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EXAMINING THE FUTURE IMPACTS OF PRESIDENT OBAMA'S OFFSHORE ENERGY PLAN

OVERSIGHT HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY AND MINERAL RESOURCES

OF THE

COMMITTEE ON NATURAL RESOURCES
U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED FOURTEENTH CONGRESS

FIRST SESSION

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OVERSIGHT HEARING ON EXAMINING THE FUTURE IMPACTS OF PRESIDENT OBAMA'S OFFSHORE ENERGY PLAN

Wednesday, April 15, 2015
U.S. House of Representatives
Subcommittee on Energy and Mineral Resources
Committee on Natural Resources
Washington, DC

The subcommittee met, pursuant to notice, at 10:06 a.m., in room 1334, Longworth House Office Building, Hon. Doug Lamborn [Chairman of the Subcommittee] presiding.

Present: Representatives Lamborn, Wittman, Fleming, Lummis, Cook, Mooney; Lowenthal, Costa, Beyer, and Gallego.

Also present: Representative Hudson.

Mr. LAMBORN. The Subcommittee on Energy and Mineral Resources will come to order. The subcommittee is meeting today to hear testimony on, "Examining the Future Impacts of President Obama's Offshore Energy Plan."

Under Committee Rule 4(f), any oral opening statements at hearings are limited to the Chairman and the Ranking Member and the Vice Chairman and a designee of the Ranking Member. This will allow us to hear from our witnesses sooner, and help Members keep to their schedules.

I also ask unanimous consent that the gentleman from North Carolina, Mr. Hudson, be allowed to participate in today's hearing.

[No response.]

Mr. LAMBORN. Hearing no objection, so ordered.

And I also ask unanimous consent that all other Members' opening statements be made part of the hearing record, if they are submitted to the subcommittee clerk by 5:00 p.m. today.

[No response.]

Mr. LAMBORN. Hearing no objection, so ordered.

I now recognize myself for my opening statement.

STATEMENT OF THE HON. DOUG LAMBORN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF COLORADO

Mr. LAMBORN. I would like to begin this morning's hearing by talking about commitment. I bring it up because the Administration often says it is "committed" to promoting oil and gas production on Federal lands, including the Outer Continental Shelf, OCS. Yet the actions of this Administration demonstrate otherwise.

In fact, a recent report issued by the Congressional Research Service shows—and I am going to ask that a chart be shown on the screen—that crude production on state and private lands has increased by 89 percent since 2010, while production on Federal lands fell 10 percent over the same period.

[Chart]

Mr. LAMBORN. I would like to submit that report for the record.
[No response.]
Mr. LAMBORN. Hearing no objection, so ordered.
This does not look like commitment to more production on Federal lands.

Today's hearing will focus on the draft proposed Outer Continental Shelf Oil and Gas Leasing Program for 2017–2022, also known as the 5-year plan. This plan has the lowest number of lease sales ever, at 14, and that is being generous, in assuming that all of the sales remain in the final plan.

It includes extensive buffer zones which take valuable resources off the table for the next 5 years. The shining hope for an Atlantic sale is dimmed when we remember that an Atlantic sale was scheduled to take place off the coast of Virginia in 2011. Now the earliest it can occur under this draft plan is 2021, a decade later. Again, that is only if the one Atlantic lease sale remains in the final plan, which is not guaranteed. This is not a demonstration of commitment to more oil and gas production.

[Slide]

Mr. LAMBORN. If you look at the slide on the screen right now, you will see that in 1987 President Reagan put out a draft plan with 42 proposed sales, 17 of which were included in the final plan. This is a show of commitment. If BOEM truly wanted to show that the United States is committed to more offshore production, we would be seeing a path toward streamlining the seismic permitting process; we would see a regulatory structure that enhances safety and environmental protection, but that is also predictable, so that companies could have a better outlook when planning for future equipment needs; we would see a 5-year plan that has more leasing in the Atlantic, that includes common sense ways to grow what existing production already exists in the Pacific, and a more aggressive agenda to grow production in offshore areas of Prudhoe Bay to reinvigorate the declining throughput of the Trans-Alaska Pipeline System.

While the pipeline can carry over 2 million barrels of oil per day, this week it is flowing at just over a quarter of that, 560,000. This is the crude that makes its way to West Coast refiners, by the way. Bottom line, an aggressive offshore leasing strategy would clearly demonstrate a true commitment to OCS oil and gas production in the United States. It would also demonstrate a strong commitment to our Nation's long-term energy security, and to American jobs.

Finally, to further foster increased exploration and production activity, we would see a plan for greater influence in the global marketplace by relinquishing decades-old export restrictions. That kind of commitment would reinvigorate the weak economy we are experiencing right now. Companies already trying to decide where to invest their leasing dollars would know that the United States is, in fact, committed to grow production in the Atlantic to generate new supply for East Coast markets. The West Coast and Alaska would know that we are committed to keeping TAPS flowing, Trans-Alaska pipeline; and foreign countries would know that the United States intends to be the global energy leader for many decades to come.

I would also like to point out that leasing does not happen without seismic surveying. This seismic surveying is done right now in the Gulf of Mexico and in the Canadian Atlantic to look deep into the earth to show where resources exist. In fact, when Director Hopper was with the Maryland Energy Administration, she oversaw a shallow seismic survey conducted off the coast of Maryland in July and August of 2013, in order to plan for an offshore wind energy area. In a statement she said, and I quote, "The data we are making available will reduce the risks and costs of offshore wind energy development, protect the marine environment, and contribute to our scientific understanding of the oceans off our coast." That is true for wind energy, and it is also true for oil and gas.

The Bureau of Ocean Energy Management has confirmed numerous times before this committee that there is no evidence of seismic surveying harming marine animals, and that is why it is important to move forward quickly with this important scientific research that will benefit the leasing process.

Leasing is the fundamental building block upon which the future of oil and gas production is built. Much of energy forecasting is out of our control, such as global supply, global demand, and the price fluctuations that go with that. But leasing is something we can control. We should remember that, and commit to fostering offshore oil and gas production through a robust offshore leasing plan.

That is why the committee has called this important hearing today, and I look forward to the testimony from our witnesses.

[The prepared statement of Mr. Lamborn follows:]

PREPARED STATEMENT OF THE HON. DOUG LAMBORN, CHAIRMAN, SUBCOMMITTEE ON ENERGY AND MINERAL RESOURCES

I'd like to begin this morning's hearing by talking about commitment. I bring it up because the Administration often says it is "committed" to promoting oil and gas production on Federal lands—including the outer Continental Shelf. Yet the actions of this administration dictate otherwise. In fact, a recent report issued by the Congressional Research Service shows [chart on screens] that crude production on state and private lands has increased by 89 percent since 2010, while production on Federal lands fell 10 percent over the same period—and I'd like to submit that report for the record.

As you can see, if you take the actions by this administration at face value, it does not look like commitment to more production. Today's hearing will focus on the Draft Proposed Outer Continental Shelf (OCS) Oil and Gas Leasing Program for 2017–2022—also known as the 5-year plan. This plan has the lowest number of lease sales EVER at 14, and that is being generous in assuming all of the sales remain in the final plan. It includes extensive buffer zones which take valuable resources off the table for the next 5 years. The shining hope for an Atlantic sale is dimmed when we remember that an Atlantic sale was scheduled to take place off the coast of Virginia in 2011. Now the earliest it can occur under this draft plan is 2021—a decade later. Again, that is only if the one Atlantic lease sale remains in the final plan.

This is not a demonstration of commitment to more oil and gas production. If you look at the slide on the screens right now, you will see that in 1987, President Reagan put out a draft plan with 42 proposed sales, 17 of which were included in the final plan. That is a show of commitment. If BOEM truly wanted to show that the United States is "committed" to more offshore production:

- We would be seeing a path forward to streamlining the seismic permitting process.
- We would see a regulatory structure that enhances safety and environmental protection, but that is also predictable so that companies could have a better outlook when planning for future equipment needs.

- We would see a 5-year plan that has more leasing in the Atlantic, that includes common sense ways to grow what existing production already exists in the Pacific, and a more aggressive agenda to grow production in offshore areas of Prudhoe Bay to reinvigorate the declining throughput of the Trans-Alaska Pipeline system.

While the pipeline can carry over 2 million barrels per day, this week it is flowing at just over a quarter of that (560,790)—and this is crude that makes its way to West Coast refiners. Bottom line: an aggressive offshore leasing strategy would clearly demonstrate a true commitment to OCS oil and gas production in the United States. It would also demonstrate a strong commitment to our Nation's long-term energy security. Finally, to further foster increased exploration and production activity, we would see a plan for greater influence in the global marketplace by relinquishing decades-old export restrictions.

That kind of commitment would not go unnoticed. Companies already trying to decide where to invest their leasing dollars would know that the United States is, in fact, *committed* to grow production in the Atlantic to generate new supply for East Coast markets. The West Coast and Alaska would know that we are committed to keep TAPS flowing. And foreign countries would know that the United States intends to be the global energy leader for many decades to come.

I also would like to point out that leasing does not happen without seismic surveying. This seismic surveying is done right now in the Gulf of Mexico and in the Canadian Atlantic to look deep into the Earth to show where resources exist. In fact, when Director Hopper was with the Maryland Energy Administration, she oversaw a shallow seismic survey conducted off the coast of Maryland in July and August of 2013 in order to plan for an offshore wind energy area. In a statement, Director Hopper said (and I quote): "The data we are making available will reduce the risks and costs of offshore wind energy development, protect the marine environment, and contribute to our scientific understanding of the oceans off our coast." The same is true for oil and gas.

This study was also conducted alongside students from the University of Maryland Eastern Shore—which is an excellent way to foster STEM (science, technology, engineering and math) education in our Nation by engaging students in this important work while also promoting offshore energy development. This is a win-win and we need more projects like this to increase our knowledge of ALL our Nation's offshore energy resources. I look forward to working alongside Director Hopper to encourage more projects like this that integrate our higher education system to promote more seismic research. The Bureau of Ocean Energy Management has confirmed numerous times before this committee that there is no evidence of seismic surveying harming marine mammals—and that is why it is important to move forward expediently with this important scientific research that will benefit the leasing process.

Leasing is the fundamental building block upon which future oil and gas production is built. So much of oil and gas forecasting is out of our control, such as global supply, global demand, and the price fluctuations that go along with it. But leasing is something we can control. We should remember that—and commit to fostering offshore oil and gas production through a robust offshore leasing plan. That is why the committee has called this important hearing today and I look forward to hearing the testimony from our witnesses.

Mr. LAMBORN. I now recognize the Ranking Member for his opening statement.

STATEMENT OF THE HON. ALAN S. LOWENTHAL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. LOWENTHAL. Thank you very much, Mr. Chairman. And thank you, Governor McCrory, and all the other witnesses that are here today to discuss the potential impacts of the new 5-year oil and gas leasing program, which is being developed by the Administration.

As we have discussed in our budget hearing on the offshore agencies last month in this subcommittee, the draft proposed plan

would open up nearly 100 million more acres in the Outer Continental Shelf for leasing and drilling, that is an area almost as large as my home state of California. This is in addition to the 220 million acres that are already available for leasing, which is roughly the size of Texas and Utah, combined.

Predictably, many in the oil and gas industry say that this is not enough. They are disappointed with the 50-mile buffer zone off the Atlantic, that highly sensitive areas have been protected by the President, and that the Bureau of Ocean Energy Management, called BOEM, is not already spending money planning for a lease sale that they are now forbidden by law from holding.

You know, most in the industry, quite frankly, wouldn't be satisfied until every acre of the Outer Continental Shelf is open for drilling. They always want more, but that is not our job. Our job is to consider the relevant statutes, and what is in the public interest, not simply to provide the industry what it wants.

For one, I am pleased that BOEM acknowledged the overwhelming public opposition to new leasing off the coasts of California, Oregon, and Washington, and left those areas out of the draft 5-year program. Those of us from the West Coast, like the people from the Gulf of Mexico, know firsthand of the tremendous devastation of a massive offshore oil blowout.

My friends on the Atlantic Coast have been spared these impacts, thankfully, but this 5-year program is going to force them to at least address this risk. I personally am not persuaded by claims of how much safer offshore drilling has become in the past few years. Those exact same claims would have been made prior to the Deepwater Horizon oil spill; in fact, they were made prior to that spill.

All it is going to take is one instance of human error to unleash a catastrophic oil spill along the East Coast, threatening the tourism economies, the fishing economies, and the environment of every state along the Eastern Seaboard.

Meanwhile, the total amount of oil under the Mid- and South Atlantic planning areas is only enough to meet our national consumption for about 5 months. So the question we have to ask ourselves is, is it worth it? Is it worth the risk of destroying the East Coast's tourism, fishing, and environment for 5 months' worth of oil? I don't think so.

And even if we could ensure that there is no Deepwater Horizon in the Atlantic's future, there would still be significant impacts to the coastline—pipelines, refineries, and supply yards—even without spills, offshore drilling brings all these impacts to the coast. A Republican State Senator from South Carolina recently pointed out in an editorial, "I suspect much of the support for offshore oil would fade away if citizens were confronted with the realities of the coastal industrialization necessary to support offshore oil."

I know there is a lot of pressure from the oil and gas industry to open up the Atlantic to their drilling rigs. But I don't think it makes sense. It doesn't make sense for the environment, it doesn't make sense for the climate, or for the people who live near or along the Atlantic Ocean, and depend upon clean ocean waters for their livelihoods.

Thank you, Mr. Chairman, and I look forward to the testimony from our witnesses.

[The prepared statement of Mr. Lowenthal follows:]

PREPARED STATEMENT OF THE HON. ALAN S. LOWENTHAL, RANKING MEMBER, SUBCOMMITTEE ON ENERGY AND MINERAL RESOURCES

Thank you very much, Mr. Chairman. And thank you, Governor McCrory and the other witnesses, for being here to discuss the potential impacts of the new 5-year oil and gas leasing program being developed by the Administration.

As we discussed in our budget hearing on the offshore agencies last month in this subcommittee, the draft proposed plan would open up nearly 100 million more acres of the Outer Continental Shelf for leasing and drilling—an area almost as large as the state of California. This is in addition to the 220 million acres that are already available for leasing, which is roughly the size of Texas and Utah combined.

Predictably, for many in the oil and gas industry, this is not enough. They are disappointed with the 50-mile buffer zone off the Atlantic, that certain highly sensitive areas were protected by the President, and that the Bureau of Ocean Energy Management is not already spending money planning for a lease sale they are forbidden by law from holding.

Most in the industry, quite frankly, wouldn't be satisfied until every acre of the Outer Continental Shelf is open for drilling—they will always want more, but it is our job to consider the relevant statutes and what is in the *public* interest, not simply to provide the industry whatever it wants.

For one, I am pleased that BOEM acknowledged the overwhelming public opposition to new leasing off the coasts of California, Oregon, and Washington, and left all those areas out of the draft 5-year program. Those of us from the West Coast, like the people who live along the Gulf of Mexico, know firsthand the tremendous devastation of a massive offshore oil blowout.

