OFFSHORE DRILLING: INDUSTRY PERSPECTIVES

OVERSIGHT HEARING

BEFORE THE

COMMITTEE ON NATURAL RESOURCES
U.S. HOUSE OF REPRESENTATIVES

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FIRST SESSION

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OVERSIGHT HEARING ON "OFFSHORE DRILLING: INDUSTRY PERSPECTIVES"

Wednesday, February 25, 2009
U.S. House of Representatives
Committee on Natural Resources
Washington, D.C.

The Committee met, pursuant to call, at 10:03 a.m. in Room 1324, Longworth House Office Building, Hon. Nick J. Rahall, II, [Chairman of the Committee] presiding.

Present: Representatives Rahall, Hastings, Napolitano, Holt, Costa, Boren, Heinrich, DeFazio, Hinchey, DeGette, Capps, Inslee, Sarbanes, Shea-Porter, Tsongas, Kratovil, Duncan, Brown, McMorris Rodgers, Gohmert, Bishop, Lamborn, Smith, Fleming, Coffman, Chaffetz and Lummis.

STATEMENT OF THE HONORABLE NICK J. RAHALL, II, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WEST VIRGINIA

The CHAIRMAN. The Committee on Natural Resources will come to order, please. The Committee is meeting today as part of a series of oversight hearings aimed at examining the nation's current offshore drilling policy, with the intention of determining where we need to go next. Two weeks ago, Ted Danson, Philippe Cousteau and others provided testimony to the Committee, predominantly in opposition to expanded drilling on the Outer Continental Shelf.

Yesterday, representatives of coastal states reminded us that there are more than simply pro-and-con sides to this issue. Today, rounding out the debate, we will hear from some of the titans of America's oil and gas industry. As I have stated repeatedly, I am not opposed to new drilling. The transition to greater reliance on alternative sources of energy will not happen overnight, and fossil fuels—oil and gas, and coal—will continue to be major assets in America's energy portfolio for the foreseeable future.

But, as was made so very clear yesterday, offshore energy development is a complex, multisided issue. The American people deserve to understand the risks and benefits that expanded drilling on the OCS will bring. There are clear benefits to offshore drilling, including jobs, tax and royalty income, and money that we keep right here at home instead of sending it overseas.

But the amount of additional oil that we could drill offshore is a drop in the bucket of what we would need to sustain our economy and meet our energy needs. Even the American Petroleum

Institute's most optimistic projections, a best-case scenario extrapolation requiring that the entire OCS be made available, would in 2030—in 2030—provide no more than five percent of our total daily energy needs, and displace only eight percent of our oil imports.

These are large volumes of oil, to be sure, but they comprise less than half the impact of the increase in fuel efficiency standards that Congress passed just over a year ago. Last year's heated election-year rhetoric on this topic was not the most productive way to move forward. I believe these hearings are a vast improvement, and I am confident that we all can work together toward a responsible energy policy that meets America's needs, reduces our dependence on imports, and protects America's important ocean resources.

I look forward to working with Members on both sides of the aisle to ensure a clean and productive future for America's oceans, and I want to thank Members on both sides of the aisle who have been very attentive to these hearings, and have been very productive in their questions and comments. I thank in particular the witnesses we have before us today. Some have come a long way and taken a tremendous amount of time out of their busy schedules, and our Committee deeply appreciates your presence.

With that, I will now recognize our Ranking Member, Mr. Hastings.

[The prepared statement of Mr. Rahall follows:]

Statement of The Honorable Nick J. Rahall, II, Chairman, Committee on Natural Resources

We are meeting today as part of a series of Committee oversight hearings aimed at examining the Nation's current offshore drilling policy with the intention of determining where we need to go next.

Two weeks ago, Ted Danson, Philippe Cousteau and others provided testimony to the Committee predominantly in opposition to expanded drilling on the Outer Continental Shelf. Yesterday, representatives of coastal States reminded us that there are more than simply pro and con sides to this issue. Today, rounding out the debate, we will hear from some of the titans of America's oil and gas industry.

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There are clear benefits to offshore drilling—including jobs, tax and royalty income, and money that we keep here at home instead of sending it overseas.

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I look forward to working with Members on both sides of the aisle to ensure a clean and productive future for America's oceans. I thank the witnesses for coming today, and I now recognize our Ranking Member, Mr. Hastings, for his opening remarks.

STATEMENT OF THE HONORABLE DOC HASTINGS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WASHINGTON

Mr. HASTINGS. Thank you, Mr. Chairman. I want to thank you today for calling today's hearing. As you mentioned, this is the third hearing focusing on how to address solutions for developing our OCS resources. Today, we will finally hear from individuals who are actively developing oil and gas resources.

Unfortunately, due to restrictions kept in place by this Congress for nearly a generation, most of the development in the U.S. has been restricted to just a few areas. I hope that today we can hear from the representatives before us about what they believe are the resources available in the OCS, how much investment and job creation they foresee from expanded OCS development, and how best Congress could best put in place rules to make OCS development occur.

One of the largest questions facing Congress is what resources are really available in the OCS? While a 2007 MMS inventory report shows that there are billions of barrels of oil available in the OCS, the real question is how to responsibly develop those resources. Estimates in the Atlantic Ocean, last surveyed in the 1970s, currently show 3.8 billion barrels of oil and 37 trillion cubic feet of natural gas.

I have been told that if the estimates were to expand in the same fashion in the Atlantic that the Gulf of Mexico resources have expanded since the 1970s, then we could have more than 18 billion barrels of oil and 89 trillion cubic feet of gas in the Atlantic Ocean alone. These resources are a significant source of American energy development, and a tremendous opportunity to help free us from foreign and imported oil and natural gas.

I hope that the witnesses today will give us some sense of what they know of the resources in the areas formerly under the Congressional moratorium. I am particularly interested in what areas they believe are the most productive for the development, and thus, their willingness to commit billions of their company dollars into exploration and research in finding the resources in the OCS.

At a time when Congress is spending hundreds of billions to stimulate the economy, we have before us companies that are prepared to spend billions of their own dollars to bring much-needed job creation and infrastructure to our shores. The only hurdle to those billions in investment has been access, which until recently has been blocked by the Federal Government.

Although Congress acted last year to lift the moratorium on OCS development, it will require action by the Department of the Interior to produce a plan for that development before any of our resources can be produced. Sadly, the Secretary of the Interior decided to delay the plan for new leasing and exploration on the OCS. The true effect of Secretary Salazar's six-month delay is, in fact, a reinstatement of a ban on drilling.

Make no mistake, this action has precisely the same result as a moratorium, so let us call it what it truly is—a moratorium, not a delay. Last August, the Minerals Management Service published a draft proposal plan based on lifting the Presidential moratorium. That was last August. That draft plan was the first step in a long

process of getting to OCS development, a process which includes resource assessments, impact reviews, environmental impact statements and multiple options for public comments.

All this must be in place before we can allow companies access to developing our resources, which will create jobs and make the U.S. less dependent on foreign-controlled oil. The need to move forward with the planning process is more important than ever because the development of these resources simply won't occur overnight.

The process of leasing, finding and producing in the OCS, particularly deepwater OCS, is one of the most challenging technological achievements in the world. The exploration and development process, and permitting, has meant that it often can take up to 10 years to develop a lease in the OCS. Now that we have new areas open, I would like to know what areas could be produced sooner than 10 years.

In addition, I hope for suggestions on how we could shorten the time it takes to bring needed energy resources on line for the American consumer. Last year, the House repeatedly considered legislation based on the premise that companies were taking too long in the nonproducing or expiration period of their leases, and should instead be punished for not producing faster.

I hope that we can examine what we could do to help speed the process along so that, when we begin to act on OCS development, we can see the end of the tunnel in the production of these resources. In addition, I hope that my colleagues who have not been as familiar with the lengthy process will hear firsthand of the difficult procedures that must be followed before production can occur.

Finally, Mr. Chairman, I know that I have said it before, but OCS development isn't just about energy. It is also about creating new American manufacturing jobs and building the infrastructure to harness this energy. Offshore drilling has the potential to create millions of high paying jobs throughout each development phase, from exploration and platform investments to production and refining.

Studies have shown that it would have the spillover effect of creating thousands of jobs across the country in other industries associated with offshore oil and gas production. America is too dependent on foreign nations for energy supplies.

We can, and should, determine the most responsible way to develop our OCS resources, and I hope that the witnesses today will help us determine the best course of action to accomplish that goal. So, Mr. Chairman, I look forward to hearing from our witnesses today.

[The prepared statement of Mr. Hastings follows:]

Statement of The Honorable Doc Hastings, Ranking Member, Committee on Natural Resources

Mr. Chairman, I want to thank you for calling today's hearing. This is the third hearing focusing on how to address solutions for developing our OCS resources. Today we will finally hear from individuals who are actively developing oil and gas resources. Unfortunately, due to restrictions kept in place by this Congress for nearly a generation most of the development in the U.S. has been restricted to just a few small areas.

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RESOURCES

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Estimates in the Atlantic Ocean, last surveyed in the 1970's, currently show 3.8 billion barrels of oil and 37 Trillion Cubic feet of natural gas. I have been told that if the estimates were to expand in the same fashion that Gulf of Mexico resources have expanded since the 1970's, then we would have more than 18 billion barrels of oil and 89 Tcf of gas in the Atlantic Ocean alone. These resources are a significant source of American energy development and a tremendous opportunity to free us from foreign oil and imported natural gas.

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The true effect of Secretary Salazar's six month delay is a reinstatement of a ban on drilling. Make no mistake; this action has precisely the same result as a moratorium. So let us call it what it truly is, a moratorium, not a delay.

Last August, the Minerals Management service published a Draft Proposal Plan based on the lifting of the Presidential moratoria. That DRAFT plan was the first step in a long process of getting to OCS development, a process which includes resource assessments, impact reviews, environmental impact statements and multiple options for public comments.

All this must be in place before we can allow companies access to developing our resources, which will stimulate the economy, create jobs and make the U.S. less dependent on foreign controlled oil.

TIMELY PRODUCTION

The need to more forward with the planning process is more important than ever because the development of these resources won't simply occur overnight. The process of leasing, finding, and producing in the OCS, particularly deep water OCS, is one of the most challenging technological achievements in the world.

The exploration and development—process and permitting—has meant that it often can take 10 years to develop a lease in the OCS. Now that we have new areas opened, I want to know what areas could be produced sooner than 10 years. In addition, I hope for suggestions on how we could shorten the time it takes to bring needed energy resources online for the American consumer.

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JOBS—CLOSING

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exploration and platform investments, to production and refining. Studies have shown it would also have spill-over effects, creating thousands of jobs across the country in other industries associated with offshore oil and gas production.

America is too dependent on foreign nations for our energy supplies. We can and should determine the most responsible way to develop our OCS resources and I hope that the witnesses today will help us determine the best course of action to accomplish that goal.

I look forward to hearing from our witnesses.

The CHAIRMAN. Thank you, Mr. Hastings. Let us move on with our panel composed of the following individuals: Mr. Marvin E. Odum, the President of Shell Oil Company; Mr. Lamar McKay, the Chairman and President of BP America; Mr. J. Larry Nichols, the Chairman and CEO at Devon Energy Corporation, testifying on behalf of the American Petroleum Institute; Mr. Tim Cejka, the President of ExxonMobil Exploration Company; Mr. Gary P. Luquette, the President of Chevron North America Exploration and Production Company; and Karen A. Harbert, the President and CEO, Institute for 21st Century Energy, U.S. Chamber of Commerce.

Lady and gentlemen, we welcome you to the Committee, and again, appreciate your taking the time to be with us today, and look forward to hearing your expertise and your testimony. We do have your prepared testimony. It will be made part of the record as if actually read. You may proceed as you wish, and in the order that I announced, under the five-minute rule.

STATEMENT OF MARVIN E. ODUM, PRESIDENT, SHELL OIL COMPANY

Mr. ODUM. Thank you. Chairman Rahall, Ranking Member Hastings and Committee Members, thank you for the opportunity to be here today to talk about the critical role of the OCS in America's energy future. I would like to just briefly summarize my written testimony which has been submitted for the record. I commend the Committee. With all Americans concerned about jobs and the economy, I think this hearing is very timely.

A comprehensive energy policy is critical to our economic recovery. As President Obama said last night, we must invest in energy to reduce our dependence on foreign oil. I am hopeful that Congress and the Administration will develop an energy and environment plan that addresses today's realities. Let me highlight just a few of those, as I see them.

First, I am concerned that our country has been lulled once again into complacency by the drop in the price of oil. Oil is now trading in the $30s, down from the $140 range that we saw just last summer, but the energy challenge that dominated the headlines and gripped households has not vanished. It is simply hidden by the current economic slowdown.

When the economy recovers, the energy challenge will return, and I believe it will return with a vengeance. I urge Congress needs to anticipate this and act now. Second, I am concerned that the debate will default to the same all-or-nothing choices—either alternative energy and conservation, or fossil fuels. Such a deadlock will not lead to forward progress.

The facts are clear. Growing global demand dictates that all sources of energy and efficiency will be needed to fuel economic

growth. Yes, policies are needed that will lead to the commercialization of green energy sources, but we must be realistic. The transition to this future will take time, even under the most optimistic circumstances.

This is not about a tradeoff. It is about a transition, and the reality is that fossil fuels will be a major source of energy for the coming decades. The economic benefits of new oil and gas production simply cannot be overlooked, especially in the difficult circumstances that we face today. Producing more of our own energy will create jobs and fuel economic recovery. It will keep investment dollars here rather than exporting trillions of dollars to pay for imported oil. It will increase energy security, and it will generate significant new revenues for Federal, state and local governments.

Offshore development is a critical part of a comprehensive U.S. energy policy. Our nation should not return to a blanket moratorium. A moratorium, in my mind, is neither a strategy, nor a solution. Mr. Chairman, I do not support carte blanche offshore drilling. I agree with the need to address import issues, such as marine sanctuaries, "no go" areas, ecosystems and the management around those, states' rights and revenue sharing.

I welcome the opportunity to work with you and Secretary Salazar on how these concepts can work, and how we best implement them. Access in the OCS is about more than just holding a lease sale. A case in point is Shell's experience in Alaska, where we are experiencing what I would call a de facto moratorium. I think this is important because it could be an indicator of what we may see as we open other areas for exploration and production.

The Alaska OCS is open for leasing. The resource potential is enormous. Shell paid the Federal Treasury over $2 billion for leases and has made additional investments, of course, to prepare for the exploration for oil and gas. Despite several years of effort, we have yet to be able to drill a single exploratory well.

We have learned firsthand several aspects of our regulatory and legal system need to be addressed as we look at opening new areas. The new Administration, I know, is working for better government. In that spirit, what I am asking for is an efficient, well-resourced and coordinated regulatory process that functions in a timely manner.

Mr. Chairman, keeping 85 percent of our OCS off-limits while trillions of dollars to import our energy needs go offshore is not sound policy. We have the technology, we have the expertise, and the OCS can be explored and developed safely and responsibly to the great long-term benefit of this nation. Thank you, and I look forward to addressing your questions.

[The prepared statement of Mr. Odum follows:]

Statement of Marvin E. Odum, President, Shell Oil Company

Mr. Chairman and members of the Committee,

Thank you for the opportunity to testify before the Committee. I would like to thank Chairman Rahall for having this series of hearings to examine the OCS and the role it can play in helping America meet the energy challenge, and for inviting me to participate in this hearing regarding the energy industry's perspective on the future of the U.S. Outer Continental Shelf.

These hearings are timely as a new Congress and a new Administration work to address the global economic recession, and our energy and climate challenges. I

believe that all of these challenges—the economy, energy and climate change—should be addressed holistically.

Shell's testimony today about our perspectives on the U.S. OCS will focus on the following points:

- In order to meet the energy challenge, the U.S. needs access to more domestic oil and gas and the U.S. OCS offers a tremendous resource, much of which is untapped. The OCS is a critical part of the solution.
- Our experience in the Gulf of Mexico and elsewhere shows that we can produce oil and gas safely and efficiently, and our technology is helping us produce more with a smaller environmental footprint.
- Access to more OCS energy will help fuel the economy and provide additional stimulus to the economic recovery. It will mean jobs and benefits to the local community and revenues to the federal treasury. We will need more OCS oil and gas to transition to the renewable fuels of the future.
- In order to effectively access new areas, such as the Alaska OCS, we need to fix the regulatory system to make government work better. Federal agencies need to work together and be adequately funded. With this and a productive partnership between government, industries and other stakeholders, we can address concerns about adequate safeguards for communities and ecosystems.

About Shell

Before we address these points, I would like to provide a little background about Shell. We are an integrated oil and gas company, dedicated to meeting ever-growing energy demands efficiently and responsibly. Shell puts safety, sustainability, the global search for viable new energy sources and innovative technologies at the heart of how we do business.

We have a robust portfolio in North America that consists of offshore and onshore exploration and production, unconventional resource development, oil products manufacturing and distribution, chemicals, LNG, hydrogen and renewables, including wind and biofuels.

In 2009, we expect to invest between $31 and $32 billion worldwide to develop a broad portfolio of energies.

Three Hard Truths

At Shell, our commitment to exploring for and developing new energy resources stems from our recognition of Three Hard Truths:

- First, global demand for energy has been accelerating and, when global economies recover, will continue to accelerate as emerging nations grow and their citizens acquire more buying power.
- Second, given this growth, existing and developing energy sources will struggle to keep up with demand and oil and gas resources will be needed for decades to come.
- Third, increased energy use will mean increased stress on the environment—a factor which must be addressed.

There has always been tension in the global energy system, but those strains are becoming more acute as the world grapples with these realities. Although the recent economic slowdown has tempered energy demand, this is only a temporary situation. When global economies revive and grow—especially those in China, India and other parts of the developing world—we will once again see accelerating energy demand. World energy demand is projected to increase by roughly 50 percent over the next 20 years and could double by 2050. To address this demand, we will need hydrocarbons, alternatives/renewables and significant progress in efficiency.

The United States imports more petroleum than it should and the cost is enormous. According to the EIA:

- More than 12 million barrels per day are imported, nearly 60 percent of our consumption.
- Imports cost the U.S. more than $600 billion last year.
- The U.S. could produce more of our own resources, rather than having others produce theirs for us.

The choice is clear. We can continue to import increasing volumes of oil and gas, or we can develop more of our own domestic resources. Producing more oil and gas in our own country is a "no lose" proposition. It provides real economic and security benefits. With increased domestic production, less money is exported from the US, more money is invested in the U.S. and federal revenues increase through royalties and taxes. This can be done in a way that provides appropriate environmental protections based on solid science and an understanding of ecosystems and the impact of oil and gas activities on them.

As we move to meet the nation's energy needs, we recognize that environmental challenges, both changes in terms of climate change and local pollution, are increasing. We need to embrace policies that address not only the global energy challenge but also these environmental challenges. We can sum it up in five words: More Energy—Carbon Dioxide Solutions. Shell supports a cap and trade program to address CO_2.

The United States needs a national climate change policy that is built within the context of energy demand—realistically recognizing the amount of energy that will be required to grow the economy. Human ingenuity combined with business acumen and political will has helped us clean up rivers, improve air quality, and make acid rain in the U.S. history. It is the same human ingenuity that will solve the climate piece of the challenges we face.

Fundamentally, it comes down to government taking its role in defining a framework. We need to create a viable, efficient and workable market; and free enterprise will innovate and solve this problem. The energy industry has a key role to play, including working on carbon capture and storage technology solutions. Currently, this technology is too expensive and our country lacks a regulatory framework to enable this technology.

Renewables and energy efficiency will play a greater role as well. Shell is investing heavily in sustainable next generation biofuels, including woodchips, biomass waste, and algae. We are testing new solar technologies and have a wind business in North America. Shell foresees strong future growth for alternative energy forms paced by:

- the speed of technological development,
- public and private investment capacity,
- government policies, and
- the affordability of energy supply.

Developing effective policies to address our energy and climate challenges can only be possible through joint, concerted efforts between governments, industry, consumers and other important stakeholders.

Economic Benefits

Shell believes that addressing the Energy Challenge head-on will result in jobs and economic benefits to the nation that can help us recover from the current financial crisis.

- The oil and gas industry is one of America's largest employers, with employees in all 50 states.
- The industry has some of the highest paying jobs in the US, about two times the national average.
- Domestic OCS oil and gas activities support other industries as well as local economies across the nation.
- The oil and gas industry makes a significant contribution to the Federal treasury and more access will mean more revenue.
- The more energy we produce in the US, the less we will need to import from other countries.

According to the U.S. Minerals Management Service (MMS) revenues from the OCS leasing program are the second largest federal revenue source behind the U.S. Treasury Department. MMS collected and distributed a record $23.4 billion to state, American Indian and federal accounts from onshore and offshore energy production in 2008.

Employment in the energy sector can and will have a positive impact in pushing economic recovery. A recent study commissioned by the American Petroleum Institute showed that a substantial number of new jobs would result from making new areas available for oil and gas leasing. Oil and gas activities are an excellent source of employment. The industry directly employs about two million people at an average salary of $93,000 per year and there are an additional four million jobs indirectly related to oil and gas activities.

Future OCS activities would produce more federal revenues. According to a study recently released by ICF International, development of America's oil and natural gas resources that have been kept off-limits (both offshore and onshore) could generate more than $1.7 trillion in government revenue, create thousands of new jobs and enhance our nation's energy security.

A growing oil and gas sector has a positive impact on many other sectors of the economy. A few of the many industries that would benefit directly and indirectly from a growing oil and gas sector include iron and steel, aviation, electronics, agriculture, construction, chemicals, plastics, marine vessels, telecommunications, manufacturing, trucking and transportation. Most of these industries have expressed their support for expanded access to the OCS.

Our industry does not need funds from the stimulus package in order to create jobs and economic growth—we need access to new oil and gas resources.

OCS Experience: Gulf of Mexico

While Shell is committed to addressing the many facets of the energy challenge, the focus of this testimony will address the topic of the hearing "Industry Perspectives on the Outer Continental Shelf." Our experience in the Gulf of Mexico has shown us that:

- We can drill safely and efficiently with an ever-decreasing environmental footprint.
- Technology enables us to find and produce oil and gas further from shore and at greater depths.
- It can take years to develop the technology and innovations that can result in a commercial project.
- The 10-Year Lease Term is key to enabling us to explore deeper and more challenging areas.

We have been exploring the Gulf of Mexico safely and efficiently for decades. During that time we have developed a host of new technologies that have enabled us to find and produce oil and gas in ever-deeper waters, more than 8,000 feet, and at greater depths below the sea floor. At the same time, advances in subsea equipment and technology allow us to produce more oil and gas, from fields and wells scattered over a wider area, through sea floor pipeline tiebacks to a single platform. In practice, the number of producing wells one platform can handle is limited only by onboard processing capacity. All of this significantly minimizes the environmental footprint.

For example, our Mars tension leg platform produces about 140,000 barrels of oil and 165 million cubic feet of natural gas every day. It produces from 34 wells: 24 direct to the platform and another 10 remote wells producing through subsea equipment then feeding through single dedicated pipes up into Mars' processing and export systems. By itself, the Mars platform accounts for about 3 percent of all U.S. crude production and 1 percent of the nation's total daily consumption.

The Gulf of Mexico remains a significant petroleum province and we expect to achieve further success through continued sound geological work, combined with leading-edge technology. Shell is one of the leading deepwater producers in the Gulf. Shell-operated total gross production in the Gulf averages more than 500,000 barrels of oil equivalent every day.

We believe that the Gulf of Mexico, and indeed the U.S. OCS, has a bright future. But in order for this domestic resource base to continue to make its contribution to the U.S. economy, we will need more running room through access to new areas in the Gulf, Alaska and elsewhere.

Environmental Record

Shell's record of preventing and minimizing oil spills in offshore drilling and production operations is excellent. Shell has had no significant offshore well blowouts in more than 30 years and no significant platform spills in more than 25 years—worldwide.

That record is reflected widely across industry due to advances in technology, such as subsea wellheads, control valves and robotics and diligent operations. According to the National Academy of Sciences less than 1% of hydrocarbon pollution in all U.S. waters now comes from drilling and extraction, while natural oil seeps contribute 63%. As a description of how diligently this is tracked and reported, Shell routinely tracks and reports oil spills of less than a tablespoon.

There has been much discussion about oil spills associated with strong hurricane activity in the Gulf of Mexico in recent years. As a result of Katrina in 2005, one of the strongest hurricanes recorded in history, Shell lost no oil from any Gulf of Mexico wells. We did spill 325 barrels of crude oil from a damaged oil storage tank on one platform. Wind and wave action dispersed it at sea. This was the only spill from our offshore assets that is directly attributable to this storm. Our Mars platform was severely damaged, but held fast in 200+ mph winds and 120-foot waves.

As a result of Hurricane Ike in 2008, it is estimated that Shell spilled 59.5 barrels of oil from a heavily damaged Pipeline Crossover Platform. This estimate was made after underwater inspection and again, the oil was dispersed by the elements during the hurricane. In all of 2008 Shell had about two-thirds of a barrel (about 28 gallons) spilled from all of our offshore drilling and production assets combined.

In 2007 there were 38 spills from our drilling and producing assets totaling only 27.24 gallons (less than 1/3 barrel). In 2006 the total spill volume was less than one-and-a half barrels (<63 gallons). These totals include all reportable spills down to drops of oil capable of producing mere sheen on the water.

There has never been an oil spill caused by a well blowout from offshore exploration and production in state or federal waters off Alaska or Canada—over 110 wells have been drilled.

Diligent Development of Leases

There has been much talk in recent months about oil companies not developing the leases they already have. There are some who are making a case that this is a justification for not offering new areas for oil and gas development. While the "use it or lose it" concept makes a catchy "bumper-sticker" slogan, the arguments that are being made to support it are not grounded in reality. In fact, we evaluate all of our leases. Prior to drilling there are a number of activities that are taken on our leases as part of our overall exploration program. These activities include, but are not limited to, geological model building, seismic acquisition and processing and reservoir analysis. The fact is, most are obtained in the exploration phase and the vast majority will not result in the finding of commercial quantities of oil and gas. This is one of the key commercial risks inherent in this business.

Lease expirations and delay rental payments are a key component of the offshore leasing program. The 5- and 10-year primary terms, during which lessees must make additional "delay rental payments" in the event that they do not conduct operations on a lease, provide the lessees with the necessary time to internally "develop" a lease before actual operations take place on the lease. At the end of a primary term, a lessee can no longer maintain the lease by making delay rental payments. At that point, it must have conducted operations in order to maintain the lease beyond the primary term. Thus, the MMS already has a "use it or lose it" system in place. Shell is a strong proponent of this system.

When we find commercial quantities, we develop them. If we determine that a lease is not prospective, we return it to the government. In fact, last December we relinquished 19 lease blocks in the Beaufort Sea to the Federal government when we determined that they were not prospective.

Shell holds 400 federal offshore leases in the Gulf and about a quarter of them (96) are producing. More than 80% are in deep and ultra-deep water. Shell will continue to be an industry leader in the Deepwater Gulf of Mexico, a frontier we pioneered more than a decade ago. In the past five years, we have produced nearly one billion barrels of oil in the Gulf.

Shell has been a leader in finding oil and gas in greater depths in the Gulf of Mexico. The 10-year lease term has been essential to allowing the development of deepwater oil and gas leases where new technology is needed in order to economically find and produce commercial quantities of hydrocarbons. A case in point is the Perdido Development Project, a world-class project Shell and other participants are undertaking in 7800 feet of water and about 200 miles south of Galveston, Texas.

The project includes four discoveries on 10 leases in a 30-mile area. The first leases were acquired in 1996. At the time Shell acquired these leases, the deepest projects in the Gulf of Mexico were in about 3,000 feet of water. We did not have the technology to develop oil and gas resources in 7,800 feet of water depth, but we did have faith in our ability to develop new technology that would enable commercial development under the lease terms we were granted by the federal government.

Around the turn of the decade Perdido is expected to yield 100,000 barrels of oil per day and 200 million cubic feet of natural gas per day. It will be the deepest offshore oil development in the world, as well as the deepest drilling and production facility and the deepest subsea well (at Tobago in 9627 feet of water). I have attached a recent Popular Science magazine article entitled "The World's Deepest Oil Well" that does a good job of explaining the technical feats involved in bringing Perdido on line.

Shell is involved in a number of near-field exploration projects where we are able to bring leases to the production phase relatively quickly because they are near existing development projects.

The Deimos field, in 3,000 feet of water, 130 miles south of New Orleans, produces oil and gas from three wells tied back to Shell's Mars platform four miles away. Deimos is a prime example of existing infrastructure—a big platform, processing equipment and export pipelines—expediting the delivery of energy to market. The project moved from the go-ahead at final investment decision to first oil production in just 15 months. Stand-alone development would have taken at least seven years.

The Gulf of Mexico oil and gas leasing program has been extremely successful for more than 50 years, aruably one of the most successful leasing programs in the world. This success is based on the maintenance of a system that provides balance, certainty and continuity to both the companies that purchase leases and the govern-

ment and taxpayers who benefit from it. The current system provides stable lease terms for the government and oil and gas companies.

OCS Experience in Alaska: A de facto Moratorium

In 2005, Shell was awarded leases in the Alaska OCS and we have acquired additional OCS acreage in subsequent federal lease sales. Our experience in Alaska has shown that:

- The area potentially has tremendous offshore energy resources that could provide a substantial benefit to the country.
- Despite being issued these leases, Shell has been unable to drill exploration wells due to legal challenges.
- The current regulatory system can be inefficient and hinder development of resources in new areas.

