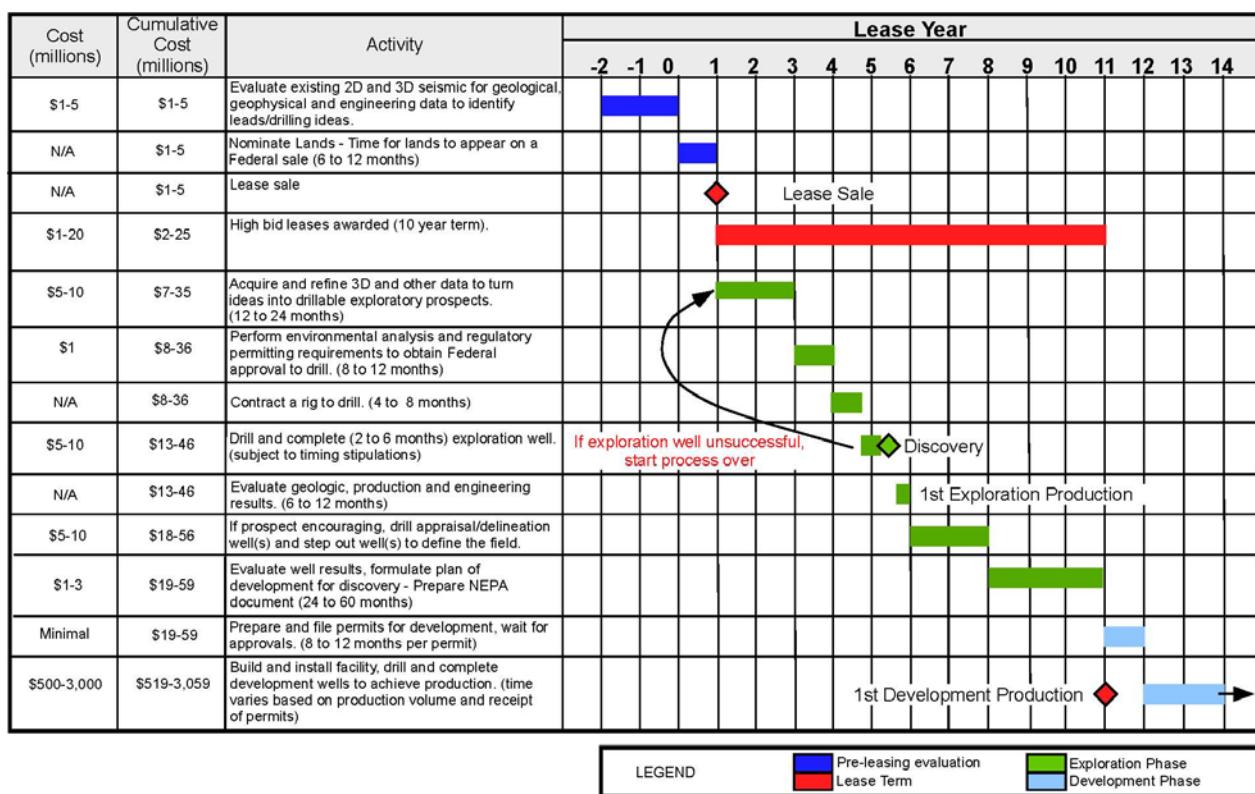


Figure 15: Federal Onshore Lease Exploration & Production Time Line with information on the costs associated with the specific activity described and the cumulative costs over the life of exploration, field development, and production. Notice the investment and work that is completed prior to a BLM lease sale. (Graphic provided by the American Petroleum Institute).

³⁴ http://tonto.eia.doe.gov/dnav/pet/pet_crd_wellend_s1_a.htm

Onshore lease terms are for a 10 year period and offshore leases vary depending on water depth and are 5, 8, or 10 years in length. Every year leases are returned to the Federal government prior to the end of the lease term because the lease holder determined there was a limited likelihood of a discovery of an oil or gas deposit.

People that are in the business of producing oil and gas will hold leases of differing ages so that not all of the leases in their portfolio are in the same stage of evaluation. The cost to evaluate a lease for its oil and gas potential escalates as the lease ages due to the costs associated with the successive stages of assessment (Figure 15). Staggering the age of the leases provides flexibility in planning for the large capital outlays associated with field development if a discovery is made. In addition, producers have to replace the oil and gas reserves that are being depleted from their producing leases; therefore there is a need to have leases of various ages in the evaluation pipeline.

This depletion of reserves from the Nation's known oil and gas fields, regardless of land ownership status, and the need to replace those reserves, is the principle reason that producers ask lawmakers to increase access to new areas prospective for oil and gas resources (open areas to leasing).

Majority Statement – “*If we extrapolate from today’s production rates on federal land and waters, we can estimate that the 68 million acres of leased but currently inactive federal land and waters could produce an additional 4.8 million barrels of oil and 44.7 billion cubic feet of natural gas each day.”*

“That would nearly double total U.S. oil production, and increase natural gas production by 75%. It would also cut U.S. oil imports by more than a third, and be more than six times the estimated peak production from the Arctic National Wildlife Refuge (ANWR).” (Majority Report, page 2)

FACTUAL CRITIQUE: The Securities and Exchange Commission might take a dim view of the manner in which the Majority seems to have arrived at its “extrapolated” production numbers for Federal leases not currently in production. It appears the extrapolation was computed without regard for the geology of the areas under lease or technological considerations of the various types of deposits that may underlie a lease. These claims were promptly refuted by the American Association of Petroleum Geologists (Appendix A) and DOI (Appendix B). See Appendix C for our best estimate of the Majority’s method of extrapolation.

On a more serious note, when the United States Geological Survey (USGS) or MMS conducts a resource assessment for the onshore or offshore mineral estate, they use available data from existing oil and gas fields and frontier areas. This would include geologic maps, geophysical surveys, drilling data, seismic surveys and any other information they can acquire. Part of the process is to identify geologic analogs of known deposits that can be used to compare with the area being analyzed. Areas where hard data and information on existing oil and gas fields is readily available, such as the Central and Western Gulf of Mexico which has been extensively explored, will yield a more accurate assessment with generally higher resource values. A good description of the methodology used can be found in the Circum-Arctic Resource Appraisal recently published by the USGS.³⁵

³⁵ <http://energy.usgs.gov/arctic/>, http://energy.usgs.gov/flash/CARA_slideshow.swf

Majority Statement – “Vast Majority of Federal Oil and Gas Resources Already Available for Development:

Development: Proponents of opening additional lands to oil and gas leasing assert that vast quantities of oil and gas are closed to energy development. In fact, according to the Minerals Management Service, of all the oil and gas believed to exist on the Outer Continental Shelf, 82% of the natural gas and 79% of the oil is located in areas that are currently open for leasing.” (Majority Report, page 2)

FACTUAL CRITIQUE: The figures cited in the report are from the 2006 MMS “Report to Congress: Comprehensive Inventory of U.S. OCS Oil and Natural Gas Resources” required by Section 357 of EPAct-2005³⁶ and reiterated in testimony provided by MMS during an oversight hearing on “The Minerals Management Service’s Five Year Program for Oil and Gas Leasing on the Outer Continental Shelf.”³⁷ The 2006 assessment found that of the technically recoverable undiscovered energy resources in the OCS, 82% of the natural gas and 79% of the oil is located in the Central and Western Gulf of Mexico (Figure 16) where most of the leases on the OCS are located (Figure 17). The light blue areas shown on Figure 17 are the portions of the OCS that were open to oil and gas leasing in FY 2008; the light green areas are currently under lease. The areas under lease in the GOM are where MMS has the most data and consequently the best ideas of what the potential for new discoveries are.

Not included in the majority report is the disclaimer MMS included in their testimony or any reference to the repeated caveats found throughout the above mentioned report.