My friends on the Atlantic Coast have been spared these impacts, thankfully, but this 5-year program would force them to face that risk.

I am not persuaded by claims of how much safer offshore drilling has become in the past few years. Those exact same claims would have been made prior to the Deepwater Horizon oil spill—in fact, they *were* made prior to that spill.

All it would take is one instance of human error to unleash a catastrophic oil spill along the East Coast, threatening the tourism economies, the fishing economies, and the environment of every state along the Eastern Seaboard.

Meanwhile, the total amount of oil under the Mid- and South Atlantic planning areas is only enough to meet our national consumption for about 5 months. So, you have to ask: is it worth it? Is it worth the risk of destroying the East Coast's tourism, fishing, and environment for 5 months worth of oil? I don't believe so.

And even if we could ensure that there is no Deepwater Horizon in the Atlantic's future, there will still be significant impacts to the coastline. Pipelines, refineries, supply yards—even without spills, offshore drilling brings all these impacts to the coast. A Republican State Senator from South Carolina recently pointed out in an editorial, "I suspect much of the support for offshore oil would fade away if citizens were confronted with the realities of the coastal industrialization necessary to support offshore oil."

I know there is a lot of pressure from the oil and gas industry to open up the Atlantic Ocean to their drilling rigs. But I don't think it makes sense. It doesn't make sense for the environment, for the climate, or for the people who live along the Atlantic Ocean and depend on clean ocean waters for their livelihoods.

Thank you, Mr. Chairman, and I look forward to the testimony from our witnesses.

Mr. LAMBORN. All right. We will now hear from our first panel witness. And, Representative Hudson, would you like to introduce our first witness?

Mr. HUDSON. Thank you, Mr. Chairman. I would like to thank you, Mr. Lowenthal, for extending me this courtesy.

Since taking office in 2013, Governor Pat McCrory has championed job creation in North Carolina. His passion for innovation and efficiency has completely transformed our state into a busi-

ness-friendly climate, attracting the best industries from around the world, and empowering our local businesses to grow and create jobs. We both agree that North Carolina is on the cusp of unlocking our own natural resources, creating thousands of jobs, and boosting our economy through offshore exploration and production.

Governor McCrory has been a consistent leader on transportation, tax, and education reform, and a national leader for offshore energy development. He has led the way among coastal governors, as chairman of the bipartisan Outer Continental Shelf Governors Coalition.

As co-chairman, myself, of the Atlantic Offshore Energy Caucus, and an advocate for getting North Carolina into the energy business, I am looking forward to working with the Governor and members of this committee to make drilling and coastal energy development in the Atlantic a reality.

Over the President's regulatory hurdles, we can clearly see thousands of jobs, lower energy costs, and economic security on our horizon.

I am looking forward to hearing from Governor McCrory on his ideas to make those goals a reality. And it is my pleasure to introduce to the committee my friend, our governor, Pat McCrory.

STATEMENT OF THE HON. PAT MCCRORY, GOVERNOR, STATE OF NORTH CAROLINA

Governor MCCRORY. Thank you very much, Congressman. Thank you, Mr. Chairman, and the rest of the committee for inviting me to testify and provide my views on the future impacts of President Obama's proposed offshore energy plan. I am testifying on behalf of the citizens of North Carolina, who it is an honor to represent as the 74th governor of now the 9th most populous state in the United States of America.

I also serve as chairman of the Outer Continental Shelf Governors Coalition, which is, as the congressman mentioned, a bipartisan group of coastal governors that advocate for safe, responsible offshore energy resource planning and development. Many of the positions expressed in my testimony are consistent with the goals and the position of this bipartisan coalition.

I also want to thank my friend, Representative Richard Hudson, for his leadership in this area.

I also want to thank the Bureau of Ocean Energy Management for including an Atlantic lease sale in the draft proposed program, and request that it remain in the final 5-year program. Harnessing America's offshore energy reserves in an environmentally safe and responsible manner will lead to greater energy independence and economic prosperity for North Carolina and the entire Nation.

An all-of-the-above energy policy is a pillar of our energy vision in North Carolina. As governor, I have met extensively with coastal communities to discuss and explain the risk and potential that comes with offshore energy exploration. A recent study shows that, by 2035, new access to offshore energy resources could generate more than 55,000 jobs and $3 billion in annual spending within North Carolina, alone.

Prior to any lease sale or resource development, we must update decades-old geological and geophysical (G&G) information through

new seismic imaging. I encourage BOEM to complete its review of the permit applications for seismic surveys by the end of this year. No more delay; we've got to get this moving now.

By necessity, North Carolina cannot support offshore energy development without equitable energy revenue sharing. The funding is vital to address the cost that states and coastal communities assume with offshore energy development, and the need for our coastal community to have further revenues to pay for such things as dredging and beach renourishment, which is crucial to our travel and tourism industry, and to our ports and fishing.

The draft proposed program currently imposes a 50-mile buffer for the Mid- and South Atlantic planning areas. That 50-mile buffer right now unnecessarily puts much of North Carolina's most accessible and undiscovered resources, frankly, under lock and key. Requirements are already in place to ensure leasing areas are established in a way that best provides access to the hydrocarbon reserves, the coastal environment, and mitigates use conflicts.

BOEM reports the 50-mile coastal buffer zone was included primarily due to issues raised by the Commonwealth of Virginia, many of which are unique to our neighboring state to the north. To my knowledge, no official request has been made for a 50-mile coastal buffer spanning the entire Mid-Atlantic planning area.

The 50-mile buffer omits several promising geological structures off of North Carolina from the leasing area. In fact, based upon seismic testing collected in the 1980s, application of the current 50-mile buffer could put out of play as much as 40 percent of North Carolina's potential offshore resources. An expansive one-size-fits-all exclusion zone is not, and let me repeat that, a one-size-fits-all inclusion zone is not the answer for minimizing use conflicts and protecting marine animals and critical habitats.

North Carolina's coastline is unique, and merits individual consideration when determining appropriate exclusion zones. Environmental analysis and results of the new G&G information could be the scientific basis for the establishment of any further buffer zones.

Additionally, the draft program proposes only one lease sale in the Atlantic in 2021, near the end of the 5-year program. This is purportedly to allow time for infrastructure studies and the completion of seismic activity. However, North Carolina is confident that we will have ample time to prepare for exploration to begin by the midpoint of the 5-year program. Therefore, we request, as the Chairman has stated, the addition of multiple lease sales earlier in the 5-year program.

Holding at least several lease sales would make Atlantic OCS development more economic, by providing incentive for Atlantic coastal states to provide the infrastructure and support services. It is critically important that states receive the certainty necessary to budget and plan for future infrastructure needs. Multiple lease sales would provide the certainty for industry to invest the resources needed to set up operations in the frontier area, and safe and economic oil and gas production relies upon an extensive amount of coastal infrastructure.

States such as North Carolina are willing to make the significant investments right now. Onshore infrastructure such as roads,

ports, and processing systems require substantial investment, and take years to develop. Therefore, I request BOEM to confirm the inclusion of at least one lease sale or more, so states can be confident that their finite resources are spent wisely. We also encourage consideration of multiple lease sales.

I would like to thank you for this opportunity. Energy development is good for the country's energy independence, and it is good for North Carolina's jobs, and future careers. Let's start this process now, and stop the delays immediately.

Thank you very much for this opportunity to give you this input.

[The prepared statement of Governor McCrory follows:]

PREPARED STATEMENT OF THE HON. PAT MCCRORY, GOVERNOR OF NORTH CAROLINA

Chairman Lamborn, Ranking Member Lowenthal and members of the House Energy and Mineral Resources Subcommittee, thank you for inviting me to testify and provide my views on the future impacts of President Obama's Proposed Offshore Energy Plan. I'm testifying on behalf of the citizens of North Carolina whom it is my honor to represent. I also serve as chairman of the Outer Continental Shelf (OCS) Governors Coalition, a bipartisan group of nine coastal governors that advocates for safe, responsible offshore energy-resource planning and development. Many of the positions expressed in my testimony are consistent with the goals and positions of the OCS Governors Coalition.

I want to thank my good friend who is with us this morning, Representative Richard Hudson, for his powerful leadership in this arena. Representative Hudson is a co-chair of the Atlantic Offshore Energy Caucus which seeks to advance policies that explore and expand energy production in the Atlantic OCS as part of an "all-of-the-above" national energy strategy. Representative Jeff Duncan, a distinguished member of this subcommittee from South Carolina, is a co-chair of the caucus. I greatly appreciate the fine work the caucus is undertaking and value this important partnership.

I want to commend the House Committee on Natural Resources for advancing legislation during the 113th Congress to increase new offshore energy production in the Atlantic and the Pacific and implement revenue sharing programs for all energy-producing coastal states.

I'm here today to advocate for the inclusion of the Atlantic OCS in the 5-Year Program for oil and gas leasing, exploration and development, and to discuss the impacts its inclusion will have on North Carolina, its economy and infrastructure needs. I want to thank the Bureau of Ocean Energy Management (BOEM) for including a lease sale in the Atlantic in the Draft Proposed Program and request that it remain in the Final 5-Year Program.

Harnessing America's offshore energy reserves in an expeditious, environmentally safe and responsible manner will lead to greater independence and economic prosperity for North Carolina and the entire Nation.

I've consistently advocated for an "all-of-the-above" energy policy as a gubernatorial candidate and as governor. During my tenure as governor, I have met extensively with elected officials and other stakeholders in beach communities, the coastal region and throughout the state to discuss the risks and potential that come with offshore energy activities.

I deeply respect the views of those who disagree with the positions I advocate. We share a passion for our clean water, fishing industry and the recreational use of our coastal resources. We would not be advocating for offshore energy development if we felt we were compromising these invaluable treasures. There is widespread support across our state for offshore leasing, exploration and development. The majority of North Carolinians agree that increased production of domestic oil and natural gas could help lower energy costs for consumers and strengthen America's energy security. The majority of North Carolinians also say that increased oil and natural gas production could benefit Federal and state budgets through bonuses, lease payments, and royalty fees.

Many coastal elected officials have voiced their support for offshore energy development, including Mayor Dean Lambeth of Kure Beach, who sent a letter to the BOEM in support of opening the Atlantic OCS to oil and gas development. Coastal residents recognize the job creation and economic benefits offshore energy development would bring to the area, as well as potential revenue for beach re-nourishment and infrastructure needs.

A December 2013 study by Quest Offshore reflects that by 2035, new access to offshore energy resources could generate more than 55,000 jobs and $3 billion in annual spending within North Carolina.

SEISMIC SURVEYS

Prior to any lease sale or resource development, we must update the decades old geological and geophysical (G&G) information. New seismic imaging and other G&G studies will provide a better understanding of the true resource potential in the Atlantic planning areas, which will allow industry to develop the Atlantic in a more economically and environmentally effective manner. Updated G&G data will provide industry a clear picture of the location and extent of recoverable energy resources, increase the likelihood that exploratory wells will successfully extract hydrocarbons, and improve the safety of test well siting.

For seismic activity to take place, G&G companies must first undergo the lengthy process of obtaining a permit from the BOEM, an authorization from the National Marine Fisheries Service and a Federal consistency determination from each of the affected states. The BOEM has received G&G applications from eight companies to date and is currently undertaking thorough analysis of the proposed G&G activities.

Last fall, the National Science Foundation conducted a 2D seismic survey of the seabed off North Carolina following the BOEM framework for research purposes. We received no reports of marine disturbances or use conflicts, nor any complaints during or after the seismic activity took place. While we are currently seeking and receiving public input on our consistency review of the permit applications, we are confident the strong mitigation measures required by the BOEM will effectively protect the marine ecosystem off North Carolina's shores when G&G activities are conducted for oil and gas resource assessment. I encourage the BOEM to complete its review of the permit applications for seismic surveys by the end of this year.

REVENUE SHARING

Offshore oil and gas should not be developed without equitable revenue sharing with coastal energy states. Frontier coastal states, like North Carolina, must provide infrastructure, expand public services and implement new environmental protection measures to prepare for offshore energy development. Coastal communities need revenue to offset potential impacts of offshore oil and gas activities and accommodate infrastructure demands such as beach nourishment, dredging, port expansion, road improvements, schools and environmental restoration. Revenue sharing is vital to address the related expenses that states and coastal communities assume with oil and gas exploration, drilling and production. It is incumbent upon me to take the costs and benefits into account when considering whether to support offshore activity in North Carolina. Considering these facts, North Carolina will not support offshore energy development without revenue sharing.

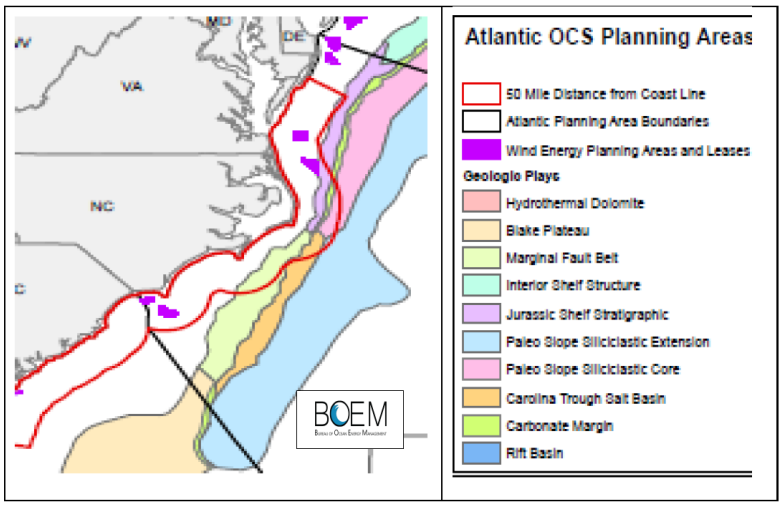
In Fiscal Year 2014, production of the OCS generated $7.4 billion in government revenues from lease bonuses, rents and royalties. The royalties that oil and gas producers pay to drill on the OCS is one of the largest sources of non-tax income to the Federal Government. The December 2013 Quest Offshore study projects that production offshore North Carolina, South Carolina and Virginia could add a cumulative $16 billion to the Federal Treasury by 2035 even if 37.5 percent of the revenues were shared with the state governments. North Carolina, South Carolina and Virginia would receive a cumulative $4 billion, $3.7 billion and $1.9 billion, respectively.

Last week, a bipartisan group of U.S. Senators from the four Atlantic planning area states sent a letter to the Senate Energy and Natural Resources Committee leaders urging the committee to include revenue sharing in future legislation. I want to stress that revenue sharing has strong bipartisan support. The governor of Virginia, my good friend Terry McAuliffe, and both of Virginia's U.S. Senators, all of whom are Democrats, support revenue sharing. Both of North Carolina's U.S. Senators, my friends and fellow-Republicans Richard Burr and Thom Tillis, support revenue sharing. The letter our Senators sent last week stated that "coastal states deserve a portion of the revenue from energy production." Additionally, the OCS Governors Coalition member states of Alabama, Alaska, Louisiana, Maine, Mississippi, South Carolina, Texas and Virginia would strongly urge your support of revenue sharing legislation.