According to MMS, Alaska's OCS has enormous oil and gas potential with an estimated 25 billion barrels of oil and 122 trillion cubic feet of natural gas. Development of these resources will benefit the nation and the state of Alaska, both economically and as a bridge to future fuels. Shell has made a significant investment to explore and develop these resources in a responsible way but has not yet been allowed to take the first step. Litigation against the government has resulted in a de facto moratorium for the Alaska OCS.

Exploring for oil and gas offshore Alaska is not new. In the 1980s, Shell acquired federal leases and drilled seven exploratory wells in the Beaufort Sea. Although we found oil and gas, production from these wells was not economically viable at that time. To date there have been a total of 30 wells drilled in the Beaufort Sea and five wells drilled in the Chukchi. There have been over 110 wells drilled in the Canadian and U.S. Arctic waters.

Shell returned to Alaska in 2005 and has participated in several Federal lease sales. We have paid the Federal Treasury nearly over $2 billion for the right to lease the acreage. We currently have 434 leases in the Beaufort Sea and the Chukchi Sea. We have invested heavily in equipment, support vessels, baseline studies, and workforce training in order to take the first step to explore for oil and natural gas. We have assembled what is arguably the most environmentally sensitive and thoroughly responsible exploration plan in history.

However, as mentioned earlier, we have yet to drill a single exploration well. There are many lawsuits challenging Federal government actions in the Alaska OCS. Only one court in one lawsuit has issued a ruling that stops the work. In 2007, the U.S. 9th Circuit Court of Appeals issued an injunction against the permit MMS issued approving Shell's plan of exploration. This injunction effectively blocked our exploratory work in both the 2007 season and the 2008 season. After nearly 16 months, in December 2008, the court ruled and ordered the MMS to vacate its approval of our Beaufort Sea Plan of Exploration pending further environmental studies.

Let me stress that I fully support the permitting work and the regulatory requirements that Congress has put in place to protect the environment. And I am not suggesting that this process become a rubber stamp—quite the opposite. My objective is to have a valid process that leads to a timely decision. Endless delays and inefficiencies should not be tolerated because it is a waste of effort and money for all concerned, Shell and the government and the taxpayer. Congress should consider legislative solutions that would, for example, require legal challenges to federal permits to be resolved in a reasonable timeframe. It should ensure that federal agencies are adequately funded so that environmental studies and other requirements can be performed on time. Finally, Congress should consider establishing an a pilot office in Alaska to coordinate the regulatory activities of all the federal agencies that address energy activities in Alaska can share resources and work together on studies, permits and other activities regarding these projects.

All of this uncertainty in Alaska is keeping an important resource from the American people and is keeping benefits from the citizens of Alaska. Let remember that a successful OCS program in Alaska will:

- Create thousands of jobs in Alaskan and outside Alaska.
- Generate billions of dollars of direct revenues to the Federal treasury as well as to the state and local communities.
- Extend the life of the Trans Alaska Pipeline System—a valuable resource to Alaska and the nation.
- Improve the economic justification for the Alaska Gas Pipeline project.

We understand that we need to protect the environment and Arctic ecosystem. Shell is ready to move forward with an exploration program that does just that. We also need to remember that the potential energy security benefits of the Alaska OCS are great. I urge Congress to examine the issues raised here—the regulatory process

and litigation—that currently hinder exploration in the Alaska OCS. The same issues will arise if and when other OCS areas are opened. It is imperative that we address them now and address President Obama's goal of making government work.

Key Policies Going Forward

Shell believes that there remains enormous energy potential on the OCS. Developing those resources can have a substantial impact on the U.S. economy and jobs, energy security, federal revenues and coastal states and communities. Properly expanding our oil and gas development on the OCS requires policy that:

- Recognizes the resource potential and impact on the U.S. economic recovery.
- Provides access to new areas on the OCS.
- Provides adequate environmental and community safeguards.
- Extends OCS revenue sharing beyond the four Gulf of Mexico coastal states.

According to the U.S. Minerals Management Service, there are 466 trillion cubic feet of natural gas and more than 96 billion barrels of oil yet to be discovered on the Outer Continental Shelf, including Alaska. To put that in perspective, that is enough natural gas to heat 100 million homes for 60 years and enough oil to fuel 85 million cars for 35 years. If we are going to utilize this resource and make it work for the American people, we need for government to take action.

Until last year, most offshore areas in the U.S. were restricted by Congressional withdrawal. Given the sustained high energy demand in the U.S. and globally, access to these resources under the long-respected government lease planning program is imperative. While I believe that much can be accomplished through that process, other issues like the need to address the regulatory system and its vulnerability to litigation requires more scrutiny.

Shell would like to work with Congress and regulatory agencies to enable proper exploration and development in the OCS in areas including:

- Marine Sanctuaries and No-Go Areas
- Ecosystem Based Management
- OCS Revenue Sharing
- State's Rights Issues

I would like to emphasize that states and communities adjacent to offshore development will have infrastructure needs such as roads, housing and schools for workers and their families, enhanced sea port and air terminal facilities, greater demands for basic public services and other expenses common to economic growth. For that reason we encourage Congress to extend the revenue sharing made available to four Gulf of Mexico states through the Gulf of Mexico Energy Security Act to other states and coastal communities that have oil and gas leasing off their coasts. Providing revenue sharing to states and local communities with future oil and gas production off their coasts would not take money out of the federal treasury. It would bring new money into the federal treasury and provide an incentive for states and local communities to support such activities.

We encourage a healthy discussion of these issues through the 5-Year Planning process and through informative hearings like those that are being held in this Committee. Ultimately, the government needs to decide what areas need to be made available for leasing and under what conditions. Those decisions need to be based on science and we need to act quickly and decisively so that we can begin developing these new energy sources that will enable us to meet the energy challenge and create new jobs and revenues for the American people.

For too many years the energy and environmental debate has been framed as an "either-or" and "us-against-them" proposition. It is wrong to frame the OCS issue in this way. It is not a trade-off between energy and economic value versus the environment. It is counter-productive to pose it as these false choices. We need to come together around the facts, reject the myths and move forward on solutions that will fuel the economic growth.

[NOTE: The Popular Science magazine article entitled "The World's Deepest Oil Well" has been retained in the Committee's official files.]

The CHAIRMAN. Thank you, Mr. Odum. Mr. McKay?

STATEMENT OF LAMAR McKAY, CHAIRMAN AND PRESIDENT, BP AMERICA

Mr. MCKAY. Chairman Rahall, Ranking Member Hastings, Members of the Committee, good morning. My name is Lamar McKay, and I represent more than 33,000 people working for BP in the

United States. BP is the country's leading producer of oil and natural gas, and the largest investor in U.S. energy development. Our more than 13,000 service stations, most of them locally owned and operated, are a familiar part of the American landscape.

We are here today to support an important part of America's energy plan: opening the Outer Continental Shelf, opening that shelf for evaluation and exploration. This strategic policy decision will allow the industry to invest tens of billions of dollars to create jobs for the American people, to diversify and expand the nation's energy supply, to generate new revenues for Federal and state governments, and do it while preserving the natural environment that we all enjoy.

We also understand the desire for greater efforts toward efficiency and energy conservation, for higher mileage automobiles, and the need to develop low-carbon fuel for transportation. BP supports these efforts. We were the first energy company to recognize the need to tackle climate change, and we are active in the effort to meet the world's growing demand for sustainable, environmentally responsible energy.

In alternatives, we are investing $8 billion over 10 years in solar, wind and biofuels development. At the same time, we must face certain realities. When the current economic downturn ends, the nation's energy demands will increase once more. Even with major investments in efficiency and new energy sources, the Energy Department projects the U.S. will rely on fossil fuels for its primary energy needs for decades to come.

Where will those fuels come from? As domestic U.S. energy production has lagged in recent years, oil imports have risen. We now depend on imported oil for about 65 percent of America's needs. Almost alone among the producing nations of the world, the U.S. has heretofore decided not to fully develop its domestic hydrocarbon endowment. A commitment by Congress to such development is one of the surest ways of diversifying, securing and enhancing the nation's energy supply.

Some of the most potentially promising areas for exploration lie off our shores in the OCS. Estimates of the amount of oil and natural gas recoverable from closed areas vary. The Interior Department estimates that there may be as many as 30 billion barrels of oil-equivalent recoverable reserves utilizing today's technology. There might be more. There might be less. We can't know unless we evaluate and explore.

Conducting low-density seismic surveys and evaluations of the entire OCS is an indispensable first step to identifying areas that might be suitable for eventual production. This will allow more focused, higher-density seismic surveys to be carried out in the most promising areas. We also support revenue sharing with coastal states. Such arrangements have been put in place recently in Louisiana, Texas, Mississippi and Alabama.

Opening up new areas would also benefit the Nation as a whole. Royalties from onshore and offshore energy production to Federal and state governments, as well as American Indian tribes, totaled $23.4 billion in 2008. Given similar oil prices, those numbers would likely increase significantly if the OCS were opened for further de-

velopment. It would also create a substantial number of good-paying American jobs.

We know that 21,000 jobs in Louisiana, with a payroll of $1.2 billion, depend directly on OCS oil and gas production offshore that state's Gulf Coast. Many more jobs, of course, are indirectly tied to such activity. BP supports an all-of-the-above energy strategy with investments across the board in fossil fuels, as well as low-carbon alternatives, but limiting or taxing one form of energy production while subsidizing another is unlikely to result in a net gain for the nation's energy supply.

BP is serious about bringing new sources of oil and gas to the U.S. market. We are also serious about building a sustainable, profitable, renewable energy business, one capable of delivering the clean, affordable energy consumers want. My company is ready to work to address the energy and environmental needs of this nation through a bipartisan and comprehensive energy policy. Thank you.

[The prepared statement of Mr. McKay follows:]

Statement of Lamar McKay, Chairman & President, BP America

My name is Lamar McKay and I am the Chairman and President of BP America.

BP appreciates the opportunity to appear before this panel and present our views on exploring for potential new sources of oil and natural gas in areas of the federal Outer Continental Shelf (OCS). The needs of our country require that we explore for new domestic sources of energy that are secure and reliable in good times and in tough times.

I represent the 33,000 employees at BP working in the United States. We are not only the largest oil and gas producer in the United States, but also the company that invests in the most diverse energy portfolio in the industry. Since 2004, we have invested more than $34 billion in the U.S. to increase existing energy sources, extend energy supplies and develop new low-carbon technologies.

BP's investments stretch from the Gulf of Mexico to the North Slope of Alaska and from the East Coast to the Midwest and the West Coast. Our over 13,000 service stations—most of them locally owned and operated—are a familiar part of the American landscape.

The company's major spending programs also touch every major segment of the energy industry, from exploration and production of oil and natural gas through refining and distribution of fuel products, as well as renewables.

By heavily investing in a diverse range of energy sources—from traditional oil and natural gas production to renewable energy including biofuels, solar, wind and hydrogen power—BP is helping meet America's energy needs today while moving towards a more secure energy future.

In 2008, BP's U.S. production of liquid hydrocarbons was 538,000 bpd, about 10 percent of U.S. domestic production and the largest of any single producer. Our gas production was over 2 Bcfd.

BP's solar business has been in operation for over 30 years and last year had sales of 162 MW globally. This represents an increase of 29% over 2007 and expectations are there will be significant growth through 2009.

We are major investors in wind generation and have amassed a land portfolio capable of potentially supporting up to 20,000 megawatts (MW) of wind generation, one of the largest positions in the country. As of year-end 2008, BP and its partners had 1,000 MW of wind generation on-line and expect to have an installed capacity of approximately 2,000 MW of wind power by the end of 2010.

We are one of the largest blenders and marketers of biofuels in the nation. Last year, BP blended over 1 billion gallons of ethanol with gasoline. We are underwriting cutting-edge research—investing more than $500 million over the next 10 years—in the search for a new generation of biofuels. We believe these will contain more energy, have less impact on the environment, and will not reduce the supply or increase the cost of food.

Overall, we support an energy policy that promotes the development of both traditional and non-traditional sources of energy, as well as conservation and efficiency. At the same time, our approach has been shaped by some stark realities about America's energy outlook.

Stark Realities

The relatively low oil and gasoline prices American consumers are now enjoying masks the fact that our country faces tremendous energy challenges. Years of contradictory public policies, poor market dynamics and company decisions have combined to limit access to resources, discourage development and constrain new investment. No company or industry on its own is large enough or powerful enough to change the conditions that brought us here. But energy companies, policymakers and consumers together have roles to play in creating a new energy future for our country.

This relationship must be shaped by the recognition that the U.S. economy needs both to better conserve energy and to produce more energy of every type to meet future growth. We need to invest in conventional oil and gas. We also need to invest in renewables to begin the transition to a lower-carbon future. However, we must all understand that this future is many years away and that these new energy sources will not make a large contribution to total U.S. energy supply for many years.

This view is reflected in a 2007 study issued by The National Petroleum Council—Facing the Hard Truths About Energy. I have integrated its observations and conclusions below and added emphasis as necessary:

> *There is no single, easy solution to the global challenges ahead. Given the massive scale of the global energy system and the long lead-times necessary to make material changes, actions must be initiated now and sustained over the long term. Over the next 25 years, the U.S. and the world face hard truths about the global energy future:*

- *Coal, oil, and natural gas will remain indispensable to meeting total projected energy demand growth.*
- *The world is not running out of energy resources, but there are accumulating risks to continuing expansion of oil and natural gas production from the conventional sources relied upon historically. These risks create significant challenges to meeting projected total energy demand.*
- *To mitigate these risks, expansion of all economic energy sources will be required, including coal, nuclear, biomass, other renewables, and unconventional oil and natural gas. Each of these sources faces significant challenges including safety, environmental, political, or economic hurdles, and imposes infrastructure requirements for development and delivery.*

The benign energy environment we are now experiencing may not last. Growth in the demand for energy will resume when our economy starts growing again. The U.S. Energy Information Administration (EIA) projects that energy demand will increase 11 percent by 2030. If anticipated U.S. needs are combined with those of the rest of the world, at growth rates of three percent, EIA projects that a 35 percent expansion in global oil production will be needed. That equates to an additional 30 million barrels of oil every day.

Finding that oil will be neither simple nor cheap. The era of "easy oil" may be over. New supplies are harder to find, more difficult and more expensive to extract, and are often located in politically unstable parts of the world. Wherever they come from, bringing new supplies to fuel our homes, businesses and transportation needs will require the investment of hundreds of billions of dollars.

Let me take the opportunity to put to rest a major energy myth, namely that there is no more energy to be found here in the US.

In fact, the United States is a sleeping giant when it comes to energy.

- We have a 100-year supply of coal. There is little doubt that, with "clean coal" and carbon capture technology, we could be using a lot more coal in the coming decades to heat our homes and recharge our electric cars.
- We have huge deposits of oil shale in many of our Western states.
- We have the potential to generate much more safe, clean, reliable electricity via nuclear energy than we are doing today.

But until technologies such as clean coal, carbon capture and renewable sources can come on line in a major way, far and away the greatest potential source of new domestic energy supply is the oil and natural gas that lies off our shores.

Here in the US, we have deliberately constrained our own supply by limiting access to promising areas for leasing, exploration and development. American domestic oil production has fallen by around 4 million barrels per day since 1985. At the same time, demand has risen by roughly similar amounts, so the gap must be filled by imports.

And when world demand rises—as it did recently, particularly in China and India—it makes those imports more expensive. That accounts in part for the dramatic rise in oil prices we experienced last summer.

A more secure and reliable source of energy closer to home is also essential to our country's long-term economic and energy well-being. As we have seen repeatedly since the first oil shock in 1973, wildly spiking and plunging oil prices kill jobs. Energy drives economic growth but few businesses—as we are seeing now—are willing to make investments in an atmosphere of great uncertainty.

The slowing of investment—the number of operating U.S. oil rigs has fallen to 1399, the lowest number since July 2005—presents a real risk to our economy. Prices could rise once again when the recovery occurs because investment may not be sufficient to offset the natural decline in the resource base. The challenge for all of us is to not allow this cyclical decline to create a structural loss in capacity. We must continue to invest in new technology and infrastructure development at the bottom of the cycle to provide continued access to supplies.

Areas of the OCS that have historically been off-limits to exploration can and should play a substantial role in closing this supply gap as well as securing our economic future. It is not the entire answer to the energy challenge we face, by any means, but the U.S. can't fashion an answer to its energy challenge without it.

A Department of the Interior study estimates the amount of oil to be found in areas that have been off-limits to exploration at 17.8 billion barrels. That's equal to 30 years of U.S. imports from Saudi Arabia. The same study put natural gas reserves at 76 trillion cubic feet, or enough to meet America's requirements for over 10 years.

These are DOI estimates. There could be more. There could also be less. We can't know unless we are given the opportunity to lease and explore.

The journey from access to production is a long one. A tremendous amount of preparation as well as infrastructure, both onshore and offshore, is required for successful development.

That's why we support a thoughtful and deliberate approach to this issue. As a first step, we propose the acquisition of new regional 2D seismic data in the OCS in order to identify the most prospective regions. From there, closely spaced 2D or 3D seismic data can be acquired to identify the best prospects in each area. Such surveys are costly and complex to plan and implement, but vastly increase the information content. This "virtual drilling" protects the environment by providing greater accuracy in mapping deposits and reduces the need for drilling exploratory wells.BP In the Gulf of Mexico

The track record of BP and the industry generally in the Western and Central Gulf of Mexico (GOM) demonstrates that when areas are opened, they can be leased, explored and developed to the highest environmental and operational standards in the world.

Our investments in the Gulf of Mexico are a remarkable American success story. Since 1985, oil production from the deepwater Gulf has increased 15-fold, from 58,000 to 870,000 barrels per day, or more than one in six barrels of oil produced in the US. It's also more than all the oil the U.S. imported on an average day from Angola, Indonesia, Kuwait, Libya, and Russia combined in 2007. [1]

We operate in water depths that exceed 1 1/2 miles—more than six Empire State Buildings stacked one on top of another—and well depths as great as 30,000 ft—the normal cruising altitude of a commercial passenger jet.

Further, we have had to cope with operating temperatures and pressures greater than any we have ever experienced. For example, a typical military fighter jet is capable of operating in an 8 G environment, while oil and gas drilling tools regularly experience forces in excess of 200 Gs. Despite these challenges, industry responded to government encouragement to invest, explore and develop the deepwater resource base.

The dramatic rise in deep-water production in the GOM also demonstrates an elemental truth about our business: the more we know, the more we can produce. As knowledge and technology advances, deposits once thought to be beyond reach or uneconomical to extract eventually become viable.

Diligent Development of Leases

I'd like to address an issue that has received a great deal of attention by some in Washington. The notion that the industry does not diligently develop the oil and gas leases it currently holds. For BP, this misperception is troubling as the leases we hold represent the future potential for oil and gas production—that is our business.

Companies spend millions to acquire leases with very little knowledge of their resource potential. I wish it were not so, but every lease does not contain oil and natural gas in commercial quantities. But, in order to determine that, we undertake

[1] EIA, "US Imports By Country of Origin," Annual Thousand Barrels per Day.

extensive geologic evaluations that extend over many years. It is through this process that we develop the understanding, confidence and technology to drill and develop a resource. The chart on page 18 graphically displays this lease maturation process overlaid by a typical development timeline.

The dollars we invest in this process are similar to venture capital for our company. We have an obligation to not only our shareholders but also to the U.S. to spend them wisely.

I am sure you would agree that all agricultural lands are not created equal—that is the expectation you can get the same yield of corn in the Arizona desert as you can in the heartland of the Midwest. So it goes with oil and gas leases. As the U.S. Department of Interior points out, a lease does not guarantee the discovery of oil and gas. Well success rates for onshore leases are about 10% for new areas. While success rates on deepwater offshore leases are about 20%.

The industry has had great success in the 15% of the OCS that is currently available for development. Since 1995, more than 750 new exploration wells have been drilled, yielding over 100 announced discoveries, much of which used technologies only dreamed of as little as two decades ago. As a result of these efforts, 7 of the top 20 U.S. oil fields are in the deep water of the Federal OCS. Since 1995, natural gas and oil produced from the deepwater have expanded by 620 and 535 percent, respectively.

By evaluating the potential of the remaining 85% and undertaking responsible development, we believe this success can be replicated.

The Role of Technology

The energy industry isn't usually classified as a high-tech business, but it truly is. This technology has been instrumental in protecting the environment. Today's offshore oil drilling technology bears about as much resemblance to what was available in the 1960s as a rotary dial telephone does to an iPhone.

I have already mentioned improved seismic imaging, which allows us to locate and map deep oil and gas deposits with vastly greater accuracy and less environmental disturbance per barrel of oil produced. But there is much more.

For example:

- With directional and extended reach drilling, we can connect multiple wells to a single platform located miles offshore, thus reducing or even eliminating the visual "footprint" of permanent energy operations;
- All offshore wells have downhole flow control valves that shut down the well automatically if damage to the surface valves is detected;
- Blowout preventer (BOP) technology has improved tremendously since early offshore drilling in the 1960's, and includes redundant systems and controls.
- New and improved well control techniques maintain constant control of the fluids in the well. Sensors continually monitor the subsurface and sea bed conditions for sudden changes in well pressure.
- We run emergency drills regularly, and all of our platforms have contingency plans that identify procedures, response equipment and key personnel needed for coping with oil outside containment. Also, since Congress passed the Oil Pollution Act of 1990, vastly greater resources are now in place to cope with "worst case" discharges.

The amount of oil introduced into the marine environment by oil and gas operations has fallen dramatically since the early 1970s. In fact, between 1991 and 1999, 35 times more oil was introduced into North American waters by recreational boaters than by offshore oil operations. [2]

A study by the National Academy of Sciences found that, worldwide, the amount of oil introduced into the marine environment had fallen by 80 percent. Offshore oil production accounted for just four percent of that total, even as such production increased 204 percent in the same period.

Looking specifically at the OCS, around 1.4 million barrels of oil per day are pumped from the OCS. According to MMS data, since 1980, less than .001 percent, or one one-thousandth of one percent, has escaped containment.

Loss of oil from tankers has also become far less likely than in earlier decades, thanks to the advent of double-hulls and other safety measures. Nevertheless, between 1971 and 2000, more oil was released into U.S. waters as a result of tanker operations (45 percent) than from OCS drilling (two percent). In the absence of increased domestic production, the U.S. will have little choice but to increase the amount of oil it receives from other sources via tankers.

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[2] Oil in the Sea III, Committee on Oil in the Sea: Inputs, Fates, and Effects, National Research Council; Table 2-2 Average, Annual Releases (1990-1999) of Petroleum by Source (in thousands of tonne).

For those who continue to question the safety of offshore energy operations, I can only point to our record in the GOM. Hurricanes Katrina, Rita, Ike and Gustav caused serious damage to oil rigs and pipelines throughout the area and shut many of them down for a time. But our personnel and safety systems were up to the challenge. There were no instances of significant oil leakage or spills.

Our technology will only improve as we go forward. At the same time, it makes strategic sense to diversify our offshore production activities away from areas subject to regular severe weather events such as the GOM. When domestic supply comes from a variety of areas, geographically speaking, those vulnerabilities can be minimized or reduced significantly.

The Role of Policy

As we look to the future, the U.S. investment climate remains challenging. Government policy can both be a vital enabler of new development or an unfortunate impediment to much needed investment. Over the last several years, numerous efforts have unnecessarily burdened viable and critical infrastructure projects; promising development areas remain out of reach; existing manufacturing operations have been challenged in their efforts to upgrade and expand; and new taxes have been proposed that will discourage future energy resource development. Furthermore, these stumbling blocks exist across the energy profile, and are not just confined to oil and gas activities.

Support for Renewables

Emblematic of these gaps are policy discussions concerning how to support and fund the development of new energy resources like wind, solar and biofuels. Not surprisingly, policymakers and consumers generally support efforts that promote the development of renewable energy. As reflected in our investment portfolio, BP concurs with this sentiment. However, there is significant divergence of opinion regarding the question of how to fund the necessary financial incentives.

BP supports transitional incentives for wind, solar, and biofuels. They are an important part of why the U.S. has been so successful in developing its renewable energy sector, but we cannot support taxes that discourage efforts to bring on other much needed energy sources (oil and gas production). This is not a recipe for increasing America's total energy production.

Biofuels

Similar policy concerns exist in the area of biofuels. EISA of 2007 created significant opportunities to develop and grow the contribution of biofuels to the transportation fuels market. BP believes that biofuels may be able to attain penetration rates of 20% or more by 2030 thus playing a significant role in meeting future transportation needs. However, the legislation has created challenges that could in the end create market distortions, supply disruptions and higher consumer prices if not adequately addressed.

The implementation timetable of the RFS program is very aggressive, creating a risk to delivery of fuel in sufficient quantities to the markets where it is needed. Congress, while mandating biofuels blending, did not adequately assess whether the market was prepared to accommodate the huge storage, transportation and delivery infrastructure requirements necessary to get the product to the consumer. In addition, given the recent economic downturn and reduction in gasoline demand, mandated blending levels are expected to outstrip the ability of the market to absorb the volumes as early as 2010, potentially threatening the integrity of the program.

BP supports accelerating research to test, evaluate and approve the use of higher biofuel blends. Further, we support efforts to transition incentives away from first generation biofuels to support the research, development and deployment of advanced non-food feedstocks, conversion technologies and fuel molecules. Similarly, policymakers should explore how trade policy can be improved to stimulate greater worldwide biofuels production and supply options for the US.

Climate policy

Our nation faces difficult choices as we take steps to foster economic growth, ensure our nation's energy security and protect the environment. Chief among these environmental concerns is that of global climate change.

BP has long advocated for the creation of a single, mandatory U.S. greenhouse gas emissions registry and a market-based price for carbon. Market-based programs deliver the greatest and fastest reductions at the least cost. Just as important, they create a level playing field, meaning that everyone must be part of the solution and first movers aren't placed at competitive disadvantage.

The fact that Congress has not yet addressed national climate policy has not deterred some from trying to impose requirements as if a national policy existed.

During the last Congress, legislation was adopted to discourage development of Canadian oil sands—the single largest oil resource base outside of Saudi Arabia. Additionally, a bill was introduced to prevent the U.S. from utilizing its world leading resource position in coal for power generation. Similarly, efforts continue to either allow or encourage state or local jurisdictions to try and impose CO_2 reduction targets on individual projects in order to make them uncompetitive and further discourage resource development.

Why do I mention these examples? They clearly represent efforts to limit energy development opportunities that would enhance U.S. energy security, economic development and environmental protection. And, in the absence of a national climate policy, these approaches will proliferate and likely result in a piecemeal regulatory approach that will stifle investment of all kinds.

We believe Congress needs to adopt a national climate policy that establishes a price for carbon. This policy mechanism will allow companies to make better investment decisions and consumers more informed behavioral choices. To do otherwise stifles the very technology breakthroughs and developments Congress supports.

Energy Security

Over the years, U.S. policy has, in effect, encouraged oil and gas providers to look beyond the U.S. border to meet growing U.S. energy demands, yet policymakers often question our reliance on foreign oil imports. Policymakers have also implored OPEC to produce and develop its own oil resources in order to reduce crude oil prices in the US.

The U.S. should strive to more fully develop its own resource base—to make a greater contribution to world oil supply—otherwise we will increasingly rely on imported energy to meet the needs of our growing economy.

The U.S. experience in the deepwater Gulf of Mexico is instructive in evaluating the role of policy. The development of the deepwater GOM was no accident or coincidence. Positive federal policies, including the Deepwater Royalty Relief Act of 1995, were instrumental in bringing the deepwater GOM online. Since its passage, GOM deepwater production has increased 15-fold to nearly 900,000 barrels/day.

Federal and State Governments Will Benefit

Increasing access to the OCS represents a potential highlight on the energy horizon—enabling job creation, generating much needed revenues for local, state and federal governments, improving the nation's energy security, reducing the transfer of wealth and expanding the manufacturing sector.

Our industry directly employs 1.8 million Americans, with at least another four million indirect jobs supporting the industry. And these are good-paying jobs. Oil and natural gas exploration and production wages in 2006 were more than double the national average.[3] These employees are covered by comprehensive health care for which the industry pays billions. America lost nearly 600,000 jobs last month alone. We can and need to keep America's energy industry working to deliver energy security for all of us.

Royalties paid to the federal government by our industry are among its largest single sources of revenue. In FY 2008, the Interior Department disbursed to the federal government, state treasuries and American Indian tribes a record $23.4 billion from both onshore and offshore energy production, including over $10 billion in bonus bids alone to acquire leases. These revenues, of course, benefit all Americans.

On the state level, BP believes that a revenue sharing program, similar to that which is now in place under the Gulf of Mexico Energy Security Act of 2006 for Louisiana and other Gulf Coast energy producing states, is fundamental to the success of a long term OCS leasing and development program.

Last November, the MMS announced it was disbursing $2.59 billion to 35 states as their share of federal revenues collected from energy production within their borders, including oil and gas drilling off their shores. Alabama received $15.8 million; Texas $21.6 million; Louisiana $49.5 million, and California $103.4 million.

Virginia, by contrast, received just $227,154.44; Florida and South Carolina did far less well than that, receiving just $6,298 and $277.50 respectively. North Carolina received nothing. At a time when states are facing record budget shortfalls, these are revenues that could be augmented significantly under an expanded OCS access program.[4]

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[3] Numbers drawn from Energizing America: Facts for Addressing Energy Policy, p. 30; API, 1/18/09.