There is great uncertainty regarding the resource potential in areas where leasing has been prohibited and where the last geophysical surveys and drilling exploration occurred more than 25 years ago.³³

MMS speaks from experience when it states, “[t]here is great uncertainty regarding the resource potential” because resource assessments for areas where modern data and information are utilized prove to be very conservative and low once drilling takes place. For example, a 1975 USGS resource assessment for the Gulf of Mexico (Gulf) estimated the undiscovered resources to be 6.25 billion barrels of oil and 50 TCF of natural gas; known reserves at the time were 4.66 billion barrels of oil and 102.35 TCF of natural gas. The most recent assessment numbers for undiscovered resources in the Gulf are 44.92 billion barrels of oil (465% increase over 1975) and 232.54 TCF of natural gas (719% increase over 1975); current reserves are 13.94 billion barrels of oil and 59.61 TCF of natural gas. Cumulative production from the Gulf listed in the 1975 assessment was 4.14 billion barrels of oil and 32.14 TCF of natural gas; the 2006 assessment reported cumulative production as 13.05 billion barrels of oil and 152.25 TCF of natural gas.³⁸

³⁶ <http://www.mms.gov/revaldiv/PDFs/FinalInvRptToCongress050106.pdf>

³⁷ Testimony of the Acting Director of MMS, Walter Cruikshank before the House Committee on Natural Resources; June 28, 2007. http://resourcescommittee.house.gov/images/Documents/20070628/testimony_cruckshank.pdf

³⁸ <http://www.mms.gov/revaldiv/PDFs/FinalInvRptToCongress050106.pdf>

Figure C

Undiscovered Technically Recoverable Oil and Gas Resources on the OCS

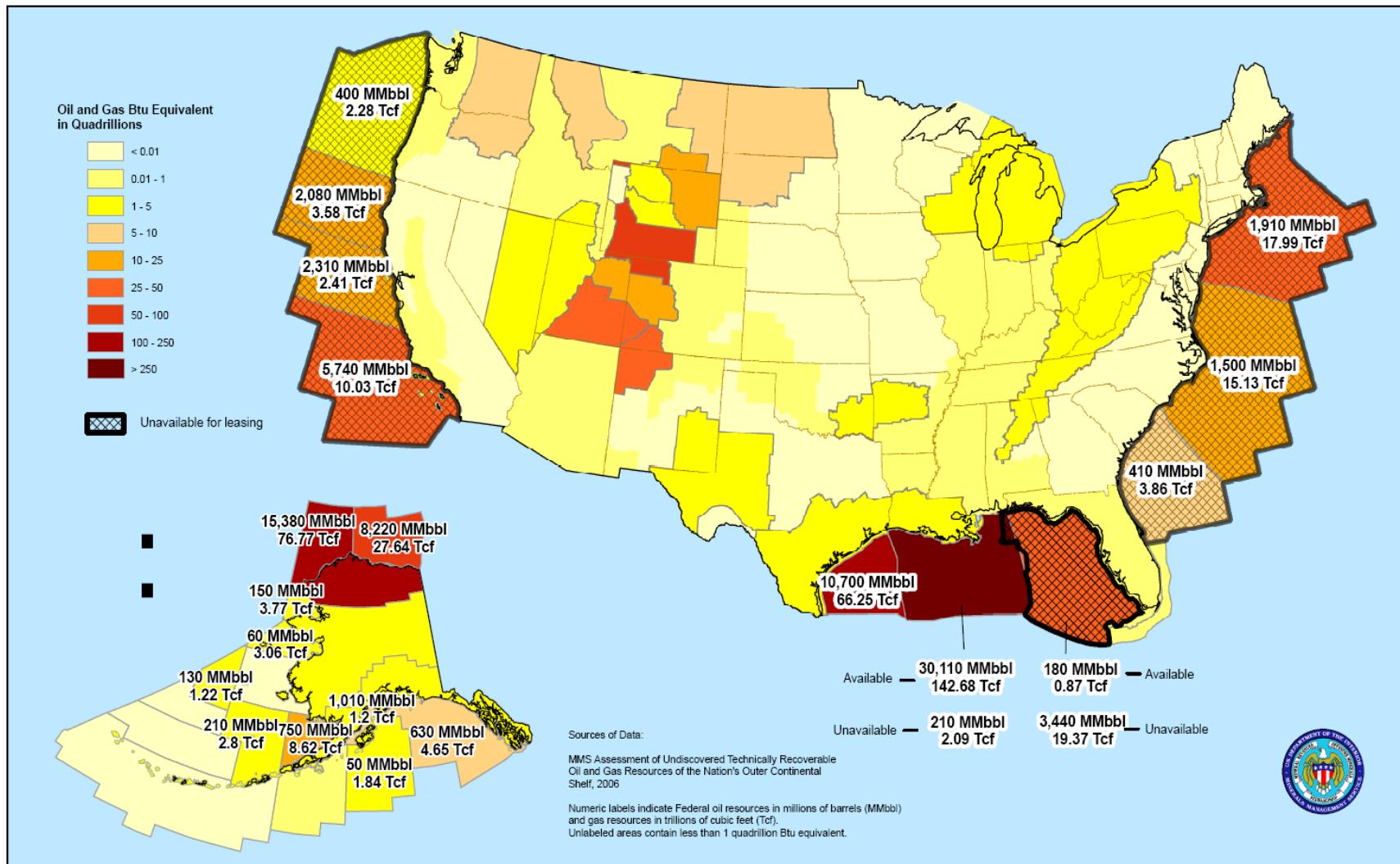


Figure 16



Figure 17

Majority Statement – Alaska: “Proponents of drilling in Alaska are most often focused on a 1.5 million acre area in the 19.2 million acre Arctic National Wildlife Refuge (ANWR). Established in 1960 and expanded in 1980, ANWR includes a 1.5 million acre area of the coastal plain known as the “1002 area” which requires Congressional authorization before oil drilling may proceed there.” (Majority Report, page 3)

FACTUAL CRITIQUE: Drilling the 1002 area of the Alaska National Wildlife Refuge (ANWR) that was set aside for the purpose of energy development, is a no-brainer. ANWR is estimated to contain 10.4 billion barrels of economically recoverable oil in a 1.5 million acre area while the nearby National Petroleum Reserve-Alaska (NPRA) contains 10.6 billion barrels of economically recoverable oil spread out over 23 million square miles (Figure 18). It’s kind of like comparing the Hope Diamond to a string of cultured pearls.

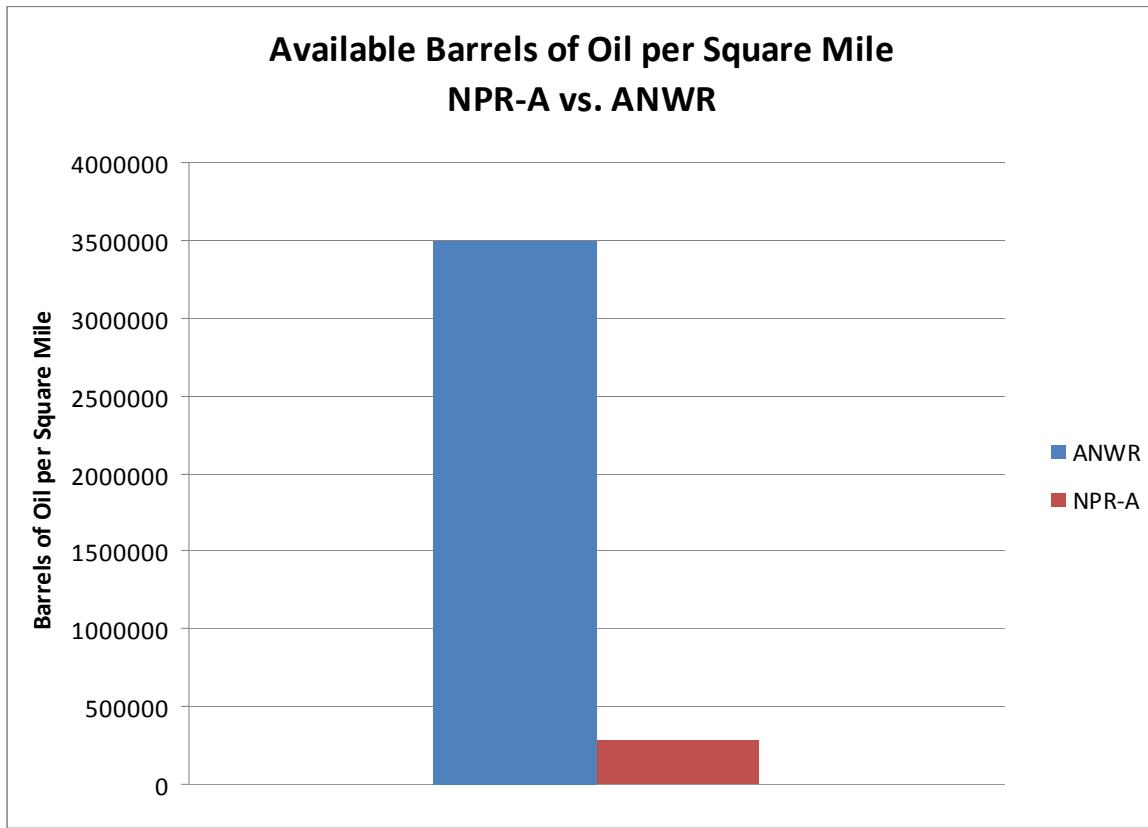


Figure 18

ANWR can be developed with minimal surface disturbance, 2000 acres, and is approximately 79 miles from the Trans-Alaska Pipeline System. The NPRA on the other hand will require approximately 250 miles of pipeline to service the numerous satellite deposits characteristic of the NPRA resource base (Figure 19). According to the Congressional Research Service, at \$125 per barrel of oil, ANWR development would deliver **\$191.1 billion in corporate income tax and royalty revenue** to the Federal government. Bonus bids alone would deliver close to \$4 billion to the Federal treasury.³⁹