50-MILE BUFFER ZONE

The 50-mile buffer zone imposed for the Mid- and South Atlantic planning areas in Option One of the Draft Proposed Plan (DPP) unnecessarily puts much of North Carolina's most accessible undiscovered resources under lock and key. Development

of the OCS oil and gas energy resources can occur with nominal impact to existing and anticipated coastal activities and marine environments. Advanced drilling techniques, marine well containment and spill response, combined with greater regulatory oversight, have made access to the hydrocarbon reserves in the Atlantic OCS safe, attainable and economical. Over the next few years, new G&G information will help pinpoint the most promising oil and gas resource areas located off the shore of North Carolina while the environmental impact statement will identify possible impacts of the resource development on the other uses of the sea and seabed, including fisheries, navigation, existing or proposed sealanes, potential sites of deepwater ports, and other anticipated uses. With a greater knowledge of the North Carolina OCS, the leasing areas can be established in a way that best provides access to the hydrocarbon reserves, preserves the coastal environment and mitigates use conflicts.



Several geologic structures with oil and gas potential are located within the coastal buffer of North Carolina, particularly off the Outer Banks. Based on historical seismic data, strict application of the 50-mile buffer could place as much as 40 percent of North Carolina's potential offshore resources out of play, including the promising Manteo Prospect located approximately 40 miles off the shoreline.

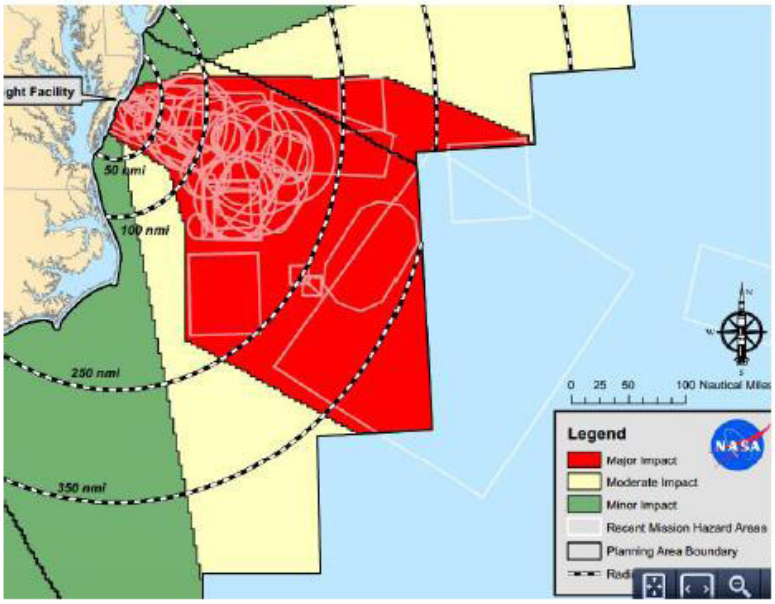
According to a 1999 U.S. Department of the Interior report titled *Geology and Exploration of the Manteo Prospect off North Carolina*, the Manteo Prospect is a "high-risk prospect with world class potential." In the early 1980s, eight oil companies including Mobil, Chevron, Amerada Hess, Conoco, Marathon, Oxy USA, Union and Shell, leased all 21 blocks of the Manteo exploration unit for a combined total of more than $300 million, which were later canceled by the Department of the Interior. Mobil estimated that the Manteo Prospect may contain as much as 5 trillion cubic feet of dry natural gas.

In much of North Carolina's offshore areas, the continental shelf drops off sharply within 50 miles from the coastline. Many areas, located 50 miles (80 km) or more offshore, are in deep water (+2500 feet). Drilling in deepwater reservoirs presents many engineering challenges. While technological advancements and rigorous design, construction and maintenance standards ensure deepwater drilling can be performed safely, it is more expensive and complex.

The BOEM stated in its report that the 50-mile coastal buffer zone was included primarily due to issues raised by the Commonwealth of Virginia, many of which are unique to our neighboring state to the north. The report states that the 50-mile buffer was imposed "to minimize potential conflicts with DOD activities as well as respond to the governor of Virginia's comments regarding minimizing other multiple-use conflicts, such as renewable energy activities, commercial and recreational fishing, critical habitat needs for marine mammals and sea turtles, hard bottom environments, and other environmental concerns." The BOEM's Docket on the Request for Information on the 2017–2022 Program shows that Governor McAuliffe, the Virginia Department of Mines, Minerals and Energy, the Hampton Roads Chamber of Commerce and the Virginia Beach City Council asked for the 50-mile buffer for the coast of Virginia only.

The docket contains no comments requesting that a 50-mile coastal buffer be applied for the entire Mid-Atlantic planning area. Comments from the Ocean Foundation did call for no leasing within 50 miles of National Marine Sanctuaries, National Seashores, National Parks, National Estuarine Research Reserves, National Monuments and National Wildlife Refuges but a 50-mile buffer was not established for any nationally designated sanctuary, seashore, park, reserve, monument or refuge in the Gulf of Mexico or within an Alaska planning area. Only the Atlantic planning areas have a 50-mile buffer.

An expansive "one-size-fits-all" exclusion zone in the Atlantic planning area is not the best mechanism for minimizing conflicts with existing and future maritime activities and protecting marine animals and critical habitats. In at least one case, for example, there are fewer concerns for conflicts *within* the 50-mile buffer. NASA indicates that in some instances, any major impacts from a launch are most likely to occur *beyond* the 50-mile buffer.



As I stated in my comments on the DPP, I urge the BOEM to reduce the proposed coastal buffer zone off the North Carolina coast. A reduced buffer would keep North Carolina's coastal and ocean activities undisturbed, maintain the view from our 320 miles of ocean beaches and shoreline, protect marine life and preserve the availability of potential resources. The final Environmental Impact Statement and the results of new G&G information should be the scientific basis for the establishment of any further buffer areas. The BOEM must acknowledge that the unique geographic characteristics of each state make the imposition of a "one-size-fits-all" standard buffer zone impractical.

ADDITIONAL LEASE SALE

Section 18 of the Outer Continental Shelf Lands Act of 1953 directs the Secretary of Interior to take individual characteristics of a planning area into consideration to develop reasonable options for a schedule of proposed lease sales. For example, the Secretary must balance the benefits of oil and gas development in a specific planning area against the environmental risk and competing ocean uses. The potential for the Atlantic OCS to contain significant resources that could possibly supply petroleum products, distillate and propane into high demand markets for many decades factors into this decision.

The DPP proposes 10 lease sales in the Gulf of Mexico (GOM) planning areas but only one lease sale each in the Chukchi Sea, Beaufort Sea, Cook Inlet, and the Mid-Atlantic and South-Atlantic planning areas. The one Atlantic sale is proposed to take place in 2021, near the end of the 5-Year Program. The DPP states that the later sale date allows time for additional analysis, including collection of seismic and

environmental information, and evaluation of infrastructure needs. However, much of this analysis will be complete well in advance of 2021. A final Environmental Impact Statement must be in place by the start of the 5-year program in 2017 and seismic studies are expected to be available in 2018 for G&G surveys conducted in 2016. North Carolina already has much of the general infrastructure (e.g., roads, housing, and medical facilities) essential to begin oil and gas exploration. North Carolina will have ample time to implement the remaining support services and spill preparedness and response capabilities necessary for exploration to begin by the midpoint of the 5-Year Program.

The timing and number of lease sales in the Mid- and South Atlantic planning areas increase investment risk for both the oil and gas producers and the states. At least two lease sales, including one in the 2018–2019 time frame, are necessary to develop the Atlantic frontier OCS area in an economically responsible manner.

Preparing for offshore energy will require significant investment. Benefits accrued by the states and coastal communities, including the increase in jobs and wages and the subsequent multiplier effects, are smaller during the exploration stage and grow as development and production allow the industry to become established. Multiple lease sales would provide the assurance and incentive for Atlantic coastal states to improve their infrastructure and support services and the certainty for industry to invest resources to properly setup operations in the frontier area. Exploratory wells drilled in the first leased blocks can better define the extent of the hydrocarbon reserves and lead to further participation and investment in a second lease sale. After leases are awarded, it will take many more years before industry can begin production. This development period provides states and coastal communities time to prepare for the influx of new industries and workforce.

ONSHORE INFRASTRUCTURE AND INVESTMENT

A significant yet underpublicized component of offshore energy exploration and production is the onshore coastal infrastructure necessary to support OCS oil and gas activities. Safe and economic oil and gas production relies upon an extensive amount of coastal infrastructure including transportation and processing systems; ports and service bases; emergency services and oil spill response; electric power infrastructure; and waste management facilities that are equipped to handle the different types of waste generated by the offshore activities.

The BOEM outlined the energy infrastructure assets that would be required to support Mid-Atlantic OCS oil and gas production in a July 2014 report entitled, "Onshore Oil and Gas Infrastructure to Support Development in the Mid-Atlantic OCS Region." The study inventoried existing infrastructure in the Mid-Atlantic region and identified energy infrastructure assets that would need to be established or expanded if production were to occur off our shores. While North Carolina has the infrastructure in place to begin the exploration phase, the report concluded that a significant amount of investment would be needed to support oil and gas production in the Mid-Atlantic.

It is critically important that states receive the certainty necessary to budget and plan for future infrastructure needs. Onshore infrastructure such as roads, ports and processing systems require substantial investment and take many years to develop. I ask that the Federal Government assure states that offshore oil and gas production will become a reality so that we can prudently invest the substantial capital necessary to finance projects vital to offshore oil and gas operations.

States such as North Carolina are willing to make significant investments now, but we can't afford to potentially squander millions of dollars in preparation for a frontier industry that has the potential to be shut down at any time by the Federal Government. I request that the BOEM confirm the inclusion of at least one lease sale in the Mid-Atlantic so that states can be confident that their finite resources are spent wisely.

Offshore energy production offers many benefits to Federal, state and local governments but also requires significant investment and planning to be conducted in a safe and economical manner. If we are serious about pursuing safe, responsible offshore energy development in the Atlantic, then the Obama administration must provide states the certainty we require to start building the regulatory and structural foundation on which the industry can grow. I look forward to working with the BOEM to responsibly open the Atlantic to oil and gas development.

By unleashing the energy potential off our Atlantic coasts, we will move America one step closer to energy independence and create new opportunities for all of North Carolina. Thank you for the opportunity to testify on this important topic.

QUESTIONS SUBMITTED FOR THE RECORD BY RANKING MEMBER LOWENTHAL TO GOVERNOR PAT MCCRORY, STATE OF NORTH CAROLINA

Question 1. Governor McCrory, in February the North Carolina Department of Environment and Natural Resources (NCDENR) wrote to the Bureau of Ocean Energy Management (BOEM) requesting that no offshore wind lease sales be offered within 24 nautical miles of the North Carolina coast, citing potential visual impacts that could negatively impact the state's coastal tourism industry. The letter from NCDENR also highlighted that North Carolina's "coastal and ocean waters are filled with a particularly diverse and important mix of fish and other organisms at various stages of their life cycle, including a variety of endangered and threatened sea turtles, pelagic seabirds and marine mammals." In your testimony, you requested that BOEM remove the 50-mile buffer zone currently in the 2017–2022 Draft Proposed Program, but you do not specify, as NCDENR does in their letter regarding offshore wind lease sales, a minimum distance from the coastline where you believe that offshore oil and gas lease sales should not be held.

Question 1a. Do you have a position on what would be an acceptable minimum buffer zone for oil and gas lease sales off the coast of North Carolina?

Answer. Buffer zones should reflect the distinctive characteristics of the Outer Continental Shelf within the planning area and the environmental, economic and social aspects of energy development for each coastal state. Tourism is an integral aspect of North Carolina's economy and the social fabric of our coastal communities. At a minimum, a buffer zone should be established off the state's coast to protect its viewshed. North Carolina is home to magnificent beaches and I believe residents and tourists should continue to enjoy them without seeing drill rigs, platforms, wind turbines or flashing warning lights in the distance.

I am unaware of any legitimate reason as to why the buffer zone needs to extend beyond the line of sight. New seismic imaging may reveal promising oil and gas resources that can be accessed and developed within the 50-mile buffer zone currently in the Bureau of Ocean Energy Management's Draft Proposed Program for 2017–2022.

Question 1b. Do you believe that any oil and gas lease sale buffer zone should at least be as large as 24 nautical miles to be consistent with the request for an offshore wind lease sale buffer zone?

Answer. I am committed to protecting the natural beauty and quality of North Carolina's pristine shoreline. For that reason, I believe that buffer zones for oil and gas lease sales should be consistent with the buffer zones for offshore wind lease sales.

North Carolina's coastal region supports industries critical to the state's economy. Our state's barrier island and ocean beaches have extremely high recreational, esthetic and ecological value and attract millions of tourists from all over the world each year. North Carolina coastal attractions include more than 320 miles of sandy beaches, two national seashores, the Wright Brothers National Memorial, and Jockey's Ridge, Fort Fisher and Fort Macon State Parks. The tourism industry in the state's oceanfront counties generates more than $2 billion in annual revenue and directly supports more than 30,000 jobs within the coastal communities.

Additionally, commercial and recreational saltwater fishing is a vital component of North Carolina's economy. In 2011, the National Oceanic and Atmospheric Administration found that saltwater recreational fishing generated $2 billion in sales and supported 18,000 jobs in the state.

Question 1c. Do you share the same concerns regarding offshore oil and gas development that NCDENR does regarding offshore wind development?

Answer. As the North Carolina Department of Environment and Natural Resources (NC DENR) expressed on behalf of my Administration, I believe there are excellent opportunities to develop wind energy and oil and gas off North Carolina's coast, provided it is done in a way that maintains our valued viewsheds, protects our natural resources and minimizes conflicts with ongoing activities. I agree that a coastal buffer zone for oil and gas, similar to what NC DENR has requested for wind energy, is important to preserve the ocean's beauty for our coastal communities and tourists. It is also vital that an environmental assessment be performed prior to any investment in oil and gas or wind energy lease areas to preserve sensitive habitats and coastal resources.

Dr. FLEMING [presiding]. Thank you, Governor McCrory, for your very valuable testimony. At this time you are excused.

Governor MCCRORY. Thank you very much.

Dr. FLEMING. We thank you for your testimony, and all of your great work in the beautiful state of North Carolina. And we will ask for Ms. Abigail Ross Hopper to step forward to join our panel.

Governor MCCRORY. Thank you very much.

Dr. FLEMING. Thank you, Governor.

[Pause.]

Dr. FLEMING. OK. We have today, as our second panelist, Ms. Abigail Ross Hopper, Director of the Bureau of Ocean Energy Management.

Let me remind you, Director, of our rules. You are probably familiar with them. You will be under a 5-minute limit on your testimony. You will have a green light for 4 minutes, then yellow for 1 minute. When it turns red, if you would, go ahead and conclude your remarks. Everything in your testimony will be put into our record.