[4] "Interior's Minerals Management Service Disburses Record $23.4 Billion in FY 2008," press release, DOI, 11/20/08.

We believe that coastal economies at the local, state and regional level will see significant, positive benefits from increased OCS access. While it is impossible to know with precision, we can examine the experience of other states. In Louisiana, for instance, 21,000 jobs with an estimated payroll of $1.2 billion depend directly on oil and gas production on the OCS.[5]

An appropriately structured revenue sharing program designed to benefit coastal communities should provide funds to help mitigate any real or perceived impacts from development. With proper planning, these communities, working with industry and government, can learn and benefit from past experiences and best practices from other jurisdictions.

According to an ICF International study, developing America's domestic oil and natural gas resources in areas where leasing has been prohibited could generate a total of more than $1.7 trillion in government revenue, create over 160,000 new jobs and significantly boost domestic petroleum production.

The ICF study also suggests that opening offshore and onshore areas would lift U.S. crude oil production by as much as two million barrels per day in 2030, offsetting nearly a fifth of the nation's imports. Natural gas production could increase by 5.34 billion cubic feet per day, or the equivalent of 61 percent of the expected natural gas imports in 2030.

Time Frames and the Need for Informed Choices

It has been said that allowing increased oil and gas exploration off America's shores isn't worth it, since it will take years before any newly discovered energy starts reaching American consumers. The same can be said for new wind projects as well, however. The reality is that energy projects of scale require significant lead-time to plan, permit, litigate, procure and construct.

One of the things you learn quickly in the energy business is that nothing happens quickly. Ours is an industry that has no choice but to take the long view. Oil used to heat Americans' homes and power their automobiles today is available as the result of decisions taken by policymakers and business leaders years or even decades ago. The sooner we start, the sooner the American people will start seeing the benefits.

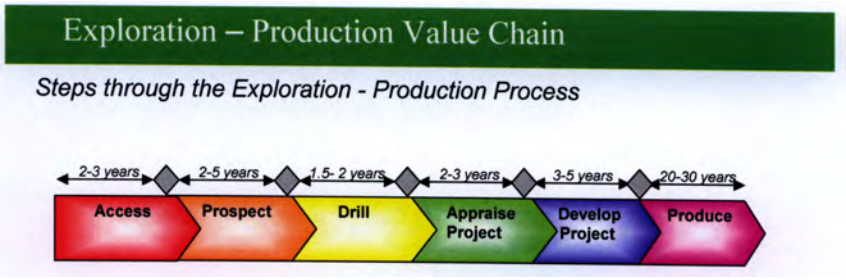
The United States has one of the world's most restrictive policies when it comes to accessing resources on its Outer Continental Shelf. In an increasingly globalized world economy, this serves only to increase dependence of the US—and increasingly places our energy future in the hands of others. In recent years, we have witnessed American officials requesting oil producing nations to boost output for our benefit.

There are no silver bullets or magic formulas when it comes to energy. Our nation requires a comprehensive "all-of-the-above" approach to energy.

We must be realistic. Exploration alone will not solve our energy dilemma. Likewise, conservation and efficiency efforts without increased production are a recipe for ongoing scarcity and economic decline.

Until we can bring new, renewable energy sources online in a big way in the decades to come, safe, environmentally-conscious oil and gas production off our shores holds the best prospect for providing our nation's economy with the growing and secure energy supply it needs.

BP stands ready to work with Congress to develop the policy measures necessary to make this happen.



The CHAIRMAN. Mr. Nichols?

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[5] Louisiana Mid-Continent Oil and Gas Association website.

STATEMENT OF J. LARRY NICHOLS, CHAIRMAN AND CHIEF EXECUTIVE OFFICER, DEVON ENERGY CORPORATION, TESTIFYING ON BEHALF OF THE AMERICAN PETROLEUM INSTITUTE

Mr. NICHOLS. Thank you, Mr. Chairman. I am Larry Nichols, Chairman and CEO of Devon Energy Corporation, and also Chairman of the American Petroleum Institute. Devon is the largest U.S. independent natural gas and oil producer in the United States. That means our sole focus is on exploration and production, and not downstream activities.

The API is, of course, the largest trade association representing our industry—with over 400 companies in all aspects of the U.S. natural gas and oil industry, including exploration and production, but also refining, marketing, transportation, as well as the service companies that support our industry.

This core sample that I am holding here today is an example of why I am excited about the offshore, and the potential that the offshore has for the economic foundation for our industry, even as we move forward on alternate energy sources, and as we move forward on improved energy efficiency. This core, this rock, is from a discovery well that was drilled some three-and-a-half miles deep, about 18,000 feet, offshore New Jersey in 1979, 30 years ago.

That well was drilled before the embargoes were put in place, the moratorium were put in place. It is a dramatic reminder of the time that we have already lost in exploring for energy resources that were put under the moratorium. It is also a reminder that drilling, even in those days, was done safely.

Developing the untapped natural resources off our coast can help put our nation on the road to economic recovery, provide jobs, higher income, economic growth, greater governmental revenues and global competitiveness. As my predecessors have said here, when our nation recovers from this crisis, which it will, we need to be prepared to meet its increased demand for energy. That is where the offshore continental shelf can play a big role.

The Energy Information Administration estimates that natural gas and oil will continue to meet more than half of our energy our country needs in 2030. Such a demand will be there even with a new climate policy, and in the case of clean-burning natural gas, our cleanest burning fuel, that demand can even be higher. Much of that energy demand can be found offshore. The size of those offshore resources may, in fact, be much larger than even the most robust estimates that we may have today.

That is because the more we explore, the more we know. One thing is clear. It is a fallacy to claim that most of our offshore resources have already been discovered and already been leased. Obviously, the best data we have is in areas that we have already explored and drilled. What we do not know is what is really out there in the previous moratoria area, and we cannot know that until we have an active and ongoing exploration program, but we can make estimates.

The United States Department of the Interior has estimated that the Atlantic and Pacific offshore continental coasts contain 55 trillion cubic feet of gas and 14.3 billion barrels of oil. The eastern Gulf of Mexico, they estimate, contains 21.5 trillion cubic feet of

gas and 3.7 billion barrels of oil. That is a lot of resources for this country.

In fact, our experience in the western half of the Gulf of Mexico, the one area offshore where we have been allowed to drill, illustrates how these estimates can be extremely low. If you look at the original estimates that were made for the Gulf of Mexico in the western half, we have already produced three-times those estimates, and the wells we have that are now producing have another five-times, so we are now sitting today at eight times the original estimate for the western part of the Gulf of Mexico.

In fact, in the eastern part of the Gulf of Mexico where the moratoria is in place, there are trillions of cubic feet of gas that have already been discovered. Those wells were not allowed to be completed, despite the fact that there is a pipeline that goes right by some of those fields—pipelines that could carry that gas to Florida very, very quickly, and gas that would probably expand in capacity as additional fields along that pipeline were developed.

But let me come back to this core sample. Advanced technology has revolutionized the exploration process for natural gas and oil in this country. Today we have tools that we did not have 10, and 20 and 30 years ago. One only needs to look at the Barnett Shale, which today is the largest gas field in the United States. Ten years ago, we did not have the technology to do it.

We hope the moratorium will remain lifted. We hope we will allow an expeditious process for the Minerals Management Service. The ICF, a recent engineering study—and this was a report done by the API—has shown that our natural gas resources will produce 160,000 new jobs and $1.7 trillion in governmental revenue. That is a lot of jobs and a lot of revenue that this nation desperately needs.

We look forward to working with this Committee to try and produce a rational policy that will allow the development of those resources. Thank you.

[The prepared statement of Mr. Nichols follows:]

Statement of J. Larry Nichols, API Chairman, on behalf of the American Petroleum Institute

I am J. Larry Nichols, Chairman and Chief Executive Officer of Devon Energy Corporation and Chairman of the American Petroleum Institute.

Devon Energy is the largest U.S. "independent" or natural gas and oil exploration-and-production company. That means that our sole focus is on finding and producing these energy sources—not refining and marketing. Most recently, our search for hydrocarbons has extended to the deepest offshore waters.

API represents nearly 400 companies involved in all aspects of the U.S. natural gas and oil industry, including exploration and production, refining, marketing and transportation, as well as the service companies that support the industry. We welcome this opportunity to present the industry's views on the role of offshore natural gas and oil development in meeting the nation's economic and energy needs.

In addition to API, this statement is supported by the American Exploration & Production Council, Independent Petroleum Association of America, International Association of Drilling Contractors, National Ocean Industries Association, Petroleum Equipment Suppliers Association, and the U.S. Oil & Gas Association.

I. Introduction

Developing the untapped resources of natural gas and oil off our coasts can help put our nation on the road to economic recovery, providing jobs, higher incomes, economic growth, greater government revenues and global competitiveness. The economic downturn has significantly reduced energy demand in recent months, and

some companies have reduced drilling accordingly. However, when our nation recovers from this crisis, we need to be prepared to meet its increased demand for energy.

The Outer Continental Shelf (OCS) has a central role to play in meeting our economic and energy needs. The OCS contains vast, untapped resources of natural gas and oil that can keep our economy strong and provide jobs, higher incomes, economic growth, and global competitiveness. The U.S. natural gas and oil industry's advanced technology has enabled it to find and develop natural gas and oil in remote, previously inaccessible offshore areas in an efficient and environmentally safe way.

Our approach to offshore natural gas and oil development—and to all domestic energy development—must be based on the economic and energy realities facing our nation. Every respected energy study on future demand comes to the same conclusion about the next several decades: we need all the energy we can produce in an environmentally responsible manner. U.S. energy policy needs to encourage development of all domestic energy sources: natural gas, oil, and alternatives like solar, wind and geothermal. We cannot afford to focus on just one energy source, to the exclusions of others. Nor can we depend upon sources that are neither fully developed nor ready to compete in the energy marketplace.

The Energy Information Administration (EIA) estimates that total U.S. energy consumption will grow by 11 percent between 2007 and 2030. Although the share of non-fossil fuels is growing rapidly, natural gas and oil will continue to play leading roles through 2030. EIA estimates that natural gas and oil will continue to meet over half of U.S. energy consumption in 2030. Such demand will be there even with any new climate policy—and in the case of clean-burning natural gas, demand may even be much greater than projected. Natural gas is a major component in efforts to address climate change. Demand for natural gas in recent years has been driven by its clean-burning nature, making it an ideal means of reducing greenhouse gas emissions. It is one of the few lower-emission power generation sources available.

EIA also estimates that just 6 percent of the nation's energy needs were supplied by renewables—including ethanol, hydropower, and biomass—in 2007, with their share expected to grow rapidly. Despite their rapid growth and because they are starting from such a small base, EIA estimates that renewables will supply only about 10 percent of the nation's energy needs by 2030.

Much of the domestic energy we need can be found offshore. All areas of the Outer Continental Shelf (OCS) should be available for leasing and development of natural gas and oil resources. We are delighted that moratoria have been lifted from most of our coasts and hope there will be similar action in the Eastern Gulf of Mexico.

In those areas now technically open, we urge expeditious—not further delayed—consideration of the Minerals Management Service's (MMS) Five-Year Leasing Program so that opportunities can be anticipated by companies like ours. That will encourage private investment in the geosciences that companies and the MMS needs in order to better estimate the extent of our offshore resources in previous moratoria areas.

Our nation is at a historic turning point for our country and its energy needs. We have a rare opportunity to significantly change our direction on energy and adopt policies that will help put America on the road to economic recovery. Record high gasoline prices in 2008 focused public attention on energy in a way not seen since the 1970s. Energy was a major issue during the presidential campaign. Public attitudes have changed dramatically. Polls have repeatedly shown strong support for increased domestic energy development.

For example, in a poll this month, 61 percent of Americans said they supported greater access to offshore oil and natural gas resources; only 26 percent of those polled were against greater access. Exit polls in last November's election showed that two-thirds of voters supported offshore drilling in areas where it was banned.

II. General Offshore Issues

Offshore Potential

Offshore natural gas and oil resources are potentially vast. The size of offshore resources may, in fact, be much larger than even the most robust estimates we have today. That's because the more we explore, the more we know.

One thing is clear: It is a fallacy to claim that most of our offshore resources are in areas already leased. While the only good data we have on discovered and estimated resources is, obviously, in areas in which robust exploration has been allowed, we do not know what is in the previous moratoria areas until we have active and ongoing exploration programs there so that we and the Minerals Management Service (MMS) can learn from the results.

However, according to the MMS, the previous moratoria areas in the Atlantic and Pacific OCS contain an estimated undiscovered technically recoverable 55.3 trillion

cubic feet of natural gas and 14.3 billion barrels of oil. In addition, most of the Eastern Gulf of Mexico remains off-limits, preventing development of an estimated undiscovered technically recoverable 21.5 trillion cubic feet of natural gas and 3.7 billion barrels of oil. According to MMS, there are multiple known fields with discovered natural gas and oil resources in the Eastern Gulf. For example, the Destin Dome, a discovery located 25 miles from shore off Pensacola, Florida, could produce anywhere from 110 billion to 165 billion cubic feet of natural gas a year for the next 20 years, according to exploration plans filed with the agency.

Our experience in the one area on the lower 48 offshore where we have been allowed to drill consistently illustrates how these estimates could be extremely low. In the Gulf of Mexico, we have now produced three times the early resource estimates—and the estimates now are that we have five times more. (See attached graph, The More We Explore, The More We Know.)

In another example, we don't have to rely on estimates to show how much natural gas we are foregoing because of policy rather than geology. In the Eastern Gulf of Mexico, there are trillions of cubic feet of discovered gas now locked away by drilling bans still in effect. This gas is along a pipeline that could be carrying more supply for Florida consumers immediately if production had been allowed. Even more important is the fact that additional drilling could see even more supply within a very few years. (See attached map, Jurassic Norphlet Trend Eastern Gulf of Mexico.)

Federal lands, including offshore areas, hold enough undiscovered recoverable natural gas to heat 60 million households for 160 years. They also hold enough undiscovered recoverable oil to produce gasoline for 65 million cars for 60 years.

Moreover, a recent ICF International study commissioned by API shows that developing the offshore areas that had been subject to Congressional moratoria, as well as the resources in Alaska's Arctic National Wildlife Refuge and a small portion of currently unavailable federal lands in the Rockies, could increase U.S. crude oil production by as much as 2 million barrels per day in 2030, offsetting nearly a fifth of the nation's oil imports. Natural gas production could increase by 5.34 billion cubic feet per day, or the equivalent of 61 percent of the expected natural gas imports in 2030.

Congress should not re-impose the moratoria or place other obstacles to the development of offshore resources. It should also open the off-limits areas of the Eastern Gulf.

Economic Benefits of Offshore Development

The ICF International study underscores how offshore natural gas and oil development benefits the economy. The study found that development of natural gas and oil resources that have been kept off-limits by Congress for decades, both offshore and onshore, could create more than 160,000 new jobs in 2030. Those new jobs would be in addition to the approximately 6 million jobs the U.S. natural gas and oil industry already supports—1.8 million people directly employed by the industry and more than 4 million jobs indirectly tied to the industry. Many of these jobs are the "green jobs" our society desires. Moreover, the average salary of exploration and production jobs is more than twice the national average.

Increased natural gas and oil development not only creates more jobs and provides more energy, it also generates significant government revenues. In fact, in November 2008, the Department of the Interior reported that it accrued a record $23.4 billion from 2008 energy production—double the previous year's revenue.

The ICF study found that development of offshore and onshore areas that had been kept off-limits to development for decades could generate more than $1.7 trillion in government revenues that would help support vital programs and reduce pressure on American taxpayers. Moreover, these revenues could help fund government energy research and development of alternative energy sources. In addition, these revenues are particularly needed by states and communities facing budget shortfalls. These governments are being forced to lay off teachers, reduce police protection, limit repair of roads and bridges, and cut back on other important programs.

The ICF study also estimated that development of all U.S. natural gas and oil resources on federal lands could produce more than $4 trillion in revenues over the life of the resources.

Industry Technology

Advanced technology has revolutionized the exploration and development process for natural gas and oil, increasing the safety and efficiency of offshore operations and helping shape the offshore industry's outstanding offshore environmental record. There is a very good chance we will advance our knowledge of offshore areas and make new discoveries if we are allowed to employ highly sophisticated and

leading-edge advances such as 3D and 4D seismic technology and subsea production systems. Today's tools did not exist 30 years ago when the industry was drilling wells in the Atlantic and Pacific.

3D seismic survey technology improves the industry's ability to locate potential natural gas and oil resources with greater accuracy. Seismic surveys send high-energy sound waves into the ground and reflect information on underground rock layers back to the surface. Since sound travels at different speeds as it passes through various types of rocks, computers can use the seismic data to create a 3-D map of what lies below the surface. This is especially helpful as engineers plan the most efficient way to produce resources from a reservoir. More precision in locating these resources facilitates field development and the location of drilling sites and production facilities. These steps can help to reduce a project's environmental footprint.

Geophysicists and engineers also use 4-D seismic technology, which adds the dimension of time to the survey process. By combining several 3-D seismic surveys taken as the field is producing over time and arranging them in a sequence, they can create images that show where gas or oil deposits may remain. By using 4-D models, engineers and geologists can gauge how many wells a reservoir might need and where to place them. The "virtual drilling" can help protect the environment by reducing the number of wells for exploration and production while maximizing the ultimate recovery of natural gas and oil from the field.

The search for resources deep below the ocean has spurred additional technological innovation, including the ability to produce and transport these resources using equipment installed on the ocean floor and, thus, not visible from shore. Subsea production systems include a series of gathering lines that connect the production from multiple wells into a single processing hub, allowing the production from the wells to be transported to a platform, where the natural gas, oil and produced water are separated for transport to shore through pipelines.

The equipment on the seafloor is maintained using robots, known as Remote Operating Vehicles (ROVs), which are tethered to a vessel. ROVs serve as eyes underwater for these operations, and are designed to connect to the subsea equipment. These systems are being deployed at depths of nearly 10,000 feet of water in the Gulf of Mexico, where deepwater development plays a significant role in current and future energy production.

Just as we had no clue only a decade or so ago that the Barnett Shale in Texas would become the most prolific onshore natural gas play in the nation, we don't know what we don't know about much of the offshore that has been under moratoria until we begin applying our new technology.

What we can say with certainty is that we can "see" better beneath the seabed, design better wells, and more efficiently and safely produce oil and natural gas than ever before if given the chance.

Offshore Environmental Record

The U.S. natural gas and oil industry has an outstanding offshore environmental record. According to the Minerals Management Service, offshore leases produce about 1.4 million barrels of oil per day. MMS calculates that since 1980 less than 0.001 percent of the oil produced in federal waters offshore has been spilled.

The environmental and safety performance of offshore production facilities was severely tested when Hurricanes Katrina and Rita roared through the heart of the Gulf of Mexico in 2005. Some 3,000 offshore platforms were in the direct path of the hurricanes. Some experienced five to six hours of sustained winds of 170 miles per hour with gusts of 200 miles per hour. Production was shut-in and some platforms destroyed. However, platforms were evacuated and production restarted without any loss of life. No significant spills were reported from production activities, according to the Minerals Management Service and Coast Guard, and not even a small spill reached shore.

Advanced technology allows our companies to explore safely while protecting our oceans. Specialized equipment, such as blowout preventers and subsurface safety valves, safeguard ocean waters. Moreover, industry standards are designed to ensure that both the design of the platform and the equipment protect the ocean waters. These design standards were strengthened again following Hurricanes Katrina and Rita.

The industry's offshore operations are among the most heavily regulated endeavors in the United States. Companies operating in federal offshore waters must obtain 17 major permits and must follow 90 sets of federal regulations. Federal agencies, including MMS and the Coast Guard, perform numerous drills and inspections throughout the year to test company responses to appropriate situations. Between 2000 and 2007, the number of spill drills and exercises has increased from 669 to 1,584.

Other Countries Are Developing Their Domestic Resources

Other countries are working pro-actively to develop their domestic natural gas and oil resources. Instead of placing areas off-limits to natural gas and oil development, these countries are moving ahead with development and some are offering incentives to encourage projects. Recent examples include:

- **Argentina:** Oil companies plan to spend $300 million in oil and natural gas exploration in 2009 under the terms of two incentives programs which offer tax discounts and higher prices on sales of new output of natural gas and oil.
- **Indonesia:** The state oil firm Pertamina plans to invest 19 trillion rupiah ($1.74 billion) in 2009, against 17 trillion rupiah in 2008. Indonesia has been offering new exploration rights and financial incentives for oil fields in a bid to step a steady decline in production.
- **Ireland:** The government has sought to develop Ireland's energy sector by attracting oil exploration companies with financial incentives and a recent series of offshore licensing rounds.
- **Pakistan:** The Pakistan Economic Coordination Council approved a 2009 petroleum policy envisaging incentives for natural gas and oil exploration. The bidding process for new gas fields has been revised; the entire bidding process would now be completed in two to three months.
- **United Kingdom:** The government proposed tax changes and incentives to help boost the recovery of the UK's remaining natural gas and oil reserves and slow the decline in output. The proposals include a value allowance to encourage marginal field development and changes to reduce or eliminate taxes on the change of use of North Sea infrastructure.

III. API Views on Specific Offshore Issues

Five-Year Plan

We were very disappointed by Secretary of the Interior Salazar's decision to delay the OCS Five-Year plan process, which was designed to address the critical energy concerns facing our nation. The draft plan already received more than 152,000 comments—a record number—from states, environmental groups, industry, labor groups and members of the public—with 87,000 or 57 percent of those comments supporting expanded and expeditious development. The Secretary's decision overlooks the fact that more than two-thirds of the American people in polls have supported tapping our vast domestic resources for the benefit of the nation.

Secretary Salazar's announcement means that development of U.S. offshore resources could be stalled, depriving the nation of tens of thousands of new jobs, billions of dollars in revenues to federal, state and local governments, and greater energy security. We share Secretary Salazar's view that the nation needs a comprehensive energy policy that includes developing alternative energy sources. However, we should also be moving as quickly as possible to develop more of our offshore natural gas and oil resources to benefit all Americans.

Orderly development of offshore natural gas and oil resources under a predictable Five-Year Leasing Program, as mandated by Congress in the Outer Continental Shelf Lands Act, provides an effective, efficient mechanism for balancing the national interest objectives of identifying and developing OCS oil and natural gas resources in a timely manner, while protecting valuable coastal and marine natural resources.

Reliable, predictable and orderly continuation of an area-wide leasing and development schedule for the OCS, which equitably shares benefits of development and minimal environmental risks among the various OCS regions, is necessary to ensure the continued investment needed to meet the nation's natural gas and oil needs. It is also important to avoid such misguided actions as underfunding the offices that prepare environmental studies, management plans and drilling plans.

State Involvement

API believes that all federal OCS acreage should be available for leasing. States currently participate through the OCS Lands Act, the Five-Year Plan process, the Coastal Zone Management Act, and the National Environmental Policy Act (NEPA) process in decisions involving leasing and natural gas and oil development. These laws provide states with a real hand in decision-making, particularly through the Coastal Zone Management Act, which allows a state to block offshore activities that are inconsistent with its coastal zone management plan. That block can be removed only by the federal government through an arduous appeals process, which can be followed by litigation if the state disagrees with the federal government's decision.

Revenue-sharing

API recognizes the legitimate stake that states have, both onshore and offshore, in receiving direct compensation from the federal minerals program. We support federal revenue-sharing with states that support leasing, exploration and development activities off their coasts and within their borders provided that current royalties, bonus bids and rentals are not affected; current regulatory schemes don't change; additional regulatory burdens are not placed on industry; and opportunities for development are not affected. We support efforts to improve the federal OCS revenue-sharing program provided it is established only for coastal states that allow development off their coast and encourages states to open offshore lands for development.

Buffer Zones

All areas of the OCS should be available without buffer zones, since these areas can be developed in an environmentally safe manner with a minimal impact on coastal communities. Placing arbitrary limits on offshore leasing close to the coastline would significantly limit offshore energy development. In the Gulf of Mexico, where offshore production is the most developed in the U.S., important finds have been made both near-shore and far-shore. In the Pacific, most undiscovered technically recoverable resources are thought to be close to shore. About 92 percent of the natural gas resources and 91 percent of the oil resources are within 50 miles. In the Atlantic, we don't know for sure. We've done some exploration, but a lot more needs to be done for us to determine where the richest pockets of natural gas and oil are located.

Advances in drilling and production technology have allowed the industry to develop fields close to existing infrastructure without the installation of additional platforms. Off the coast of California, this has allowed the industry to use a single platform to access supplies from four miles away, resulting in additional production of 10,000 barrels a day.

"Idle Leases"

While natural gas and oil companies are seeking to find and produce natural gas and oil in new offshore areas, they are also making the maximum effort to develop the leases they already have. If a lease is not producing, critics who don't understand the exploration and production process say it is "idle" when, much more often than not, it is being actively explored and developed.

The purchase of a lease is always a gamble. Exploration is an essential part of the energy business. There is nothing "idle" about it. When a natural gas and oil company purchases a lease, it believes the lease may yield enough natural gas and oil to benefit consumers and become economically viable to develop. But until a company actually completes the exploration process, it does not know whether or not the millions of dollars spent on the lease were actually worth it.

Typically, exploration of a lease involves extensive analyses of geological and geophysical data, environmental studies that can be equally detailed, and a variety of government permits before drilling can occur. If drilling leads to the discovery of natural gas or oil in sufficient quantities to justify development, additional geological study often is required for planning field development. Additional engineering and design work, environmental studies and detailed permits likewise will be needed before complex production facilities can be installed and operations begun.

If the company finds there is no natural gas or oil underneath a lease, the company hands the lease back to the government, incurs the loss of invested money and moves on to more promising leases. Those who call for so-called "use-it-or-lose-it" requirements fail to recognize that such requirements are already in effect, with leases that are no longer being explored returned to the government.

Use of Litigation and Bureaucratic Action to Block Offshore Development

Legal challenges and bureaucratic delays are common with both offshore and onshore federal projects, and the consequences are often multi-year delays in the production and delivery of significant natural gas and oil resources to U.S. consumers. Even where a project has not been delayed or canceled, companies must carefully consider whether to risk further investment if litigation has been initiated, but not yet decided, in opposition to their project. Leases within projects that have been obstructed or canceled due to litigation or bureaucratic delays are often wrongly characterized as "nonproducing" by opponents of offshore development.

Examples of litigation that has delayed offshore development include the following:

- The Ninth Circuit Court of Appeals recently ordered a second halt to Shell's exploration of the Beaufort Sea off the northern coast of Alaska, due to environmental groups' claims that the Minerals Management Service did not properly

account for environmental impacts on the lease sales under the National Environmental Policy Act (NEPA). Even if Shell ultimately finds reserves capable of production, the litigation will have delayed that oil coming to market by two years. Shell's expenses to date are understood to be well over $100 million—with no return on investment and no increased supply to consumers. This is despite the fact that the government prepared a detailed 1,500 page environmental impact statement on leases in the area.

- The Ninth Circuit Court of Appeals also used the Coastal Zone Management Act to stop development of oil leases when it allowed California's Coastal Commission to review and veto lease renewals for 35 offshore leases. Offshore development under those leases has been halted since 2001.
- The Destin Dome, located off Pensacola, Florida, was believed to be one of the largest natural gas fields in the U.S., with 2.6 trillion cubic feet of natural gas, according to the Department of Energy. After drilling exploratory wells, Chevron submitted a development plan to the state and the Interior Department for review in 1996. Two years later, Florida objected to the application and Chevron appealed to the Department of Commerce, which delayed making a decision through the terms of two Presidents and multiple Secretaries of Commerce. After waiting years for a Commerce decision, Chevron sued the federal government in 2000, 14 years after Chevron and its partners paid for the rights to explore the Destin blocks. They were subsequently reimbursed the money they paid for the bonus bids and lease rentals. Meanwhile, U.S. consumers have been denied that natural gas to heat and cool their homes.