³⁹ <http://www.congress.gov/erp/rl/pdf/RL34547.pdf>

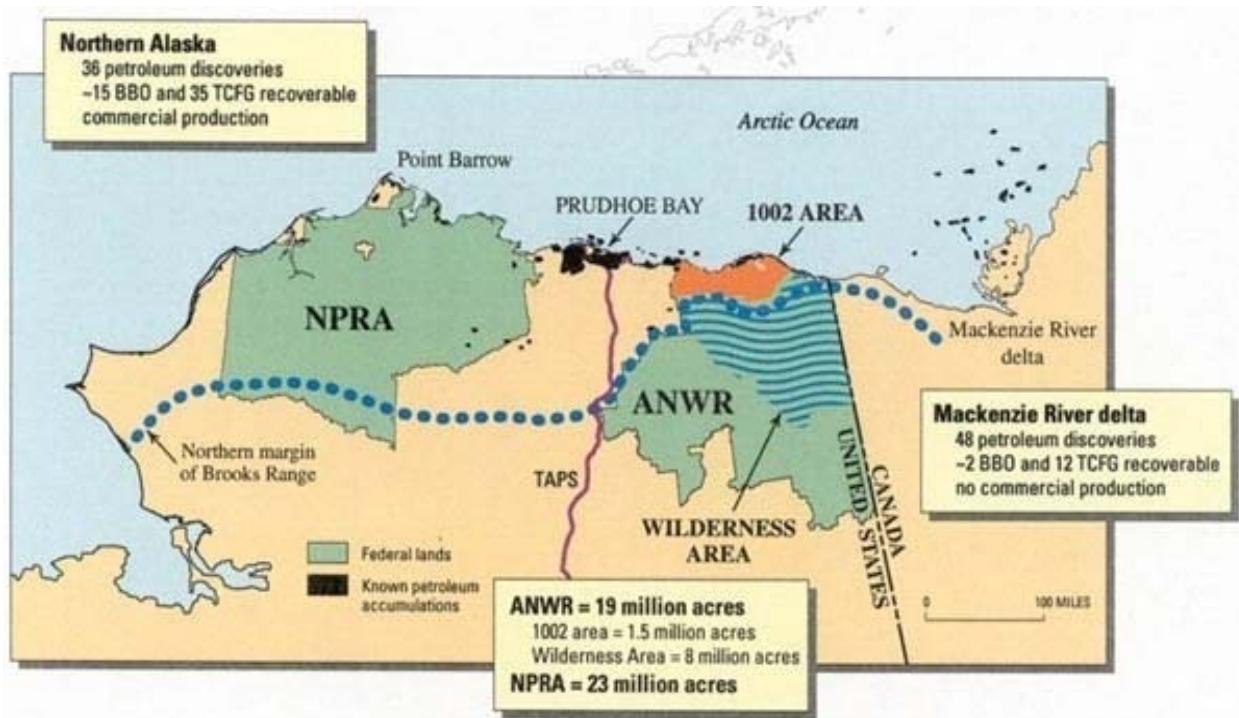


Figure 19: Map of Northern Alaska Showing the relationship of the “1002 Area” of ANWR, ANWR, TAPS and the NPRA. The Prudhoe Bay oil field is on State land.

Majority Report: “However, in addition to ANWR, there are another nearly 91 million acres currently open to leasing in the Arctic region of Alaska, including onshore and offshore lands. Oil and gas companies have leased only 11.8 million of the 91 million acres.” (Majority Report, page 3)

MMS held three lease sales in the Beaufort Sea (Figure 17) between 2003 and 2007; 261 leases have been issued. However, evaluation of the leases has been stalled due to litigation brought by environmental groups to stop seismic surveys and exploration drilling on these leases. Subsequent lease sales held earlier this year for the Chukchi Sea (Figure 17) brought in \$2.66 billion in bonus bids for 487 leases.⁴⁰ Litigation has been filed challenging the Chukchi lease sale (Appendix D).

Majority Report: “Within the National Petroleum Reserve-Alaska (NPRA), oil companies have leased 3 million acres of 22.6 million acres available to lease. No production has occurred on any of those lands and industry has drilled only 25 exploratory wells there since 2000.” (Majority Report, page 3)

Litigation has also plagued BLM’s leasing program for NPRA, delaying lease sales and limiting areas within the NPRA that can be leased (Appendix E). In addition to litigation, other factors hamper oil and gas exploration and development in Alaska. These include a short drilling window which is limited to the winter months to minimize environmental impacts to the terrain,⁴¹ permitting delays and lack of infrastructure such as pipelines.

⁴⁰ <http://www.mms.gov/ooc/press/2008/press0206.htm>

⁴¹ Ice Road Truckers, which airs on the History Channel, chronicles these winter working limitations in Canada’s arctic.

BLM's recent NPRA lease sale held on September 24, 2008, offered 4.8 million acres of land. Five companies bid \$30.9 million for the leases.⁴²

THE FIRST PRODUCTION FROM THE NPRA IS ON THE HORIZON: Recent discoveries and appraisal drilling in northeast NPRA, led to the formation of the Greater Mooses Tooth Unit (GMTU) in January 2008. This is the first Unit formed on federal NPRA lands. GMTU, operated by ConocoPhillips, is in relatively close proximity to the Alpine Field on State lands, and should be in production by 2012.

Majority Report: *"The Energy Information Administration (EIA) estimates that it will require 8 to 10 years after opening ANWR before oil is produced from any new leases. Furthermore, it would be 20 years after opening ANWR before oil production reached its peak of only 780,000 barrels per day. Production at that level would start to drop within a short time."* (Majority Report, page 3)

Without limitations on frivolous litigation and an expedited permitting process it could take 8 to 10 years or longer to bring ANWR into production. However, Congress has the ability to address the permitting and litigation hurdles faced by industry. For example, the "The Trans-Alaska Pipeline Authorization Act of 1973" (TAPAA) limited opportunities for litigation and established an office to coordinate environmental permitting for the pipeline.⁴³ Construction of the 800 mile pipeline took 3.5 years.⁴⁴ The arguments of environmentalists who sued to stop construction of the pipeline have turned out to be without merit.

Majority Report: *"According to the EIA, opening ANWR would reduce U.S. crude oil imports, but not until 2022-2026 and only by a few percentage points. Further, it would not significantly increase total world oil production, nor would it significantly affect world oil prices."* (Majority Report, page 3)

In response to a request by Senator Stevens (R-AK), the Energy Information Administration (EIA) reported that opening ANWR would lower oil prices by \$0.41 to \$1.44 per barrel,⁴⁵ however, the EIA has contradicted itself in responding to another congressional request that posed a generic question regarding the impact on world oil prices by adding 1 million barrels of oil production per day (same as ANWR). In the generic analysis, EIA estimated that one million barrels of new production per day would lower the price of a barrel of oil by \$20 (Appendix F).

As stated above, **Congress** has the authority (if not the will) to limit the opportunities for environmental organizations to file frivolous lawsuits challenging leasing, exploration activities, development and construction of infrastructure required to develop America's oil and gas resources contained in the 1002 area of ANWR. And just as was done in TAPAA and EPAct-2005, Congress can establish an office to coordinate the environmental permitting process required for leasing and environmentally responsible development of the energy resources in ANWR, NPRA, and the Alaska OCS (See Appendix B for a list of permits required for onshore and offshore energy development). If Congress acted as it did in TAPAA to facilitate the expeditious construction of TAPS, Americans would see production from ANWR long before EIA's projection of 2022-2026.

Congress did pass legislation to open the 1002 area of ANWR in 1995. And if President Clinton had not vetoed that legislation, this significant American resource would already be in production. Since 1995 our dependence on

⁴² <http://www.reuters.com/article/bondsNews/idUSN2447418420080924>

⁴³ http://www.law.cornell.edu/uscode/43/usc_sec_43_00001652---000-.html

⁴⁴ <http://www.alyeska-pipe.com/Default.asp>

⁴⁵ [http://www.eia.doe.gov/oiaf/servicerpt/anwr/pdf/sroiaf\(2008\)03.pdf](http://www.eia.doe.gov/oiaf/servicerpt/anwr/pdf/sroiaf(2008)03.pdf)

Organization of the Petroleum Exporting Countries (OPEC) has increased by 44%, or 1.86 million barrels per day.⁴⁶ So far this year alone, the U.S. has spent \$130 billion purchasing crude oil from OPEC nations.⁴⁷

Conventional world oil reserves are at an all-time high at 1,238 billion barrels of oil. World oil production is flat. Consumption is rising.⁴⁸ It makes sense for the United States to develop more of its own energy resources making the country more self-reliant and less dependent on the mercy of other nationalized oil producers whose self interest is best served by high oil and natural gas prices.

Not only that, by developing the energy resources in ANWR, the U.S. will expand its energy infrastructure in the Arctic that will facilitate the development of other oil and gas resources in Arctic Alaska. Adding new oil and gas production from ANWR and other parts of Alaska will cushion the impact of hurricanes on the Nation's vulnerable Gulf of Mexico energy infrastructure.