At this point, the Chair now recognizes you for 5 minutes to give your testimony.

STATEMENT OF ABIGAIL HOPPER, DIRECTOR, BUREAU OF OCEAN ENERGY MANAGEMENT, U.S. DEPARTMENT OF THE INTERIOR

Ms. HOPPER. Thank you so very much. Good morning, members of the subcommittee. Good morning, I am pleased to appear before you today to discuss the Bureau of Ocean Energy Management, which I will call BOEM for the rest of our time together, our offshore oil and gas leasing program under the current Outer Continental Shelf Oil and Gas Leasing Program, as well as our development of the 2017–2022 program.

The Administration is committed to promoting safe and responsible domestic oil and gas production, as well as developing offshore renewable energy as part of a comprehensive energy strategy to grow America's energy economy and continue to reduce our dependence on foreign oil.

A brief word about our current 2012–2017 program. BOEM, to date, has held seven lease sales in the Gulf of Mexico, generating almost $3 billion in bonus payments, as well as more than $164 million in rentals. Eight sales remain on the current program lease sale schedule.

So, as you know, BOEM's responsibilities are outlined in the Outer Continental Shelf Lands Act, OCSLA. The OCSLA prescribes the method by which the Department develops each 5-year program.

Publication of the 2017–2022 draft proposed program, which I will call the DPP for the rest of our time together, which occurred on January 29, 2015, is the first proposal in a three-proposal process to develop the next program. BOEM simultaneously published a notice of intent to prepare a draft programmatic environmental impact statement, which will analyze the potential environmental effects of the DPP. Twenty-three EIS scoping meetings were held in communities on the Atlantic Coast, along the Gulf of Mexico,

and in Alaska during this 60-day comment period. BOEM has received well over a million comments.

The second phase of the process is expected in early 2016, with the publication of the proposed program and the draft programmatic EIS. The Department will invite public comment on those documents, as well.

And then the third phase, publication of the proposed final program and the final Environmental Impact Statement, is expected in late 2016.

So, the DPP includes potential lease sales in eight planning areas, and includes nearly 80 percent of estimated undiscovered technically recoverable oil and gas resources on the Outer Continental Shelf. In total, the DPP schedules 14 potential lease sales for the program: 10 sales in the Gulf, 1 in the Atlantic, and 3 off the coast of Alaska. As I mentioned, there are 10 sales proposed for the Gulf of Mexico.

In past programs, BOEM has scheduled separate, generally alternating annual sales in the Western and Central Gulf of Mexico planning areas, as well as periodic sales in the portion of the Eastern Gulf not under moratorium. In contrast, the DPP that is currently published schedules two combined regionwide sales per year, comprised of the Western, Central, and Eastern Gulf of Mexico unleased acreage not subject to moratorium. We are proposing this change to provide greater flexibility to industry, including its ability to respond to the significant energy reforms that are happening in Mexico. We will be taking feedback on that approach, and if the traditional approach is preferred, we can revert back to that for the final program.

In Alaska, the DPP continues to take the balanced approach to development with one sale each in the Beaufort, Cook Inlet, and the Chukchi. The DPP also includes one lease sale in a portion of the Mid-Atlantic and South-Atlantic planning areas. The sale would be located at least 50 miles off the coast of Virginia, North Carolina, South Carolina, and Georgia. Data suggest that portions of those planning areas may contain significant oil and gas resource potential. However, as the Governor mentioned, current geological and geophysical information is older, based on data collected in the 1970s and 1980s.

So, as a result of that, in July 2014 BOEM issued a record of decision for the programmatic EIS for the Atlantic G&G activities, and we established a path forward for appropriate G&G survey activities to be authorized by BOEM. Several permits are currently under our consideration, and we will be happy to talk more about that permitting process this morning.

So, Mr. Chairman, thank you very much for the opportunity to be here today, and I am happy to answer any questions.

[The prepared statement of Ms. Hopper follows:]

PREPARED STATEMENT OF ABIGAIL ROSS HOPPER, DIRECTOR, BUREAU OF OCEAN ENERGY MANAGEMENT, U.S. DEPARTMENT OF THE INTERIOR

Chairman Lamborn, Ranking Member Lowenthal, and members of the subcommittee, I am pleased to appear before you today to discuss the Bureau of Ocean Energy Management's (BOEM) offshore oil and gas leasing under the current Outer Continental Shelf (OCS) Oil and Gas Leasing Program (2012–2017 Program), as well as our development of the 2017–2022 Program. The Administration is com-

mitted to promoting safe and responsible domestic oil and gas production, as well as developing offshore renewable energy, as part of a comprehensive, all-of-the-above energy strategy to grow America's energy economy and continue to reduce our dependence on foreign oil. Ensuring safe and responsible development of the Nation's offshore oil and gas resources through leasing under the 5-Year Program is an important part of that strategy.

The Outer Continental Shelf Lands Act (OCSLA) requires BOEM to propose a schedule of lease sales every 5 years. This is referred to as the "5-Year Program." As specified by Section 18 of the OCSLA, preparation and approval of an Oil and Gas Leasing Program is based on the Secretary of the Interior's consideration of eight factors which include balancing of the potential for environmental damage, discovery of oil and gas, and adverse impact on the coastal zone, to determine the size, timing, and location of lease sales.

LEASING UNDER THE 2012–2017 OCS OIL AND GAS PROGRAM

BOEM's offshore leasing activity under the current Program reflects the Administration's overall approach to promoting safe and environmentally responsible oil and gas resource development. This includes encouraging exploration and development in the Gulf of Mexico (GOM), where resources and industry interest are most extensive, and where mature infrastructure exists to support oil and gas activities. BOEM has held seven lease sales in the GOM under the current Program, generating almost $3 billion in bonus payments, as well as more than $164 million in rentals.

Eight sales remain on the current Program lease sale schedule, with five sales in the GOM: Western GOM sales in 2015 and 2016, Central GOM in 2016 and 2017, Eastern GOM in 2016; and three off Alaska—Chukchi Sea, Cook Inlet, and Beaufort Sea.

THE 2017–2022 OCS OIL AND GAS LEASING PROGRAM

With the current Program ending in mid-2017, BOEM is preparing the 2017–2022 OCS Oil and Gas Leasing Program. In June 2014, the Department published a Request for Information and Comments (RFI) and received approximately 500,000 comments. On January 29, 2015, The Department published the 2017–2022 OCS Oil and Gas Leasing Draft Proposed Program (DPP) with a 60-day comment period. BOEM simultaneously published a Notice of Intent to Prepare a draft Programmatic Environmental Impact Statement (PEIS), which will analyze the potential environmental effects of the Program. Twenty-three EIS scoping meetings were held in communities on the Atlantic coast, GOM, and Alaska during the 60-day comment period. BOEM received over 900,000 comments and is committed to integrating the critical information received during the comment period into the scientific, environmental and social analysis that informs our decisionmaking. The Department expects to publish the Proposed Program and Draft PEIS in early 2016; the Department will invite public comment on both of these documents. Publication of the Proposed Final Program and Final PEIS is expected in late 2016.

Draft Proposed Program

The OCSLA prescribes the method by which the Department develops each 5-Year Program. Publication of the 2017–2022 DPP is the first proposal in a three-proposal process to develop the 2017–2022 Program. The 2017–2022 DPP includes potential lease sales in eight planning areas and includes nearly 80 percent of estimated undiscovered technically recoverable oil and gas resources on the U.S. OCS. In total, the 2017–2022 DPP schedules 14 potential lease sales for the 2017–2022 Program in eight planning areas—10 sales in the GOM, one in the Atlantic and three off the coast of Alaska.

The 5-Year Program is designed to promote the diligent development of U.S. offshore oil and gas resources, which remains a key component of our domestic energy portfolio and contributes significantly to the Nation's economic output. The sales proposed in the DPP involve sales in offshore areas that have the highest oil and gas resource potential, highest industry interest, and/or are off the coasts of states where their government officials have expressed a strong interest in potential energy exploration. The areas selected for the DPP and additional environmental review simultaneously consider potential environmental impacts, stakeholder concerns, and competing uses of ocean and coastal areas.

The 2017–2022 DPP continues the regionally tailored leasing strategy set forth in the current 5-Year Program. The proposed schedule reflects the belief that a "one-size-fits-all" approach to offshore leasing is not appropriate. Instead, the approach is tailored to achieve the dual goals of promoting prompt development of the domes-

tic oil and gas resources while protecting the marine, coastal and human environments specific to each OCS region.

Gulf of Mexico

Of the 14 lease sales included in the 2017–2022 DPP, 10 are in the GOM, where infrastructure is best-established and the oil and gas resource potential is significant. In past programs, BOEM has scheduled separate, generally alternating, annual sales in the Western and Central GOM planning areas, as well as periodic sales in the portion of the Eastern GOM not under moratorium. In contrast, the 2017–2022 DPP schedules two combined region-wide sales per year, comprised of the Western, Central, and Eastern GOM unleased acreage not subject to moratorium. BOEM is proposing this change to provide greater flexibility to industry, including the ability to respond to the significant recent energy reforms in Mexico that have the potential to meaningfully change how exploration and development decisions are made in the GOM.

BOEM will review feedback received on this approach, and if the traditional approach is preferred, BOEM can revert back to the traditional separate planning area model for sales in the 2017–2022 5-Year Program.

Alaska

In Alaska, the 2017–2022 DPP continues to take a balanced approach to development, utilizing the targeted leasing strategy set forth in the 2012–2017 Program by identifying one potential sale each in the Beaufort Sea (2020), Cook Inlet (2021), and Chukchi Sea (2022) Planning Areas. These potential sales in the three Alaska program areas are currently proposed to be scheduled later in the 5-year period. Holding the sales later in the 2017–2022 Program is expected to provide greater opportunity to obtain and evaluate information regarding environmental issues, subsistence use needs, infrastructure capabilities, and results from any exploration activity associated with existing leases.

Similar to the 2012–2017 5-Year Program, BOEM will continue to use a scientific approach to information and stakeholder feedback to proactively determine, in advance of any potential sale, which specific areas offer the greatest resource potential while minimizing potential conflicts with environmental, subsistence, and multiple use considerations. Sales will be tailored to offer areas that have significant resource potential while appropriately weighing environmental protection, subsistence use needs, and other considerations.

Atlantic

The 2017–2022 DPP includes one lease sale in a portion of the Mid-Atlantic and South-Atlantic Planning Areas in 2021. Consistent with the targeted and balanced leasing approach adopted in the Arctic, the potential sale would be located at least 50 miles off the coasts of Virginia, North Carolina, South Carolina, and Georgia. Presenting this option in the 2017–2022 DPP allows for consideration of a targeted area with oil and gas resource potential, while limiting potential impacts on the environment and other ocean uses. Governors, congressional delegations and local governments from the four states listed above all requested that the OCS off their respective coasts be included in the 2017–2022 DPP and indicated a desire to better understand the oil and gas potential of this area.

The 50-mile coastal buffer proposed off the coasts of Virginia, North Carolina, South Carolina, and Georgia is intended to minimize multiple use conflicts, such as those from Department of Defense and NASA activities, renewable energy activities, commercial and recreational fishing, critical habitat needs for wildlife, and other environmental concerns. During the subsequent Section 18 and NEPA processes, BOEM will be collecting and analyzing additional information regarding the extent to which any existing conflicts can be minimized and what mitigation measures should be required if a lease sale does take place.

Some data suggest that portions of the Mid-Atlantic and South-Atlantic Planning Areas may contain significant oil and gas resource potential; however, current geological and geophysical (G&G) information regarding that potential is based on older data collected in the 1970s and 1980s. Tremendous advances in instrumentation and technology for the acquisition and analysis of G&G data have been made in the intervening decades. In recognition of these advances in G&G data acquisition and processing technology and the need to better understand the scope of existing resources and potential conflicts, BOEM's July 2014 Record of Decision (ROD) for the PEIS for Atlantic G&G activities established a path forward for appropriate G&G survey activities to be authorized by BOEM off the Mid-Atlantic and South-Atlantic coast. That decision establishes safeguards governing potential survey activities to update the region's offshore oil and gas resources data.

The ROD for Atlantic G&G activities requires the implementation of stringent mitigation measures and safeguards for purposes of avoiding, minimizing, and/or mitigating environmental impacts, including impacts on marine life. G&G activities in the Atlantic will increase BOEM's understanding of the area's resource potential and will develop a suite of environmental studies for the purpose of establishing an environmental baseline. Several permits are currently under BOEM's consideration for conducting G&G surveys that, if approved, will provide critical new information to inform potential future leasing decisions.

Pacific

No lease sales in the four planning areas off the Pacific coast were included in the DPP for potential oil and natural gas leasing consideration. The exclusion of the Pacific Region is consistent with the long-standing interests of Pacific coast states and comments received on the RFI.

CONCLUSION

The 5-Year Program is an important component of the Administration's all-of-the-above energy strategy. The 2017–2022 DPP has led to a significant outpouring of public interest from a wide array of stakeholders. BOEM takes this input very seriously, and we are working hard to consider the feedback we received, and to integrate comments into our Proposed Program and Draft PEIS.

Mr. Chairman, thank you again for the opportunity to be here today to discuss the Bureau's effort to create an oil and gas leasing program that will safely and responsibly reduce our dependence on foreign oil and create jobs through the development of these important energy resources. I am happy to answer any questions that you or members of the committee may have.

QUESTIONS SUBMITTED FOR THE RECORD TO ABIGAIL ROSS HOPPER, DIRECTOR, BUREAU OF OCEAN ENERGY MANAGEMENT

Questions Submitted by Chairman Lamborn

Question 1. Will the 8 remaining sales in the 2012–2017 5-year plan be conducted as planned in the current leasing schedule? Can you commit to this committee that those three scheduled lease sales in the Arctic will occur on time?

Answer. To date, the sales remain on the schedule and are in various phases of development in lease sale preparation and the NEPA process. With respect to the three lease sales scheduled offshore Alaska, BOEM is proceeding with preparations for these sales, although, as with any offshore lease sale, the decision as to whether ultimately to hold the sale is up to the Secretary.

Question 2. While you cannot add new areas to the existing plan once finalized, can you clarify that under Outer Continental Shelf Lands Act (OCSLA), you have the authority to add lease sales to the proposed areas that are currently being scoped?

Answer. Under the OCSLA, a final 5-Year Program may not be revised "significantly" without following the same procedure as utilized to prepare the program, i.e., the Section 18 process. Adding areas to existing sales and adding new sales even in the same area have been found to be significant changes; therefore, the Secretary may not do either without initiating the Section 18 process again. Similarly, for a 5-Year Program still under development, where areas or lease sales were not previously announced for comment under Section 18 in the Draft Proposed Program, they cannot be considered for inclusion in the Final 5-Year Program without reinitiating the Section 18 process.

Question 3. This Administration has said repeatedly that it is committed to promoting renewable energy development both onshore and offshore. In the President's Fiscal Year 2016 Budget, BOEM requested an increase of over $1.1 million for the renewable energy program. In 2009, President Obama and former Interior Secretary Ken Salazar announced the final regulations for the OCS renewable energy program.