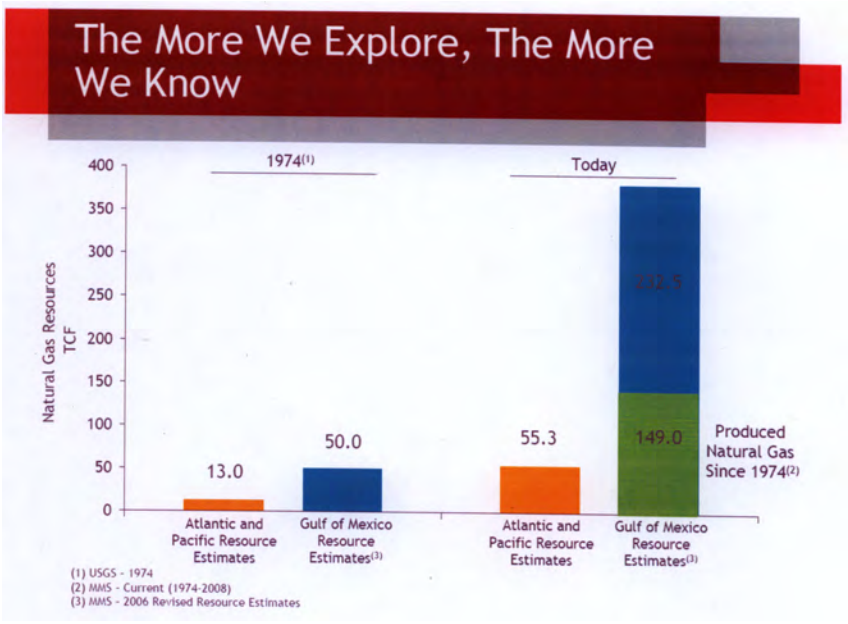
Royalties

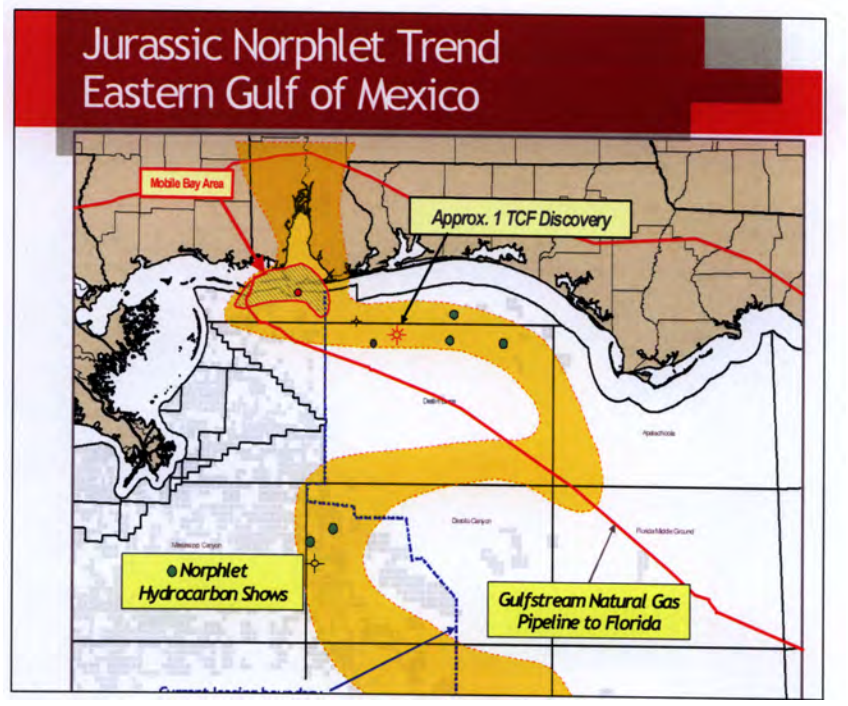
Natural gas and oil produced on government lands generates substantial revenues to the government in the form of royalties. Revenues from such development go to both the federal government and to states to help pay for vital programs. These royalties are one of the largest sources of income to the federal government; since 1953, the federal government has collected more than $200 billion in bonus bids, royalties and rentals. In Fiscal Year 2008, the government collected and distributed $23.4 billion from onshore and offshore energy production. This includes the more than $10 billion paid by companies in bonus bids to lease tracts for offshore energy production on the Outer Continental Shelf in the Gulf of Mexico and Alaska as well as onshore leases.

Recently, the Fifth Circuit Court of Appeals issued a decision finding for Anadarko Petroleum in a case regarding royalty collection. The Fifth Circuit panel unanimously affirmed that Congress, when it passed the Deepwater Royalty Relief Act, provided royalty relief, based only on a volume limitation, not price. That Act was passed at a time of historically low crude oil prices as a means to increase production and sustain jobs in a struggling industry. It was enormously successful, helping to boost deepwater Gulf of Mexico production by 50 percent in less than a decade.

IV. Conclusion

What the nation needs is a policy that increases, not decreases, domestic energy production. Offshore development is a vital component of U.S. energy development. Barriers to offshore oil and natural gas production contribute to volatile energy prices, slower economic growth, lost American jobs and a weakened U.S. position in global markets. We need to find and develop our offshore oil and natural gas resources in an orderly, efficient, and environmentally sound way. By so doing, we can put America on the road to economic recovery and help ensure our nation's energy security for decades to come.





The CHAIRMAN. Thank you, Mr. Nichols. Mr. Cejka?

I am sorry if I mispronounced your name in the first go-round.
Mr. CEJKA. It is Cejka, but I hear almost anything, sir.
The CHAIRMAN. Cejka. I am sorry again.

STATEMENT OF TIM CEJKA, PRESIDENT, EXXONMOBIL EXPLORATION COMPANY

Mr. CEJKA. Mr. Chairman, Ranking Member Hastings and Members of the Committee, I wanted to thank you for the opportunity to discuss, I think, this very important topic. My name is Tim Cejka, and I am President of ExxonMobil Exploration Company, which has the responsibility for global exploration. The U.S. represents a major element of our global portfolio.

This morning I would like to discuss how increasing access to U.S. energy supplies will strengthen the U.S. energy security, create jobs for Americans, stimulate the U.S. economy, and increase revenues to the Federal and state governments. I would like to describe how the energy industry can help achieve each of these objectives in an environmentally responsible way.

The need for more oil and natural gas available to Americans is clear. The United States' continued economic growth and prosperity depends on access to clean, reliable and affordable supplies of energy. There is no single answer to our energy needs. We must pursue an integrated set of solutions that will help us accelerate gains in energy efficiency, curb greenhouse gas emissions, and develop new supplies of energy from all sources, including oil and natural gas found in our own backyard.

Thankfully, the United States is endowed with significant energy resources. Unleashing their value for the benefit of all Americans represents an important opportunity for growth, not only for these challenging times, but also on the long-term health of our economy. It is important to note that the current estimates for oil and gas potential in the OCS areas that have been off-limits were made using data from now outdated technology.

We have resource underestimations that have resulted in the past. Where industry has been able to collect data utilizing advanced technology, resource estimates have grown. In 1987, for example, the U.S. Government estimated there were nine billion barrels in the Gulf of Mexico. By 2006, advanced technologies caused the resource estimate for that area alone to grow to 45 billion barrels. But meeting America's basic energy needs is only one of many reasons the United States should develop our domestic oil and natural gas resources.

Doing so will also strengthen our energy security. By diversifying our nation's energy portfolio with more energy from more domestic locations, Americans will be less vulnerable to supply interruptions from any one region or country in the world. Developing more of our domestic energy resources will help stimulate our economy.

According to one recent study, the decision to lift the bans in the offshore oil and gas production alone would lead to investments that generate more than 76,000 new jobs in our industry, which now accounts for six million employed Americans. Increased domestic energy production will help ease pressure on Federal and state budgets, too. Annual receipts from mineral leases are already a major source of Federal and state revenues.

Opening additional domestic offshore areas to production opens the door to more than $1.3 trillion in additional royalties, bonus bids, rental fees and other tax revenues for the Federal and state governments. Federal oil and natural gas leasing has generated in excess of $200 billion since 1953 through bonus bids, royalty and lease rental payments. That does not include the tax revenues.

In developing our domestic resources, the energy industry is also committed to doing it in an environmentally responsible manner. It has been more than 30 years since the first offshore moratorium was imposed. In those intervening decades, our industry has made tremendous leaps forward in technology, in operational excellence and in environmental performance.

For example, extended-reach directional drilling now enables us to develop areas up to six miles from a single location, minimizing the environmental footprint. Advances in subsea production ensure facilities remain safe and largely hidden from view. Technology currently in place in the Gulf of Mexico has already proven able to prevent spills, even during the worst hurricanes we have seen in a long time.

We can apply these technologies, and more, to new areas open to the development and preserve the safety, the biodiversity and the beauty of the American coastlines. We look forward to working with Congress, the Department of the Interior and state governments to find a safe, secure, environmentally responsible way to use America's resources to produce energy for American needs right here at home, and in doing so create jobs, strengthen our security and grow our economy. Thank you.

[The prepared statement of Mr. Cejka follows:]

Statement of Tim Cejka, President, ExxonMobil Exploration Company

Mr. Chairman...Ranking Member Hastings...Members of the Committee.

This morning, I would like to discuss how increased access to U.S. energy supplies will strengthen U.S. energy security—create jobs for more Americans—stimulate the U.S. economy—and increase revenues to federal and state governments.

And I would like to describe how the energy industry can help achieve each of these objectives in an environmentally responsible way.

The need for making more oil and natural gas available to Americans is clear. The United States' continued economic growth and prosperity depend on access to reliable and affordable supplies of energy.

There is no single answer to our energy needs. We must pursue an integrated set of solutions that will help us accelerate gains in energy efficiency...curb greenhouse-gas emissions...and develop new supplies of energy from all sources, including oil and natural gas found in our nation's own backyard.

Thankfully, the United States is endowed with significant energy resources. Unleashing their value for the benefit of all Americans represents an important opportunity for growth, not only for these challenging times, but also to underpin the longer term health of our economy.

It is important to note that the current estimates for the oil and gas potential in the OCS areas that have been off limits were made using data from now-outdated technology, and we have seen historic resource underestimates result from this. Where industry has been able to collect data utilizing advanced technology, the resource estimates have grown. In 1987, for example, the U.S. Government estimated that there were 9 billion barrels of oil in the Gulf of Mexico. By 2006, advanced technologies caused the resource estimate for that area to grow to 45 billion barrels.

But meeting Americans' basic energy needs is only one of many reasons the United States should develop our domestic oil and natural gas resources.

Doing so will also strengthen U.S. energy security. By diversifying our nation's energy portfolio with more energy from more domestic locations, Americans will be less vulnerable to supply interruptions from any one region or country of the world.

Developing more of our domestic energy resources will help stimulate our economy. According to one recent study, the decision to lift bans on offshore oil and gas production alone could lead to investments that generate more than 76,000 new jobs in our industry, which now accounts for nearly 6 million employed Americans.

Increased domestic energy production will help ease pressure on federal and state budgets, too. Annual receipts from mineral leases are already a major source of federal and state revenues. Opening additional domestic offshore areas to production opens the door to more than $1.3 trillion in additional royalties, bonus bids, rental fees, and other tax revenues for our federal and state governments. Federal oil and natural gas leasing has generated in excess of $200 billion since 1953 through bonus bids, royalties and lease rental payments alone, not including any tax revenues.

In developing our domestic resources, the energy industry is also committed to doing so in an environmentally responsible manner.

It has been more than 30 years since the first offshore moratorium was imposed. In those intervening decades, our industry has made tremendous leaps forward in technology—operational excellence—and environmental performance.

For example, extended-reach directional drilling now enables us to develop areas up to six miles from a single location, minimizing the environmental footprint. Advances in subsea production ensure facilities remain safe and largely hidden from view. And technology currently in place in the Gulf of Mexico has already proven able to prevent spills even during hurricanes.

We can apply these technologies and more to new areas opened to development and preserve the safety, biodiversity, and beauty of America's coastlines.

We look forward to working with the Congress, the Department of the Interior, and state governments to find safe, secure, and environmentally responsible ways to use America's resources to produce the energy America needs right here at home—and in so doing, create jobs, strengthen our security and grow our economy.

Thank you.

The CHAIRMAN. Thank you. Mr. Luquette?

STATEMENT OF GARY P. LUQUETTE, PRESIDENT, CHEVRON NORTH AMERICA EXPLORATION AND PRODUCTION COMPANY

Mr. LUQUETTE. Good morning. Mr. Chairman, Ranking Member Hastings and Members of the Committee, my name is Gary Luquette, I am the President of Chevron North America Exploration and Production Company. I have the honor today of representing over 28,000 Chevron employees who live and work in the U.S. before your Committee.

Our nation is confronting serious economic challenges. I appreciate the opportunity today to share with you how the oil and gas industry, and Chevron, can assist our nation in the economic recovery process. There are two overarching ways the industry can help—by enhancing America's energy security, and by creating more jobs and more revenue for Federal, state and local governments.

To the urgent goal of addressing both energy and economy, I will speak briefly about two things—why the development of the Outer Continental Shelf, including the former moratoria areas, is essential, and how we can do it in a responsible and sustainable way.

First, OCS development is essential because America needs the energy. While energy demand is down today due to the economic slowdown, we know that energy demand will grow longer-term.

Today's decision should help us prepare for, not jeopardize, tomorrow's economic growth. To prepare for tomorrow's economic growth and meet our nation's increasing long-term energy demand, we must recognize we are not in an either/or situation. We need more conservation, we need more alternatives and renewables, and

we need more conventional oil and natural gas. We need more of all forms of energy.

Every major study of America's energy future agrees that, even with the most aggressive development of alternatives and renewables, oil and gas will continue to make up a dominant share of the energy mix for decades to come. Given the projected increase in energy demand, we need to access our secure and reliable U.S. resources, including the OCS. The good news is, the potential in the OCS is significant.

By 2025, OCS production could add one million barrels of oil a day to our energy portfolio, and based on our experience in the Gulf of Mexico with the introduction of new technology, that amount should drastically increase. Every barrel produced in the U.S. increases our energy security and reduces our dependence on less reliable sources. Of course, this also helps the U.S. economy by keeping U.S. dollars and jobs here at home.

To sum up why developing the OCS is essential, America needs the energy, America needs the jobs and America needs the economic boost that development will provide. My second point is how, how can we develop the OCS in a responsible and sustainable way? We in the oil and gas industry appreciate this fact, that our ability to continue to operate depends on doing exactly this.

I will focus on three of the seven policy recommendations contained in my written testimony today. First, we should sustain the 2008 decision to open up the majority of the OCS. Again, developing these resources will boost our economy, improve our energy security and reduce our vulnerability to imports from abroad.

Second, we should guide future leasing by using the comprehensive and time-tested Minerals Management Service five-year plan leasing process. As an early part of the process, the MMS should support and encourage the gathering of new, state-of-the-art geophysical data so we, as a nation, can understand the true extent of the OCS resource potential. Then, and only then, can we make an informed leasing and development decision.

Third, we should incentivize states to support OCS production by allowing all coastal states where there is new production to have an increased share in royalties and revenues. To conclude, I am proud of my 30 years of service to this industry. I can assure you that Chevron, and all of our employees, will continue to apply our best efforts to provide energy that is vital to America.

Reliable and affordable energy is a pillar of Americans' economic stability and strength. Developing America's own oil and gas resources can supply even more of the jobs and energy we need and boost the American economy. But, ladies and gentlemen, to strengthen America's energy pillar and help stimulate our economic recovery, it is vital that we act now. Thank you.

[The prepared statement of Mr. Luquette follows:]

Statement of Gary P. Luquette, President,
Chevron North America Exploration and Production Company

Chairman Rahall, Ranking Member Hastings, Members of the Committee. My name is Gary Luquette and I am President of Chevron North America Exploration and Production Company. I am here to represent the more than 62,000 Chevron employees, of whom 27,000 work here in the United States, and the more than 1.5 million stockholders who put their trust in our company each day. Chevron's broad

portfolio of energy businesses include oil and natural gas production, refining and marketing of petroleum products, geothermal, and energy efficiency services. We are actively pursuing next-generation biofuels and other alternatives with a number of important strategic partnerships.

I lead the Chevron North America Exploration and Production Company, made up of over 5,000 employees working to deliver energy supplies from both onshore and offshore resources. We produce about 5 percent of United States oil and gas, and extend the limits of technology everyday, in areas such as the outer continental shelf of the Gulf of Mexico, to lengthen the life of existing assets and to deliver future supplies. While our company has a heritage going back 130 years, we are constantly reinventing how we explore for and produce energy.

Chevron invests in America. Last year we spent $13.3 billion with our suppliers and other business partners in the United States purchasing goods and services from more than 11,000 large and small businesses throughout the country.

Chevron also strives to be a strong corporate citizen in the communities where we live and work. We invested in about 2,000 charitable organizations across 43 states and the District of Columbia. In 2008, our United States charitable contributions totaled over $75 million.

I want to thank the Committee for holding this important hearing today. We believe development of a long term, strategic and comprehensive energy policy is a critical national priority. This hearing provides an opportunity to demonstrate the vital importance of America's oil and gas industry today and for decades to come. It offers the chance to underscore how our industry works to address America's greatest energy vulnerability, imports of foreign oil; the commitment of the U.S. energy industry to develop U.S. oil and gas resources; and the policies that need to be maintained or implemented to enable us to develop these vital resources in a prudent and orderly manner. Finally, today's hearing highlights the critical role that the industry plays in addressing the current economic challenge faced by this country—through creating good, high paying jobs; increasing revenues to federal, state and local treasuries; and reducing our trade deficit and capital outflows by producing more energy here at home.

Energy is the foundation of America's economic growth and global competitiveness and energy policy must ensure that American consumers and businesses have access to the reliable, affordable supplies of energy that underpin our economy, even as we use that energy more wisely.

Our country's role as a major consumer of energy is well understood, but fewer people understand the United States' strength as a producer of energy: the United States is the world's leading producer of refined petroleum products, electricity, nuclear power, wind power and ethanol; the second largest producer of coal, natural gas; and the third largest producer of oil.

Billions of people around the globe are working every day to increase their standard of living. This will cause an inevitable increase in global energy demand, and competition for energy resources will intensify. Accounting for production declines in existing oil and gas fields, by 2015 the world will need to replace as much as 45 million barrels it produces each day with new production. [1] By strengthening our own domestic production capability, the United States can reduce future demand for imports, improve economic and energy security, and be in a stronger position to lead global efforts to meet these challenges. Our country's leadership is essential.

Any comprehensive energy policy must also include emphasis on efficiency and conservation, which are the most immediate and cost-effective sources of "new" energy with no greenhouse gas emissions. As important as resource development is, the energy challenges we face cannot be met by addressing only the supply side. It is a focus for our company and we applaud the efforts of Congress to enact efficiency measures in recent legislation.

Stabilizing and strengthening our economy is a top priority and energy will play a central role in that process.

Affordable, reliable energy is the backbone of a strong and competitive economy. America's domestic oil and natural gas industry plays an integral role in the nation's economy. In addition to providing critical energy supplies to fuel our economy, the industry directly employs 1.8 million workers and an additional 4 million are employed in energy related jobs. Oil and natural gas operations provide billions of dollars of tax and royalty revenues to Federal, state and local governments—$152 billion between 2001 and 2006. [2] In Fiscal Year 2008 royalties, rents and bonuses alone paid to the Minerals Management Service (MMS) totaled $23.8 billion. The industry also contributes hundreds of billions of dollars to the country's Gross Domestic Product (GDP). For example, in 2006 the upstream domestic oil and natural gas industry contributed around $160 billion in GDP, more than the individual con-

tributions of major industries such as agriculture, auto manufacturing, or computer and electronic product manufacturing. [3]

According to a recent study, development in the former moratoria areas of the Outer Continental Shelf, and other restricted areas in the Arctic National Wildlife Refuge and the Rockies would create 160,000 new jobs by 2030 and up to $1.7 trillion in bonus revenues and royalties over the coming decades. [4] Every incremental barrel of oil developed at home avoids the purchase of a barrel of imported oil, creates jobs, and provides incremental revenue to the government.

Even with the most aggressive development of renewables and alternatives, every major study of our energy future underscores the critical importance of oil and gas in meeting America's energy needs for decades to come.

While much attention has been paid in the public dialogue to replacing petroleum with alternatives like biofuels, even under the most aggressive scenarios for the introduction of biofuels and renewables, these energy sources will meet only a fraction of U.S. demand. The United States Energy Information Agency projects that even after the implementation of major efficiency initiatives, United States' liquids demand will increase approximately 5 percent from 2007 levels through 2030. [5]

Chevron has maintained for many years that it will take a new energy equation to address the United States' energy needs for the next several decades. We believe that we need conservation on a large scale, expansion of traditional energy sources such as oil and gas, and rapid development of alternatives and renewables. We live in an "And" world where we will need all energy sources to satisfy the growing global energy demand in a sustainable way.

Despite our strength as an energy producer, domestic oil production has fallen approximately 40 percent since 1985, while domestic oil consumption has grown more than 30 percent. The result has been a significant increase in our dependence on foreign oil. Today America has the ability to reduce its dependence and improve energy security through the prudent and sustainable development of oil and gas resources which until now have been off-limits. This can be accomplished through the time-tested existing Federal leasing and licensing programs.

Focusing on the subject of this hearing, the National Petroleum Council has estimated that 1 million barrels per day of oil and 3.8 billion cubic feet per day of gas can be brought on line over time from offshore areas previously and currently under moratoria. The total estimate may be increased over time as our understanding of the areas improves and as new technology enhances our ability to tap these resources. This is what has happened in the Gulf of Mexico. Between 1975 and 2006 the Department of the Interior published 8 comprehensive assessments of the undiscovered resource potential of the OCS. For the Gulf of Mexico, the estimates of undiscovered recoverable oil resources increased seven-fold during this time period and undiscovered recoverable natural gas estimates increased by more than four and a half times. [6]

The undeveloped OCS includes promising known prospects. For example, in the late 1980's, Chevron made a significant discovery of natural gas in the Eastern Gulf of Mexico called Destin Dome, approximately 25 miles off the coast of Florida. At the time, it was estimated that Destin Dome held enough natural gas to supply one million American households for 30 years.

Chevron and its partners, however, could not get permits to develop the field because of opposition in Florida and a maze of regulatory and administrative barriers at the federal level. After a long, expensive and frustrating effort to move forward, we relinquished the leases as part of a settlement reached with the government in 2002. This was not a good outcome for the government, industry, the workers involved in development and production of this gas, or consumers. We currently import little natural gas and can maintain domestic production for years to come, but only if promising resources like Destin Dome are made available and our comprehensive energy policy ensures that they can be brought to commercial production.

Developing domestic energy is an urgent challenge, but one that can be addressed through the joint efforts of this Committee, the Obama Administration and companies like Chevron.

Bringing these important resources on line will require a long term focus and stable policies to attract the enormous investments and drive the constant innovation and evolution of technology needed to responsibly develop the OCS. We need to start now. Chevron believes that swift action to initiate evaluation and development of offshore resources is important, and that the joint efforts of Congress, the Obama Administration, the states and companies like Chevron can address this crucial element of our energy strategy in a way that balances the need for energy with the many other considerations.

Already one of the largest producers in the Gulf of Mexico, Chevron is focused on developing new offshore energy supplies to help meet America's needs. These efforts are complex, costly, time consuming and often require the development of new technology. Our experiences provide important insights relevant to new offshore areas.

First, one of the most important factors determining the time and cost it will take to bring new offshore resources into production is proximity to infrastructure. The timeline for a frontier prospect that is far from existing support facilities and infrastructure can easily stretch to a decade or more from lease acquisition to first oil. Projects closer to infrastructure will generally offer shorter timelines. Second, technology today has improved our ability to locate and safely develop offshore resources.

The following are four examples of the effort and time needed to bring new OCS production to the market. These are Blind Faith, Tahiti, Buckskin, and Flatrock projects, all in the Gulf of Mexico. While the challenges are very real, we are grateful that we have the people, the technology and the financial resources to overcome these challenges and develop the affordable, reliable energy supplies that are so vital to America's competitiveness.

We started production at our new Blind Faith facility in 2008, seven years after the initial successful exploratory well was drilled. Total development time following lease acquisition was around a decade and, given the complexities involved in this project, this was a very aggressive schedule. The Blind Faith facility is located in 6,500 feet of water, and supports wells that are drilled more than five miles below the ocean floor. The wells themselves use remote subsea completion technology, allowing a single facility to produce a much larger area. The depth, high pressures and temperatures encountered in Blind Faith's reservoirs presented technical challenges. Developing the technology to solve these challenges has been a significant accomplishment and will enable us to bring an estimated 65,000 barrels per day of oil and 55 million cubic feet of natural gas to market each day.

Another project, Tahiti, further illustrates the challenges our industry manages in terms of timing, scale and cost. We acquired the Tahiti leases in the 1990s. In 2002, following years to complete evaluation and permitting, we used leading-edge technology to drill in 4,000 feet of water and found an estimated 400 million to 500 million barrels of recoverable resource. It has taken seven years to build the infrastructure required to produce the oil and gas from more than 100 miles offshore and five miles deep. When Tahiti comes online this year, we will have invested $4.7 billion—and dedicated personnel and resources for over a decade to manage exploration, permitting, engineering and development—before realizing $1 of return on our investment. Once in production, Tahiti is expected to add 125,000 barrels of oil and 70 million cubic feet of gas per day to the U.S. domestic supply, and is expected to produce for decades to come.

Just this month we announced another significant milestone—a new deepwater oil discovery in the Gulf of Mexico at the Buckskin prospect, located in 6,000 feet of water depth approximately 180 miles southwest of New Orleans and 44 miles west of Chevron's 2004 Jack discovery. The Buckskin discovery is confirmation that our efforts to explore this geologic formation called the Lower Tertiary trend will help provide new U.S. oil and natural gas supplies. Buckskin, like Tahiti and Blind Faith, will take time to develop but we are optimistic that it will further bolster the nation's domestic energy supplies.

Not all of our activity is focused in the deep water of the Gulf. We are also working hard to maximize resource recovery from more mature areas. Last year, working with our partners, we announced commercialization of a new deep gas discovery known as Flatrock, located in just 12 feet of water deep below existing shallow reservoirs. Applying modern 3-D seismic data and state-of the-art analysis, we identified deep gas reservoirs close to our production facilities in the Tiger Shoal area offshore Louisiana. While the deeper resources required drilling wells to depths of 18,000 feet and application of new technology to safely manage the higher temperatures and pressures, due to the proximity to existing infrastructure, we were able to bring three producing wells into service within a year of discovery and are continuing to work on additional development in the area.

As we consider our approach to the undeveloped OCS, it is clear from these examples that proximity to infrastructure should be one of the factors governing selection of priority areas. The undeveloped OCS is unlikely to yield prospects with the timeline of a Flatrock, but those we can identify that are closest to infrastructure represent the resources we can most quickly develop and that will serve as the foundation for more extensive exploration and development.

Finally, these four examples represent projects that were simply not feasible a couple of decades ago. They are possible today thanks to remarkable innovations in technology, equipment and processes. This ability to innovate and apply sophisti-

cated new technologies holds promise for continued success, maximizing the potential of U.S. resources.

Chevron recognizes the importance of operating in an environmentally responsible manner and in a way that accommodates other uses of federal lands and waters.

Just as our ability to identify and develop resources has evolved, so too have the equipment and procedures we use to safeguard the environment. The oil and gas industry has proven, especially in the last 25 years, that it has the technical capability and safety procedures in place to minimize the risk of adverse impact on the natural environment. Successfully drilling deep wells in water depths exceeding 5,000 feet is one example of industry's ability to operate without adverse environmental impact. Even more impressive is the record of the offshore industry during hurricanes in 2005 and 2008. These storms adversely impacted hundreds of surface facilities, yet industry technology such as subsurface safety valves and safety procedures to shut in and evacuate production facilities in advance of the storms protected our workforce and the environment by preventing major oil spills from the impacted wells.

We also have developed ways to reduce the visible footprint of our projects and produce offshore assets with fewer permanent surface facilities. Directional drilling and the ability to install subsea completion and gathering systems greatly extend our reach from surface facilities, or eliminate the need for them altogether.

America's efforts to reduce foreign oil dependence must include the continued prudent and responsible development of federal resources, including development of resources in areas of the OCS recently under moratoria, through the MMS mineral development programs that have been in place for many years.

Expiration of moratoria has created the potential opportunity to apply advanced exploration and production know-how in unexplored parts of the OCS, but it is important to note that removal of a moratorium does not create immediate or uncontrolled access to these offshore areas. MMS resource development programs, in place for over 25 years, provide the Secretary of the Interior with the tools, authority and flexibility to manage a balanced program of energy development. The leasing process is methodical, balances mineral development with other considerations, provides robust environmental safeguards and includes multiple opportunities for stakeholder input.

We believe the question before this Committee and Administration is how best to implement and sustain a thoughtful development strategy in former moratoria areas.

The areas involved are vast. Both industry and government resources must be deployed in a prioritized manner to maximize the effectiveness of this strategy. The procedures to do this are in place. A carefully planned and phased approach to developing former moratoria areas is the critical next step, utilizing the MMS 5 year leasing program process that has proven a successful approach to offshore development. We offer several recommendations for consideration:

1. Lift the statutory moratorium on the Eastern Gulf of Mexico

The eastern Gulf of Mexico remains under a moratorium imposed under the Gulf of Mexico Energy Security Act of 2006. The most important action Congress can take to enhance our energy security is to lift this moratorium. The GOMESA restriction impacts areas with the best known prospects that are relatively close to existing infrastructure, including Destin Dome.

2. Reject calls for new moratoria and similar restrictions on OCS development.

Removal of the Presidential and Congressional moratoria in 2008 was a positive first step toward responsible OCS development, but additional steps are needed. Without understanding the process, many consider "available for leasing" to be synonymous with "already leased". Nothing could be further from reality. The MMS is charged with determining which areas within a given Planning Area will be offered for lease. It does so, balancing resource potential, commercial interest, environmental and other considerations, including the views of the states, using a methodical process. There are at least six public input steps as well as specific reviews with the states and Congress between the initiation of planning and an actual lease sale. Once a lease is issued there is additional planning, review and approval required before an exploratory well can be drilled. It can easily take five years from OCS program planning inception to that first well. As we approach the very real need for energy and the economic benefits that accompany domestic production, we urge Congress to reject proposals that arbitrarily remove areas from this careful process by reinstating moratoria in whole or in part.