For example, just last month hurricane Ike destroyed 52 production platforms in the GOM. Collectively these platforms produced 13,300 barrels of oil per day and 90 million cubic feet of natural gas. An additional 29 platforms have extensive damage that will take 3 to 6 months to repair and 33 platforms reported minor damage that will take 1 to 3 months to repair. The GOM provides 25% of the Nation's domestic oil and 15% of the Nation's natural gas.⁴⁹

CONCLUSION

"Drill here, drill now" has taken hold with the American people. They understand instinctively that more drilling yields more resources. And that if the drilling takes place on American soil then Americans have better control over the prices they pay for gasoline and other forms of energy. Americans know the U.S. is 60% dependent on foreign sources of oil because we have restricted access to the Federal mineral estate and have allowed litigation by radical environmental groups and a cumbersome permitting process to unnecessarily delay the exploration and development of Federal oil and gas leases.

America has an enormous amount of energy resources if only the people had access to them. Resource assessments published since 2006 indicate that the U.S. has 147 billion barrels of oil and 872 TCF of natural gas within the Federal mineral estate. These resource assessments only evaluated our conventional oil and gas resources and not the Nation's unconventional energy resources such as methane gas hydrates, oil shale, tar sands, or heavy oil.

World oil consumption is rising and even though world oil reserves are at an all-time high, production is flat, thus creating a tight supply scenario. The incentive for the nationalized oil producing countries, such as Venezuela and other OPEC nations is to keep supply tight and prices high. These oil companies owned by foreign governments' control 77% of the World's oil reserves while the privately owned and investor owned oil companies such as

⁴⁶ <http://tonto.eia.doe.gov/dnav/pet/hist/mttimxx1m.htm>

⁴⁷ http://www.census.gov/foreign-trade/Press-Release/current_press_release/exh3s.pdf

⁴⁸ <http://www.bp.com/productlanding.do?categoryId=6929&contentId=7044622>

http://energy.usgs.gov/flash/CARA_slideshow.swf

⁴⁹ <http://www.mms.gov/ooc/press/2008/press0924a.htm>

ExxonMobil and Shell only have 6% of the World's oil reserves.⁵⁰ Many of these countries are openly hostile to the U.S. Drilling for more domestic energy is sound national policy that will lower prices for Americans and free us from dependency on despotic foreign governments.

Producing more domestic energy resources will also help to address our trade deficit. Petroleum imports accounted for 49% of our trade deficit for the first half of 2008 (January-July). That's up from 33% for the same period in 2007 – a 16% percent increase in one year.⁵¹

Domestic energy production enriches the U.S. Federal treasury regardless of land ownership. In 2006, the top 27 energy producing companies paid \$48.845 billion in various taxes to Federal, State, and local governments and collected another \$48.113 billion in excise taxes on their behalf. Taxes paid by these 27 companies increased by 44% between 2004 and 2006 (Appendix G). Producers operating on federal leases paid an additional \$10.48 billion dollars in bonus bids, rents and royalties in FY-2006. MMS believes it is on track to collect more than \$20 billion in FY-2008.

To increase domestic oil and gas reserves and production, Congress will have to take action to limit opportunities for litigation, facilitate environmental permitting of projects and where necessary create incentives to encourage development. In 1973, Congress passed TAPAA which included limitations on litigation and provided measures to facilitate permitting for the TAPS. In 1995 Congress passed the Deep Water Royalty Relief Act (DWRRA) which provided energy developers incentives to explore for oil and gas deposits in the deep and ultra-deep water frontier areas of the Gulf. EPAct-2005 contained provisions to help the regulatory agencies coordinate with one another to facilitate the permitting of onshore oil and gas projects.

The outcome of the passage of these laws positively benefitted the American people. After the passage of TAPA, construction of TAPS was allowed to go forward and the 800 mile Trans-Alaskan Pipeline was completed in just 3.5 years. DWRRA provided royalty relief for a percentage of production from fields discovered in the technologically difficult and expensive deep and ultra-deep waters in the Gulf. At the time DWRRA was enacted oil and gas prices were relatively low and the technology to explore and produce in deep and ultra-deep water was in its infancy. Prior to passage of DWRRA only 10% of the oil produced in the Gulf came from fields in these frontier areas. By 2006, 72% of the oil and 38% of the natural gas from the Gulf was produced from fields in deep and ultra-deep water. Finally, pilot offices created by EPAct-2005 have helped the regulatory agencies working on environmental permits required for oil and gas development better coordinate, allowing the permits to be processed faster.

It's time for Congress to take the next step and let American ingenuity and tenacity loose to develop the Nation's energy resources. After all, it was Americans who birthed and built the oil and gas industry which has benefited Nations around the world, improved our standard of living and helped us become the most prosperous Nation on Earth.

⁵⁰ http://www.api.org/aboutoilgas/upload/oil_mergers.pdf

⁵¹ http://www.census.gov/foreign-trade/Press-Release/current_press_release/exh9.pdf

APPENDIX A: AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

LETTER TO HOUSE LEADERSHIP

AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

An International Geological Organization

Willard R. (Will) Green
President

June 23, 2008

The Honorable Nancy Pelosi
Speaker
U.S. House of Representatives
Washington, DC 20515

The Honorable Steny Hoyer
Majority Leader
U. S. House of Representatives
Washington, DC 20515

The Honorable John Boehner
Minority Leader
U. S. House of Representatives
Washington, DC 20515

Dear Speaker Pelosi, Majority Leader Hoyer, and Minority Leader Boehner:

Given the on-going debate about access and leasing activity on federal onshore lands and the Outer Continental Shelf, I would like to offer some perspective, on behalf of the American Association of Petroleum Geologists (AAPG), on the science and process of finding oil and natural gas.

AAPG, an international geoscience organization, is the world's largest professional geological society representing over 33,000 members. The purpose of AAPG is to advance the science of geology, foster scientific research, promote technology and advance the well-being of its members. With members in 116 countries, more than two-thirds of whom work and reside in the United States, AAPG serves as a voice for the shared interests of energy geologists and geophysicists in our profession worldwide.

AAPG strives to increase public awareness of the crucial role that the geosciences, and particularly petroleum and energy-related geology, play in our society.

Finding and developing oil and natural gas blends science, engineering, and economics. It has distinct phases: exploration, development, and production. And it is risky, because finding oil and natural gas traps, places where oil and natural gas migrate and concentrate, buried under thousands of feet of rock is like finding the proverbial needle in a haystack. Talent and technology increase our chances of a discovery, but there are no guarantees.

What is exploration? Well, the grid pattern on a block map makes it tempting to think of exploration as a process of simply drilling a well in each grid block to determine whether it contains oil. But because of the natural variation in regional geology, one cannot assume oil and natural gas are evenly distributed across a given lease or region. Rather, exploration is about unraveling the geologic history of the rock underneath that

grid block, trying to understand where oil or natural gas may have formed and where it migrated. If the geology isn't right, you won't find oil or natural gas.

Legendary geologist Wallace Pratt once observed, "Where oil is first found is in the minds of men." When preparing a lease bid, geologists use their knowledge to identify the specific areas in a region that they believe have the highest likelihood of containing oil and natural gas traps. Successful exploration begins with an idea – a hypothesis of where oil may be found.

Since exploration is about developing and testing ideas, some acreage available for leasing is never leased. That is because no one develops a compelling idea of why oil or natural gas should be there. Similarly, some acreage is leased and drilled repeatedly with no success. Then, one day, a geologist develops an idea that works, resulting in new oil or natural gas production from the same land that others dismissed as barren.

Once a lease is awarded, geologists begin an intensive assessment. They collect new geological, geophysical, and geochemical data to better understand the geology in their lease area. They use this data to construct a geological model that best explains where they think oil and natural gas were generated, where it may have been trapped, and whether the trap is big enough to warrant drilling.

If there is no evidence of a suitable trap, the explorer will relinquish the lease and walk away. If they see a trap that looks interesting, they schedule a drill rig to find out if they are right. Drilling is the true test of the geologists' model, and it isn't a decision to be made lightly. Drilling costs for a single well can range from \$0.5 million for shallow onshore wells to over \$25 million for tests in deep water offshore.

As the well is drilling, geologists continually collect and evaluate data to see whether it conforms to their expectations based on the geological model. Eventually, they reach the rock layer where they think the trap is located.

If there is no oil or natural gas when the drill reaches the trap they were targeting, they've drilled a dry hole. At this point the explorers will evaluate why the hole is dry: was there never oil and gas here; how was the geological model wrong; and can it be improved based on what they know from the drilled well? Depending on the results of this analysis, they may tweak the exploration idea and drill another well or decide the idea failed and relinquish the lease.

If there is oil and/or natural gas, they've drilled a discovery. Typically, they will test the well to see what volumes of oil and/or natural gas flow from it. Sometimes the flow rates do not justify further expenditures and the well is abandoned. If the results are promising, they will usually drill several additional wells to better define the size and shape of the trap. All of this data improves the geological model.

Based on this revised geological model, engineers plan how to develop the new field (e.g., number of production wells to drill, construction of oil field facilities and pipelines).