Question 3a. How many offshore commercial wind energy leases have been issued?

Answer. Nine: three in Massachusetts, two in Rhode Island/Massachusetts, one in Delaware, two in Maryland, and one in Virginia.

Question 3b. Could you please list the location for each leased offshore wind area and the revenue generated from each lease sale?

Answer.

Massachusetts

- Cape Wind: lease issued non-competitively/no lease sale: $353,112
- MA Wind Energy Areas (WEA) lease sale: $431,482

Rhode Island/Massachusetts WEA lease sale: $3,089,461

Delaware: lease issued non-competitively/no lease sale: $867,870

Maryland WEA lease sale: $8,701,098

Virginia WEA lease sale: $1,600,000

Total: $13,822,041

Question 3c. How many gigawatts are currently being produced by offshore wind?

Answer. All BOEM issued leases are in the development phase and no construction or operations have commenced.

Question 3d. In the 2009 announcement, the President stated a goal of achieving 10 gigawatts of wind capacity by 2020, how close is your agency to achieving that goal?

Answer. In 2012 the President set a goal to issue permits for 10 gigawatts of wind, solar and geothermal projects on public lands by the end of the year. The DOI achieved this goal ahead of schedule. In 2013, the President, as part of the Climate Action Plan, directed an additional 10 gigawatts of renewable energy projects to be permitted by 2020.

Onshore, the BLM has approved over 16.5 GWs of renewable energy projects including wind, solar and geothermal. Of these approved renewable energy on projects, over 5.6 GWs are wind energy projects. Offshore, BOEM projects that nearly 9 GW of energy could be produced by offshore wind from the leases issued to date.

It is important to note that DOI is responsible only for providing opportunities for companies to develop resources through the permitting and leasing of public lands. The decision to proceed with development ultimately rests with industry.

Questions Submitted by Rep. Wittman

Question 1. Several times since the 2017–2022 Draft 5-Year Proposed Program was published the Department of Interior has been quick to point out that there are still several more phases in the planning process and that the Department will further narrow or take areas out of the proposed plan.

As you know, Virginia has been asking for offshore leasing and exploration for the last decade.

A majority of state and congressional officials including Senators Mark Warner, Tim Kaine and Governor McAuliffe support energy production in the Atlantic Ocean.

As the Department and BOEM begin to develop a final offshore leasing program for the 2017–2022 5-Year Plan, will you commit to taking into consideration the broad bipartisan support for offshore energy production in the Atlantic Ocean?

Answer. BOEM is committed to a robust and public process for developing the 5-Year Program. Input from governors and states will continue to be an important factor as state laws, goals, and policies are one of the eight factors that the Secretary must consider in preparing a 5-year program under Section 18 of the Outer Continental Shelf Lands Act.

Question 2. It is my understanding that Governor McAuliffe, in response to BOEM's Request for Information last summer, pointed out that Virginia's Lease Sale 220 was already included in a Draft Proposed Plan in 2006, only to be canceled in 2010.

Now, Virginia will not see a lease sale until roughly 2021, which is 15 years after its original inclusion in a 5-year plan.

Delays like this represent a missed opportunity to harness our domestic energy potential, create thousands of new jobs, and generate millions in government revenue.

As you know, Virginia stands to gain 25,000 jobs and billions in economic activity from opening the Atlantic OCS to oil and gas development.

Will BOEM further limit areas in the Atlantic as you continue the planning process for 2017–2022, as you have done in the past?

Answer. The multi-step 5-year process, in coordination with the National Environmental Policy Act process, provides several more opportunities to analyze and make decisions on the size, timing, and location of potential lease sales. Whether any of those sales, including proposed Lease Sale 260 in the Mid- and South Atlantic, will be further narrowed in any way, depends on the outcome of several stages of analyses, public comments, and the Secretary's decision on what best meets the Nation's energy needs while balancing the potentials for environmental damage, discovery of oil and gas, and adverse impacts to the coastal zone.

Dr. FLEMING. We thank you, Ms. Hopper, Director Hopper.

At this point, the dais will move to questions. And the Chair now recognizes himself for first questions.

It has been interesting that President Obama has made a lot of hay in the news about the increased development of our natural resources, oil and gas, during his administration. And, technically, he is correct. Unfortunately, that increase has been all on the private sector, that he has no control or jurisdiction of. We know that that is coming from the new technologies, hydraulic fracturing and horizontal drilling.

On the other hand, during his administration, there has actually been a 10 percent drop in Federal lands development. So, if you apply that to what really is under the President's jurisdiction, you find that it is actually going the wrong way. And, unfortunately, with this new drilling plan, what we are seeing is fewer leases than ever. You are fitting in with this, with your plan, suggesting that we restrict energy development, especially since the number of leases actually auctioned could only go down from here.

How exactly do you intend to grow offshore production, or do you really choose to do that?

Ms. HOPPER. So I thank you very much for that question. I think there are two parts. One is about oil production and one is about lease sales. So I will answer the first one first.

In terms of oil production, it is really the role of the Federal Government to make lands available for leasing. And we do that through the 5-year plan. Industry can determine (a) what acres that we offer that they are interested in leasing. And then, once they hold those leases, what they are interested in developing.

If you look at the chart that was up earlier, you will see, yes, there was a drop in production following the Deepwater Horizon disaster 5 years ago. It has continued to climb since that dip: 2014 production was up over 2013 production. The Energy Information Administration released its estimates yesterday, and production on the Outer Continental Shelf is projected to continue to rise for the next 4 or 5 years on the Outer Continental Shelf.

So, I think it tells us that the industry is, even in this sort of era of lower oil prices, interested in investing in areas in which there are known reserves——

Dr. FLEMING. Well, let me make a point here.

Ms. HOPPER. Sure.

Dr. FLEMING. Of course, the increase is really on top of a baseline that dropped tremendously after the BP spill. So we have not gotten back to the baseline. And, actually, the development that is happening now is based on leases that occurred years ago under prior administrations.

So, what you are really doing here, by limiting the number of leases, is you are actually restricting and lowering the baseline again. So, while you may be technically correct, year over year, there may be increases, but you are way below the baseline, and it is going to be many years, if ever, that you get back to the baseline.

So, I think we would be hard put to say that we are actually increasing production over the real baseline in out years, based on what this administration has been doing the last 5 years, and based on what your plan, going forward, is.

Ms. HOPPER. Well, I think, actually, the data will show the estimates from EIA show that production is, for 2015, 2016, 2017, 2018, and 2019, projected to exceed the high that was in 2010. So I do think the trajectory will get us up to and beyond where we were in 2010.

In terms of the number of lease sales, as I described, we have taken a different look at how to lease the Gulf of Mexico, largely in part because of the reforms in Mexico, and sort of understanding how that is going to impact our producers here, on our side of the border. So, we are offering—whereas in the current 5-year plan we have offered the Western Gulf five times, we have offered the Central Gulf five times, and then the Eastern part, that is not subject to moratorium, twice. So, for a total of 12. And this plan, we are offering the Eastern—let me finish——

Dr. FLEMING. You don't need to go through all the details.

Ms. HOPPER. No, I think it is important——

Dr. FLEMING. I have one other question, and my time is limited, I am sorry.

Ms. HOPPER. Sure.

Dr. FLEMING. We will hear from a witness in the next panel about the competitive environment for offshore leases, and how countries like Canada, Mexico, and Brazil are competing. Are the actions you are taking helping or hurting the United States, relative to these countries?

Ms. HOPPER. I think the actions we are taking absolutely help America be competitive with these other countries. I think the terms of our lease sale are competitive with other countries. The terms of our royalties and our bonus payments are absolutely competitive.

Dr. FLEMING. So, by restricting leases, making fewer leases available to companies to drill, you think that gives us an advantage over these countries?

Ms. HOPPER. I disagree with your characterization. I think, in fact, we are making more leases available. If you add those all together, that is 30 lease sales for the Western, Central, and Eastern Gulf.

Dr. FLEMING. Well, as I conclude here, I would say this is kind of like marking the price down in order to increase it later, and show that you have actually increased it.

The truth is you have lowered the baseline, and so of course, you are going to show some increases over time. But you are well below where you were, historically.

With that, I will recognize the Ranking Member.

Ms. HOPPER. Thank you, sir.

Mr. LOWENTHAL. Thank you, Mr. Chair, and thank you, Director Hopper.

I would just like to jump into this and make a statement also, about when the Chair mentioned how production of oil on Federal lands has not increased, yet on private and state lands has increased. I would like you to respond to the fact, or agree or disagree with me, that we are not comparing apples to apples, in the sense that if we eliminate where there has been a reduction in offshore drilling, which has decreased because of, as we know, the tremendous devastation that occurred in the Gulf, if we just look at Federal lands onshore, and compare those to state lands onshore, Federal land production of oil and gas since 2008 has increased by 45 percent. That is what is in comparison to state and private lands onshore. Is that not true?

Ms. HOPPER. I believe that is what the data show, sir.

Mr. LOWENTHAL. But I would like to kind of move to another realm, and that has to do with climate change. I like the title of this hearing, it refers to the future impacts of offshore leasing programs, because I think we have a responsibility to look at the broader impacts of the plan, not simply the energy supply impacts, but also the environmental and climate impacts.

However, BOEM's draft program does not have a lot to say about climate change. It describes the sensitivity that different parts of the OCS have to climate change. But, otherwise, just gives a cursory description about climate impact uncertainty, and appears to punt the issue to the Environmental Impact Statement. That would be fine, if BOEM followed the new draft NEPA guidance from the Council on Environmental Quality that instructs agencies to consider the downstream climate effects of their actions. That is, how much carbon dioxide is emitted by burning the oil and gas that would be produced under the 5-year program.

But for the 2012–2017 program, BOEM doesn't do that at all. The final Environmental Impact Statement for that said consumption is not considered, because the scope of this EIS is limited to issues that have a bearing on the decisions for the proposed leasing program.

However, given the Secretary's statement last month, that helping our Nation cut carbon pollution should inform our decisions about where we develop, how we develop, and what we develop, is BOEM going to include a more robust analysis of the potential greenhouse gas emissions from this leasing program? And would that include the social cost of carbon, as my colleagues and I are recommending?

Ms. HOPPER. Thank you for that question. Yes, I am very aware of the draft guidance that CEQ has put out. I would point out that it is still draft, so we haven't gotten our final direction from CEQ yet.

You are right, in that our programmatic EIS for this proposed program will take a look at the greenhouse gas impacts of the extraction of the natural resources. And I think it is a conversation that we are still having with the Secretary about how much further beyond that we take it.

I would agree with you, that sort of the world in which we lived in when we prepared the EIS for the 2012–2017 is a bit different

than where we find ourselves today. So, I think there is certainly room for more conversation about that.

Mr. LOWENTHAL. Thank you. I just want to now change—and I do hope that we really begin to address these issues.

When you talk about the leased acreage that is offered, what percentage of acres that are offered for lease actually get bid on by the industry?

Ms. HOPPER. It is a very small percentage. Over the course of time, it has ranged to sort of between 9–11 percent.

Mr. LOWENTHAL. And with the drop in oil price, has that affected this at all, in terms of percentages?

Ms. HOPPER. I do believe so, sir. In the sales that we have had in this current program, we are averaging about a 3 percent leasing of the acres that we offer. In the sale we had right after I was here last time, we offered 41 million acres for lease, and we leased just under a million.

Mr. LOWENTHAL. So there is a lot of acreage out there that is being offered that companies aren't bidding on. Is that because you are offering acres that just don't have a lot of resources?

Ms. HOPPER. In the Gulf of Mexico, we really make all acres available. So, industry makes decisions about sort of where the prospects are and where they want to utilize their capital.

Mr. LOWENTHAL. I think my time is up. I am going to continue to follow this line of questioning, and so I yield back to see if we have another.

Dr. FLEMING. All right. The gentleman yields back, and the Chair now recognizes Mrs. Lummis.

Mrs. LUMMIS. Thank you, Mr. Chairman. I am a little unclear about how you are going to finish off the current 5-year plan before proceeding to the next 5-year plan. So, my first questions are going to deal with the current 5-year plan.

Now, you have included, there are eight potential lease sales that remain under the current program. Correct?

Ms. HOPPER. That is correct.

Mrs. LUMMIS. OK. Will the three Arctic lease sales included in the current 5-year plan remain on schedule?

Ms. HOPPER. To date they remain on schedule. They are in various phases of development. Both the Chukchi and the Beaufort have had the call for nominations, and information has gone out. We have gotten public comments, and we are assessing those. The Cook Inlet sale is a little bit further along. I believe we have finished the scoping process, but we are further along in the development of the Environmental Impact Statement.

It will ultimately be the Secretary's decision about whether the sales take place. But as of today, we are on track to have those sales.

Mrs. LUMMIS. OK. Same question about the Gulf of Mexico. Do you intend to conduct all five of the lease sales in the Gulf of Mexico that remain under the current 5-year program within these 5 years?

Ms. HOPPER. Certainly. Again, sort of that same caveat, that the Secretary makes the ultimate decision. But we at BOEM are proceeding forward with the environmental assessment, the call for in-

formation, and the evaluation of all five of those lease sales. Yes, ma'am.

Mrs. LUMMIS. OK. Under your proposals for the 2017–2022, it is the lowest number of planned lease sales since at least 1980. Why is that?

Ms. HOPPER. Well, as I was explaining to the Chair, when we changed the way in which we are leasing the Gulf of Mexico to go to a regionwide, rather than planning area leases, we consolidated all of those sales together. So, if you broke them out in a way in which we break them out now, they would add up to 30 instead of 10. We could probably talk all afternoon about the various ways to cut those numbers.

But the sort of answer is that the Gulf of Mexico will be up for lease 10 times, the entire thing, 10 times during that proposed 5-year plan, whereas today it is 5 times for the Western, 5 times for the Central, and twice for the Eastern.

So, I think I am not as concerned about the number of sales as I am about what is available. And what is available is the entire Gulf of Mexico. Similarly——

Mrs. LUMMIS. OK, let me switch, can I switch to the Atlantic?

Ms. HOPPER. Of course.

Mrs. LUMMIS. OK. Was the decision to offer only one lease sale in the Atlantic based in part on estimates of undiscovered technically recoverable resources?

Ms. HOPPER. I think the decision to offer one lease sale in the Atlantic is predicated on the fact that that is a frontier area. We have not had a lease sale there since 1983. As you said, we don't have a good understanding of what that resource is. And we thought sort of putting forward a strategic plan about understanding the resource, and then having a lease sale, was the most thoughtful and kind of considerate-of-the-process way to go forward.

Mrs. LUMMIS. Is the data old?

Ms. HOPPER. Yes.

Mrs. LUMMIS. From the Atlantic?

Ms. HOPPER. Yes, ma'am.

Mrs. LUMMIS. Is it correct that most of that data was collected in the 1970s?

Ms. HOPPER. I believe the 1970s and the 1980s, yes.

Mrs. LUMMIS. Now, one more question. I have time for one more.