We also urge rejection of policies proposed as compromise but that carry the same effect as a moratorium. For example, arbitrary buffer zones, restricting access with-

in a set distance to shore, risks functioning as an outright moratorium. A 50 mile buffer zone, which has been proposed, would remove from consideration the best known prospects in the undeveloped OCS and, according to MMS data, severely reduce the potential resource available. It would also tend to push all development farther from existing infrastructure. MMS can fulfill its role most effectively when it is free to evaluate and identify those resources that can be developed most effectively, efficiently and safely.

3. Pursue development of new OCS resources with a thoughtful, prioritized approach.

Chevron supports a phased approach to developing former moratoria areas, moving quickly to include highest priority areas in the MMS 5-Year Leasing Program currently under development for 2010-2015. There are 26 Planning Areas in the OCS. Due to practical constraints, it is unrealistic for either MMS or the industry to immediately focus on all of the former moratoria areas while simultaneously continuing development in existing accessible planning areas. A strategic approach to phasing in evaluation and leasing, starting with the most prospective areas and those closest to existing infrastructure, makes the most economic sense and will help bring on new domestic oil and natural gas as soon as possible. Through the stakeholder input process, MMS will be able to identify those Planning Areas with the highest level of interest which in turn may contain the greatest potential for commercial discovery of new domestic offshore resources.

4. Facilitate the acquisition of more modern resource assessment data (including seismic) to better inform development choices in previously unexplored areas.

Decades of oil and gas access restrictions to most of the OCS have precluded not only drilling, but also any pre-leasing activity including collection of seismic data. MMS estimates, based on limited amounts of older data such as wells, cores and seismic surveys, indicate substantial resource potential exists, but the scarcity of comprehensive modern information using improved evaluation technology makes these estimates highly speculative. More extensive and better data is needed to update estimates of total resource potential, guide government efforts to implement an effective leasing program, and to improve our ability to identify and focus on the most promising prospects first. Congress can facilitate the gathering of this data by providing adequate MMS budgets to allow them to do this work and to establish a mechanism where companies can contribute to pre-leasing data collection.

5. Preserve the existing MMS planning and leasing framework.

MMS OCS mineral development programs in place for over 25 years provide the Secretary of the Interior with the tools, authority and flexibility to manage a balanced program of energy development. The leasing process is methodical, balances mineral development with other priorities, provides strong environmental safeguards and includes multiple opportunities for stakeholder input.

6. Avoid arbitrary and unnecessary due diligence provisions.

Simply stated, both the existing regulatory process and basic economics ensure that leases are developed in a diligent manner. Leases are acquired at significant expense through a competitive bidding process and are subject to annual rental fees. If drilling or production is not commenced within the primary term, the lease is automatically relinquished to the government along with all of the bid bonus and rental fees paid. Beyond this due diligence obligation built in to the lease structure, the regulations and lease terms contain numerous additional requirements specifying leaseholder obligations. For example, exploration and development plans specify the number and timing of wells to be drilled.

There is no guarantee that commercial quantities oil and gas exist on any given lease, and under the existing program leaseholders bear all of the commercial risk for exploration and development of these properties. For leases returned to the government, leaseholders are out of pocket not only for bonuses and rentals but also for all the resources invested in planning, evaluation, and exploratory drilling. If a lease does terminate, it is not uncommon for the MMS to re-offer the expired acreage at the next Lease Sale and for someone else to lease it starting the whole process over again.

Chevron currently holds over 2000 Federal leases, around 70% of which are producing oil or natural gas, and are classified as "developed" in reports to the government. More than 85% of Chevron's federal onshore leases are producing oil and gas. Most of Chevron's undeveloped federal leases are located offshore in water depths between 4,000 and 10,000 feet where there is no existing infrastructure to produce hydrocarbons. These represent complex, high cost and long cycle time developments, and although government regulations require us to report them as "undeveloped,"

this does not mean they are inactive. Our Tahiti project in the Gulf is an excellent example. It is still listed today as "undeveloped" even though billions of dollars have been spent, facilities have been constructed and the startup date is very close.

Chevron's consistent practice is to conduct a thorough evaluation, followed by exploratory drilling, appraisal drilling, and finally installation of production facilities, where viable, of every lease we hold. Many leases do not have recoverable resources—we relinquish leases for those properties once we determine that commercial quantities of oil and gas are not available.

7. Give states an incentive to support exploration and production by enhanced revenue sharing.

While offshore oil and gas operations boost local economies, the host states also bear some of the burden of administering the program. For example, permitting and regulating shoreside support facilities often are the jurisdiction of state and local agencies. Provisions for enhanced revenue sharing already exist for states adjacent to existing Gulf of Mexico production, and should be extended to all coastal states.

It will take time and stable, sustained policies to bring new resources to the marketplace.

Chevron supports a stable and consistent policy and regulatory environment with respect to access and leasing. Energy investments are long-term, and expensive. The Tahiti project has spanned 5 congresses and its producing life could span 15 more. An unstable regulatory environment greatly increases the risk profile of these projects and discourages investment in domestic energy. We urge Congress and the Administration to maintain a path for the responsible development of new OCS resources and avoid changes to policy and arbitrary restrictions that will hinder that development.

New domestic oil and natural gas resources, as with all other energy choices, are not a quick fix to our energy challenges. Nor are they the only source we should pursue. We need all energy sources as well as efficiency measures to meet demand in the coming decades. Thoughtful development of oil and gas resources as a part of a broad energy policy will enhance energy security, create high quality jobs, increase government revenues and reduce U.S. capital outflows to foreign producers.

At Chevron, we want to work with you to realize that potential.

Thank you.

ENDNOTES

[1] NPC Study—2008 update, http://www.npc.org/Hard__Truths-update__2008.pdf
[2] MMS, EIA-28 Financial Reporting System
[3] U.S. GDP—2006 (U.S. Bureau of Economic Analysis)
[4] Strengthening Our Economy: The Untapped U.S. Oil and Gas Resources. ICF International December, 2008
[5] EIA Annual Energy Outlook, Early Release (December 2008).
[6] U.S. Minerals Management Service, 2006, "Report to Congress: Comprehensive Inventory of U.S. Oil and Natural Gas Resources—Energy Policy Act of 2005 Section 357," February, 2006.

The CHAIRMAN. Thank you. Ms. Harbert?

STATEMENT OF KAREN A. HARBERT, PRESIDENT AND CHIEF EXECUTIVE OFFICER, INSTITUTE FOR 21ST CENTURY ENERGY, U.S. CHAMBER OF COMMERCE

Ms. HARBERT. Thank you, Chairman Rahall, and Ranking Member Hastings and Members of the Committee. I am Karen Harbert, President and CEO of the Institute for 21st Century Energy, an affiliate of the U.S. Chamber of Commerce. As many of you know, the Chamber is the world's largest business federation, representing more than three million businesses and organizations of every size, sector and region of our country.

Offshore drilling, like many other issues in the energy policy arena, too often winds up pitting people against one another and dividing them into simplistic camps labeled either "pro-environment" or "pro-oil." The reality is that our country and our economy

is ill-served by narrow approaches that only look to benefit a single side of this debate.

Our nation's energy, environmental and economic future are all intertwined with one another, and we need comprehensive policies that will address all three. Many of those testifying at your previous hearing stressed the importance of continued development of renewable resources, such as solar and wind, and to this I would say we could not agree more.

There is no question that renewable resources of energy need to play a greater role in our energy mix, and that is why the Institute made a number of recommendations designed to encourage the development and deployment of renewable energy technologies as part of our comprehensive transition plan we submitted to you in this Congress and to the Administration.

But those who would say we can attain energy security without oil or natural gas are as incorrect as those who would say that we can drill our way out of our current energy challenges. The only way we can effectively meet our energy demands is with an approach that includes a myriad of resources, including oil, gas and renewables. Just as we can't ignore the promise of renewable energy, we also cannot ignore the reality of our continued need for oil and natural gas.

Therefore, the Institute has recommended permanently ending the remaining moratoria on exploration and production of oil and natural gas on the Outer Continental Shelf and on Federal lands onshore, and to expeditiously make leases available for exploration and development. The energy policies that Congress has passed over the last several years concede that oil is going to play a critical role for years to come.

The Energy Independence and Security Act of 2007 set a renewable fuel standard that assumed 20 percent of our transportation needs could be met by renewable fuels. This recognized that oil will still make a majority contribution to our fuel supply in the year 2022.

While the Institute has issued several recommendations to transform our transportation sector, such as extending tax credits for plug-in hybrids, including second generation biofuels, like cellulosic ethanol and the blenders' tax credit, we also recognize that the U.S. will continue to be dependent on oil for years to come, and that oil is going to come from somewhere.

According to the International Energy Agency, between 2007 and 2030, 64 million barrels per day of gross capacity—that is about six times the capacity of Saudi Arabia today—will be needed to be brought on line to meet the growth in oil demand and offset the inevitable decline from production from existing fields. Unless the U.S. acts to develop its own resources, the IEA further estimates that this growth in capacity will be predominantly filled by the OPEC countries in the Middle East.

The IEA also estimates that, globally, over $6 trillion in new oil and gas investments will be needed by 2030. Our own economy could use a portion of that jolt that those investments would provide. A recent ICF study showed that if energy development were permitted in the previously off-limit areas of the OCS, Alaska and

a portion of the Rockies, we would see 160,000 new jobs and a new royalty revenue stream for the American economy.

A conservative estimate is that the OCS contains 86 billion barrels of oil and 420 trillion cubic feet of natural gas. We have the technology today, and more will be developed in the future to better map these regions, better access these supplies, and do it all in an environmentally responsible manner. Consider that in 1981 when the OCS moratorium was first implemented, typewriters were on every desk, people were listening to music on record albums, and the easiest way to get directions was to buy a map at the gas station.

Today we have computers, the Internet, MP3 players and GPS devices. Technology has the power to change and improve the way we live, and the power to change the way we use, consume and produce energy. The fear mongering that some engage in when it comes to expanding domestic production is neither factually accurate, nor productive to a meaningful dialogue.

Beyond permanently ending the OCS moratorium as a means of providing legal and regulatory certainty on the issue, there are important steps this Congress and the Administration must take. First, Congress should make sure that states are compensated for any new exploration or production off their shores, and we recommend bringing all coastal states in line with the Gulf of Mexico states at a higher level of 37-and-a-half percent as was approved in 2006 by this Congress.

Second, Congress should reject the so-called "Use It or Lose It" that already exists in law today. Finally, the Administration and Congress should not allow bureaucratic processes to slow down our path to energy security. We are closely watching the Department of the Interior's process and Secretary Salazar's proposal to further delay the five-year leasing program that has been put out already for extensive public comment.

Our nation faces extraordinary challenges. We currently import 60 percent of our oil. If we had made hard decisions in previous Congresses and previous Administrations, we would not face that energy reality today. This Congress has a chance to change our nation's future, and we look forward to helping you do that to maintain America's competitiveness, drive our economic recovery, create American jobs, and preserve our environment. Thank you.

[The prepared statement of Ms. Harbert follows:]

Statement of Karen A. Harbert, President and CEO,
Institute for 21st Century Energy, U.S. Chamber of Commerce

Thank you, Chairman Rahall, Ranking Member Hastings, and members of the House Committee on Natural Resources. I am Karen Harbert, President and CEO of the Institute for 21st Century Energy (Institute), an affiliate of the U.S. Chamber of Commerce. The U.S. Chamber of Commerce is the world's largest business federation, representing more than three million businesses and organizations of every size, sector and region.

Overview

I appreciate the Committee holding a series of hearings on the issue of offshore drilling, and in particular your effort to seek perspectives from a broad array of individuals and groups. The mission of Institute is to unify policymakers, regulators, business leaders, and the American public behind common sense energy strategy to help keep America secure, prosperous, and clean. In that regard we hope to be of service to this Committee, this Congress as a whole, and the Administration.

Offshore drilling—like many other issues in the energy policy arena—too often winds up pitting people against one another and dividing them into simplistic camps labeled either "pro-environment" or "pro-oil". The reality is that our country is ill-served by narrow approaches that only look to benefit a single side of this debate. Our nation's energy, environmental and economic future are all intertwined with one another, and we need comprehensive policies that will address all three.

The goal of my testimony today is to provide some balance to this issue, and to put offshore drilling into its proper context relative to our nation's needs and its current policies.

The U.S. Needs a Comprehensive Approach to Energy

Earlier this month, the committee heard from representatives of environmental and commercial groups, and yesterday you heard from representatives from states. Many of those testifying at both hearings stressed the importance of continued development of renewable energy sources such as solar and wind, and to this I would say that we couldn't agree more. There is no question that renewable sources of energy need to play a greater role in our energy mix.

But those who would say that we can attain energy security without oil are as incorrect as those who would say that we can drill our way out of our current energy challenges. The only way we can effectively meet our energy demands is with an approach that includes a myriad of sources—including oil, gas and renewables.

But beyond new sources of energy, America needs a new approach to energy. We need an energy strategy that takes into account the many challenges that need to be addressed in both the short- and long-term. What guides the Institute is our desire to see policymakers embrace a comprehensive, consensus-driven approach to energy policy.

To that end, last summer the Institute unveiled 13 pillars upon which any comprehensive energy reform effort should be built. Among them were, increasing research and development of clean energy technologies, and expanding domestic oil and gas exploration and production. These pillars are:

1. Aggressively Promote Energy Efficiency;
2. Reduce the Environmental Impact of Energy Consumption and Production;
3. Invest in Climate Science to Guide Energy, Economic, and Environmental Policy;
4. Significantly Increase Research, Development, and Demonstration of Advanced Clean Energy Technologies;
5. Immediately Expand Domestic Oil and Gas Exploration and Production;
6. Commit to and Expand Nuclear Energy Use;
7. Commit to the Use of Clean Coal;
8. Increase Renewable Sources of Electricity;
9. Transform our Transportation Sector;
10. Modernize and Protect U.S. Energy Infrastructure;
11. Address Critical Shortages of Qualified Energy Professionals;
12. Reduce Overly Burdensome Regulations and Opportunities for Frivolous Litigation; and
13. Demonstrate Global Leadership on Energy Security and Climate Change.

As a follow-up, the Institute unveiled a Blueprint for Securing America's Energy Future that built on these pillars and provided specific recommendations for how Congress and the Administration should craft a comprehensive energy plan. In November, we presented to the incoming Administration and Congress a detailed implementation plan that included timelines for each recommendation and identified who in our government has the responsibility for taking action.

Congress and the new Administration have made research and development funding of clean energy technologies a priority, as evidenced in the major commitment made in the stimulus package that was recently signed into law.

It is our belief that investing in research and development of new technologies will ultimately pay major dividends. But it is important to remember that government should not be in the business of picking technology winners and losers and that research and development—while critically important—takes time. It is also critical to find the appropriate roles for government and the private sector. The role of the private sector in our future energy security is paramount and we should not seek to crowd out their participation, capital, innovations or expertise.

Just as we can't ignore the promise of renewable energy sources, we also can't ignore the reality of our continued need for oil. When it comes to energy, our nation can't afford an either/or approach—because the bottom line is that we need all types of conventional, unconventional and renewable energy—through diversification comes improved energy security.

Therefore, in addition to our expanding the role for renewable and clean energy,, investing in clean coal technologies and expanding nuclear power, we also recommend permanently ending the remaining moratoria on exploration and production of oil and natural gas in the Outer Continental Shelf and on federal lands onshore. For 30 years, 85 percent of America's oil and natural gas resources have been placed off-limits to exploration and production and this clearly has not benefitted the American economy or the average American consumer. The restrictions we have placed on the production of our own domestic oil and natural gas resources are a significant self-inflicted wound to our security and prosperity.

Oil Will Continue to Play an Important Role in Meeting our Energy Demands

The Committee is well aware of the challenges we face when it comes to energy. Between now and 2030, global demand for energy could increase by more than 50 percent, and by as much as 20 percent here in the United States. If we fail to develop the supplies needed to meet this demand, there will be catastrophic consequences for our global competitiveness, our economy and our quality of life.

The fact is that oil will remain the backbone of our national and global economy for the foreseeable future. Despite the valuable progress being made in the development of new energy sources and technologies, there is still no viable substitute for oil.

The aggressive energy policies that Congress has passed over the last several years concede that oil is going to play a critical role for years to come. The Energy Independence and Security Act of 2007 (EISA) amended the Renewable Fuel Standard to require the use of 36 billion gallons of renewable fuel annually by 2022. This was projected to be roughly 20 percent of U.S. transportation needs. So even under this innovation-driven policy, we are assuming that 80 percent of our transportation needs will still be met by oil in the year 2022. While the Institute has issued several recommendations to transform our transportation sector, such as extending tax credits for plug in hybrids and including second generation biofuels like cellulosic ethanol in the blenders' tax credit, we nevertheless realize that the United States will continue to be dependent on oil for years to come.

Domestic Sources of Oil and Gas are Critical for our Economy and National Security

According to the International Energy Agency (IEA), between 2007 and 2030, 64 million barrels per day of gross capacity—which is the equivalent of six times the current capacity of Saudi Arabia—will need to be installed in order to meet the growth in oil demand and offset the inevitable decline in production from existing fields.

Unless the U.S. acts to develop its own resources, the IEA further projects that this growth in capacity will be predominantly filled by OPEC countries in the Middle East. We already see that other nations are moving quickly to secure and stabilize their future oil supplies. Last week, China entered into an oil-for-loans agreement with Russia. These types of agreements are a reminder that as long as there is a demand for oil, capital will continue to flow into the countries that can supply it.

Between 2007 and 2030, the IEA also that estimates globally, $6.3 trillion in new investments will need to be made in oil and gas. Thus, if the United States fails to explore and develop its own oil resources, we are potentially turning away trillions of dollars in capital investments. This is an opportunity that we could ill afford to lose during an economic boom, let alone during the trying economic circumstances we are currently facing.

The United States already imports roughly 60 percent of our oil from foreign nations, which is nearly double the amount we imported in the 1970s. And in 2008, the United States sent between $400 and $700 billion overseas for imported oil.

It is in America's best interest from an economic and national security perspective to have a stable supply of energy, including oil and gas, and thus we can no longer afford to ignore the billions of barrels that lie off our shores. It is estimated that America's Outer Continental Shelf (OCS) contains 86 billion barrels of oil and 420 trillion cubic feet of natural gas. That estimate is conservative since previous surveys were conducted decades ago. The technologies available today and in the future will allow us to better map these regions, better access their supplies of oil and natural gas, and do it all in an environmentally responsible manner.

Consider that in 1981, when the OCS moratorium was first implemented, typewriters were on every desk, people were still listening to music on record albums, and the easiest way to get directions was to buy a map at the gas station. Today, we rely on personal computers and the Internet, mp3 players, and GPS devices. Just

as technology has the power to change and improve the way we live, it also has the power to change and improve the way we get our energy. The mongering fear that some engage in when it comes to expanding domestic production is neither factually accurate nor productive to a meaningful dialogue on our energy future.

Policymakers Must Take Action to Address our Energy Challenges

It is time to embrace the reality that our energy challenges will require a long term, comprehensive approach that outlasts political cycles or economic ups and downs.

In addition to permanently ending the OCS moratorium as a means of providing legal and regulatory certainty on the issue, there are still other important steps that Congress and the Administration must take—and other steps they must avoid—to ensure that our nation is able to realize the full benefits of these important resources.

It is important to remember that the energy business is capital intensive. A new offshore production platform typically costs in excess of $500 million to construct and hundreds of millions of dollars per year to operate. Before companies will make these types of investments, they need to be certain that they will be allowed to finish what they start.

I mentioned before that the United States sent a minimum of $400 billion overseas for imported oil in 2008. If even a fraction of that money could be kept and invested here in the United States, it could make a huge impact. A recent ICF International study showed that if energy development were permitted in the previously off-limits areas of the Outer Continental Shelf (OCS), Arctic National Wildlife Refuge (ANWR) and a small portion of the Rockies it would lead to the creation of 160,000 new jobs. In addition there are significant royalty revenues associated with these opportunities.

Second, Congress should make sure that states are well compensated for any exploration or production taking place off their shores. Under current law, the federal government shares 27 percent or less of revenues from oil and natural gas production within the first three nautical miles of federal waters off of the state boundary and zero beyond that. We recommend bringing all coastal states in line with Gulf of Mexico states, which were granted a higher percentage share of 37.5 percent of the revenue for new leases off its coast under the Gulf of Mexico Energy Security Act in 2006.

Third, Congress should reject additional so-called "Use It or Lose It" leasing provisions. Such provisions would be duplicative, unnecessary and ultimately set back the exploration and development of the OCS. "Use It or Lose It" is already the law of the land. Companies purchasing a lease already have a time period that they must act within, and having invested billions of dollars on a lease, they are already heavily incentivized to see it produce sooner rather than later. Exploring and developing a lease takes time, and adding additional, punitive "Use It or Lose It" provisions would make it less likely that companies would want to invest in these areas.

Fourth and finally, the Administration and Congress should not allow bureaucratic processes to slow down our path to energy security. The Institute is carefully following the Interior Department's recent action to extend the public comment period by six months and delay until this fall the review of proposed leasing plans for future oil and gas exploration and production on the OCS. We naturally agree with Secretary Salazar's recent statement that America requires a comprehensive energy plan, but such a plan must include a pathway for greater supplies of proven energy sources like oil.

Our nation faces some extraordinary energy challenges in the years ahead, but these challenges are also an opportunity. If we embrace a comprehensive approach and enact smart policies, we can lay the groundwork for energy security, environmental protection and economic prosperity.

Thank you.

The CHAIRMAN. Thank you very much, all of you, for your very enlightening testimony, and well-prepared, and most importantly, staying within the five-minute time limit. You know, I agree, Mr. Odum, you started out by saying that it is very important that we not be lulled into a false sense of energy security now that prices at the pump are down. We know they will go up, yes, as the economy improves. I think that was alluded to by several of the testimonies here this morning.

Last year, during the election campaign when we saw the over $4 per gallon gas prices, we were subjected to a bumper sticker campaign—drill here, drill now, pay less, blah, blah, blah. All of that, of course, was an attempt to get the American people to believe that if the moratoria were lifted, then high gasoline prices would immediately drop.

Today, the moratoria has been lifted, gasoline prices have dropped, although I don't believe, and that would be one of my questions to the panel, that the lift in the moratoria has caused the current drop in gas prices compared to where they were last summer. So, that would be one question.

The second question would be the stake—this would go to the entire panel—that new leasing and drilling in previously closed areas of the OCS will significantly alter gas prices at the pump in the near future.

Mr. ODUM. If I could start, Mr. Chairman?

The CHAIRMAN. Yes.

Mr. ODUM. I think to the first point, specifically to your question do I think gas prices have come down as a result of lifting the moratorium, I don't think there is that direct relationship. I think the world, and of course, the country, is actually watching to see what do we do next to build some confidence. That actually means we will develop some of these areas.

The CHAIRMAN. Yes, sir? I am sorry. Mr. McKay?

Mr. MCKAY. I would just say that I believe the drop in gas prices are due primarily to a drop in demand on gasoline and the shape of the world economy. As far as new leasing and drilling, I think a million barrels a day is a significant number, if that is the potential of the offshore that is currently off-limits. That would not be immediate. It would take 10 to 20 years, probably, to develop. However, it would send a signal to the world that we are opening up our areas for exploration and development, and overall would be advantageous, I think.

The CHAIRMAN. OK. Mr. Nichols?

Mr. NICHOLS. I am sure we are all going to say the same thing on your first question. The drop in prices is because of the drop in demand, which is because of the recession around the world, and that is pretty clear.

The CHAIRMAN. All right. I assume the remaining three will say the same thing, so let me move on to my second question. Which areas of the OCS are your companies most interested in developing in priority order? In other words, if you could buy a lease tomorrow in an area that was previously off-limits, where would it be located?

Mr. NICHOLS. The area of the offshore that we have the most knowledge about is the Gulf of Mexico, because we already have leases and facilities that go right up to that imaginary line that goes down the middle of the Gulf of Mexico, dividing the eastern part from the western part. That is the part of the United States that we have the most knowledge and, indeed, the infrastructure, as I said in my testimony, with pipelines going right through that area offshore, so that area would probably be the most.

I am sure that different companies would have different views on the Pacific Coast, Atlantic Coast, Alaska, and that would be be-

cause we really don't have enough knowledge or information at this stage to really make an informed decision.

Mr. CEJKA. May I follow up?

The CHAIRMAN. Yes.

Mr. CEJKA. Following up on Mr. Nichols' comment, on all the offshore areas it has been over 30 years. I started 33 years ago, and the first project I worked on was offshore California. I remember vividly the technology we had. There were no computers. We used paper seismic records and pencils to make our interpretations. The advances in seismic are unbelievable in those 30-plus years. The first thing I would say is let the industry gather seismic data on the coastlines.

The industry will find places it has interest. Mr. Chairman, to your question of where, it is a horserace. We see things differently because we have different technologies and different people. Sometimes our company is right, and sometimes Chevron and BP are right; but that is what makes it good to have competition in the industry because we do eventually find the right spot. It is hard to predict until we gather this new seismic data, which will help all of us determine where the better areas are.

Mr. ODUM. Mr. Chairman, if I could just add one piece which I think is a little bit different to that answer—specifically, offshore Alaska where there have been wells drilled in the past—we know there is oil and gas out there. It is an area open to leasing, but it is currently being inhibited. I think just for the Committee to think about—what could be done to that area which is open, what could be done to help move that forward—would be an important question.

The CHAIRMAN. Any further comments on that? Thank you. Mr. Hastings?

Mr. HASTINGS. Thank you, Mr. Chairman. I want to ask a question of all the panelists except Ms. Harbert because she is not in the business, but I am wondering if you could tell me, and if you don't know, you know, the broad range here, submit that for the record, and that is this: Do you know how much that your company paid to Federal and state governments in 2008? I am talking about taxes, royalty, bonus bids.

Mr. Cejka? I knew some Cejkas in my hometown, so if I call you Mr. Cejka, is that OK?

Mr. CEJKA. Yes. That is absolutely fine.

Mr. HASTINGS. OK. Fine. If you could do that, and if you don't have it in front of you, please submit it for the record. We will start with Mr. Odum.

Mr. ODUM. If I could just characterize that in the very recent past, maybe 18 months to two years——

Mr. HASTINGS. That is fine.

Mr. ODUM.—about $600 million in the Gulf of Mexico and over $2 billion in Alaska.

Mr. HASTINGS. Mr. McKay?

Mr. MCKAY. In 2008, counting bonuses, rental payments, royalties and income taxes, $5.3 billion.

Mr. HASTINGS. Mr. Nichols?

Mr. NICHOLS. I don't have that number, but would be glad to submit it.

Mr. HASTINGS. OK. Mr. Cejka?

Mr. CEJKA. In 2008 and 2007, we contributed about $16 billion to the U.S. economy in terms of taxes, royalty.

Mr. HASTINGS. In taxes and royalty. Mr. Luquette?

Mr. LUQUETTE. I don't have those figures handy but can provide those.

Mr. HASTINGS. OK. Fine. I appreciate that. Mr. McKay, I would like to ask you a question. We hear a lot about technology in the offshore industry, and typewriters when we last explored some areas. I thought that was good. Could you elaborate a little bit on the technological advances that have occurred in the industry that has made your work more environmentally friendly?

Mr. MCKAY. Yes. I think building on from where my colleague from Exxon was, seismic technology has moved massively forward in the last 30 years. We can image and see things, and therefore target things that weren't even possible as little as 10 years ago. The footprint that we must impact, in terms of number of wells drilled, leads that are developed down into prospects, and some are culled, as they are not potential, that has increased our ability to drill in the right place drastically.

The other thing I would say, in drilling technology we can now do extended-reach drilling. You heard an example of up to six miles. There are examples, we are trying to go out eight miles. We can also design the wells based on the seismic interpretations to be safer, more robust and designed better for the situations that they are going into. The third area is around monitoring and control. The systems, the pressure sensors, temperature sensors, flow sensors are miles better than they were in the past.

We can see things and understand things in real time now downhole in the well and at the surface, and control things much better than we could in the past. The last area, I would say, which is a big, big benefit, is the usage of subsea completions where we can drill wells, produce those wells purely from subsea installations, tie those back to central processing facilities 15, 20, 30 miles away and therefore the visual impact is very low.

And so when you combine all those systems, you have a safer, more environmentally sensitive methodology of development today than we had 30 years ago, or actually even 10 years ago.

Mr. HASTINGS. Thank you. And last, well, maybe not last, for Mr. Cejka. I just can't resist, I guess. You have been in the business, you said, for 33 years. Are you aware of any other industrial country that limits the energy resources like the United States?

Mr. CEJKA. There are none. To my knowledge, there are none.

Mr. HASTINGS. All right. As far as stimulus, because that issue was talked about a great deal, is your company receiving any bailout money?

Mr. CEJKA. Absolutely not.

Mr. HASTINGS. All right. Any of the other companies receiving bailout money?

Mr. ODUM. No.

Mr. HASTINGS. OK. Good. One last question real quickly. Mr. Nichols, do you believe that the Federal government should subsidize your member companies by directly contracting for new seis-

mic surveys of former moratoria areas before additional leasing can take place?

Mr. NICHOLS. No, I do not.

Mr. HASTINGS. OK. Great. Thank you. I will yield back my time because I know that we have votes going.

The CHAIRMAN. Yes. Let me go to Mr. Sarbanes and advise the panel, with your indulgence, and if you can return, we will have to take about a 30 minute break after this questioner and come back after that time for more questions. Is that agreeable with the panel? OK. Thank you. Mr. Sarbanes?