Using complex economic tools, they must decide whether the revenue from the oil and natural gas sales will exceed the past and continuing expenses to decide whether it is a commercial discovery.

The process of leasing, evaluating, drilling, and developing an oil or natural gas field typically takes five to ten years. Some fields come online sooner. Others are delayed by permitting or regulatory delays or constraints in the availability of data acquisition and drilling equipment and crews. Large projects and those in deep water may require a decade or more to ramp up to full production.

As you can see, oil and natural gas exploration is not simple and it is not easy. It requires geological ingenuity, advanced technologies, and the time to do the job right. It also requires access to areas where exploration ideas can be tested—the greater the number of areas available for exploration, the higher the chance of finding oil and natural gas traps.

U.S. consumers are burdened by high crude oil prices. Conservation and efficiency improvements are necessary responses, but equally important is increasing long-term supply from stable parts of the world, such as our very own federal lands and Outer Continental Shelf.

As Congress considers measures to deal with high crude oil prices, I urge caution. Policies that increase exploration costs, decrease the available time to properly evaluate leases, and restrict access to federal lands and the Outer Continental Shelf do not provide the American people with short-term relief from high prices and undermine the goal of increasing stable long-term supplies.

I am happy to further discuss these ideas. Please contact me through our Geoscience & Energy Office in Washington, D.C. at 202-684-8225 or 202-355-3415.

Sincerely,



Willard R. (Will) Green
President

Cc: The Honorable Nick Rahall, Chairman, Committee on Natural Resources
The Honorable Don Young, Ranking Member, Committee on Natural Resources

APPENDIX B: DOI LETTER TO CONGRESSMAN DON YOUNG REGARDING THE MAJORITY'S EXTRAPOLATION



United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240



JUN 25 2008

The Honorable Don Young
Ranking Republican Member
Committee on Natural Resources
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Young:

Thank you for your letter of June 19, 2008, to Secretary Kempthorne regarding a recent report on oil and gas by the House Committee on Natural Resources. Secretary Kempthorne has asked me to reply.

In your letter you asked that the Department of the Interior (Department) address the report's claim that oil companies hold non-producing leases on 68 million acres which could produce 4.8 million barrels of oil and 44.7 of natural gas each day.

The report does not reference specific locations for much of the data and therefore we cannot ascertain where each of the numbers was derived. It appears the report took raw data, some of which can be found on the Department websites, and then used various formulas to reach certain conclusions. The report does not disclose the assumptions or formulas used.

The views contained in the report are based on a misunderstanding of the very lengthy regulatory process. The existence of a lease does not guarantee the discovery of, or any particular quantity of oil and gas. To truly determine this, lessees must develop data and eventually explore their leases which requires numerous permits involving compliance with various environmental laws and regulations. This process often takes months or years. In addition, lessees undertake a vast array of business steps prior to making a decision to move a lease into production, and must obtain another set of Federal and State permits to do so. I would like to provide some background on both points.

Obtaining a lease is just the first step. The lessee must first obtain the myriad of permits and approvals for exploration activities and development plans that are required before production can occur. Exploration, which occurs after the issuance of the lease, is critical. For example, after an operator acquires an onshore lease they must obtain Geophysical Permits, Permits to

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June 25, 2008

Drill, Sundry Notices, and permits that may be required by State government. In addition to all necessary permits being obtained, an operator must also file a plan of development.

Development offshore is equally complex. An operator must obtain Geological and Geophysical Exploration Permits, Environmental Protection Agency National Pollutant Discharge Elimination System Permits, an Army Corps of Engineers Permit, Permits to Drill, and Marine Mammals/Endangered Species Permits. If a lessee makes the decision to move to development, in addition to the myriad of required permits, an operator must file numerous plans, including Deepwater Operations Plans, Oil Spill Response Plans, Hydrogen Sulfide Plans, Development Plans or Development Operations Coordination Documents.

While these lists are not exhaustive, they illustrate the efforts that must be undertaken before a lease can be explored and developed and production comes online. A more comprehensive list of the various permits, approvals, and other legal and regulatory prerequisites that may be required based on site specifics for both onshore and offshore production is attached for your information.

In addition to the processes mentioned above, other factors affect potential development and subsequent production. These factors include capital investments and equipment such as drilling rigs and platforms.

In shallow water, approximately one in three wells results in a discovery of a quantity of oil and/or natural gas sufficient to produce economically. In deeper water, one well in five is economical. Shallow wells cost approximately \$200,000 for just the drilling. In deepwater, the drilling of one well may cost \$100 million to \$200 million. A full development project, including a platform or floater, involves multiple blocks and has cost as much as \$3.5 billion. Onshore development is less expensive. A well 10,000 feet or deeper will cost \$2 million to \$3 million. A shallow well runs about \$200,000.

To illustrate further that a lease does not mean the discovery of oil and gas, it is important to look at the well success rates. For onshore leases, the well success rate is about 10 percent for new areas. For areas already developed, it is much higher – about 95%. For offshore, in shallow water, the success rate is about 33 percent. In deepwater it is about 20 percent.

In the Gulf of Mexico, 1132 new deep water exploration wells have been drilled since 1995, with over 170 new discoveries. While the government does conduct activities to determine resource availability, it is the private sector that funds exploration activities for more refined data and analysis on a site specific basis that can lead to production. The lengthy processes we have in place can lead to more production but it takes time to find the exact location of those resources.

In today's market, it does not make business sense for lease holders to defer or forgo pursuing production and continue to pay rental fees. In addition to the bonus bid paid at the time of a

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June 25, 2008

lease being issued, lessees are required to pay rentals for leases. In Fiscal Year 2007, \$267.2 million in rental fees was collected as rent for oil and gas, coal, and other mineral leases.

If a lessee determines that leased acreage does not contain sufficient resources to produce economically, it will typically relinquish the lease, and the Federal Government is free to offer the tract at a subsequent lease sale. However, only after numerous steps are taken, and leased acreage is determined to contain economically and technologically producible oil and gas, can a lessee justify the significant investment required to bring leased acreage into producing status.

While increasing the productivity of already leased land is important, to ensure our country's future security and economic well being we need to open new areas for development. The lengthy processes we have in place, which can lead to more production, means that we need to look to new areas. We cannot ignore that the world's demand for oil has grown dramatically. Meanwhile, the supply of oil has grown much more slowly. As a result, oil prices have risen sharply, and that increase has been reflected at American gasoline pumps.

Sincerely,



C. Stephen Allred
Assistant Secretary,
Land and Minerals Management

Attachments

Plans and Permits Required on OCS

The number of required plan and permit approvals is on the order of 25 to 30. The reason for a range is that the specific lease holder may not file for certain permits on their own. For example, they may not file for a G&G (geological/geophysical) permit but it is certain that no lease holder will move forward with out geophysical data to guide them. They may obtain sufficient data from a third party that acquired under their own speculative permit with the intention to sell the information to successful lease bidders. Additionally, there may be supplemental plans filed to cover changes in assumptions based on newer information and other steps that not all lessees will need to file. The overview of MMS regulations is at http://www.gomr.mms.gov/homepg/regulate/regs/reg_sum.html with a discussion of the plans and permits at http://www.gomr.mms.gov/homepg/regulate/regs/laws/env_safe.html#perapp. Following is a fairly complete list of the plans and permits that a lessee may have to file to bring a lease to production:

List of Typical Plans and Permits Required to Bring a Lease to Production

- Oil and Gas Lease
- Geological and Geophysical Exploration permit
- Exploration Plan
- Coast Guard Compliance review for mobile drilling units
- Oil Spill Response Plan
- Oil Spill Financial Responsibility
- Hydrogen Sulfide Plan (some locations)
- Coastal Zone Management Consistency Determination (Exploration)
- Army Corps of Engineers Permit (Navigation and National Security)
- EPA National Pollutant Discharge Elimination System Permit
- EPA Air Emissions Permit (some locations)
- Marine Mammals/Endangered Species permits from NOAA or FWS (some locations)
- Application for Permit to Drill (exploratory wells)
- Application for Permit to Modify (any changes in drilling program)
- Application for Permit to Modify (to plug and abandon exploration wells)
- Deepwater Operations Plan (for some locations)
- Conservation Information Document (for some locations)
- Coast Guard Structural Review (for floating production systems)
- Certified Verification Agent Review (for some locations)
- Development Plan or Development Operations Coordination Document (depending on location)
- Pipeline Right-of-Way
- Coastal Zone Management Consistency Determination (Development)
- Application for Permit to Drill (development wells)
- Application for Permit to Modify (any changes in development drilling program)
- Application for Permit to Modify (to plug and abandon development wells)
- Platform Removal Application
- Pipeline Decommissioning Application

Permits, Plans, and Surveys for Development of an Oil and Gas Lease On-Shore

BLM Permits, Plans, and Surveys

Geophysical Exploration Permit - Notice of Intent; Notice of Completion – (Required if the operator chooses to conduct this optional activity) Purpose: Allows exploration for oil and gas resources on Federal lands.