The second panel today will show that industry has expressed an interest in participating in more lease sales than you propose, including in the Atlantic. Considering that the 5-year program is a ceiling on lease sales, and that you have the flexibility to postpone or cancel lease sales, wouldn't it make more sense to err on the side of more?

Ms. HOPPER. I think the draft proposed plan that we put out is the Secretary's and BOEM's best thought about the appropriate number of lease sales to have. We really looked at it from an acreage and a resource perspective, in that we didn't count the number of lease sales. That wasn't as important to us as the number of acres, over 300 million acres, as opening up the new area in the Atlantic, offering the entire region, the entire Gulf of Mexico numerous times. That was what we found persuasive.

Mrs. LUMMIS. Thank you, Mr. Chairman. I yield back.

Dr. FLEMING. OK, the gentlelady yields back. The Chairman recognizes Mr. Gallego for 5 minutes.

Mr. GALLEGO. Thank you, Mr. Chair.

Director Hopper, this is going to fall a little, I think, along the questioning of Congressman Lowenthal; how many millions of acres of leases do we currently have that aren't actually producing oil right now?

Ms. HOPPER. OK. It is going to require me to do one quick thing of math. So we currently have——

Mr. GALLEGO. Round about, yes, OK.

Ms. HOPPER [continuing]. About 24 million acres are leased but not currently producing.

Mr. GALLEGO. Any idea how many years those acres have been leased and have not been producing?

Ms. HOPPER. You know, I don't have it. By statute, our lease terms are 10 years.

Mr. GALLEGO. Ten years, OK.

Ms. HOPPER. I don't have it sort of blocked out, when each of those came into lease.

Mr. GALLEGO. And I guess I am going to take the contrarian point of view from the rest of the committee here, except for Ranking Member Lowenthal. But, in my opinion, the demand for oil is going to go down, not up, in the near future. But it seems like, instead of trying to compensate for that, what we are doing is actually putting out more acres for lease, with no guarantee that they would actually start producing at any point.

Is there any thought process to do some rollbacks in the future, especially considering that it seems that we are going to have a drop in demand, at least for the next 2 years, when it comes to the oil price?

Ms. HOPPER. Well, as I mentioned, the OCSLA, the Outer Continental Shelf Lands Act, is the statute that guides what BOEM does. And we have a statutory obligation to expeditiously make available acres for lease. So, I think it is important that we offer as many acres that we think balance the environmental, economic, and sort of human aspects of all of that.

So, I think we need to continue to do that. But industry will, obviously, make a decision, first of all, about what they lease in the first place, and then what they develop. The only caveat I would point out about kind of producing versus not producing is that there is a fair amount of activity that can happen before something is producing. So there is geophysical and geotechnical surveying happening that is an important element of the development process. It doesn't quite get captured in the development category.

Mr. GALLEGO. I yield back my time.

Ms. HOPPER. Thank you, sir.

Dr. FLEMING. The gentleman yields back, and Mr. Mooney is recognized.

Mr. MOONEY. Thank you, Mr. Chairman and Director Hopper.

So, first question is, while I understand you cannot add areas to the existing plan once drafted, can you clarify, however, that under the Outer Continental Shelf Lands Act, that you do have the au-

thority to add lease sales to the proposed areas that are currently being scoped?

Ms. HOPPER. I do not believe that is so. I think we cannot offer lease sales.

Mr. MOONEY. OK. And then, additionally, would you be able to, or are you able to, move up the lease sales that are scheduled? For instance, moving up the Atlantic lease sale to an earlier date than 2021, like it is scheduled now?

Ms. HOPPER. I do believe we have the discretion to change the timing.

Mr. MOONEY. OK. For those acres that are leased, but with no activity, does the Federal Government receive money for those acres?

Ms. HOPPER. Excuse me, yes. There are rental payments.

Mr. MOONEY. OK. As BOEM has noted in the past, there is no evidence of seismic surveying causing harm to marine mammals. In fact, the acquisition of seismic data could be beneficial in generating increased revenue into the Federal Treasury in the form of bonus bids, should the data show that more resources may exist in new acreage such as the Atlantic.

So, can you explain where the seismic permits are in the process, and, for example, why none have yet been approved?

Ms. HOPPER. Certainly. So, I think it is important to sort of take a moment and understand that, as I said earlier, the Atlantic really is a frontier area.

Mr. MOONEY. OK.

Ms. HOPPER. I don't think it is a good analogy to say, "Well, everything is happening in the Gulf of Mexico seamlessly. Why can't you just sort of transplant that whole structure here, to the East Coast?"

So, we have taken a thoughtful and careful look, and are developing the regulatory pathway for those G&G permits, which has meant that all of the states up and down the East Coast, under the Coastal Zone Management Act (CZMA), have the right to take a look at those. NOAA said, "Yes, you can take a look at those" in November of last year. My understanding is that the permittees transmitted that information to the states in January or February. They have a 90-day period. So those should be coming back to NOAA soon for the CZMA review.

We, at the BOEM side, have really taken seriously our obligation to engage stakeholders, as states all up and down the East Coast look at both seismic surveying and then perhaps, ultimately, oil and gas development that they may have never considered before. We have held public meetings in those states. I think there are eight of them, total. We have done six, we have two more left that will be done in the next week or so, and we have invited public comment on those permits.

So, what is happening right now is that we are finishing up the public comment period. We will incorporate those into the environmental assessment. The Department of Defense plays a role in taking a look at those permits. Obviously, the ocean is a busy place; NASA also takes a look.

There is a clear trajectory toward permit either approval or disapproval, but it sort of has an Eastern Seaboard gloss to it, if you

will. I think that this will not always be the case. I think, as our citizens sort of have a better understanding of the process and what is out there, I think it will go more quickly. But we really did have to create something unique for the East Coast.

Mr. MOONEY. OK. Thank you, Mr. Chairman. No further questions.

Dr. FLEMING. The gentleman yields back. Mr. Costa is recognized for 5 minutes.

Mr. COSTA. Thank you very much, Mr. Chairman. I guess I am having this feeling, as a famous American baseball player, Yogi Berra, once said, "It is deja vu all over again." We had this hearing in 2007, I guess two programs ago, but it is always good to get updated. And the challenge, I really think, here is always striving to get a balanced energy program in this country. And I observe from administration to administration, going back to the previous administration and the one before that, that balance is oftentimes in the eye of the beholder.

But, clearly, what has been lacking that I think maybe we are getting better at, is the interim and the long-term view of America's energy needs. When I first took office 11 years ago, we were importing over 60 percent of our energy needs. Today it is a little over 40 percent of our energy needs. That is significant in 11 years. And if we continue on this pattern of these leases that I think are available to us off the Atlantic, as well as off the coast of Alaska, and other energy sources, both domestic that are inland, I think, with a balanced approach, we can get to probably a little over 20 percent of our energy needs.

Have you made projections, Director Hopper, in terms of the glide path on if these leases are utilized, the best estimates, in terms of, for example, what is available on the Atlantic leases on the areas that are shaded, coupled with those off Alaska, where this might put us, in a 10-year projection?

Ms. HOPPER. We have certainly done a resource characterization, and have estimates about how many billion barrels of oil equivalent are in the areas, in each of the 26 planning areas. I have to admit, I don't have them memorized.

But we think there are significant resources off Alaska——

Mr. COSTA. No, we know there are.

Ms. HOPPER. Right.

Mr. COSTA. Right. I mean there are significant resources off of California, but they are difficult to get, for a lot of reasons.

Ms. HOPPER. I apologize, perhaps I did not understand your question.

Mr. COSTA. Well, no, I am trying to understand if these leases are developed and utilized over the course of the next 10 years, how much do you believe that will further reduce America's dependency on foreign sources of oil or gas.

Ms. HOPPER. Oh, I got it, sorry. So——

Mr. COSTA. I mean we went from 60 percent plus to a little over 40 percent.

Ms. HOPPER. Right.

Mr. COSTA. I am trying to figure out how long it will take, under what is available, for America's energy companies to reduce that dependency further.

Ms. HOPPER. Right. So my understanding is that yes, we have taken a look at that. And, in combination with the Energy Information Administration, they released——

Mr. COSTA. Right.

Ms. HOPPER [continuing]. Their analysis yesterday.

Mr. COSTA. No, I know you coordinate.

Ms. HOPPER. Right, right. They (a) project that the oil production on the Outer Continental Shelf will continue to rise over the next 5 years and that (b) we will be a net exporter of energy in the near term, and I think those two things go together.

I don't have, perhaps in my huge DPP there is a technical analysis of exactly that, but I think, sort of on the broad brush, yes, the increased oil production that will happen on the Outer Continental Shelf under this leasing plan will decrease our imports of oil.

Mr. COSTA. No, and I think it is really incumbent, notwithstanding different political points of view, that we try to find a bipartisan agreement on where we go in the next 10 years, energy companies need time to plan, invest.

Ms. HOPPER. Right.

Mr. COSTA. These are not inexpensive areas in which to extract energy. Clearly, it has tremendous geopolitical impacts, as it relates to ourselves, our involvement in the Middle East and elsewhere, as well as to our European allies. And Congress has to contemplate what we do with the exportation of potentially, as an example, natural gas, which would be, I think, a significant gamechanger in Europe, with the irascible Putin and his own energy policy.

So, this is all important. I think we need to continue to strive in the direction we are going. Some can argue we are not going fast enough, some can argue that it is about right, some will say we are going too fast. But, clearly, the direction is in the right point.

Mr. Chairman, I have expired my time. But I thank you for continuing to provide this update.

Ms. HOPPER. Thank you, sir.

Dr. FLEMING. The gentleman yields back. Mr. Wittman is recognized for 5 minutes.

Dr. WITTMAN. Thank you, Mr. Chairman. Director Hopper, thank you so much for joining us. I want to get right to the draft 2017–2022 proposed energy development plan issued by the Department of the Interior.

There still seems to be a lot of uncertainty and caveats there about, the Department has still said that they are continuing to consider areas to be included or not included in that plan. As you know, in Virginia, there is broad bipartisan support for offshore energy development off of Virginia. Governor McAuliffe, Senators Kaine and Warner and the vast majority of the Virginia Congressional Delegation feel very strongly that we ought to be able to develop Lease 220 as part of that OCS effort.

As you know, both the Department and BOEM, we want to make sure that, in the development of that plan, and with the finalization of that plan, that you keep in mind the broad bipartisan support in Virginia, and we can count on Virginia's area on the Outer

Continental Shelf being included in the finalized plan for not just energy exploration, but energy development.

Ms. HOPPER. Right. I will give you perhaps what you will find is the same unsatisfactory answer that my Secretary gave you, which is that we can't make any guarantees at this point, that the statute really does lay out a deliberative process by which we evaluate this. But I can tell you, obviously, as you know, sort of the input of governors and of state leaders like yourself, Federal leaders like yourself, is one of the factors that we consider in evaluating that.

So I will assure you that that will continue to be an important factor.

Dr. WITTMAN. Let me ask this, too. I know that last year there was a request for information put out by BOEM, and Governor McAuliffe was very direct in asking the agency to consider the history of the uncertainty that is being created.

As you know, Lease 220 was included in 2006 in the 5-year plan, only to be removed in 2010. Obviously, that uncertainty creates a lot of problems. Now, potentially, Virginia and Lease 220 wouldn't be included in a plan until 2021, 15 years later. Obviously, lots of lost opportunity, lost investment. We believe, in Virginia, that it can create over 25,000 new jobs. We have a facility located there in Virginia that if, at the time, energy development was allowed, there was a refinery there on the shore that could take every bit of material, hydrocarbons, whatever it may be, oil or natural gas, and refine it. Unfortunately, that facility had to close. We still think that we can regenerate that facility.

But the uncertainty there is of concern to all of us, and I wanted to make sure that, in the planning process, are there any plans to further limit what can be done there in Lease 220, or the decisions that are being made about the development of energy sources there? I know that, in sort of a back door way, the Department has said they will allow for exploration. The problem with allowing for exploration without the certainty of being able to develop energy resources there, you are not going to find people that are going to make that significant investment to do the exploration.

So, is there going to be continuity in the Department's policy and process to make sure that not only is there exploration, but also certainty and development of energy resources there, in the OCS off of Virginia?

Ms. HOPPER. Yes. So I had the pleasure of being in Norfolk with your governor a couple of weeks ago——

Dr. WITTMAN. Yes.

Ms. HOPPER [continuing]. Talking about offshore energy. And he clearly is an enthusiastic supporter of all forms. And we talked about this, and I understand, I really do, having represented private companies for a long time, that regulatory certainty and a clear path forward is very important. So, I think you will find, from our Department, a consistent method.

As I said, it is our statutory obligation to take a very careful look. But, as I was talking with Congressman Mooney earlier about the G&G permits, this is not the Gulf of Mexico, this is the Eastern Seaboard, which just has a different character and a different familiarity. But as we sort of walk that path together, we will remain

committed to both exploration and, if there are resources there, and the Secretary decides to hold a lease sale, then we are fully authorized to permit and develop it as well.

Dr. WITTMAN. Well, I think there has to be that continuity there. Because, right now, the understanding is that exploration will take place sans the certainty of being able to develop that. And there is not a single company that is going to go to their shareholders and say, "We are going to invest money into an area of exploration where we have no certainty about being able to develop."

So, I think that continuity is critical in the plan there, in making sure that when it comes to our state officials, and our governor, and the things that they are doing, that certainty is critical, not only for the state, but also here at the national level, as we try to put together some type of energy policy.

So, I would implore you to make sure that you provide that certainty, timeliness in the decision, and certainty as far as the definition of the decision. You know, uncertainty or vagueness in the decision is not going to get us to the point of having that investment that we need.

So, thank you, Mr. Chairman. With that, I yield back.

Ms. HOPPER. I understand, thank you.

Dr. FLEMING. The gentleman yields back. And I believe Mr. Lowenthal would like to be recognized for 30 seconds.

Mr. LOWENTHAL. Yes, I just want to introduce into the record a letter from marine scientists, over 70, of which, interestingly enough, 7 of them, 3 from Duke University, 2 from University of North Carolina, 2 from East Carolina University, are united in their concerns over the introduction of seismic oil and gas exploration along the U.S., Mid-Atlantic, and Atlantic coasts. They think it represents a significant threat to marine life. I just want to introduce that into the record.

Dr. FLEMING. OK. And if there are no objections, so ordered.

Well, Director Hopper, we thank you for your testimony and taking our questions. And we may want to submit further questions in writing, and would like to have a response for them. Thank you for your work today.

Ms. HOPPER. Thank you very much.

Dr. FLEMING. And you are excused. Thank you.

The Chair would then like to call forward Mr. Mark Shuster, Executive Vice President, Upstream Americas Exploration, Shell Oil Company; Mr. Robert Hobbs, Chief Executive Officer, TGS; Mr. Chett C. Chiasson from Greater Lafourche Port Commission. Mr. Chiasson, am I saying that correct? I have to change to my Louisiana diction. But I was trying to read the recreation of your name there, and it is a little different. Chiasson is what I am used to; and, Ms. Emilie Swearingen, Commissioner, Town of Kure Beach, North Carolina.