Mr. SARBANES. Thank you, Mr. Chairman. I am curious. Before the last year or two, when you must have fully expected that the moratorium would have remained in place, I assume that looking out from a couple years back, that would have been your operating assumption as you were making plans and strategies about going forward. Is that fair enough? OK.

So, what were the plans to make what you all characterize as a transition from where we are now to a new portfolio of energy resources that is more diversified? If the moratorium had stayed in place, what was the strategy? Anybody could take this question.

Mr. ODUM. Well, I can tell you that we are talking about an expanded portfolio, expanded opportunities for the U.S. when we talk about opening new areas. One of our primary businesses is oil and gas, but also working in the renewable areas of wind. We have a significant wind business in North America, and also very significant investments into second-generation biofuels.

Mr. SARBANES. See, I think, I mean, my impression is my belief. I am willing to have my belief system overturned, but my belief right now is that the transition you are talking about can be achieved if the moratorium were back in place, provided that the exceptions to it, the places where you had the opportunity to pursue leases and so forth, were part of that reality.

To me, that is the presumption that needs to be rebutted here because 85 percent is off-limits, right, if you go back to the moratorium? Fifteen percent, it seems to me, based on what I know and hear, should be sufficient to accomplish this transition we are talking about, particularly, as you indicate, if the estimates of what you would find were low in most instances when you then get out and do the research.

I am having trouble understanding why, with the moratorium being back in place, it doesn't give us enough to make this transition to the new reality that we want to see.

Mr. NICHOLS. If I might, one of the things you might focus on is where an oil and gas company allocates those dollars. We can allocate those dollars to the United States, or to Canada, or to other parts of the world. The more the United States restricts where we can drill as companies, the more those dollars have to find places internationally.

So, when the President of the United States talks about increasing the United States lessening our dependence on foreign oil, that says if you open up more areas in the United States where we can explore for oil, we can do that. Some of those dollars will get transferred from places offshore out of the United States to places onshore.

Mr. SARBANES. But I am hearing something—from Mr. Odum I heard something a little bit different. Twice you have alluded indirectly to the idea that the problem is not necessarily that you don't have access to sites where there could be oil—under those exceptions where the leases you had while the moratorium was in place. The problem is that the process for completing that exploration and getting it into an operation mode is cumbersome and needs to be streamlined, or reregulated, or whatever it is.

Mr. ODUM. I appreciate the opportunity to clarify because what I am saying is actually exactly what Mr. Nichols is saying. It is an option for this country to develop the additional resources that are out there for the benefit of security, jobs, all the things that have been mentioned before, so I won't repeat that.

Regarding my specific comments on how we can make the system more effective in terms of accessing areas, it was a particular flag around Alaska where we have had some challenges getting things done efficiently and effectively. I think it just speaks to the fact that when we open new areas for exploration and production. we need to be sure that we adequately fund and resource the pieces of government that are involved in getting that done. So, that was my main point.

Mr. SARBANES. Well, I would like to test the proposition that if we do the things you are recommending with respect to the areas that would be available, even with a moratorium in place, that you could get to the kind of energy production that, again, would allow us to make this transition.

I am probably running out of time here—'I am at yellow, but I wanted to pursue something else, which is I think, Mr. McKay, you talked about the $8 billion over 10 years that BP is putting into pursuing alterative energy sources, renewable energy sources, and so forth.

I just want to put that in context for people listening because $8 billion is a lot of money. However, it is not a lot of money compared to, for example, the profits that BP made in a two-year period, which was $57 billion, so I am not impressed with that as representing an aggressive transition to a new and more diversified energy portfolio.

One of the things I am concerned about, Mr. Odum, is the false sense of security that you are worried about because the price has gone down. I am worried about the false sense of security that can result if we suddenly think that we have all of this OCS available to do drilling and we fall back into the frame of mind that we don't have to have the discipline to pursue these alternative sources of energy.

I think there is a discipline dimension to this as well, and I think I have probably used my time up. Thank you, Mr. Chairman. Thank you all.

The CHAIRMAN. OK. The Committee will stand in recess for a half hour.

[Whereupon, a short recess was taken.]

The CHAIRMAN. The Committee on Natural Resources will resume its sitting. We will recognize the gentleman from Oregon, Mr. DeFazio, for questions.

Mr. DEFAZIO. Thank you, Mr. Chairman. I am sorry. I was detained in Homeland Security with the Secretary so I missed some of the questions, and if the panel would cut me a little slack here, I may ask some questions that are repetitive. As you know, there was consideration of legislation here last year in the Congress when gas was retailing for over $4 a gallon and consumers were outraged.

The Republicans said, "Drill here, drill now," like that would provide immediate relief. There were others of us who felt that orderly and prompt development of some of the existing leases perhaps might provide relief sooner, but we didn't believe it would provide relief immediately either. I guess my really simple question is, would "drill here, drill now" last summer, if implemented as proposed, have made any difference in the retail price of gasoline during last summer? Yes or no? Seems like a pretty easy question. Anyone?

Mr. NICHOLS. Well, as we discussed earlier in this hearing, you know, Economics 101 obviously says the more supply you bring to any commodity, that that has a downward pressure on price.

Mr. DEFAZIO. Right, but, of course, just the potential leases for potential future supply of unknown volume, that probably wouldn't provide a lot to a current market, would it?

Mr. NICHOLS. That had no impact.

Mr. DEFAZIO. Right.

Mr. NICHOLS. We all said that earlier.

Mr. DEFAZIO. Right. OK. That is good. So then, if we are going to supply, I guess, I have a news report from Reuters, July 3, and it points to about the time gas prices were peaking over about $4—$4.30 in my district—that we were exporting a record 1.6 million barrels of refined petroleum products at that point in time, up 33 percent from the same period in 2007.

I assume your answer is going to be, "Well, we are in a global supply chain, and we will send the oil wherever it gets the highest value for the refined product," so I would like first a little discussion of why we were exporting a record amount of refined product at a time when Americans were being squeezed dramatically at the pump.

And then, I guess the follow-on question to that would be I often hear that the reason for jumps is, "This refinery had a fire, this one shut down for cleaning, this one here had a hurricane," and the price jumps up. Do we have enough refinery capacity? So, two-part question. Why were we exporting a record amount at a time when Americans were paying record prices, or were they paying record prices because we were exporting a record amount?

Mr. CEJKA. I will address the first question, if I may, sir.

Mr. DEFAZIO. Sure.

Mr. CEJKA. The products that were being refined were, when you go through a refinery run, and I speak as an upstreamer so I don't speak with total engineering knowledge, but you develop a lot of products under one run—gasoline is just one of them—but there are other byproducts that come out of that, from sophisticated lubricants down to very base sort of what is called "coke," which is sort of a leftover product.

Mr. DEFAZIO. Sure, but if I just could, and, you know I don't always believe the news, but they do say in the first paragraph, "Shipping record amounts of gasoline and diesel fuel to other countries." They weren't saying other splits. They were saying gasoline and diesel in record amounts. But go ahead.

Mr. CEJKA. Well, I don't believe we were shipping record amounts of gasoline. From what I know, it was on the product side.

Mr. DEFAZIO. OK. Well, I guess, can anybody else address that? I mean, we will have to check it out because perhaps Reuters was wrong and you guys should have, you know, tried to get them to correct it at the time.

Ms. HARBERT. Congressman, if I might, I think we need to recognize why there were high oil prices or high gasoline prices. It was not because we were exporting some of the refined product. Most of that product was actually going to Canada, and it was a very small amount of what we were refining. The reason there were high prices is because demand was outstripping supply, and the reason it was outstripping supply is because we haven't brought new supply onstream in this country in so long.

Mr. DEFAZIO. But there were no gas lines like in the 1970s; there were no absolute shortages; there was no rationing. I am not aware of anywhere in the world that there were gas lines outside of Iraq, which has its own set of problems, so to say there wasn't enough supply, I guess, means we were rationing through high prices because we were not rationing at the pump, there were no absolute shortages, there were no red flags, yellow flags, green flags, any of that kind of stuff.

Ms. HARBERT. We did see consumer behavior moderate quite substantially and, in fact, in August of last year we saw driving behavior change, and people drove five percent less in August of last year as they did the year before, so the consumers responded to the high prices. We certainly don't want to make decisions today that would put us 10 years from now in an even worse situation. So, 10 years ago if we had brought new supply on, we wouldn't be importing as much and we wouldn't have seen those high prices this summer.

And so we really have an opportunity now to make a difference. You know, the stimulus package stipulated some long-term investments to get us out of this energy crisis, and whether or not leases can be brought on line in one year or three years or more, we should be investing for the long term because this is a long-term challenge.

Mr. DEFAZIO. Sure. And if Congress had chosen to impose higher fuel efficiency standards 17 years ago, we wouldn't have been in the same pickle either, but those are what if's. Let us look to the future. I appreciate that. Let me ask a question about prices today and OPEC. OPEC, which some of you deal with on a regular basis, regularly meets. They have meetings and they decide to constrain production.

Now, they do that not for conservation purposes, but for purposes of driving up the price and profiting themselves, and the profits seem to flow through the chain to your books, too. I believe five or six of the members of OPEC are members of the World Trade Organization, and three are observers and want admission. The clear

rules say the only reason you can constrain supply is for conservation purposes, not to manipulate the market and drive up prices.

I have asked, to be fair, President Clinton, who refused to file a complaint against OPEC, President Bush, who refused to file a complaint against OPEC, and we will soon be asking President Obama to file a complaint against OPEC. Would any of you support, you know, such a complaint as consumers, or you are providers but you are also consumers of their product, because they are illegally constraining supply to drive up and manipulate the market price?

I mean, because you have to have standing to file these complaints and consumers can't. I can't. No one I represent can. The government can or industry could. Anybody willing to take on that question?

Mr. ODUM. Congressman, if I could just comment. I think what it tells me is I could be clear about what I do support—which relates to what the President said last night—which is, what can the U.S. do to stimulate its own energy sources and energy supply to reduce the number of imports?

Mr. DEFAZIO. Sure. Well, I am all for that, and I have been for the 20 years I have served here; but what I am saying is that since we are all here about free trade every day of the week, every day of the year, and I voted against all these agreements because I said they aren't to benefit the American people, mainly to benefit multinational corporations, of which you are some, this is a clear violation. They can't do that.

If you do it, you will go to jail, right? If you say, "Well, we are going to hold back stuff here and we are going to collude with each other and drive up the price"—which, of course, I know doesn't happen, so you know that there would be the force of law on you. This is international law. These governments are signatories. The U.S. is a signatory. Shouldn't the U.S. defend its consumers by filing a complaint against OPEC for improper, illegal constraint of supply?

Ms. HARBERT. I think there is a couple of comments on that. First of all, what would be the consequences of doing such a thing, whether there is the legal ability to do it or not? That is probably the subject of a much longer conversation?

Mr. DEFAZIO. It might break up OPEC because some of them might say, "Heck, you know, we are out of here." Right now, they are colluding very nicely and cooperating in a record way, which usually doesn't happen, and it is happening now. They are all coordinating to drive up the price now. Even though demand is way down, consumers are going to be paying well over $3 a gallon by Memorial Day. I can predict it right here, right now.

Ms. HARBERT. If the desire is to lower prices by suing the producers of the actual product, I don't know what type of effect that would have on prices, but one could assume that that may have a negative effect on prices.

Mr. DEFAZIO. Well, you know how the WTO works, which is, it is an extraterritorial penalty, and we can then discriminate against any of their products in any way, as can other members of the WTO extraterritorially, and they really don't have much recourse at that point.

I mean, we cave in to the WTO all the time, so I am just kind of wondering why the USA has to cave in to complaints filed against us, but somehow OPEC, we don't even dare file a complaint, which is what you are telling me here, "We don't dare file a complaint because they have us by whatever."

The CHAIRMAN. The gentleman's time expired over five minutes ago.

Mr. DEFAZIO. Thank you, Mr. Chairman.

The CHAIRMAN. The gentleman from Colorado is recognized. Mr. Coffman?

Mr. COFFMAN. Thank you, Mr. Chairman. First of all, I have had five overseas military assignments, four of which have been in the Middle East, have taken me to the Middle East. I fully understand the dangers of our dependence on foreign oil. It is not just bad for our trade deficit; it puts some of the money in the hands of those who wish to kill Americans.

And so I think my question is, what is the capacity for the offshore drilling that we are discussing today if you had the capability to do it in a manner that would also address some of the environmental concerns that were raised today, which already are probably in the regulatory framework around offshore drilling? What capacity would it have in displacing the importation of foreign oil? To any member of the panel.

Mr. NICHOLS. Well, an exact number for that is going to be difficult because we don't really know how big that resource is. As all of us have said in different ways, estimates about the resources out there are unknown, and will remain unknown, until we start exploring. Clearly, all of the numbers that you have heard today are very significant oil and natural gas numbers that really would replace, in time, foreign imports of oil and natural gas, too, for that matter.

Mr. ODUM. Congressman, could I just add. One of the things I worry about is this impression that it is not significant enough. As you have heard the discussion around the vast resources that could be there, they are likely even bigger than the estimates that exist. When we talk about importing 60 percent of our oil, what comes to my mind immediately are some of the larger projects that are out in the Gulf of Mexico now and a project we have coming on just in the next probably six months or so.

The project that I have in my mind produces 180,000 barrels a day per one single development. So, again, as we talk about moving, you know, vast areas up to a million or more barrels a day, I think that is a very reasonable estimate, and that is significant.

Mr. CEJKA. To go back to an earlier point several of us made in terms of it takes all the sources, as we move to alternatives and unconventional ways of finding energy and producing energy, we need to be doing that as we add this extra bit of production. So, you know, if the additional production offsets five percent of our imports, maybe fuel efficiencies, solar, wind offset another five. I think we have to clot that piece by piece because five percent is a huge number.

It doesn't sound like it, but that would be a tremendous amount of production. If we don't do it, we are going to continue to be dependent. The U.S. right now is declining in its production. That

will not stop until we find new areas to bring new production on. And so, we are looking at a further decline if we don't do something now.

Mr. COFFMAN. Any other? Great. Thank you. There have been some concerns that were raised about the issue off Santa Barbara, Hurricane Katrina. If we were going to look with today's technology, where would you say the greatest environmental concern would be in the whole process if you were to aggregate offshore drilling from the first phase of production to the last phase of bringing it in? If there was a sensitive point environmentally, where would that be?

Mr. LUQUETTE. Well, let me have a go at it and we will have other thoughts, I am sure, but I think natural disasters—and, in particular, in the OCS we are talking about hurricanes—represent our biggest threat. Industry has had some pretty significant storms in 2005 and 2008 that have really devastated a lot of the facilities.

The good news is that the record, from a spill-performance standpoint, has been outstanding considering the amount of devastation. I still think that represents our biggest exposure when we talk about OCS areas.

Mr. COFFMAN. It was brought up yesterday that it was a much greater concern about the spillage with the importation of foreign oil coming in on tankers than it was in offshore drilling. I wonder if anybody could comment on that. It would seem to me that if anybody is interested and concerned about a ban in offshore drilling, they ought to be concerned about a ban in the importation of foreign oil, given the dangerous or precarious situation with the tankers. I am wondering if anybody could address that.

Mr. ODUM. Well, I think just simply to confirm that the numbers do, I believe, show that tankering, that there would be more spillage from that than the type of operations we are talking about offshore. I think, you know, and I will refer to the written testimony that I know I submitted where we put quite a bit of detail in there to try to represent what is the performance of this offshore industry in terms of spillage? It is stellar performance.

I will just add one small thing. I think when you look at what opening new areas would look like and what type of developments you would have, you should look at the Gulf of Mexico in terms of the latest projects because that represents the latest technology for some of the deepwater projects and others—and look at the record of those projects. They are stellar.

Mr. COFFMAN. Some concerns also were raised yesterday about the visual blight of having them within a distance offshore where they could be seen in some of our areas that, say, base their economies on tourism, and it was mentioned that there was a way to have them not be visible. I think one was facades, but another one that struck a greater interest with me was having them at or below the surface. What is the capability of doing that?

Mr. MCKAY. We have a couple of different things. One, we have subsea technology. Fields can be developed with subsea wellheads on them so it would be beneath the surface and tied back offshore. Due to the curvature of the Earth, about 15 miles out you wouldn't see a normal height platform. So, roughly tied back offshore to a

central processing facility is one way to do it. I think there are several ways to do it, but that is one of the simplest ways to do it.

Mr. COFFMAN. OK.

Mr. CEJKA. If I could just add one thing. With this new long-distance drilling capability, you could put a rig onshore and drill six miles offshore. There would be nothing on the water.

Mr. COFFMAN. Thank you, Mr. Chairman. I yield the balance of my time.

The CHAIRMAN. The gentleman's time has expired. The Chair, unfortunately, with the indulgence of the panel, is going to have to ask for another recess after Mr. Costa's questions as we have a vote on the House Floor, but this should be a very quick vote. I will go over and vote and come back and resume the Committee's hearing immediately upon my return. The gentleman from California, the Chairman of our Energy and Minerals Subcommittee, Mr. Costa, is recognized.

Mr. COSTA. Thank you very much, Mr. Chairman. Thank you for the thoughtful hearing process that you are lending to this important issue, both last week, this week and as we continue to work with the Subcommittees. It is very important, as you have noted from your statements, that we try to get it right and that we try to develop a balanced, comprehensive energy policy that in my view, or I like to refer to, uses all the energy tools in our energy toolbox, both with near-term, interim and long-term strategies to reduce our dependency on foreign sources and to make us less reliant on fossil fuels.

Having said that, for the record, I would like to, without objection, submit the National Academy of Sciences report published in 2002; and I want to know, just quickly, by nods of heads by the witnesses whether or not you agree, it indicates after a compendium of looking at studies that, in fact, today's accidental spills from platforms represent one percent of petroleum inputs in North America waters and about three percent worldwide. Do you support the National Academy of Sciences report? All heads nodding. Without objection.

Not a lot of time, obviously. I want to talk about the discussion last year that I thought was not as thoughtful as the "Drill, Baby." Comparable to that was the "Use It or Lose It." I would like to get your concepts. I mean, I thought most of them were not very thoughtful, both responses.

Why does "Use It or Lose It" not relate to the realities of the availability of the carbon, the oil and the natural gas, and why should, therefore, we consider opening up? Because I do believe that OCS, as well as Federal lands, is part of one of the energy tools in the energy toolbox. Who wants to take the first crack at that?

Mr. NICHOLS. I will take a crack at that. The oil and gas industry has absolutely no incentive to continue paying the Federal government leases to maintain a lease that is not serving us some use. If you go through the history of a lease, we first identify broad prospects and then go through the leasing process with the government.

Mr. COSTA. And then you do a bid.

Mr. NICHOLS. You do a bid, and if you get the leases, then, since you own those leases for a period of time——

Mr. COSTA. Now, don't the bids differ in price? I mean, not all bids are alike.

Mr. NICHOLS. They do. Yes.

Mr. COSTA. And that is based upon a guesstimate, estimate of what the carbon content is in a leased lot? A leased lot is three-by-three miles?

Mr. NICHOLS. Each company has its own assumptions on what may be underneath that prospect, underneath that lease. No one has knowledge, I mean good knowledge.

Mr. COSTA. Which is why the price varies on what the lease bids are?

Mr. NICHOLS. It varies widely from block to block, and the price can vary widely on what each——

Mr. COSTA. From millions to hundred millions, and then last year there was a record price of what, a billion dollars?

Mr. NICHOLS. Yes. They vary widely because we don't know what is under there. We have guesses and estimates of what is under there.

Mr. COSTA. What are the chances in the Gulf of Mexico or elsewhere that you will hit a find after you spend millions or hundreds of millions of dollars on a lease that you have successfully bid on?

Mr. CEJKA. If you take the Gulf of Mexico all in, it is a 25 percent chance.

Mr. COSTA. Twenty-five percent chance. That is after you have successfully bid whatever you have bid, that is after you have done your due diligence five to six years, after you have done the test well to determine whether the carbon footprint in that three-by-three square mile is sufficient enough to put a permanent well in.

Mr. CEJKA. That is correct, and it may be several three-by-three miles put together.

Mr. COSTA. No, they are, generally speaking when you do your bids.

Mr. CEJKA. But, you know, that is using the best technology we have because we have been in the Gulf of Mexico a long, long time, and a lot of the more obvious things have been found.

Mr. COSTA. Logically, in terms of the concept of whether or not we provide additional OCS leases or not is really—I mean, logic would tell you that all the leases that you currently are holding under the concept of "Use It or Lose It" would seem to suggest that the carbon content in each lease provision is the same in terms of the volume of oil or natural gas and, therefore, you should be using all of it and be drilling all of them concurrently, right? Am I missing something?

Mr. NICHOLS. Yes. No, that is the assumption there. Of course, it is an invalid assumption because once you own a lease, as you continue to do more detailed geophysical work and seismic work, you may decide that the assumptions upon which you bought that lease in the first place are no longer valid, and so you drop the lease. So, the gap between when you do the leasing and when you actually have a discovery, those are leases in process. They are leases we are working on.

Once we get to the conclusion that that lease is not one that is going to continue to be a prospect that will be worth drilling, then we drop it because there is no incentive to pay the government a delay rental, an annual rental, to maintain a lease that you are not going to ultimately drill.

Mr. COSTA. Go ahead.

Mr. CEJKA. If I can give you some statistics. For our company in particular, about half the acreage we hold is under production, the other half is under active exploration, and only four percent, under that definition, would be inactive. We are dropping those acres and giving them back to the government this year. That is how we keep that cycle moving. So, you know, "Use It or Lose It" is what we do on a daily basis.

Mr. COSTA. My time has expired, but let me just for the record state that when I was in Iraq last year, I was talking to an Army Corps of Engineers colonel who was helping rehabilitate the fields there in Iraq. I was asking about the chance of success when they put a hole in the ground in Iraq versus the Gulf of Mexico, where you say it is a 25 percent chance of success. He says it is 70- to 80 percent chance of success in Iraq when they put a hole in the ground.

That low-risk investment versus the Gulf of Mexico, I think, ought to be considered. I just would say, members of the Committee, that for me "Use It or Lose It" is as nonsensical as "Drill, Baby, Drill." They are both nonsensical. I want to thank the Chairman for the time that you have given me.

The CHAIRMAN. Yes. The Committee will stand in recess for five minutes. I am going to run over and vote and come back and resume the Committee hearing. Anybody want to get in line and be recognized immediately for questions?

[Whereupon, a short recess was taken.]

The CHAIRMAN. Committee will resume its sitting, and the gentleman from Colorado, Mr. Lamborn, is recognized.

Mr. LAMBORN. Thank you, Mr. Chairman, and thank all of you witnesses as well for staying around and working with our disjointed schedule this morning. The question I would like to ask any one of you could answer, but I would like to just keep this, for the sake of time, to one of you. Mr. Odum, could you explain what the permitting process requires in terms of the length of time that it takes before a lease can actually become productive, and how many permits are required per well?

Mr. ODUM. Thank you, Congressman. I think it is a really important question. If I can, because I have just been through the cycle, let me just focus on offshore Alaska. The time period is multiple years, so it is important to remember that before a lease sale ever takes place, the Department of the Interior does an environmental impact assessment. That is all part of that process.

That takes place ahead of time. The determination is made that a lease program can go ahead and then that is when we, as companies, come in and bid and move forward. Now, for just the exploration phase to drill a well offshore Alaska, there is probably 39-or-so permits. I would say major permits, probably 15 to 20 major permits. That is the first phase.

Now, as we think about, you know, bringing the production on, the second phase is once you discover something and you define it, then you go through another environmental impact study, the government will, to define what a development would look like and what are the acceptable parameters around a development. That is also a multi-year project. I have looked ahead at that for Alaska and there is something on the order of 150 permits associated with getting a development to move forward.

Mr. LAMBORN. We are up to almost 200 permits?

Mr. ODUM. That is right. In my opening statement, that is one of the reasons that I pointed to as an area where Congress may want to have a look is that whole system that we just described is extremely important to make sure we get the right elements——

Mr. LAMBORN. Real quick.

The CHAIRMAN. Are you talking Alaska only?

Mr. ODUM. Well, that is specific to Alaska, which is where I have most recently seen the numbers.

Mr. LAMBORN. To build on what the Chairman just referred to, would there be a similar type of red tape process for either the Pacific Coast, or Atlantic Coast, or Gulf of Mexico?

Mr. ODUM. Yes.

Mr. CEJKA. In the Gulf of Mexico, for example, on the last phase Mr. Odum referred to, it would be about 90 permits.

Mr. LAMBORN. Should Congress, as a way to cut through the red tape and get energy to the consumer faster, and to reduce our reliance on foreign producers faster, should we look at something like consolidating this process? Maybe having a multiagency one-stop permitting station, if you will, or something like that?

Mr. CEJKA. We would highly support that. It allows the broad look at the features being permitted, it takes all the variables in place, and it gives you one place to have a discussion.

Mr. ODUM. I agree completely, and it allows the various agencies as a lot of these permits to work together to use the same information. I think it increases the quality of the product as well.

Mr. LAMBORN. OK. Thank you. There are so many questions that I would like to ask you, but for the sake of time, obviously we have to focus, so for any one of you, there is a general philosophical question I would like to ask. There are some critics who say that since you can't solve all of our energy needs by doing offshore drilling on the Outer Continental Shelf, we shouldn't even bother to go there at all. I don't agree with that, but how would you answer that criticism that if this isn't a silver bullet, we just shouldn't even mess with it?

Mr. NICHOLS. I think in all of our testimony we have alluded to that, and that the answer to the United States has to be "all of the above". Using the same rationale that if one source is not going to solve all of the problems we shouldn't use it, logically you would be against solar, and you would be against wind, and you would be against any of the sources. We need them all. We need to develop our renewable resources, but we also need to develop coal and natural gas in all of the places where it can be developed in an environmentally responsible way.

Mr. LAMBORN. Any of the rest of you would like to respond to that?

Ms. HARBERT. I think it is time to stop taking options off the table for the American consumer. We need to put all the options back on. It will keep energy affordable, reliable, and it will be a long-term investment, if we do that, for a long-term economic recovery.

Mr. LAMBORN. OK. Thank you for your answers, and thank you for being here today.

The CHAIRMAN. I am going to make a few comments and perhaps ask a question here, and use just a bit of time to see if any of my other colleagues show up for questions. If not, we will dismiss the panel. Just summarizing what I have heard today, matter of fact, in all the panels that we have had, there certainly seems to be more commonalities than there are disagreements, and that is what I have been trying to use this series of hearings to explore, and certainly those commonalities will not be lost on this Committee during our future deliberations.

Where those deliberations take us, where this whole series of hearings takes us, is not defined at this particular moment, except to say that we do need to develop a comprehensive national energy policy out of this Congress. I think we all agree that we need to use "all of the above" in our options, and "nothing", as you have just said, Karen, can be taken off the table. I am certainly an advocate of "all of the above" as long as they are domestically produced energy resources.

As we look to the future, certainly the development of any comprehensive national energy policy will not fall entirely within this Committee's jurisdiction. It will involve multiple committees in the Congress, and it would involve expertise of many others. It is my hope that when called upon, and whether called upon or not, this Committee will have in place the parameters, if not more, for a legislation that will address issues within our jurisdiction.

The OCS is certainly one of those areas of jurisdiction. We developed a bill in the past, a lot of us called it a compromise bill last summer. It did not have everybody's support but, during that process, I noted there was a lot of give and take. That is what I envision this process to be in the future—a lot of give and take.

I know, Mr. Odum, you said there is no tradeoffs, but transition, but I think perhaps there are some areas where we do need to call it a tradeoff because of the legislative acts of compromise while reaching that transition, while exercising that transition, I guess I should say. I do hope that at the end of the day when these negotiations are undertaken and when the compromises are made, they are done in good faith and that the commonalities are not etched in stone, but at least etched in our good faith negotiations and that we can reach an agreement.

In other words, if there is a compromise made, then we don't find that there is something else that needs to be done on down the pipe, and therefore, that particular compromise did not elicit the support of groups for which it was addressed in the beginning to elicit support. I may be a little fuzzy there, but what I am trying to say is that I hope we can reach those areas of common agreement and have everybody onboard when it comes our turn to develop a piece of legislation. Anybody like to comment on that? If not, I will go to Mr. Boren on our side, recognize him.

Mr. BOREN. Thank you, Mr. Chairman. This has been an interesting experience. I mean, I think we have had multiple panels on this issue. Earlier we had Philippe Cousteau and Ted Danson, we have had now executives of the industry, and how pleasing it is to have you all here today. I was a little bit late to the hearing because, on the Intelligence Committee, we were visiting with the new Director of National Intelligence.

Something that he talked about was the world economy, the global economy, the price of oil and gas and the fact that even though prices have gone down, eventually they are going to go back up, and for us to keep an eye on it. I told him, I said, "You know, what better way to ensure our national security than to develop the resources that we have in the United States."

And so I want to thank you all as patriots and for being part of the group that is actually exploring and keeping our dollars in the United States, and not having to rely as much on foreign oil. I have a few questions, and I want to start with my home state leader, Larry Nichols. If he could start, and then the rest of the panel may want to respond.

First question. How do you respond to groups that say drilling offshore is environmentally dangerous, that it can pose major long-term risks to sensitive ocean ecosystems, will damage beaches, hurt marine life, pollute our seas, and will worsen climate change?