- **National Environmental Policy Act (NEPA) Review** – Environmental review may consist of review and documentation through a Determination of NEPA Adequacy (DNA), Categorical Exclusion (CX), Environmental Assessment (EA), or Environmental Impact Statement (EIS). (May be completed by the BLM or the Operator to BLM standards. The BLM signs the Decision)
- **Land Use Plan Conformance** – Project evaluated to ensure it is in conformance with the BLM's land use plan.
- **Surveys** - (Completed by the BLM or the Operator.)
 - **Cultural Survey** – Almost always required. Almost always completed through an operator-funded contract with a cultural survey contractor that has been approved by the BLM. May involve consultation with the State Historic Preservation Officer.
 - **Wildlife Surveys** – Frequently required. May be completed by the BLM or the operator to BLM standards.
 - **Endangered Species Act Consultation** – only required when endangered species may be affected by the project.
- **Tribal Consultation** – May occur at the Planning or Permitting stage in areas where Indian tribes have historically used an area or have expressed an interest in proposed projects.

Oil and Gas Lease – (Required) Conveys a basic right to develop oil and gas from Federal Mineral estate pending approval of additional site-specific permits.

- **Land Use Plan Conformance** – The proposed lease is evaluated to ensure it is in conformance with the BLM's land use plan.
- **Tribal Consultation** – May occur at the leasing stage if not current in the land use plan.
- **Endangered Species Act Consultation** – May occur at the leasing stage if not current in the land use plan and there are endangered species present.

Communityization/Unitization Approval - (Some Locations) Creates management units to improve development efficiency.

Plan of Development - (If operations are located within a unit agreement) Creates a development management plan for the Unit.

Application for Permit to Drill (APD) – (Required) Contains the operator's proposed drilling and surface use plans and any additional permit requirements added by the BLM. The BLM may also require Cultural and Wildlife surveys.

- **National Environmental Policy Act (NEPA) Review** – Environmental review may consist of review and documentation through a Determination of NEPA Adequacy (DNA), Categorical Exclusion (CX), Environmental Assessment (EA), or Environmental Impact Statement (EIS). (May be completed by the BLM or the Operator to BLM standards. The BLM signs the Decision)
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 - **Endangered Species Act Consultation** – only required when endangered species may be affected by the project.
- **Tribal Consultation** – May occur at the Planning or Permitting stage in areas where Indian tribes have historically used an area or have expressed an interest in proposed projects.

Sundry Notice – (Required) Notifies the BLM of the operator's proposed changes to the APD

- **Approval and/or Review** – In limited cases may involve NEPA, Cultural, Wildlife, ESA reviews and consultation.

Hydrogen Sulfide Plan – (Required if the poison gas may be encountered) Plans for protection of public health and safety in the event of a hydrogen sulfide leak.

Right-of-Way Grant – (Required for any development that occurs off the lease area.) Provides legal access for roads, pipelines, and powerlines.

- **National Environmental Policy Act (NEPA) Review** – Environmental review may consist of review and documentation through a Determination of NEPA Adequacy (DNA), Categorical Exclusion (CX), Environmental Assessment (EA), or Environmental Impact Statement (EIS). (May be completed by the BLM or the Operator to BLM standards. The BLM signs the Decision)

standards. The BLM signs the Decision.) Usually completed in conjunction with the APD NEPA analysis.

- **Land Use Plan Conformance** – Project evaluated to ensure it is in conformance with the BLM's land use plan.
- **Surveys** - (Completed by the BLM or the Operator.)
 - **Cultural Survey** – Almost always required. Almost always completed through an operator-funded contract with a cultural survey contractor that has been approved by the BLM. May involve consultation with the State Historic Preservation Officer.
 - **Wildlife Surveys** – Frequently required. May be completed by the BLM or the operator to BLM standards.
 - **Endangered Species Act Consultation** – only required when endangered species may be affected by the project.
- **Tribal Consultation** – May occur at the Planning or Permitting stage in areas where Indian tribes have historically used an area or have expressed an interest in proposed projects.

Other Federal, State, or Local Permits and Plans

Air Emission Permit – (May be required by State)

National Pollutant Discharge Elimination System Permit – (May be required by the State or EPA)

Section 404 Permit – (May be required by the Army Corp of Engineers if the project would potentially dredge or fill waters of the US)

Storm Water Prevention Plan - (Required in some States)

UIC Permit - (Required for Class II wells - water disposal or reinjection)

Spill Prevention Countermeasure Control Plan - This is a permit required by EPA when oil and gas activities have the potential to impact waters of the United States

APPENDIX C: HOW THE EXTRAPOLATION WORKS

The Securities and Exchange Commission (SEC) might take a dim view of the manner in which the Majority seems to have arrived at their “extrapolated” production numbers for Federal leases not currently in production. This is the Minority staff’s best estimate of the Majority’s method of extrapolation:

STEP 1: It appears they divided the number of non-producing acres by the number of producing acres to come up with this ratio -- 2.8605.

Total Federal non-producing acres under lease = 67,945,092 Acres

Total Federal producing acres under lease = 23,752,458 Acres

Equation I: $67,945,092 / 23,752,485 = 2.8605$

Non-Producing Acres are 2.8605 times greater than Producing Areas

STEP 2: Second it appears the Majority then took the volume of oil produced daily from Federal lands and multiplied it by 2.8605 thus arriving at 4,678,788 Barrels/Day.

Total daily oil production from Federal lands = 1,635,654 Barrels/Day

Our Equation II: $2.8605 \times 1,635,654 = 4,678,788$ Barrels/Day from non-producing leases.

Our number was slightly lower than the Majority Staff figure, however, if one rounds up the first and second number you then arrive at:

Majority Equation II: $2.9 \times 1,640,000$ Barrels Oil/Day = 4,756,000 Barrels Oil/Day from non-producing leases.

Rounding up one more time you get 4.8 Million Barrels of Oil/Day from non-producing leases.

STEP 3: Third it appears they took the amount of gas produced daily from Federal lands and multiplied it by 2.861.

Total daily gas production from Federal lands = 15,576,733,470 Cubic Feet/Day (15.58 BCF/Day)

Our Equation III: $2.8605 \times 15,576,733,470$ Cubic Feet/Day = 44,557,246,090 Cubic Feet/Day

Majority Equation III: 2.861×15.6 Billion Cubic feet (BCF)/ Day = 44.63 BCF/Day from non-producing leases.

Rounding up one more time to 44.7 BCF/day from non-producing leases; Americans should only wish it was this simple to find and produce oil and gas. Guessing never produced a barrel of oil or cubic foot of gas.

APPENDIX D: SUMMARY OF OFFSHORE ALASKA LITIGATION

Department of Interior July 15, 2008

There are a total of **six** litigation cases filed against MMS affecting the Alaska OCS. The litigation is grouped into the following categories for Leasing, Operations, Seismic, Other MMS, Related Litigation, and Notices to Sue. In addition, there are pending Notices to Sue Minerals Management Service, U.S. Fish and Wildlife Service, Secretary of the Interior, National Marine Fisheries Service, and/or the Secretary of Commerce.

Leasing:

- **5-Year Leasing Program Lawsuit:** On July 2, 2007, the Center for Biological Diversity (CBD), Native Village of Point Hope, and Alaska Wilderness League filed a petition for review of the OCS 5-Year Program for 2007-2012 alleging violations of the Outer Continental Shelf Lands Act (OCSLA), Endangered Species Act (ESA), National Environmental Policy Act (NEPA), and the Administrative Procedures Act (APA). API intervened. Plaintiffs have recently filed their briefs which focus on Alaska - climate change and the Secretary's comparison of OCS areas for relative environmental sensitivity.
- **Chukchi Sea Sale 193 Lawsuit (Sale held February 2008):** On January 31, 2008, Native Village of Point Hope, CBD and other environmental organizations filed an action challenging Chukchi Sea Sale 193 in the U.S. district court for Alaska. Shell and BP have intervened. Plaintiffs allege that MMS and FWS did not comply with NEPA and ESA regarding impacts to polar bears, walrus, and other species as well as impacts from seismic surveys and oil spills. On May 9, 2008, the plaintiffs amended their complaint.
- **Beaufort Sea Sale 202 Lawsuit (Sale held April 2007):** On February 27, 2008, the North Slope Borough and the Alaska Eskimo Whaling Commission filed a notice to appeal to the United States Court of Appeals for the Ninth Circuit regarding the U.S. district court for Alaska ruling on January 8, 2008 that upheld the MMS Sale 202 Finding of No Significant Impact and climate change process. Briefing will be in July 2008.

Impact or likely impact:

Alaska OCS Region: The current OCS Leasing Program 2007-2012 lists six oil and gas lease sales in Alaska—3 Chukchi Sea; 2-Beaufort Sea; and 1-North Aleutian Basin. The leasing program allows for two interest sales in the Cook Inlet. Chukchi Sea Sale 193 was held in February 2008 and the Federal government earned approximately \$2.7 billion for this sale.