Let me remind our witnesses today that you will each have 5 minutes to give your testimony. If for some reason you don't get to all of your written testimony, it will all be submitted in the record, so don't worry about that. You have 5 minutes, and you will be under a green light for 4, then the yellow light for 1 minute. When the red light comes on, it is time to wrap it up quickly.

So we thank you, again, for being here for testimony.

Therefore, the Chair now recognizes Mr. Shuster to testify for 5 minutes.

STATEMENT OF MARK SHUSTER, EXECUTIVE VICE PRESIDENT, UPSTREAM AMERICAS EXPLORATION, SHELL OIL COMPANY

Mr. SHUSTER. Good morning, Chairman Lamborn, Ranking Member Lowenthal, and members of the committee. Thank you for the opportunity to testify today to examine Outer Continental Shelf, OCS, exploration and production, and why it is important for our country.

Shell commends DOI's careful analysis in the draft proposed program, the DPP. The document illustrates the potentially enormous oil and gas resources in the OCS which deserve thoughtful and serious evaluation.

There are two important changes that should be made to the proposed program. First, it should include more areas in the Eastern Gulf of Mexico. And, second, there should be more lease sales in the Atlantic. With these changes, the plan will attract the capital necessary to develop the offshore resources and meet the Nation's future energy needs.

The Gulf of Mexico has been important for the United States, both for energy security and revenue generation. Shell has been operating in the Gulf of Mexico for more than six decades, and produces approximately 228,000 barrels of oil equivalent each day, Shell's share, from the basin. But production in the Gulf will begin to decline in the latter part of this decade. In light of this decline, the proposed program plays a critical role in determining how domestic offshore production will evolve, and what role it will play in 2030 and beyond.

So, let me make my two points. First, the proposed program must include access to broad areas of the OCS. Why? Because not every lease has oil and gas. And, even where oil or gas is found, it may not be economic to produce. As an industry rule of thumb, it takes about 100 OCS lease blocks to get 10 drillable prospects. And of these 10 prospects, only 1 will be a commercial discovery.

The DPP does include new areas in the Mid- and South Atlantic region. This is good. The area holds an estimated 9 billion barrels. The key acreage in the Eastern Gulf of Mexico, which also holds an estimated 9 billion barrels, was excluded from the plan. These Eastern Gulf areas are not only rich in resources, they are also adjacent to existing infrastructure. In order to properly study and evaluate this area, the proposed program should be revised to include Eastern Gulf acreage. Specifically, the DOI should do what it did in the 2010 plan. It should include the Eastern Gulf areas, contingent on Congress lifting the moratorium.

Second, the government should include more lease sales in the proposed program, and more sales early in the 5-year program. Why? Because evaluation of lease prospects is a lengthy process. Also, it can take 10 years or more from drilling an exploration well to first oil production, especially in new areas like the Atlantic.

Companies will invest in the OCS only if the United States has policies that encourage it. Access to perspective acreage and regular, frequent lease sales through a robust proposed program are

critical. It is important to recognize that other countries with offshore oil and gas resources are actively inviting such investment. In this hemisphere, from Canada to Mexico to Brazil, countries are competing for private investment to develop their resources and realize the benefits of energy security, jobs, and economic growth.

When companies like Shell make decisions about where to invest and explore, each opportunity is weighed against others. If the United States adopts policies that prematurely remove areas and limit leasing opportunities, it will diminish our country's competitive edge for decades to come.

In conclusion, new OCS production affords our country with a bountiful opportunity. To that end, the 2017–2022 proposed program should include more areas in the Eastern Gulf, and earlier, and more frequent lease sales in the Atlantic. This will attract the capital needed to develop the offshore resources, and contribute to energy security for future generations. It will positively impact our country in 2030 and beyond. Thank you very much.

[Slide]

Mr. SHUSTER. I would also like to point out we have a graphic on the screen there that shows the areas that are open for leasing offshore along the Atlantic margins. And the only areas that are not shown there are the Atlantic margin and the Eastern Gulf of Mexico.

[The prepared statement of Mr. Shuster follows:]

PREPARED STATEMENT OF MARK SHUSTER, EXECUTIVE VICE PRESIDENT, UPSTREAM AMERICAS EXPLORATION, SHELL OIL COMPANY

INTRODUCTION

Mr. Chairman and members of the subcommittee, I would like to thank you for having this hearing to examine the Outer Continental Shelf (OCS) and the role it can play in helping America meet its energy needs and for inviting me to participate in the hearing to give an industry perspective examining the future impacts of President Obama's Offshore Energy Plan.

As Executive Vice President of Shell Exploration in the Americas, I lead a team of professionals who identify, invest in and explore for oil and gas resources. I have worked in the Exploration and Production industry for almost 30 years, and spent some of that time studying the U.S. Atlantic and Eastern Gulf of Mexico's resource potential. I can give an informed view of the these offshore areas, and also discuss why the Proposed Program should include more frequent and earlier lease sales in the U.S. Atlantic region and include more areas in the Eastern Gulf of Mexico that are adjacent to and on trend with existing infrastructure and production.

Shell appreciates and commends BOEM's careful analysis in the Draft Proposed Program (DPP). It clearly demonstrates the OCS's potentially enormous economic and energy value to the Nation, which deserves a careful and serious evaluation in the ongoing 5-year planning process.

This hearing is timely and, some might even say, urgent. Producing our natural resources doesn't happen overnight—we need to plan for production decades in advance. Today we are realizing the economic benefits from abundant domestic energy production that is possible because of decisions that were made years ago. We must continue to make decisions today that will allow us to continue to realize these benefits for generations to come.

World energy demand will double in the next 40 years. This demand can only be met if all sources of energy and efficiency are accessed. We cannot ignore that oil and gas will play a major part in meeting America's energy needs for decades to come.

As a responsible integrated energy company, Shell recognizes that access alone will not solve our energy challenges. We also need alternatives, renewables and effective mitigation technologies. However, the United States has vast oil and gas resources on the OCS—much of which remains under-evaluated and inaccessible.

Access to our natural resources will contribute to U.S. energy security and economic health by creating U.S. jobs, revenue, and energy security.

Based on the Bureau of Ocean Energy Management's assessment, the Mid- and South Atlantic contains a resource potential of about 9 billion barrels, and the Eastern Gulf of Mexico holds about the same amount. Innovation and technology advances have accelerated exploration and production in deep water areas around the world, including in the Gulf of Mexico, however, deep water exploration has yet to start in the U.S. Mid- and South Atlantic and in the Eastern Gulf of Mexico. Therefore, the socio-economic benefits from development of those areas are unrealized and will remain unrealized without a change in policy.

A critical step to including the Eastern Gulf of Mexico in the 5-year program is to ensure that the required Environmental Impact Statements cover the Eastern Gulf of Mexico as well as the planned Mid- and South U.S. Atlantic areas. The government must also move quickly to approve seismic permits so that new resource data can be collected. Seismic acquisition, properly mitigated, causes no harm to marine animals. Enacting Federal Revenue Sharing legislation which allocates bonus and royalty revenues to those coastal states with existing or planned offshore development is also an important and necessary step forward. This has been done successfully in the Gulf of Mexico.

Today, deep water exploration and production in the Gulf of Mexico follows the principle of multi-use—that is sharing waters with fishing and shipping interests and others, while maintaining safety and environmentally sound practices. Oil and gas exploration and production can be conducted safely, which the industry has demonstrated over the last several years with support and oversight from the Bureau of Safety and Environmental Enforcement.

The record clearly shows that offshore development can occur in an environmentally responsible way. We should demand no less.

There are those who suggest a "do nothing" approach to OCS development is the best choice. Perhaps they have an outdated view of how the oil and gas industry operates today. We do not have to choose OCS development *or* the environment. We can safely access OCS resources and be good environmental stewards.

I am hopeful that this hearing will advance discussions so we can come together around the facts, reject the myths and move forward on solutions that will help sustain our Nation's future energy supply while fueling economic growth.

Today I will discuss three major points to highlight why new areas of the OCS should be made accessible for exploration.

- First, the vast U.S. oil and gas resources that can and must play a critical role in meeting future energy demand and in fueling the economy;
- Second, the oil and gas industry's ability to co-exist with other interests in our oceans; and
- Third, the renaissance of activities by other countries to secure investment in their OCS programs.

ABOUT SHELL

Before addressing these points, let me provide some background information about Shell. We are an integrated oil and gas company, dedicated to meeting ever-growing energy needs efficiently and responsibly. Shell is one of the largest leaseholders in the OCS and one of the largest producers of oil and natural gas from Federal OCS leases in the United States. In the Gulf of Mexico, Shell currently operates seven major floating offshore facilities, (six deep-water tension-leg platforms and one ultra-deep-water spar platform); five fixed-structure facilities and platforms; numerous subsea production systems; as well as one of the largest contracted drilling rig fleets in the Gulf. We are also part owner of four producing projects in the Gulf operated by other oil and gas companies. 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 the Americas 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.

GLOBAL ENERGY DEMAND

The world must grapple with the reality that global energy demand is projected to increase by roughly 50 percent over the next 20 years and could double by 2050. As the global recession continues to fade and economies recover, demand will accel-

erate. A key driver of increased demand will be strong economic growth and an enormous, emerging middle-class in developing nations.

To address this demand, we will need all sources of energy—oil and natural gas, alternatives, renewables—and significant progress in efficiency. Oil and gas will be the dominant energy source for decades. Renewables and energy efficiency will play an ever-larger role, but still not large enough to meet demand independently.

Shell is actively pursuing research and development into next-generation biofuels. We also have a wind business in North America and Europe.

Future growth for alternative energy forms will be paced by the speed of technological development, public and private investment capacity, government policies, and the affordability of energy supply. Still, it takes several decades to replace even 1 percent of conventional energy with a renewable source. The effort to tip the scale toward more renewable sources of energy is worthwhile; however, even unprecedented growth in renewables would leave an enormous energy gap that must be filled with reliable oil and gas energy sources.

Governments have a role to play in enacting policies that will foster a viable, efficient and workable marketplace that allows technology and innovation to move forward. Industry—and most particularly the energy industry—has an important role to play as well in co-creating solutions to continue to improve industry standards and operations, and operate in an environmentally sustainable way.

BENEFITS OF DOMESTIC OIL AND GAS DEVELOPMENT

The Gulf of Mexico has been a critical component of this country's energy supply for decades; however, oil and natural gas production in the Gulf will begin to decline in the latter part of this decade. In light of this decline, the Proposed Program plays a critical role in determining how domestic offshore production will evolve and what role it will play in 2030 and beyond.

Shell had hoped additional new areas would be considered and studied in the DPP. The DOI's decision to prematurely defer areas seems contrary to the OCS Lands Act directive to "make resources available to meet the Nation's energy needs," and "to insure the extent of OCS resources is assessed at the earliest practicable time." The limited nature of the proposal also conflicts with the DPP's general conclusion that, with the advent of new safety measures adopted by government and industry, "offshore oil and gas development can be conducted safely and responsibly."

This country's OCS areas can help meet future energy demand and drive economic growth and prosperity.

- Global demand for energy will continue to grow, and existing and developing energy sources may well struggle to keep up with this increased demand.
- The United States has immense oil and gas resources on the Outer Continental Shelf, and it is within the government's ability to further reduce imported energy with more domestic supplies.
- Domestic oil and gas production provides energy security, creates jobs, generates Federal revenue, and drives economic stability.

A 2011 study by Wood Mackenzie shows that developing the "off limit areas" in the United States could:

- Create more than 1 million new jobs; and
- Generate $127 billion in new government revenue by 2020.

An estimated 9.2 million people are directly or indirectly employed in the domestic oil and gas industry. This makes the industry one of the largest employers in the Nation. The industry has some of the highest paying jobs in the United States, about two times the national average. A growing oil and gas sector has a positive impact on many other sectors of the economy, such as 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.

Every U.S. president over the last 40 years has encouraged Americans to become less dependent on foreign oil through conservation and alternative fuels. Today, breakthroughs in technologies and processes enable the industry to take advantage of our energy resources like never before, and using them to access the resources contained within the OCS will help our country achieve that goal.

According to General James Jones, Former National Security Advisor to President Obama, "A nation that fails to secure the energy its citizens and its economic engine need to keep functioning leaves itself vulnerable to external contingencies in a dan-

gerous and uncertain world, and to the whims of foreign leaders and other actors who many not always have its interests at heart."

Domestic energy production is critical for the security and prosperity of the United States. Money spent on domestic energy circulates in the U.S. economy, and increases domestic economic activity and jobs. OCS activity will also help address our national debt, bringing in hundreds of billions in Federal revenues through taxes, royalties from oil and gas production and the economic activity that is stimulated as a result of exploration and development.

COMPETING WITH OTHER NATIONS

As the United States ponders future development of its OCS resources, other countries fortunate enough to be situated on the Atlantic coast are rapidly moving forward seizing opportunities. Most of them—in fact almost all of them—are actively exploring or preparing to explore for oil and gas off their coasts.

In this hemisphere, from Canada to Mexico to Brazil, countries are competing for private investment to develop their resources and realize the benefits of energy security, jobs and economic growth. When companies like Shell make decisions about where to invest and explore, each opportunity is weighed against others. If the United States adopts policies that prematurely remove areas and limit leasing opportunities, the U.S. diminishes our country's competitive edge for decades to come.

As you can imagine, the current price environment has the industry, including Shell, taking a very hard and strategic look at exploration activities and budgets. Decisions about where to explore are carefully weighed against other global opportunities, and restricting areas in the United States diminishes our country's competitive edge when compared to other nations. One example is in Nova Scotia, Canada, where about 3 years ago, offshore lease blocks were made available. Shell evaluated its global prospects and decided to compete for those licenses. We currently plan to invest $1 billion in seismic, research, exploration and development of the licenses. Since the U.S. Atlantic was not available in the U.S. leasing program, investing the dollars in the United States was never factored into the 15-year investment decision we made on the Canadian licenses.

The Gulf of Mexico has kept the United States globally competitive for decades. The U.S. stands to lose a lot if we don't make new acreage available.

Success in the Gulf of Mexico has been due in part to reliable and predictable access to new acreage over time—and the same consistency is needed in the Atlantic, Eastern Gulf of Mexico and other areas of the OCS.

OFFSHORE SAFETY STANDARDS

Shell has demonstrated, in the Gulf of Mexico and elsewhere, that it can produce oil and gas safely and efficiently. Advanced technologies continue to help us produce more with a smaller environmental footprint. Technology enables us to find and produce oil and gas farther from shore and at greater depths.

Since 2010, new regulatory requirements have raised the bar on safety and industry has made substantial changes in its operations to meet them. There is no question the industry must be held to the highest standards both for protecting the environment and protecting the health and well-being of our workers and the communities in which we operate.