Mr. NICHOLS. Thank you. I think all you have to do is look at the track record that this industry has developed offshore. Hurricanes have roared through the Gulf of Mexico year after year, and yet, the record of this industry is outstanding. There have been no significant spills at all, despite hurricanes, which are the greatest threat that we have. We have seen that year after year with no spills at all coming from that record.

The technology of this industry has developed dramatically over the decades, and the proof of that is just shown in that track record.

Mr. BOREN. Great. Any others?

Mr. ODUM. Well, I really like Larry's answers, and I think it is. Look at our track record. I would just put out the invitation to come, we are completely transparent on this point, and to come have a look and experience it for yourselves any time.

Mr. BOREN. OK. Another question I have—I think it was mentioned earlier about increased production and when it will be able to come on line with the moratorium being lifted. How fast do you all think that we can come on line for your individual companies, and not only how fast, but is there something that we can do to speed up the process, whether it be regulatory burdens being lifted, or something else that we can help your industry with?

Mr. LUQUETTE. Mr. Odum mentioned earlier, you missed the response that he provided on the issue of inefficiencies in the permitting process. I think there is fertile ground for industry to work with the regulator in trying to improve the efficiency of that process so that permits can be obtained in a more timely manner.

With respect to timing, it all depends on the nature of the resource, the location of the resource. I will give you some examples. Something that is discovered in the Gulf of Mexico is closer to infrastructure, close to existing pipes, and gas plants and refineries.

Clearly, from the time you let the lease to the time you achieve first oil or gas would be shorter than as you extend it out into the deeper waters of the Gulf of Mexico, or went onto the Atlantic or Pacific basins where you would have to have infrastructure put in, in addition to the exploration process in order to move toward commercial production.

Mr. BOREN. Great. A question again for Mr. Nichols. You had mentioned in your testimony that the estimated amount of natural gas and oil resources available if we opened up the OCS for more exploration and production, you used terms like "billions of barrels of oil" and "trillions of cubic feet of gas." Could you estimate? Do you have any idea what your industry could be producing offshore if we had allowed access a few years ago?

Because I think the argument is, well, we won't get these resources for 20 years. Well, why don't we start now? What would have happened if we had done it 10 years ago, or 15 years ago?

Mr. NICHOLS. Yes. The argument of, it takes a long time, is an argument that you could use against any natural resource. You could use it against developing solar, or wind, or anything else. They all take time. The sooner we start, the sooner we get there. With regard to offshore, as Mr. Luquette said, there are some resources that are right next to infrastructure in the eastern half of the Gulf of Mexico that could be brought on very soon, in a matter of a year or two.

There is an existing gas discovery that could be brought on exceptionally fast. Others will take a longer period of time. The volume itself is hard to say. Just bear in mind that the original estimates for the western part of the Gulf of Mexico that we can explore for now, we have already discovered eight times what was originally forecast.

Will that hold true for the eastern half of the Gulf of Mexico, or Alaska, or Pacific, or Atlantic? Impossible to say, but you do have that track record showing that these early estimates tend to be very, very conservative. A lot of that is caused by new technology that continues to open up areas that were unforeseeable not that long ago. So, this is a significant resource that could be brought on in a meaningful timeframe for our country.

Mr. BOREN. Mr. Chairman, I see my time is running out. I do want to thank the industry. This is an industry that employs a lot of blue-collar Democrats that are in my district, and, you know, we always see these high numbers of profits and everything else. Right now with the prices down, I mean, there are layoffs that are occurring in my district, and so you notice the talk of the windfall profits tax has kind of gone away.

We need to remember that prices go up, but they also go down, and people lose their jobs. This is an industry that is vital to our national security. I will continue as long as I am in Congress to support these individuals who employ a lot of people in my district. I yield back.

The CHAIRMAN. Thank you, Mr. Boren. Gentleman from South Carolina, Mr. Brown.

Mr. BROWN. Thank you, Mr. Chairman. Thank you very much for coming and being a part of this discussion. Like the gentleman from Oklahoma said, we have been debating this issue now for, I

guess, a couple of weeks and we are glad to have your testimony today. We recognize you are on the forefront of making the deliveries and creating the energy that we so badly need in this great country. Are all of the oil just domestic energy exploration, or are you dealing in foreign fields, too?

Mr. CEJKA. I have responsibility for global exploration for ExxonMobil, so domestic, as well as the rest of the world.

Mr. BROWN. So, you are already doing offshore drilling in other countries then?

Mr. CEJKA. Yes. Very much so.

Mr. BROWN. OK. All of the oil is involved then? You are not. OK. So, the ones that are involved in, say, offshore—other countries—what is the difference in, say, permitting a well in one of those countries versus, say, permitting a well in the Gulf or off California, where else?

Mr. CEJKA. No simple answer, sir. It depends on the country. A lot of the countries, we go to the Ministry of Oil and Gas, and that really is our one-stop shop. So, although we may have long negotiations with that ministry we are not going to multiple places for multiple different permits. The other thing that is really different is the size of the acreage available.

The three-mile-by-three-mile blocks that the U.S. offers is probably the smallest on a global basis. That affords you, of course, an opportunity to explore more area to have a greater chance of success. Those are really the primary differences that we see. As you would imagine, some countries are easier to get your permits, and some are more difficult.

Mr. BROWN. In comparison to the one that you just mentioned about going and getting sort of a one-stop shop, how long would it take you to get a permit so you could go from buying or leasing the fields, to getting a permit, to actually getting resources out of the ground? How long does it normally take?

Mr. CEJKA. Do you want to take it? There is not a normal.

Mr. BROWN. Well, just take the best country or the worst country, whichever one. I am just leading up to another question.

Mr. ODUM. If I could, it may steer it in just a slightly different direction, but I think, I will look to the panel here to see how much agreement there is. In terms of the efficiency of getting permits and moving forward with the projects in the Gulf of Mexico, I would say it is pretty good. It is competitive with the world in general.

I would express or describe a difference experience that we are having in Alaska right now. Where it was open for leasing, we bought the leases and we are finding it to be a fairly slow, fairly cumbersome prospect. And so I think the question looking forward—how are we going to design this for the new areas that we open—is very important.

Mr. BROWN. Well, I guess that is my problem. My question, I know that we keep talking about it, but it doesn't do any good to permit it if it is going to take 20 years. You know, where will we be in the energy cycle in 20 years? I notice, Mr. Nichols, that piece of, I guess rock or whatever you had there earlier, you said it came from New Jersey.

Mr. NICHOLS. Yes. It was offshore, a well that was drilled in 1979.

Mr. BROWN. Was that to explore to see if there was some energy down there?

Mr. NICHOLS. That well actually discovered oil and gas. It was not commercial at that time and the bans took place shortly thereafter, so that lease was abandoned.

Mr. BROWN. So, no cost recovery at all on that?

Mr. NICHOLS. No. No. In fact, the company that bought that, Tenneco, paid the government $8 million just for the lease, and remember this was 1979, so $8 million was more then, and then drilled what amounted to a dry hole.

Mr. BROWN. OK. So, there was no energy there?

Mr. NICHOLS. There was oil and gas there, but at the time they did, there was not enough of it that could be economically produced so the lease was abandoned.

Mr. BROWN. Could you go back and reclaim it?

Mr. NICHOLS. You certainly could go back and reevaluate that with modern technology.

Mr. BROWN. But the moratorium has been lifted. I was just wondering if there was any movement to go back and——

Mr. NICHOLS. No. We can't do anything until the Department of the Interior grants leases, and no leases have been granted. They haven't really started the process. As you know, that process has now been delayed for another six months, so the process to allow us to start bidding has not yet begun.

Mr. BROWN. But the oil lease is still not active then?

Mr. NICHOLS. No. That oil lease expired decades ago.

Mr. BROWN. Most of them are predicated if you don't deliver in a certain period of time, it expires? Is that the way it works?

Mr. NICHOLS. Yes. That is exactly the way it works. You are given a certain amount of time to explore on that lease and unless you establish commercial production, the lease expires.

Mr. BROWN. But you have to pay for it whether it is good or bad?

Mr. NICHOLS. Yes.

Mr. BROWN. One other question, Mr. Chairman. I notice my time has expired, too, but the Ranking Member requested that you all would give him some kind of a tax figure to what your companies are paying. What I would also like to see added to that is the number of dollars that you pay out in dividends. I just feel like you are getting a bad shake.

You all are absolutely making this country strong because we have the greatest energy source in the world, and sometimes you get sort of a black mark for doing it. I was just trying to project some of the good things that you all do, and there is a lot of it out there. Thank you for letting the light stay on. Thank you.

Mr. NICHOLS. Thank you.

The CHAIRMAN. Gentleman from New York, Mr. Hinchey.

Mr. HINCHEY. Thank you very much, Mr. Chairman, and thanks for organizing this. Gentlemen, thank you very much for being here. Sorry I wasn't here for the early part of the hearing, for probably the most important part of the hearing, but I was engaged in some other things here and, of course, we couldn't get here. I just

wanted to have an opportunity to ask a couple of questions, simple ones.

We know how the effect of the price of energy has had on our economy and how sometime around the middle of last year we saw the price of a barrel of oil hit its highest; and the price of a gallon of gasoline also hit its highest, sometime I think probably last summer, if I remember correctly. But now the barrel of oil has gone down to somewhere below $40 a barrel.

I don't know what the exact price is. What is it? $34 or something like that? $34 a barrel. In spite of the fact that the price has dropped, the price of gasoline and the price of home heating oil is pushing its way up again. Can you tell us why that is happening? Doesn't seem to make any sense.

Mr. MCKAY. I can give you a view. In the fourth quarter of last year when gasoline prices were at their lowest, that was on the back of one of the most volatile and severe demand drops that we have seen in the last 25 years, and inventories were strong and the market was supplied——

Mr. HINCHEY. I can't hear you.

Mr. MCKAY. Sorry.

Mr. HINCHEY. Just speak louder. It is just you and me here.

Mr. MCKAY. OK. All right. Good point. Demand fell big time in the fourth quarter. Lots of inventory. Gasoline was essentially sold at zero margin. Refiners were not making money selling gasoline. In quarter one, the markets rebalanced, and if you take the historical norm for what the cost of crude, the ingredient, on a gallon basis, add the taxes, then add the cost of refining, marketing and distribution, you get right out——

Mr. HINCHEY. No, I know all of that is, they are all important parts in the cost of the produced product, but what I am trying to figure out is, why is it that when the price of a barrel has dropped down now to $34, why is it that the price of a gallon of gasoline, the price of a gallon of home heating oil isn't more consistent with the price of a barrel of oil out on the market?

Mr. MCKAY. The prices I saw a few days ago, $1.90 and $38 a barrel, that is consistent with the norms for taxes, price of ingredients, crude oil——

Mr. HINCHEY. Taxes haven't increased; taxes have stayed the same. Everything has stayed essentially the same, but the price of a barrel has gone down. But nevertheless, when you go out and buy gasoline and you start pumping it, you look at the price and you see the price has gone up a few cents today, a few cents yesterday.

Mr. MCKAY. Let me just add the components together. If you take $38 a barrel, divide by 42 gallons in a barrel, you get 90 cents or so. It is about 47 cents in Federal and state taxes and then it is about 50 cents to refine, distribute and market that. That is $1.90 a gallon. That matches the normal price for that level of crude oil.

I would also add that the crude oil that goes into all our refineries, 65 percent of it is imported, and those prices are higher than WTI by as much as $6 to $10 a barrel. The blended price is higher than the posted WTI price.

Mr. HINCHEY. So, in other words, when we see the price of oil go down, we can't expect that the price of a gallon of gasoline is going to go down accordingly?

Mr. MCKAY. No, I am sorry; I am not saying that. I am saying the price of gasoline matches the price of oil to historical norms.

Mr. HINCHEY. Well, OK. Your answer is interesting, but I can't see how the price of a gallon of gasoline matches the price of a barrel of oil when we see these changes taking place, and the fact that the price of gasoline and home heating oil isn't following the drop in the price of a gallon of oil.

Mr. MCKAY. I would only say I believe it has fallen. It has gone from $4.30 a gallon to about $1.90, last price I saw.

Mr. HINCHEY. Obviously, this needs some further insight and further investigation. I know that a lot of the companies are now focusing some attention and some resources on renewable energy, alternative energy. We see that in the advertisements all the time. Can you give us some idea as to what percentage of your expenditures are now being focused on alternative energy, solar energy, for example? Anyone?

Mr. MCKAY. Our capital——

Mr. HINCHEY. BP?

Mr. MCKAY. BP capital that we spend on total energy in the U.S., it is about eight percent of our total capital in terms of alternatives. Eight percent.

Mr. HINCHEY. The total that you spend is eight percent?

Mr. MCKAY. On alternatives as compared to total capital.

Mr. HINCHEY. On alternatives. What are the specific objectives of that?

Mr. MCKAY. We are working on solar, wind and biofuels, and we spent, as an example, about right at $1 billion last year on all those three.

Mr. HINCHEY. According to the Department of Energy, the natural gas and petroleum receives over $2 billion in tax subsidies just in 2007. We don't know what it is in 2008 yet. We know that the oil companies have been very successful. $119 billion in profits last year. Do you think that it is necessary to continue those subsidies in the neighborhood of $2 billion a year in spite of the fact that the profits are close to $120 billion?

Mr. NICHOLS. What subsidies do you think we get?

Mr. HINCHEY. Well, I am just saying, these are subsidies that are talked about by the Department of Energy. They say that Federal money goes out to the oil companies, and these are subsidies for the production of oil for petroleum and gas, and that they amounted to $2 billion in tax subsidies in 2007. Are they wrong about that?

Mr. NICHOLS. I am unaware of any subsidies that my company gets.

Mr. HINCHEY. No tax subsidies?

Mr. NICHOLS. Correct.

Mr. HINCHEY. No tax subsidies? No companies get any tax subsidies from the Federal government?

Mr. ODUM. I would just say that there is a set of tax laws, of course, and regulations and that is what we follow and that is what we pay to, so I agree with Mr. Nichols' comments.

Mr. HINCHEY. Well, are you saying that there are tax subsidies?

Mr. ODUM. No. What I am saying is there are clear tax laws, clear regulations that dictate what that payment to the government is, and that is exactly what we follow.

Mr. HINCHEY. No, of course. That is obvious. We all do that as good as we can, but we are also informed that there are $2 billion in tax subsidies that benefit the industry. That is not correct?

Mr. NICHOLS. I do not believe that is a fair statement. No, sir.

Mr. HINCHEY. OK. Well, we will have to go back to the Energy Department and figure out exactly what they are saying. My time is up, and I thank you very much.

The CHAIRMAN. Thank you. Gentleman from Texas, Mr. Gohmert.

Mr. GOHMERT. Thank you, Mr. Chairman. I appreciate the chance of having this important hearing. Let me follow up on that. I am from East Texas, and oil and gas has always been important. There in East Texas now they are exploring, they are producing. People are doing everything they can to try to help the country with its energy needs, and it always amazes me how everyone in the country is using energy but not in my backyard do you produce it. You know, as much of a team player as we try to be in our neck of the woods, we kind of need a little help from some of the rest of the country.

On the tax law issue, I think there may be some confusion because there are those who, in their efforts to vilify companies that are producing energy, have talked in terms of subsidies, when actually my understanding is there are tax laws obviously that affect every manufacturer, every company that is producing anything, and there has been a push to try to eliminate the deductions for operating costs that the energy industry has that every other industry has a chance to deduct in order to get to what the profit is and that this movement is to say, "Well, we are not going to allow them to actually deduct the actual costs of generating oil or gas from the money that they take in so that they will have to pay higher tax basically on what they get in." Is that your understanding?

Mr. NICHOLS. Yes.

Mr. GOHMERT. OK. People talk about subsidies. Nobody is sending you a check, isn't that right?

Mr. ODUM. That is absolutely correct.

Mr. GOHMERT. We are talking about the deduction of operating expenses that are real and true operating expenses, but one way of raising taxes on energy companies is to say you may have to put these rigs out there and pay all these people to do all these things to get it out of the ground, but we are not going to let you deduct all of that; therefore, you pay the government more tax. That is my understanding, and so it is a little bit of a misnomer.

Now, I understand that it was mentioned earlier about the pipeline in the Gulf of Mexico, for example. We hear all this talk about, well, it takes 10 years to get ANWR on line, it takes 10 or 20 years to get the OCS on line, but they are not giving credit to what has occurred over the last 20 and 10 years. It is my understanding there is a pipeline in the Gulf of Mexico that was not there 20 years ago, correct?

Mr. NICHOLS. I don't know when that pipeline was built, but there is a pipeline there now that goes by a trillion-cubic-feet gas field that could easily be brought onstream very quickly.

Mr. GOHMERT. A trillion cubic feet of gas that is not being produced, isn't that correct?

Mr. NICHOLS. That is correct.

Mr. GOHMERT. OK. Now, here we are talking about the crunch and needing more money, and, gee—where is it going to come from, and when you talk about a trillion cubic feet of gas, do you know what the existing royalty being paid on profits from gas is on new contracts? Anybody?

Mr. CEJKA. I don't have that for gas.

Mr. GOHMERT. Well, let me, I was part of some of the discussions with this Committee back in 2006 when we pushed through the House an OCS drilling package, and, you know, in my neck of the woods it was always standard that oil companies, energy companies would pay a one-eighth royalty to the landowner. So, you got one-eighth, and there are people that got very wealthy by getting that one-eighth of the profit—not for lifting a finger—just happened to own the property that the well was drilled on.

But it is my understanding that that one-eighth had been pushed up and up and that it may now on Federal lands if we talked about drilling right now, probably 16 percent. Is that your understanding of kind of what the discussion is?

Mr. LUQUETTE. New OCS leases are three-sixteenths, so 18.

Mr. GOHMERT. Yes. It is bumped up because the Federal government has all this, and that is money the Federal government wouldn't have to lift a finger to get, billions of dollars that ultimately could come into our treasury without a taxpayer having to pay another dime. These are just resources we refuse to utilize and recognize, isn't that right?

Mr. NICHOLS. That is right.

Mr. GOHMERT. There is no prohibition against this Federal Government saying, "We will lease the OCS, we will take our three-sixteenths undivided interest to profits and we will use a big hunk of that to finance the exploration, the experimentation of the next generation of energy," and you couldn't do anything about it, right? Isn't that correct?

Mr. NICHOLS. That is correct.

Mr. GOHMERT. Thank you. What gets me is, the demigods are going to say my time is expired, but it goes back to Philippe Cousteau was sitting where you guys are and his grandfather did more to open up the ocean and the eyes of the world to what is in the ocean, but he had to admit the Calypso his grandfather used was not a sailboat. It ran on diesel and because of diesel fuel, we had the ocean opened up. Thank you very much, Mr. Chairman.

The CHAIRMAN. The gentleman from Washington, Mr. Inslee.

Mr. INSLEE. Thank you. Mr. Cejka, I have been noticing an ad that your company has been running on television for the last year quite heavily. It talks about your company's efforts in renewable resources. What percentage, just rough estimate, do you think that ad is of your total television advertising budget over the last year? Just rough.

Mr. CEJKA. I will have to get it for you. I am not even involved in the advertising. I have no idea what the percentage is.

Mr. INSLEE. I mean, it is the one that stands out in my mind, certainly. It seems like it is over 50 percent of the ads you are running. Is that fair, you think, or not?

Mr. CEJKA. I don't know.

Mr. INSLEE. OK. What percentage of your total revenues are dedicated to the research and development of what you might call "renewable sources of energy?"

Mr. CEJKA. I don't calculate the percentages but we spend about $100 million in developing a new process called "controlled free zone" to help separate CO_2 from the natural gas stream to better be able to inject it. If that process is successful—this is an experiment—it could reduce the cost of separation of CO_2 by over two-thirds.

So, $100 million there, $100 million we have spent at Sanford in developing and supporting public research available to everybody, with other companies also contributing to look at alternatives as well as to look at renewables and sequestration. We spent $1 billion looking for ways to gain efficiency. Efficiency is one of the best ways we can contribute by lessening the impact on our greenhouse emissions.

We are one of the world leaders in cogeneration. In cogeneration of electricity, we have over 30 facilities, and what we have done through that and other efforts to reduce our energy use has brought our emissions down five million metric tons, which would be the equivalent of taking a million cars off the road.

Mr. INSLEE. Mr. Cejka, I was just kind of looking for a rough percentage of your revenues. Could I ask you to provide that to the Committee, please?

Mr. CEJKA. Sure.

Mr. INSLEE. OK. I will ask you to do two things. If you can provide that to the Committee, could you also provide the percentage of your message about renewable energies to your total TV budget for the last 12 months? If I could ask you to provide those two numbers. I appreciate that. Gentlemen, I want to ask you if—I am making an assumption you are all capitalists, and market-oriented capitalists.

One of those assumptions of capitalists is we pay for what we use, and some folks believe that the industry as a whole is using the atmosphere because CO_2 is a pollutant that comes from the use of the product you produce. I just want to ask if you believe there should be some national cap on the amount of carbon dioxide that goes into the atmosphere that we should have as a nation?

To the extent you can give me a "yes" or "no" question due to the limits of time. You can supplement your answers in writing if you think that is appropriate. Mr. Odum, would you like to start?

Mr. ODUM. I will start by just saying that, you know, we have been out there in favor very strongly of a cap-and-trade system in the U.S. for a number of years now.

Mr. MCKAY. Yes. BP also supports cap-and-trade.

Mr. NICHOLS. Any cap-and-trade system or any carbon tax has to be used very carefully. Any additional taxes on the American public at a time when we are in one of the worst economic reces-

sions of any people's lives could be a very detrimental effect to the American public.

Mr. INSLEE. So, that is, you would consider it, or not now, or what do you think?

Mr. NICHOLS. I think not now. I think now would be a very dangerous time to do either.

Mr. INSLEE. OK.

Mr. CEJKA. We are in support of a carbon tax.

Mr. LUQUETTE. Chevron would also support a national framework.

Ms. HARBERT. While not representing a particular company, I will say, from the Chamber of Commerce's perspective, we have to be very careful as we wade into this debate that we are very clear about what the costs are to our economy, what type of job dislocations there will be, and we certainly cannot be selective on whose industries has to pay for such a scheme. It is very important that there be a very transparent debate and a very honest discussion about the costs and the tradeoffs.

Mr. INSLEE. I assure you it will be transparent. It will be on C-SPAN. I don't know if anybody will watch, but it will be transparent. Thank you for that answer. Mr. Cejka, I believe you said Exxon favored a carbon tax. A carbon tax does not have an enforceable cap on the amount of CO_2 that goes into the atmosphere. Are you saying that you would resist a cap on CO_2?

Mr. CEJKA. No. We are saying that, as your beginning statement was, we are all capitalists. We believe the financial market, by having the carbon tax, will get people's behavior to change and it will actually induce or incentivize the reduction of carbon. That is what I mean when I say that. We believe that has the impact of causing that.

Mr. INSLEE. So, you would resist an actual cap then, do I take it?

Mr. CEJKA. It is a hard question. It depends on how it is phrased, but yes.

Mr. INSLEE. OK. Thank you. I look forward to your further information, Mr. Cejka. Thank you very much.

The CHAIRMAN. The gentleman from Utah, Mr. Bishop.

Mr. BISHOP. Thank you, gentlemen, for being here. I appreciate your time and your patience, and especially for the interruptions that we have had. You have seen, obviously, here that Congress is horrifically bad at time management. If you ran your companies' time management the way we do, you would probably be as far in debt as this government is at the same time. I appreciate that.

I also appreciate your consideration because I understand every time we speak, we emit carbon dioxide into the air, so hopefully you will be very careful on what kind of carbon tax you place on. I am not sure exactly to whom to address a couple of questions I have that go into areas you haven't been asked. Maybe Ms. Harbert or Mr. Nichols at first.

I understand that former Governor Engler either has, or will, send a letter to the Committee talking about the impact of energy on manufacturing. Indeed, in this country, manufacturing consumes one-third of our nation's energy, a third or 30 percent of the electricity that we produce, and that since the national gas prices

began to climb in the year 2000, we have had the loss of 3.7 million jobs in the manufacturing sector of this country.

If I could have perhaps Ms. Harbert or somebody else just speak about the impact on manufacturing jobs a rising energy cost gives. Perhaps a second resource of that is that we sometimes have this idea that what we are talking about is simply cars running, and, yet, for all the gas that is produced, a significant portion of that has nothing to do with transportation.

We are talking about pharmaceuticals. We are talking about plastics, even feed. Something like, for every barrel that is produced, about 19 percent actually goes to transportation. The rest have ancillary products that impact and influence our life. If I could just ask you to comment on those two.

Ms. HARBERT. I think the point is a very good one. If we make smart energy policy decisions, we have the ability to actually increase the productivity of this country, increase jobs, increase manufacturing jobs in this country. But if done poorly, there will be a very big, deleterious effect on this economy, which we can ill afford in the financial crisis in which we find ourselves.

You know, the energy industry employs six million people across this country. INA has the potential to employ more. I think as we look at a long-term recovery, energy is not just at the heart of it, but it is part of the solution. It is not part of the problem.

I think this Committee, and some of the tenor that we are hearing, is trying to vilify parts of the energy industry rather than recognizing that they have a viable contribution to make in sustaining the very backbone of our economy and, in fact, growing our economy and reducing our dependence on foreign oil. That is a very important argument that needs to be kept on the table.

Mr. BISHOP. I thank you. Mr. Cejka. You did give me the estimates of how far off our estimate is for the Gulf of Mexico. You had the numbers there in your opening testimony. Can you just give me those again?

Mr. CEJKA. It was originally estimated in 1987 to be about nine billion, and now we believe it to be 45 billion.

Mr. BISHOP. OK. I thank you for repeating those numbers for me. There have been legislative proposals that say anything that we do in the OCS beyond 100 miles of the coastline should be given without offering revenue sharing to the states. Are any of you in favor of such a proposal? Mr. Nichols?

Mr. NICHOLS. Yes. I think we would all be in favor of a proposal where areas that had legitimate environmental needs—that needed special protection, say, around a coral reef—that those were protected.

We all want to protect those sort of natural resources for this country, but simplistic bans that are based on arbitrary numbers without any real science behind them don't make much sense, particularly since we can drill from onshore, we can access oil and gas that is within six miles or so of the shoreline. We also have the potential to have exploration and wellheads that have a very low visibility.

Mr. BISHOP. Let me try and focus you a little bit more. I probably was not clear in what I was talking about. There are proposals about royalty payments being made that would exclude states. As

I understand, anything done on ground, on the land is basically, well, it used to be 50/50. We have kind of fudged it in favor of the national government.

Mr. NICHOLS. The industry has historically been in favor of including the states in some formula in the royalties that are received.

Mr. BISHOP. I realize I have like 20 seconds. This is where I come in, once again, as an old schoolteacher that still gets a retirement check. I am concerned about a state landlock, like Utah, to try to build an education system when this wonderful Federal government owns 70 percent of our land. We have a difficult time to do that.

The other day Representative Lummis was talking about what they are doing in Wyoming. Wyoming pays their starting teachers $20,000 a year more than one of her neighboring states because of part of the royalty payments that they use as the basis of their education system. One of the groups we had before us was talking about the potential of California getting $900 million in just royalty payments from offshore drilling, which hit me because every year California comes and hits us up on rural free school monies.

In fact, I had one of the superintendents talking to me and I said "Don't you equalize somewhere in California?" The superintendent said, "No, no, we are kind of left on our own." It would be brilliant to actually consider the impact these systems have on building an effective education system. My state cannot survive without a vibrant mining and a vibrant manufacturing base, in addition to trade and tourism, and everything else that we have going on with it.

I say that simply as someone who wishes to look at public policy, who wants to make sure that our university system is there for my last two kids that I have to fund going through it. I am over. I am over by a minute, and I apologize for that, Mr. Chairman. I had a couple other questions, but we have kept you here a long time. I will yield back.

The CHAIRMAN. The lady from California, Ms. Capps.

Ms. CAPPS. Thank you, Mr. Chairman, and thank each of you from the industries, and also the Chamber, for spending your time with us here. This is our third, as you know, hearing. Credit our Chairman with getting us into a topic that is very important, and when we discuss energy, it is important to you as well—offshore drilling and the industry's perspective.

I am going to start with you, Mr. Nichols, if I could, as you represent the API. I take it the API isn't particularly pleased with Secretary Salazar's decision to extend the comment period on the 2010 five-year plan by six months. That has been inferred previously. Is that a fair assessment?

Mr. NICHOLS. Yes.

Ms. CAPPS. But it has been pointed out by both sides in this debate, it takes a very long time for production to start from new leases. I think you all agree with that as well. The industry has been very clear that it takes many, many years to get production going once you do get a lease, and we are a number of years away, no doubt, from even being able to lease, if we in fact do lease, new areas.

So, when we are looking at a 10- to 15-year period before we could get new production, I am questioning why a six-month review period to make sure we are being careful, and that our leasing decisions are based on the strongest science available, is that really that much of a burden? You want to expand on that a little bit?

Mr. NICHOLS. Well, yes. Let me first, with due respect, challenge one of your assumptions. We have not said, and this comment is made by all of us at different times during this hearing today, that the 10- to 15-year timeframe that you utilized is not entirely valid.

Ms. CAPPS. I am not arguing that point. No. That is the given. That is the norm in your industry. I know that from my district that I represent as well.

Mr. NICHOLS. No, that is not the norm or the given. For example, there are pipelines that go right through from Louisiana over to Florida, there is a natural gas pipeline that goes within a few miles of an existing trillion-cubic-feet gas discovery that could be brought onstream very, very quickly. It could have been brought onstream in the past. It could be brought onstream very, very quickly if the leases were granted by the Federal government.