While the OCS Lands Act expressly provides that leases continue during judicial or administrative review of the Five Year Program, litigation is also brought against individual lease sales under that program for which there is no similar provision. There is therefore always the risk of injunction in those cases. In addition, an adverse ruling by the court in the Sale 193 litigation could result in the United States being forced to return \$2.7 billion with interest and rescinding 487 leases issued as a result of that Chukchi Sea sale. The return of approximately \$43 million with interest and rescinding 90 leases issued could result from Beaufort Sea Sale 202 litigation. In addition to court ordered interference with the leases, an adverse ruling requiring MMS to prepare or supplement an EIS could have a significant impact to agency's NEPA compliance program. Further, litigation that continually delays operations has a chilling economic impact to the Federal government regarding company interest in leasing and operating in the OCS.

Additionally, the United States could lose billions of dollars in royalties from anticipated production of oil and gas from the Beaufort and Chukchi Seas which is needed to expand the life expectancy of the Trans-Alaska Pipeline System and an essential component of the proposed Alaska Natural Gas Pipeline.

It is important to note, the Coastal Impact Assistance Program legislation ties the amount the State of Alaska receives to leasing revenue. Subsequently, should a court rule in the favor of the plaintiffs the State of Alaska would receive a substantial reduction of revenue.

Furthermore from a National perspective, an adverse decision regarding the MMS NEPA compliance in the context of the 5-year leasing program has implications for the entire United States OCS and our National Security.

Operations:

- **Shell Exploration Plan Lawsuit:** The Ninth Circuit Court of Appeals heard oral arguments on December 4, 2007 in San Francisco, California. The petition challenges the EA for Shell Oil Company's exploration activities in the Beaufort Sea. Currently, Shell's exploration activities are enjoined by court ordered stay. We expect a decision any day.

Impact or likely impact:

As a result of this litigation, in 2007 hundreds of jobs were lost in Alaska. Based on industry's estimates, litigation has resulted in 100's of million dollars and delayed the inventory of the oil and gas potential in the Beaufort and Chukchi Seas when the U.S. Court of Appeals for the Ninth Circuit issued an order prohibiting exploration activities until their ruling on the merits of the case. Since the circuit court did not issue a timely decision for the 2008 drilling season, Shell announced on June 20, 2008, a delay to their 2008 drilling plan because of the legal challenge. This is the second year that Shell has not been able to conduct exploratory drilling activities in the Beaufort Sea. Even if the court rules in favor of MMS, the ruling will force Shell to truncate Shell's original three year exploration program into one year.

An adverse ruling requiring MMS to complete an Environmental Impact Statement for the exploration will delay exploratory drilling for approximately four years. In addition, an adverse ruling requiring MMS to prepare an EIS could have a significant impact to agency's NEPA compliance program.

Seismic:

- **Beaufort and Chukchi Seas Seismic Survey Lawsuit:** On May 5, 2008, Native Village of Point Hope, CBD, and other environmental plaintiffs filed suit against the MMS and NMFS for authorizing seismic surveys in the Arctic and are seeking a preliminary injunction to prevent planned 2008 seismic activities. Shell, BP and the State of Alaska have intervened. The MMS and intervenors filed briefs on May 27, 2008. On July 2, 2008, the U.S. District Court for the District of Alaska (Judge Ralph Beistline) issued an order denying the preliminary injunction and dismissing the case. The court found that MMS and NMFS did not violate the NEPA or MMPA by issuing permits prior to the completion of a Final Programmatic Environmental Impact Statement. On July 3, 2008, the plaintiffs filed a Notice of Appeal with the district court on the district court's ruling. On July 9, 2008, the Judge Beistline denied plaintiffs motion for injunction pending an appeal. On July 11, 2008, the U.S. Court of Appeals for the Ninth Circuit denied the plaintiffs July 7, 2008, emergency motion for injunction pending appeal.

Impact or likely impact:

As a result of the U.S. Court of Appeals for the Ninth Circuit July 11, 2008, order denying the plaintiffs' emergency motion for injunction, the litigation should not impact the seismic activities for the 2008 open water season. Ultimately, impacts of this litigation will depend on the circuit court's decision regarding the merits of the case.

Unfortunately, a direct result of this and other litigation companies are wary of their ability to conduct seismic activities. As a result, companies are reconsidering future investment in seismic operations and reconsidering their business decisions involving the Alaska OCS.

Other MMS Litigation:

- **FOIA Lawsuit:** Related action to the Chukchi Sea Sale 193 lawsuit, the Natural Resources Defense Council and CBD sued MMS on January 28, 2008 challenging the adequacy of the MMS response to their FOIA request for information on the Sale 193 EIS.

Impact or likely impact:

Adverse rulings in the Ninth Circuit have already narrowed the interpretation of the exemption for pre-decisional and deliberative communications necessary for important decision making. An adverse ruling in this case could expose the department to attorney fees and additional FOIA litigation.

Related Litigation

- **FWS Incidental Take Regulations-Beaufort Sea (MMPA):** On April 22, 2008, the district court for the District of Alaska upheld the FWS Incidental Take Regulations under the MMPA authorizing incidental take of polar bears and walrus by oil and gas activities in the Beaufort Sea. That decision has been appealed to the U.S. Court of Appeals for the Ninth Circuit. The polar bear has since been listed as threatened. A similar Chukchi Sea Incidental Take Regulation was issued on June 11, 2008.
- **FWS Incidental Take Regulations-Chukchi Sea (MMPA):** On July 8, 2008, the Center for Biological Diversity and Pacific Environments filed suit in the U.S. District Court for the District of Alaska alleging the Secretary of the Interior and the U.S. Fish and Wildlife Service violated the Marine Mammal Protection Act, National Environmental Policy Act, and the Endangered Species Act by issuing regulations authorizing “incidental take” of polar bears and Pacific walrus from oil and gas exploration activities in the Chukchi Sea.

Impact or likely impact:

An adverse ruling by the courts will delay exploration activities and seismic survey activities because industry by practice does not operate their drilling program without an Incidental Harassment Authorization or Letter of Authorization for the incidental take of marine mammals. Further, MMS Section 7 of the Endangered Species Act consultation is based on industry receiving the Incidental Harassment Authorization and Letters of Authorization. If the regulations are voided by a court ruling, lessees will be at risk of committing unauthorized takes and MMS would have to reevaluate its prior authorizations of activities.

Notices of Intent to Sue--MMS:

- **Notice of Intent to Sue for Alleged Violations of the Endangered Species Act (eiders):** On February 5, 2008, Earthjustice provided a Notice of Intent to sue MMS on behalf of multiple environmental groups alleging faulty ESA consultation on Steller's and spectacled eiders in connection with OCS Sale 193. They have since amended their pending litigation on Sale 193 to include an eider consultation challenge.
- **Notice of Intent to Sue for Alleged Violations of the Endangered Species Act (fin and humpback whales):** On April 25, 2008, MMS received a 60-day Notice of Intent to sue from the Center for Biological Diversity (CBD) on behalf of Pacific Environment, Natural Resources Defense Council, the Wilderness Society, the Alaska Wilderness League and CBD. The Notice names MMS and NMFS as potential defendants. The notice is for alleged violations of the Endangered Species Act with respect to consultation adequacy. Humpback and fin whales have recently been sighted in the Beaufort and Chukchi Seas, outside of their normal range.
- **Notice of Intent to Sue for Alleged Violations of the Endangered Species Act (polar bear):** On May 19, 2008, based upon the recent listing of the polar bear as a threatened species under the ESA, the Center for Biological Diversity (CBD) served a 60 day notice with DOI asserting that all oil and gas activities

permitted by MMS in the Arctic violate Section 7 of the ESA. This notice also includes the FWS and the BLM for authorizing actions that CBD claims pose a significant threat to the polar bear.

Impact or likely impact:

If a lawsuit is filed it will impact the 5-Year Leasing Program, Lease Sale 193, Lease Sales, 186, 195, 202, Lease Sales 124, 144, 170, and BF, Liberty Development and Production Plan,

2007 Shell Exploration Plan, and our Geological and Geophysical Permits in the Beaufort and Chukchi Seas. Litigation that continually delays operations has a chilling economic impact to the Federal government regarding company interest in leasing and operating in the OCS.

Notice to Sue-Related to MMS

- **Notice of Intent to Sue for Alleged Violations of the Endangered Species Act:** On May 27, 2008, CBD issued a 60 Day Notice to the FWS for alleged failure to process a listing petition for the ice dependant Pacific walrus.

Impact or likely impact:

Impacts of this litigation to the Alaska OCS will depend on whether a lawsuit is filed and the court's decision regarding the merits of the case.

- **NPR-A Supplemental EIS:** Litigation is anticipated on the BLM NPR-A Supplemental EIS based upon the CBD climate change comments. (Similar to the OCS 5 Year Program challenge).
- **New Petitions to List:** On May 28, 2008, CBD filed with the NMFS a petition to list ringed, bearded and spotted seals, which occur in the Chukchi, and Beaufort Seas. It appears that we will see an attempt to list all ice dependent species.