There are undoubtedly other discoveries that could be made in that part of the Gulf of Mexico that are near infrastructure that could be brought on, not in 10 to 15 years, but in a much, much shorter timeframe.

Ms. CAPPS. But you still agree that the six-month timeframe that the Secretary is asking for in terms of a study, those studies that might be necessary to make sure that the science is there, that that is unnecessary.

Mr. NICHOLS. We have already had a moratorium for 27 years. You could argue that another six months doesn't make much difference. The concern is really focusing on the fundamental issue of are we going to open up those areas or not? If this is a process, the Department of the Interior has already received tens of thousands of comments on this in the timeframe already.

It is an area because of the nature of the offshore areas and because there has been no studies on this for so many decades, the information that is available to anyone is really not very viable and very worthwhile because it is based upon very old seismic data, very old science.

Ms. CAPPS. Right. I am very aware of that. We are not just talking about the Gulf, but we are talking about opening up OCS.

Mr. NICHOLS. Exactly.

Ms. CAPPS. I will get to that in a minute, but back to this 10 or 15 year window, or the delays in the leasing process, or whatever it is that is causing this timeframe. I would think you might be using some of that time, and also your very best profits—we all sit up and take note when the quarterly reports come out and we see, particularly the contrast with our declining economy, what the profit margins have been for many of your companies.

This came up with my colleague, Mr. Hinchey, in a previous set of questions. I want to get specific on how you are addressing renewable energy technologies. A lot of advertising has gone on with respect to some of you for the public in talking about what you are doing. I want to ask you, Mr. Nichols, you can represent the indus-

try, but if anyone else wants to chime in, you are certainly welcome to. What percentage?

British Petroleum, you have mentioned eight percent of all of your profits. I would like to have a percentage from each of you, if I could, please, and if you want to get back in writing if you don't have the numbers with you. I'd like the actual dollar amount per year, or within a timeframe, that you are spending on research into renewable energies or production of renewable energy sources as you are, kind of sitting, waiting for the OCS to open up—and the percentage of that in terms of your profit. So, Mr. Nichols, maybe can you speak for the industry as a whole or maybe your company?

Mr. NICHOLS. There are others that could speak better on one of those issues.

Mr. ODUM. I will just start.

Ms. CAPPS. Sure.

Mr. ODUM. And be happy to provide——

Ms. CAPPS. I would like it in writing, actually, in addition to what you are saying because I think that is good information for us to have.

Mr. ODUM. I will tell you for us, specifically, representing Shell as a company, there is really three areas of main focus. Second-generation advanced biofuels, we think, is an area that holds great promise so we are putting a tremendous amount of effort into that, and we have a strong wind business in the U.S. already. I think we are up to about, with our partners, 900 megawatts of wind energy.

We also do some in solar, more international than in the U.S., but we are working in that area and, of course, hydrogen as well. The first two are the main pieces of business for us. The other one, which Mr. Cejka mentioned, is a really important one, and that is efficiency. You know, our existing energy structure, to the extent we can make it more efficient, that is a very important resource, so we spend a lot there.

Ms. CAPPS. How many dollars are you putting into that, sir?

Mr. ODUM. You know, I don't have a number off the top of my head, but I know we look at every one of our facilities and say, how can we increase the efficiency of this facility?

Ms. CAPPS. Right. Is it possible to put something like that into a report?

Mr. ODUM. I think we could certainly estimate something that would be reasonable.

Ms. CAPPS. Right. I would appreciate that very much for the record, if we could ask for that. Others want to respond?

Mr. MCKAY. I just want to clarify. In the last five years or so in the U.S., in the U.S., we have put about $1.7 billion of investment in the U.S. Our primary investments are in wind—our largest investment where we have about 1,000 megawatts turning now in five states. As for the other areas we have worked, we have worked solar for 31 years, I believe.

We are also working on biofuels research, similar to what Mr. Odum said. We believe in working in better molecules, better feedstock, and better processes for changing those molecules into useable fuels.

Ms. CAPPS. Mr. Nichols, and then I am actually going to stop it there, if you don't mind, because I am actually going to ask indulgence as if this were a second round. Thank you.

Mr. NICHOLS. If I might add, since 2000 the oil and gas industry has invested $42 billion, and zero in low-carbon research and development. That amount is 45 percent of the combined spending by all U.S. companies and the Federal government. So, the industry has done quite a bit in this area, particularly in relationship to the Federal government. That is according to a report by T2 & Associates in the Center for Energy Economics at the University of Texas.

Ms. CAPPS. Thank you.

Ms. HARBERT. I do think there is an important data point there, that the Federal government on an annual basis has been investing $3 billion in clean energy research and development, which is less today than the Federal government invested after the Arab oil embargo. It is important that we look at the private sectors putting more money into clean energy research and development than the Federal government has for quite some time.

Ms. CAPPS. I think that is a very important piece of evidence to have as part of this hearing. I am glad we can make this part of the record, and I thank you for that. Any other submissions in writing, I think, would really be useful for us to understand. You are energy companies, you are not just doing drilling, which there is an assumption, particularly on my side of the aisle, that this is the case. I appreciate that you are giving this information to us.

I have been given some kind of permission, especially now, we have a new minority leader here, to continue my questioning. It will be as if it is my second round. This is an open question to each of you, at least the oil company representatives. There has been a lot of discussion about the fact that we really don't know much about what resources are under the former moratorium areas, and that new inventories are needed. That was just mentioned now.

I should disclose, I guess I should, that I represent Santa Barbara and the coastal area of California, where we do a lot of drilling offshore and onshore, and that the resources under the OCS are of quite a bit of interest to us. There are a lot of earthquake faults running through there. These inventories can get quite expensive.

MMS has estimated it might be up to $80 million to do seismic estimates in each frontier area. I want to ask each of you to answer if your companies would be willing to pay for these investigations of what the resources are. Any of your companies willing to do that?

Mr. CEJKA. We would prefer to do it rather than have the government do it. We would prefer to pay for the seismic.

Ms. CAPPS. OK. And is that something that you are doing or you need to be asked to do?

Mr. CEJKA. We will not put the investment in until we know there is going to be a stable leasing regime. Otherwise, it would be wasted money.

Ms. CAPPS. So, you would wait until the decision about offshore oil drilling is made, and that study would need to be done before the lease could be granted.

Mr. CEJKA. We need the long-term security to know it is a reality.

Ms. CAPPS. OK. Any of the other companies want to respond?

Mr. ODUM. Well, I would just like to make a point that while we don't know exactly what is out there and how much it is——

Ms. CAPPS. Right.

Mr. ODUM.—I think what we do know, as an industry and as a government, is that they are very substantial, large resources. I don't want to somehow give the impression we don't know, so there may not be very much. We know there is a lot. We just don't know exactly how much it is.

Ms. CAPPS. OK. I just, I guess, want to get this on the record as well and see if there is dispute about the fact that your five companies made a combined $119 billion in profits last year, and so this would seem to me, and it seems like some of you are agreeing at least, a reasonable expectation that some of these profits could go into doing those studies.

They would have to be verified as being independently accurate, but that is something that is possible to do. Anyone else wish to comment on this? We will leave it to those who have spoken up. I have another question to ask, an open one, to the panel. We hear a great deal about how the industry has made vast technological improvements in recent decades. I have heard this a lot because my ocean was the scene of the 1969 blowout on Platform A.

It has been pointed out to me many times that over the decades risks of spills have been, if not removed, but at least drastically improved. I have pointed out at some of our previous hearings that it is not just the spills from pumping the oil that is of concern to many of us, but it is other impacts as well. According to MMS, over the past 10 years there have been an average of 6,200 barrels of various hazardous fluids spilled each year on the OCS.

In the 20 years before that, the average was just over 3,000 barrels spilled per year. My question is going to be about what kind of improvements have there been made, but I want to let you know that there is a company called Greka that is operating in northern Santa Barbara County onshore—I believe the parent company is Green Dragon Gas that is based in China—and they have spilled hundreds of thousands of barrels into our creekbeds and into our wildlife areas in that region.

EPA calls this company in my Congressional district the biggest polluters in our state, and they actually consider, and they have said publicly, that the fines that they pay are the cost of doing business. So, some of us in my Congressional district have a little jaundiced view of progress that has been made over the past years. I will give you this chance on borrowed time. I do have one final question to ask Mr. Nichols. You want to just highlight some of the improvements that would give someone like me confidence about opening up the OCS? Any of you?

Mr. ODUM. Well, first of all, I would support the discussion, and clearly you have been a big part of that in terms of what have been the technological improvements, so I won't go over that again. What I would actually like to do is provide the actual numbers from our operations. I don't have them all right here with me——

Ms. CAPPS. And that could be done in writing.

Mr. ODUM. This is an area where I think it is extremely important. It is has got to be a major area of questioning for people as we think about opening new areas. I say, let us look exactly at the track record. I would open that look at what we do in the Gulf of Mexico.

Ms. HARBERT. I would like to note that the U.S. has the most stringent environmental regulations on production than any other country in the world, and so if we are not going to open up here, and we are going to be more and more reliant on imported oil, that oil will be coming from places that have less stringent environmental regulations. So this is an energy and environmental choice. We can produce it here, cleanly with the best technology, or we can import it from places that don't necessarily have our interests at heart, and certainly don't have the type of stringent environmental regulations that we have here in this country.

Ms. CAPPS. I think that is a very good point that should be part of discussion, and I appreciate that you have offered that. Anyone else before I turn to the last question? Still on borrowed time. Then I will sum up by taking exception, I guess I will say, Mr. Nichols, to the part of your testimony where you insinuate that the United States is not proactively developing our domestic natural gas and oil resources.

This idea, I consider it a false idea, is used by a lot of our colleagues, my colleagues, that support new drilling as well. Mr. Luquette pointed out—I hope I said your name properly—I am sorry if I didn't—we are an energy powerhouse, you said that, producing the third most oil of any country in the world, second in natural gas, and that we drill more wells than any other company. Did I get that right in your statement?

We also lease huge swaths of land in the Gulf of Mexico and in the Arctic Ocean. There are 24 billion barrels of unleashed, undiscovered oil still in the central and western Gulf of Mexico. Is this not true? Unleased, undiscovered oil available in the Gulf? I have been told that is correct. And every year we put those resources up for lease twice, two times a year. Am I correct on that?

Mr. NICHOLS. I am not sure where you got the numbers. I mean, there are leases that are put up regularly that the oil and gas industry does not believe that oil and gas is there and therefore don't lease them. So, the fact they are unleased just means that we don't think there is any oil and gas there.

Ms. CAPPS. Well, these figures came from MMS, so I will have them entered into the record, but I will note that that is the source of it. You are welcome to challenge that if you think these figures are wrong. In 2005, I was a part of the Energy and Commerce Committee—where we passed it out of the committee and then in the Congress—new tax incentives and royalty relief to incentivize drilling.

This is my question to you. Can you really, in light of that, continue to say with a straight face, I am assuming, that the U.S. is not developing our domestic resources?

Mr. NICHOLS. Absolutely can say that. The United States, as you well know, has had a moratorium on all of the Atlantic Coast, all of the Pacific Coast, all of the eastern half of the Gulf of Mexico,

and all of Alaska. There is no other country in the world that has that kind of moratorium on 85 percent of its offshore lands.

That includes very environmentally conscious countries, like Norway and England, that have stellar records, as we do. I think it is a very accurate statement, when you look at the sheer percentage of offshore lands that have been under a moratoria for decades, to say that the United States has not been doing what it could do to develop our resources.

Ms. CAPPS. Yes, I have heard that. It is not the first time I have heard that, but you didn't really address the issue of the undeveloped leases or available land in the Gulf, resources that have not, by your decisions—all of you, or any number of you, have chosen twice a year as the MMS has offered these, you have passed on them.

Mr. NICHOLS. The answer to that is very simple. There is not oil and gas under every single lease or under every single acre that the United States owns as Federal lands. We pass on those as an industry because each company individually, using their own geological and geophysical information, concludes that there is not something there worth exploring for.

Mr. LUQUETTE. Many of these leases that you are referring to, bonuses were paid, rentals were paid, seismic studies were done, in some cases wells drilled, and these leases were returned because of the determination they were nonprospective. I am having a difficult time reconciling MMS resources with the open lease count, but there are a number of these leases that have been through a number of bid cycles, and many of them have garnered significant investments in the investigation process.

Ms. CAPPS. I guess I am belaboring the point. The area offshore that I am very familiar with off Santa Barbara's coastline, many of those leases as well were not tapped into because of the technology that wasn't available in previous times. Now, with things like slant drilling, there are many more projects being proposed, and I am curious that your industries have in the past explored, or maybe made assessments, and that you have said "no," and you continue to say "no."

Have you thought of the new technologies that might make, as we have seen with some natural gas fields, that these are now available with new technology? Again, you have talked about areas on land. How about offshore in the Gulf?

Mr. LUQUETTE. Well, just let me attack that problem from a technology standpoint. If you look at the industry's track record, we used whatever technology we had available. In the early days, we drilled shallow wells in shallow water. Now, the companies represented here are drilling in ultra-deep water to ultra-deep depths. As the technologies evolve, we move out to those.

So, a particular lease that might have sat in 6,000 feet of water 20 years ago would have been uninteresting to us because we didn't have the technology. When we have the technology and it is available, we pursue.

Ms. CAPPS. So, you wouldn't pass on some of these onshore or in the Gulf that you have passed on in the past, but you don't have the technology now?

Mr. LUQUETTE. If there was a new idea. People come up with new ideas. If one of us drills a dry hole somewhere else, it may give a different company a different idea and they can come back to a lease that had been abandoned with a new idea and potentially find something. So, we turn these leases over, as an industry, on a constant basis, and it is this generation of new ideas, this generation of new technology, that allows us to continue, but there is a point of no return. I mean, we are drilling depths now at 30,000 to 32,000 feet where you——

Ms. CAPPS. On land or off?

Mr. LUQUETTE. Offshore and on land, where the temperatures and the pressures are such we are not going to be able to do that, so we are now drilling on a pincushion, and we are running out of spaces to do it.

Ms. CAPPS. And in the Gulf as well are you?

Mr. LUQUETTE. In the Gulf as well.

Ms. CAPPS. Thank you. I have way overstayed my time. I appreciate, also, your taking the time to address the issues I have brought up. Thank you very much.

The CHAIRMAN. Do you have any questions, Ms. Lummis?

Ms. LUMMIS. My name is Cynthia Lummis, I am from Wyoming. I want to thank the gentlemen and lady for appearing before us today, and I apologize for being unable to appear until now at this hearing. I do have a couple of questions for you. I come from one of America's largest onshore oil, gas and coal producing states. I have toured sites in the Pinedale Anticline in Wyoming that even four years ago would not have existed.

Thirty-five wells on one well pad—drilling horizontally and directionally—producing natural gas that we never could have recovered four years ago. Stunning developments that have really reduced the footprint on the surface of the ground. My familiarity with onshore does not necessarily translate to offshore, so I would like to ask how has offshore exploration and production technology changed over the past 40 years? What have been the impacts of these changes and advancements on industry's overall environmental impact, specifically offshore?

Mr. NICHOLS. There is a lot I would love to say about that but we would be here all afternoon. Let me just give you a couple of examples about offshore. Ten years ago, the industry did not really have the capacity to have drilling rigs that could drill in 8,000 and 10,000 feet of water. We do today. Ten years ago, we did not have seismic that could see below thick salt bodies out in the deepest water and see land out there.

If you had asked this industry 10 years ago whether or not a geologic formation known as the Lower Tertiary would be prospective, or could even be explored for, the answer would have been no. It was really beyond technology. Today we have multiple hundred-million-barrel discoveries out there that the industry is trying to bring onstream—a major potential resource. None of it is producing yet, but we are working very hard to make that happen. So, technology continues to open up new areas and new ideas offshore, just as it does onshore.

Ms. LUMMIS. Well, thank you. Follow-up question, Mr. Chairman. How long will it be before we will start seeing increased production

on the Outer Continental Shelf, assuming that the lift of the moratorium stays in place. This question is for anyone who wishes to respond.

Mr. NICHOLS. You know, part of that is going to depend upon whether and how long the Department of the Interior takes to grant the leases. We obviously can't start doing the detailed research until the leases are granted. At that time, we can start bidding for the leases in the orderly process that the Department of the Interior typically does—due to the detailed, expensive seismic work to refine where prospects might be and then drill them. The answer, in terms of time, can be very short to very long.

As I said earlier, on some of the prospects that are immediately adjacent to the western half of the Gulf of Mexico where we have been allowed to drill, those oil and gas fields, if discovered, could be brought onstream in a matter of a year or two, a couple years. In other areas, it would take longer because it would take longer to do the fundamental research.

Ms. LUMMIS. You know, once again, I am more familiar with onshore than offshore. Could one of you describe the usual permitting or environmental study process that would occur for an offshore lease?

Mr. ODUM. Well, I will pick an example that we are going through right now, which is offshore Alaska, and so in terms of just understanding the timeframe, of course, what is done before a leasing actually takes place is an environmental assessment of the area by the government, by the Department of the Interior. That typically takes a couple of years, I would say. Then, a leasing process and then, of course, an exploration plan is developed. That is then analyzed from an impact and mitigation point of view.

We apply for the permits. That again can be another one to two years, let us say, and then in the meantime, we are building the infrastructure to be able to drill, and then we can go out and drill a well. So, it is multiple years, that process.

Ms. LUMMIS. I want to ask a question specific to California production as well. How many adjacent leases would you be able to drill nearly immediately after the lease is issued regarding California production where you could slant drill or use newer technologies? Anyone?

Mr. ODUM. This is going to be a very generic answer, I am afraid, because it is really all over the map. I mean, some of it, again, back to Mr. Nichols' point, could happen fairly quickly. Some would take more time. There are so many variables involved.

Ms. LUMMIS. I have another question, Mr. Chairman. It is with regard to comprehensive resource inventory. Some people have requested that that is needed on the Outer Continental Shelf prior to additional leasing on previously off-limit areas. Would such a process prove helpful, or would it be a hindrance to responsible offshore development?

Mr. NICHOLS. The word "inventory" implies that there is something that you can go count. The information we have on the places that have been under moratorium for almost three decades—the information there is not very good. It is old treatises. It is old seismic data that by modern technology is essentially worthless.

So, the inventory that we could do with existing data won't really tell you anything other than what we already know, that by making comparisons to other similar geologic basins around the world, including the western half of the Gulf of Mexico, these offshore areas should contain substantial oil and gas reserves. Exactly where they are and how they might be developed, each of the companies here, and other companies that are not here, would have their own separate ideas.

The most efficient way from the government's standpoint would be to put these up for lease just as it has for decades in the western half of the Gulf of Mexico, let the industry go do what we do best at our expense, not at taxpayer expense, and do the seismic studies there, and then drill the wells, which is ultimately the only way you really know whether there is anything there. The model that we have used successfully in the western half of the Gulf of Mexico for years is the model that would seem to make the most sense.

Ms. LUMMIS. Thank you. I am assuming since someone just got beeped by your caucus that we will be beeped by ours as well to go vote. Thank you, Mr. Chairman. I have additional questions, but I think we are getting called to vote.

The CHAIRMAN. Gentleman from Oregon, Mr. DeFazio.

Mr. DEFAZIO. Thank you, Mr. Chairman. Perhaps after a lengthy session, we can find some consensus on something. I heard earlier that you want to participate in helping Americans conserve. Let me give you an observation. A number of you represent the largest distributors at the retail level. I know some are franchises, some are company-owned. I don't know the exact mix, but you have a label out there and you have some control.

We have numbers showing that if Americans just properly inflated their tires, according to the Bush Administration, it would save three million gallons a day. Carnegie-Mellon students from an extrapolation said 2.4 percent a year in terms of gallons consumed. There are other estimates out there, but we know there is a lot. I will just say, as a consumer, what I reflect is I have to drive past seven gas stations to find one that has an available pay for air pump.

It used to be everybody had compressors and air pumps at their stations. As the industry has changed, you don't. I would suggest if you want to contribute something and really help us with significant conservation linking, say, to the government with an education program and you guys making it available.

If the government put out an education program, it would still be I am driving past seven gas stations halfway through my town to find the one where I can pay 50 cents to blow up my tires. Make them free and put them in all your stations and help us conserve. Anybody interested in that? I hope you are. Then the other, I understand, in response to Mr. Inslee, that Shell and BP said they would support cap-and-trade.

I want to know, if you support cap-and-trade how you envision the market existing in a way that it can't be manipulated, because economists say, "Well, it has got to be a very fungible market because we have to have liquidity." To them, liquidity means hedge funds, it means derivatives, it means God only knows what new

bubble and what new instrument. I worry that we are going to create profits and cost without product.

In Europe, cap-and-trade over the last two years has $60 billion of cost and their carbon is up. Now, what is the objective here? Now some can say, "Well, they were in the process of setting a price and the price came out at $60 a ton, pretty much average over two years." That is great, except now, with a bad economy, it has dropped to $15 a ton. So, if I made an investment last year at $60 a ton, suddenly, whoa, I am way underwater here and nobody is going to be wanting to buy my offsets.

I am just wondering how Shell and BP, if you have a sophisticated vision, and if you do, I would love to have you share it with me, because I am very concerned about this market and the potential for its manipulation. You guys have any thought on that?

Mr. MCKAY. I can't answer every one of your concerns, but I would say the EU cap-and-trade system has gotten better. The verification and understanding of the emissions themselves, and the way allowances and credits are utilized, has gotten better. They are essentially into starting Phase 3.

Mr. DEFAZIO. $60 billion on top of consumers and business later, but, yes, OK, we have to experiment.

Mr. MCKAY. Any price that is put on carbon, whether it is a tax or a cap on emissions, will have an economic effect.

Mr. DEFAZIO. Well, here is just the thing. I mean, I am an old, very simplistic kind of guy. I tell you, I grew up at a time when the rivers in the East burned and the Willamette River in Oregon was an open sewer. The government didn't think, "Well, let us have a market-based system to clean up those rivers, and we will sell credits to pollute, and we will sell offsets."

They said, "Hey, we are going to stop the polluting. Here is the schedule. It is predictable. You will pay for permits and if you don't meet the schedule, you will pay fines. We are going to clean this darn thing up." I think if, as a society, we adopt that approach and decide we want to deal with carbon, it is honest, it is predictable and it is long term. I don't see that in the market. It is certainly not predictable.

Maybe Europe has got its act together now after $60 billion, but since the price just dropped to 25 percent, I think that is going to create some new problems with cap-and-trade in Europe ongoing. I think the fascination with the market, given Enron and given Wall Street, is a little bizarre at this point in time. If you have thought out how we are going to have a limited entry or a market that is going to be resistant to manipulation, I would love to have your thoughts on it because I am going to be trying to offer amendments as we move through this what seems to be, unfortunately, an inevitable process. Thank you. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you. That concludes this third in a series of hearings on OCS oil and gas drilling. Again, I want to express my deep appreciation to the panel for traveling to be with us today, I am not going to ask you how you got here—and also want to say thank you for your time and patience. That concludes today's hearings.

[Whereupon, at 1:35 p.m., the Committee was adjourned.]

[Additional material submitted for the record follows:]

[NOTE: Responses to questions submitted for the record by the witnesses have been retained in the Committee's official files.]

[The prepared statement of Mrs. Capps follows:]

Statement of The Honorable Lois Capps, a Representative in Congress from the State of California

Thank you, Mr. Chairman.

I'm pleased the Committee will be hearing today from the oil and gas industry.

As someone who witnessed the horrible economic and environmental consequences of the huge 1969 oil spill, I know I have a certain bias against new offshore drilling.

But, even so, it seems obvious that the renewed interest in offshore drilling as a potential solution to energy independence hits many dry holes.

First, even if we wanted to, we simply can't drill our way to energy independence.

The U.S. has less than 3 percent of world oil supplies, yet we make up nearly 25 percent of world demand.

More drilling off our coasts isn't going to change those numbers, so no one should believe arguments that more drilling in pristine areas means we stop relying on foreign oil.

More drilling won't end our addiction to oil it just enables it.

Second, 80 percent of the oil and gas resources off our coasts are already available for leasing and drilling.

While large swaths of our coasts are off limits to new drilling, the areas where most oil and gas are located are not.

Listening to proponents of more offshore drilling, you'd think we've been locking up all our resources. The opposite is true.

Third, we are drilling more domestically than we have in years.

The Bush Administration's energy policy was basically to drill for more resources. It leased public lands for drilling throughout the west, the Gulf Coast and elsewhere at a record pace over the last eight years.

It even issued a draft proposal days before leaving office that would result in the leasing of the entire Atlantic coast, and four areas off my state of California.

Right now, the oil and gas industry has some 6,000 leases in the Gulf of Mexico where the majority of oil and natural gas reserves are found that are not being drilled on.

For years, the oil and gas industry has said that it wants to lower prices for American consumers, but they can't because they're prevented from drilling. This couldn't be further from the truth.

Finally, the Energy Department says that opening up our coasts to new drilling would have little to no effect on gas prices today or tomorrow.

The best estimate is that it would take 10 years for the product to come on line and then maybe it would affect prices by a few cents.

So, we're drilling domestically more than ever, the oil industry already has access to most offshore resources, the industry is not drilling in millions of acres of public land that it has leased and, even if it did, it wouldn't lower prices and it wouldn't really have any effect on our reliance on foreign oil.

Mr. Chairman, we should be investing our time, energy and creativity into real solutions that put us on the right path toward renewable energy solutions for our future.

America shouldn't be known for chasing after yesterday's energy technologies, but for leadership toward the clean energy solutions of today and tomorrow.

Thank you again for calling this hearing.

[A letter submitted for the record by Hon. John Engler, President and CEO, National Association of Manufacturers, follows:]

National Association of Manufacturers

John Engler
President and CEO

February 25, 2009

The Honorable Nick Rahall
Chairman
House Committee on Natural Resources
1324 Longworth House Office Building
U.S. House of Representatives
Washington, DC 20515

The Honorable Doc Hastings
Ranking Member
House Committee on Natural Resources
1329 Longworth House Office Building
U.S. House of Representatives
Washington, DC 20515

Dear Chairman Rahall and Representative Hastings:

On behalf of the National Association of Manufacturers (NAM), I am writing to offer some thoughts with respect to your hearing on access to the energy resources on the Outer Continental Shelf (OCS).

First, I would like to commend you on your leadership last Congress in lifting the Congressional moratorium on the OCS. In our view, this was significant not just in making our country more energy secure, but it also has the ability to fuel our economy by creating new jobs over the next several years and generating over $1 trillion in government revenues. Both are sorely needed during this economic downturn.

The NAM devotes great attention to energy policy, because manufacturing is tremendously energy intensive (manufacturers account for more than one-third of the nation's energy consumption and almost 30 percent of its electricity). Affordable and reliable energy is essential if manufacturers in the United States are to compete in the global marketplace. Among the various types of energy sources used by manufacturers, natural gas supplies impact the manufacturing on two levels. Natural gas is not only a fuel and source of electricity, but also serves as a feedstock for such diverse products as plastics and life-saving pharmaceuticals.

Since natural gas prices began to climb in the summer of 2000 and prior to the onset of the credit crisis in late 2008, the nation lost more than 3.7 million high wage manufacturing jobs. Much of this can be attributed to government policies that constrain the access and development of domestic resources. A comprehensive energy policy that capitalizes on domestic sources of natural gas and oil will not only produce jobs, but it could raise more than a trillion dollars for cash-strapped federal and state treasuries. These new revenue streams, created by larger tax revenues and royalty and lease payments to federal and state governments from new domestic energy development projects, will reduce taxpayer debts.

Today, imports account for fully 60 percent of our petroleum consumption, and 34 percent of our total energy consumption. Taking advantage of the Energy Policy Act's provisions that would expedite permitting of domestic energy projects and the Congressional lifting of the OCS moratorium would go a long way toward reducing the country's reliance on foreign imports.

With reserves conservatively estimated to include at least 420 trillion cubic feet (TCF) of natural gas and 86 billion barrels of oil, tapping these resources will not only help strengthen the country's manufacturing sector, but it will increase America's overall energy and economic security. Experience has demonstrated that resource estimates understate the size of actual reserves. In the Gulf of Mexico, for example, natural gas and oil reserves have proven to be three times larger than earlier estimates, as developers have acquired leases and moved forward with exploration and extraction projects. The NAM also supports use of the OCS to promote alternative energy projects, including wind farms, as a means of developing a comprehensive energy policy.

Technological advances and the promises of research and development demonstrate that these resources can be developed efficiently, safely and with great sensitivity to the environment. Research and development is an essential part of our energy security; and a forward-thinking, federal energy policy will encourage even more technological progress.

As the NAM and its 11,000 member companies prepare to submit comments during the next several months to the Department of Interior's Minerals Management Service (MMS) advocating for expanded access to the OCS, we urge federal lawmakers to consider policies that will expedite development of these vital resources. Congress should, for example, pass legislation which will guarantee to the states a portion of revenues derived from the leasing of offshore areas, as demonstrated by the bipartisan Gulf of Mexico Energy Security Act of 2006. Congress should also reject proposals that may hinder development of these resources by means of appropriations restrictions or the designation of large tracts of the OCS as being off-limits to modern and environmentally sound exploration and development.

Thank you very much for the opportunity to comment on this very important issue for American manufacturing.

Sincerely,

John Engler

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