APPENDIX E: LITIGATION HISTORY: OIL AND GAS LEASING IN THE NATIONAL PETROLEUM RESERVE – ALASKA

Department of the Interior July 2008

In 1980 Congress amended the Naval Petroleum Reserves Production Act (Public Law 96-514), directing the Secretary of the Interior to carry out “an expeditious program of competitive leasing of oil and gas” in the 23 million acre National Petroleum Reserve in Alaska. Pursuant to this directive, BLM developed an expedited leasing program.

In 1983, BLM completed an environmental impact statement (EIS) and issued a record of decision (ROD) opening all but 1,416,000 acres of NPR-A to leasing. The ROD called for five annual lease sales of approximately two million acres each. Soon after the release of the ROD a lawsuit was filed by two Inupiat Eskimos in U.S. District Court for Alaska. The plaintiffs, together with amicus State of Alaska and North Slope Borough, sought a preliminary injunction blocking the lease sale. They contended that BLM failed to make certain subsistence-related determinations required by Section 810 of the Alaska National Interest Lands Conservation Act (ANILCA), 16 U.S.C. § 3120. After a trial on the merits, the district court held in favor of BLM, finding that such determinations were not required. However the court issued an injunction precluding execution of the leases pending appeal of the matter to the Ninth Circuit. The district court’s decision was affirmed on appeal in *Kunakana v. Clark*, 742 F.2d 1145 (9th Cir. 1984), thus allowing issuance of the leases. By 1998, all leases issued under the 1983 ROD had expired without a significant discovery.

In 1998, BLM completed an EIS and issued a ROD addressing the 4.6 million acre Northeast Planning Area of NPR-A. The ROD opened 87 percent of the area to leasing, excluding an area that included most of the submerged lands of Teshekpuk Lake and lands to the north and east of the lake. Several environmental groups filed suit in U.S. District Court for the District of Columbia (*Wilderness Soc'y v. Babbit*, Civ. No. 98-2395), alleging violations of the National Environmental Policy Act (NEPA) and seeking an injunction to preclude lease sales under the ROD. In an unreported decision, the court ruled in favor of BLM as to the plaintiffs’ motion for a preliminary injunction, thus allowing the lease sales to move forward. BLM held lease sales in 1999 and 2002, which resulted in the issuance of several leases near Teshekpuk Lake. However, the court has yet to issue a final decision on the merits, and the case remains pending without any action having been taken by the court for several years now.

After completing an EIS, in 2004 BLM issued a ROD addressing the Northwest Planning Area. The ROD opened all 8.8 million acres of the planning area to leasing, but deferred 1,570,000 acres near the village of Wainwright from leasing for ten years. Several environmental groups filed suit against the Department of the Interior in U.S. District Court in Alaska. The plaintiffs argued that BLM acted arbitrarily in violation of NEPA by authorizing leasing in the entire planning area without considering reasonable alternatives and without doing a site-specific analysis of each of the areas affected by the proposed action. The plaintiffs further argued that the biological opinion was arbitrary in violation of the Endangered Species Act, alleging that it was insufficiently thorough, not co-extensive with the ROD, and paid insufficient attention to the uneven distribution of eiders within the affected area. The district court ruled in favor of BLM on all counts, *N. Alaska Envtl. Ctr. v. Norton*, 361 F. Supp. 2d 1069 (D. AK 2005). The decision was upheld on appeal in its entirety in *N. Alaska Envtl. Ctr. v. Kempthorne*, 457 F.3d 969 (9th Cir. 2006).

Seeking to open additional areas of the Northeast Planning Area to oil and gas leasing pursuant to a 2002 recommendation contained in the President's National Energy Policy, BLM completed an amendment to the 1998 EIS in 2005 and issued an amended ROD in 2006. The amended ROD sought to open for leasing all lands in the planning area except the submerged lands underlying Teshekpuk Lake. In doing so, 389,000 acres that had been unavailable under the 1998 ROD would be available. Several environmental groups filed suit against the Department of the Interior in U.S. District Court in Alaska, alleging violations of NEPA and the Endangered Species Act. Holding in favor of the plaintiffs in part, in *National Audubon Society v. Kempthorne*, No. 1:05-cv-00008-JKS (Sep. 25, 2006), the court vacated the ROD. The court found that the amended EIS failed to adequately analyze cumulative impacts associated with the adjoining Northwest Planning Area, and that for similar reasons the biological opinion was inadequate as well. The Department chose not to appeal the adverse decision, but instead proceeded to correct the deficiencies noted by the court by supplementing the amended EIS and revising the biological opinion accordingly. BLM issued the final Supplemental EIS on May 23, 2008. Under the Naval Petroleum Reserves Production Act, potential plaintiffs have 60 days from issuance of a final EIS to bring suit (i.e., until July 22, 2008).

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APPENDIX F: GUY CARUSO LETTER TO CONGRESSMAN KINGSTON REGARDING THE IMPACT OF 1 MILLION BARRELS PER DAY OF NEW CRUDE OIL PRODUCTION



Department of Energy
Washington, DC 20585

July 2, 2008

The Honorable Jack Kingston
U.S. House of Representatives
Washington, D.C. 20515

Dear Congressman Kingston:

This is in response to your letter of May 28, 2008, which requests an estimate of what the impact on oil prices would be if an additional 1 million barrels per day of crude oil productive capacity were brought online today.

Your letter specifically asks that this estimate be based on the same methodology and set of circumstances and assumptions underlying my response to a question at a March 4, 2008, hearing of the Senate Energy and Natural Resources Committee regarding the impact on prices of adding oil to the Strategic Petroleum Reserve (SPR). At the hearing, I stated EIA staff had estimated that, holding other factors constant, an unanticipated generic fill program adding 100,000 barrels per day to the SPR over the first 10 months of 2008 could increase oil prices by about \$2 per barrel over that same period.

Applying the same methodology to the hypothetical scenario of bringing 1 million barrels of crude oil productive capacity online today, prices could be expected to decline by up to \$20 per barrel. This price drop reflects the significant price change needed to absorb increased supply in the short run. It should be noted that, while the immediate addition of 1 million barrels per day of unanticipated new productive capacity would significantly affect prices, an addition of this size typically involves years of planning and development activity. Also, it is assumed in the hypothetical scenario above that there would be no offsetting response in other OPEC or non-OPEC production or in other planned projects to add productive capacity and no changes in inventory levels.

I hope this information is of assistance to you. If you have further questions, please do not hesitate to contact me or your staff may contact Glen Sweetnam at 202-586-2188.

Sincerely,

Guy F. Caruso
Administrator
Energy Information Administration

Printed with soy ink on recycled paper

APPENDIX G: TOTAL TAXES PAID BY THE TOP 27 ENERGY PRODUCING COMPANIES

Total Taxes Paid by Top 27 Energy Producing Companies¹

In 2006, the top 27 energy producing companies accounted for about 44 percent of the total U.S. crude oil and natural gas production. They accounted for 81 percent of U.S. refining capacity. In that single year, these 27 companies incurred and collected more than \$149 billion in taxes.

Total Taxes Incurred and Collected by FRS Companies, 2004-2006 (in millions)

	2004	2005	2006
Income Tax Expense*	\$48,357	\$71,094	\$90,445
Production Taxes (includes Severance)	\$3,559	\$4,914	\$5,646
Property	\$2,230	\$2,358	\$2,709
Sales and Use	\$192	\$376	\$393
Payroll	\$1,188	\$1,315	\$1,431
Other	\$615	\$543	\$656
Excise Taxes (collected on behalf of governments)	\$45,406	\$47,207	\$48,113
Total Taxes:	\$101,547	\$127,807	\$149,393
Total Taxes without excise:	\$56,141	\$80,600	\$101,280
Percent change from 2004:		43.57%	80.40%
Percent change from 2005:		25.66%	

- Excluding excise taxes collected on behalf of the government, the taxes incurred by FRS companies increased from \$56 billion in 2004 to \$80 billion in 2005 (**a 44 percent increase**). Taxes incurred by these companies increased another 25 percent between 2005 and 2006, from \$80 billion to over \$101 billion. This amounts to an **80 percent increase** in taxes incurred over just two years (2004 – 2006).
- The worldwide effective tax rate (based on taxes paid and incurred) of the top 27 energy companies was 40.7 percent in 2006. For the past three years, the oil and gas industry's effective tax rate has exceeded top corporate income tax rate of 35 percent. The income tax expense figures above include income taxes paid to foreign governments.

¹ List of top 27 major U.S. energy producing companies included in the U.S. Department of Energy, Energy Information Administration's Annual Financial Reporting System (FRS) survey. Data taken from Form EIA-28, Schedule 5112.

* Income Tax Expense includes:

	2004	2005	2006
U.S. Federal Income Tax	\$18,141	\$26,004	\$31,835
U.S. State and Local Income Taxes	\$2,052	\$3,468	\$3,112
Foreign Income Taxes	\$27,228	\$39,271	\$53,435