Let me highlight some of the progress made by the Federal Government and industry:

- The Final Drilling Safety Rule is focused on minimizing the likelihood of an incident and addresses barriers that should be in place to prevent a hazard. Prevention is a top priority.
- Responding to an incident, should one occur, has been substantially enhanced with new, more stringent requirements for containment capability. The Marine Well Containment Company (MWCC), which Shell initially formed in partnership with three other oil and gas companies, is designed to do just that. The MWCC is a stand-alone organization committed to improving capability for containing a potential underwater well control incident in the Gulf of Mexico.
- The Center for Offshore Safety has been created to promote the safety of offshore operations and complements the government's regulatory role. The Center will provide an effective means for sharing best practices. Members will be subject to independent, third-party auditing and verification. The Center will operate around an existing safety framework known as RP75, or "Recommended Practice for Development of a Safety and Environmental Management Program for Offshore Operations and Facilities."

- The industry has also significantly increased its resources to respond to a major oil spill by adding vessels, equipment and personnel.

In addition to meeting regulatory requirements, a company must relentlessly foster and promote safety every single day. At Shell we call this Goal Zero. Everyone who works for us—both employee and contractor—is expected to comply with the rules; intervene when anything seems unsafe; and respect people, the environment and our neighbors. Compliance is not optional.

We have personal safety systems and procedures with clear, firm rules; simple "do's and don'ts" covering activities with the highest potential safety risk. We take this very seriously in every situation—from prohibiting our employees and contractors from using mobile phones in any way, shape or form, while they are driving, to obtaining authorization before entering a confined space. We're very clear about these rules and people who cannot comply with our "Life Saving Rules" do not work for Shell.

We also have process safety systems in place to manage the safety and integrity of our operations and assets. Process safety is also managed through a variety of tools, such as well and facility design standards; established "operating envelopes"; maintenance and inspection intervals for safety critical equipment; and effective Management of Change processes.

Our approach also requires that all our drilling contractors develop a Safety Case to demonstrate how major risks are properly managed. A Safety Case shows how we identify and assess the hazards on the rig; how we establish barriers to prevent and control the hazards; and how we assign the critical activities needed to maintain the integrity of these barriers. Further, it guides the rig and crews in risk management; and requires and confirms that the staff has the appropriate training and meets Shell's required competencies.

A ROBUST REGULATORY PROCESS IS CRITICAL

Shell fully supports a robust permitting process. The bar for conducting safe and responsible operations is high in oil and gas exploration, and it should be. Shell fully understands and supports this.

We need a regulatory framework that is clear; and a regulatory process that is properly funded, efficient and robust. The process should lead to timely decisions, not "just-in-time" decisions. At the same time, permitting for oil and gas activity must be done thoroughly and based on sound science. Without that, legal challenges are likely and can also act to block a program.

RECOMMENDATIONS: HOW DO WE MOVE FORWARD?

There is no question the Federal Government has a critical role to play as a steward of our oceans. It also has a role to play in supporting the OCS leasing program and the sustainable development of our natural resources—as does the industry. To that end, Shell respectfully offers the following recommendations for your consideration:

- The U.S. Department of the Interior should include more lease sales in the Proposed Program for frontier areas, like the Atlantic, holding at least two lease sales—one sale early in the Program and one later, will allow companies to continue evaluating the resource in calculated stages, which is a lengthy process. The DOI should now schedule timely lease sales that will allow for prompt exploration of these areas. Without that, the Nation will be challenged to satisfy future energy needs and to advance U.S. economic and national security interests. Decisions about the 2017–2022 5-Year Program will impact this country in 2030 and beyond.
- The Proposed Program must include access to broad areas of the OCS because not every lease has oil and gas and even where oil or gas is found, it may not be economic to produce. Specifically, the DOI should do what it did in the 2010 plan—it should include the Eastern Gulf areas contingent on Congress lifting the moratorium.
- Shell supports the proposal to offer all Gulf of Mexico tracts twice a year. Such a proposal will provide flexibility for both government and private industry to respond to rapidly changing market conditions.
- Shell supports OCS revenue sharing for all states.
- Pursuing a serial exploration and appraisal program in a frontier area requires reliable and predictable access to new acreage over time. Shell encourages BOEM to issue a Final Program that provides industry the necessary certainty and predictability to support future OCS exploration.

- Federal permitting agencies must coordinate and streamline the permitting work. Multiple Federal agencies are now involved in issuing multiple Federal permits for a single offshore project. The regulatory process should not have open-ended time frames that leave permit applicants without a clear understanding of permit timelines. Rather, the regulatory process should have firm timelines and clear milestones marking the path to permit delivery.

CONCLUSION

Oil and gas will remain critical sources of energy for decades to come. Regardless of what projections you review, the country will rely on fossil fuels for more than 50 percent of its energy supply through 2050 and likely beyond that point. Furthermore, there are broad and sustained benefits in developing our own domestic resources. By accessing our domestic resources, we will create jobs, power the economy, supply revenue to governments, and provide energy security. Keeping this economic value here at home, we can at the same time move forward with investments in the next generation of technologies and energy solutions that will power the future.

Thank you. I am happy to answer any questions.

QUESTION SUBMITTED FOR THE RECORD BY CHAIRMAN LAMBORN TO MARK SHUSTER, EXECUTIVE VICE PRESIDENT, UPSTREAM AMERICAS EXPLORATION, SHELL OIL COMPANY

Question. The hearing delved into the promising resource potential that is currently off limits in the Eastern Gulf of Mexico Planning Area as a result of the Gulf of Mexico Energy Security Act of 2006. Can you provide further details, if available, on the potential economic and energy security benefits that would result from safe and responsible exploration and development in that area once the moratorium expires in 2022?

Answer. Thank you Mr. Chairman for the question. The Gulf of Mexico has been important for the United States both for energy security and revenue generation. Shell has been operating in the Gulf of Mexico for more than six decades and produces approximately 150 million barrels of oil equivalent each year from the Western and Central Planning Areas. The EIA predicts the GOM production will increase by 265,000 barrels per day by the end of this year. However, the GOM production is expected to start declining in the latter part of this decade. As discussed at the hearing, being prepared for that decline means exploring for new resources today. Exploring and production is a long process. In the GOM, it takes approximately 10 years to go from a lease sale to production of first oil while in frontier areas like the Atlantic it will take longer, 15–20 years. Part of the reason for the different timelines is the proximity to existing infrastructure and certainty of the regulatory process.

Our resource estimate for the Eastern Gulf of Mexico (EGOM) Planning Area is similar to that of the BOEM which in 2011 estimated the Barrels of Oil Equivalent of undiscovered technically recovered resources to be approximately 8 billion barrels. The EGOM is not only rich in resources, but also adjacent to existing infrastructure. This is important because the timeline for exploration and production of the EGOM will be similar to the other areas of the GOM, 10 years, instead of frontier areas, 15–20 years. Opening this area will also provide resources to fill the predicted decline, stable revenue sources to Federal and state governments, and economic and job security for those directly and indirectly working now in the GOM.

In this hemisphere, from Canada to Mexico to Brazil, countries are competing for private investment to develop their resources and realize the benefits of energy security, jobs and economic growth. When companies like Shell make decisions about where to invest and explore, each opportunity is weighed against others. Having areas like the EGOM and Atlantic open for leasing will attract the capital needed to develop the offshore resources and contribute to energy security for future generations.

Dr. FLEMING. OK. Thank you, Mr. Shuster.

The Chair now recognizes Mr. Hobbs for 5 minutes.

STATEMENT OF ROBERT HOBBS, CHIEF EXECUTIVE OFFICER, TGS

Mr. HOBBS. Chairman Fleming, Ranking Member Lowenthal, and members of the subcommittee, good morning, and thank you for giving us the opportunity to testify on the Administration's 5-year plan. My name is Robert Hobbs, I am CEO of TGS, a company that provides geoscientific data products and services to the oil and gas industry here in the United States and around the world. I am the immediate past chairman of the International Association of Geophysical Contractors. I also serve on the Board of Directors for the National Oceans Industry Association.

The energy resources of the Federal Outer Continental Shelf are vitally important to America's energy, economic, and national security. And the purpose of the 5-year plan is to provide a road map for the leasing of OCS areas. The 5-year plan provides the public, government, and industry with a measure of reliability and predictability in the leasing of offshore oil and gas resources.

While seismic and other geophysical surveys are permitted through a separate process, these surveys provide information that is critical to a successful 5-year plan, improving the economics of oil and gas production, and, importantly, lessening its environmental impact.

Before I outline how the geophysical sector fits into the plan, let me just spend a few moments explaining how we perform surveys, in this case, seismic surveys. And I will refer to a slide that will be projected on the monitors.

[Slide]

Mr. HOBBS. Geophysical surveys are the only feasible technology available to accurately image the subsurface before a single well is drilled. The use of modern seismic surveys is similar to ultrasound technology, a non-invasive mapping technique built upon the simple properties of sound waves. These surveys use acoustic sources to send sound energy deep into the earth's crust. As the sound waves return, we record them on hydrophones that may be towed up to 7 miles behind a survey vessel. The process allows us to record data to depths of 40,000 feet, and that is about 7½ miles below the earth's surface.

However, the data still needs to be processed before it can be interpreted and potential oil and gas reserves can be identified. Geophysical companies like mine, and our customers, the oil and gas companies like Shell, use some of the most powerful computers in the world in order to perform that processing.

[Slide]

Mr. HOBBS. The next slide shows a seismic source. This seismic source itself looks like what you see on the monitor. It is simply a cylinder that is filled with air, which is then released under pressure. Depending on the size of the survey, several of these cylinders will be used in a synchronized manner. The sound itself lasts only about a tenth of a second.

[Slide]

Mr. HOBBS. The next slide, I know it is hard to read, but it will be submitted with my testimony. The industry utilizes a number of measures to reduce or eliminate any risk to marine life. As a result of these measures, BOEM has stated that there has—and this

is quote from BOEM—"There has been no documented scientific evidence of noise from geological and geophysical, or G&G surveys, adversely affecting marine animal populations."

It is important that the committee understand that each step of the process—planning, permitting, acquiring, and processing the data—may take months.

How does this all fit into the 5-year plan? BOEM needs geophysical data to assess and confirm the hydrocarbon resource potential in the OCS, and to ensure the government is receiving value on its lease bids. Industry needs the data to determine which lease areas are commercially viable. Modern seismic imaging reduces risk by increasing the likelihood that exploratory wells will successfully tap hydrocarbons, and decreasing the number of wells that need to be drilled in a given area, reducing the overall footprint for exploration. Most importantly, geophysical data acquisition and interpretation must take place long before a lease sale can be held.

Interior Secretary Jewell has said the Administration wants to build up its understanding of resource potential on the Atlantic. Our surveys will provide that understanding. The need is pronounced: more than 60 percent of the Atlantic under consideration has never been surveyed. And the last survey of any of the potential lease areas took place in the 1970s and early 1980s. Compared to this level of detail that we can produce today, these surveys can be described, at best, primitive.

[Slide]

Mr. HOBBS. The next graphic shows an example of older technology versus the newer technology that we are able to provide now. The image on the left was produced from that earlier survey in the late 1970s, early 1980s. Yet it contains valuable information. But compare it to the image on the right, in this case, a modern 3D survey. Technological advances and the enormous strides in computing power tell us so much more than we could have imagined more than 30 years ago, when the older surveys were done. Very clearly, we need newer, better surveys to answer Secretary Jewell's call to build up our understanding.

Unfortunately, the Administration's plans for an Atlantic lease sale have added a level of uncertainty to the process, because the first sale is not planned until 2021, and only one sale is scheduled. BOEM has lost any flexibility if the sale is postponed for any reason. The long wait will not encourage more thorough surveys. It creates an unnecessary level of unpredictability and risk.

For this reason, we have encouraged the Administration to schedule an additional Atlantic sale for 2019, providing ample time to collect data and analyze the resource potential. At least 10 applications of geophysical surveys in the Atlantic OCS have been pending since BOEM completed its programmatic environmental review last July. We encourage the Administration to timely conduct the additional environmental reviews necessary to authorize these pending permit applications.

Then, finally, the geophysical industry stands ready to provide government and industry with the information to make rational decisions, both economically and environmentally, on energy policy.

The geophysical industry uses cutting-edge acoustic, geophysical, and computer technology to allow us to look miles beneath——

Dr. FLEMING. You are a minute over. I apologize.

Mr. HOBBS. OK, that is fine.

Dr. FLEMING. We want to be sure we get to everyone, and I assure you, your entire testimony will be put into the record.

Mr. HOBBS. Thank you.

[The prepared statement of Mr. Hobbs follows:]

PREPARED STATEMENT OF ROBERT HOBBS, CHIEF EXECUTIVE OFFICER, TGS, ON BEHALF OF THE INTERNATIONAL ASSOCIATION OF GEOPHYSICAL CONTRACTORS AND THE NATIONAL OCEAN INDUSTRIES ASSOCIATION

Chairman Lamborn, Ranking Member Lowenthal and members of the subcommittee, good morning and thank you for the opportunity to testify on the Administration's 5-year plan. My name is Robert Hobbs and I am the Chief Executive Officer of TGS, a company that provides geoscientific data products and services to the oil and gas industry here in the United States and around the world. I am the immediate past chairman of the International Association of Geophysical Contractors. IAGC's members provide geophysical services to the oil and natural gas industry. I also serve on the Board of Directors for the National Ocean Industries Association. NOIA is the only national trade association representing all segments of the offshore industry with an interest in the exploration and production of both traditional and renewable energy resources on the U.S. OCS.

The energy resources of the OCS are vitally important to America's energy, economic, and national security, and the purpose of the 5-Year OCS Oil and Gas Leasing Program, or "5-Year Plan," is to provide a roadmap for the leasing of OCS areas. The 5-Year Plan provides the public, government, and industry with a measure of reliability and predictability in the leasing of offshore oil and gas resources. While seismic and other geophysical surveys follow a separate permitting process, these surveys provide information that is critical to a successful 5-Year Plan, improving the economics of oil and gas exploration and production and, importantly, lessening its environmental impact. Without accurate surveys of the geological formations in the lease areas, exploration is a guessing game, like finding a needle in ten thousand haystacks. Before I outline how the geophysical sector fits into the plan, let me spend a few moments explaining how we perform surveys, in this case seismic surveys.

Geophysical surveys are the only feasible technology available to accurately image the subsurface before a single well is drilled. The use of modern seismic technology is similar to ultrasound technology—a non-invasive mapping technique built upon the simple properties of sound waves. These surveys use acoustic sources to send sound energy deep into the earth's crust. As the sound waves return, we record them on hydrophones that may be towed up to 7 miles behind the survey vessel. This process allows us to record data to depths of 40,000 feet—about 7.5 miles—below the earth's surface. (Exhibit A)

However, the data still needs to be processed before it can be interpreted and potential oil and gas reserves can be identified. IAGC's members and their clients use some of the most powerful computers in the world in order to perform that processing.

The acoustic source itself looks like this. (Exhibit B) It is a cylinder that is filled with air and which is then released under pressure, creating a seismic pulse. For the purposes of comparison, each cylinder releases an amount of air that you would find in a quart-sized soft drink bottle and it is released at 2,000 psi, about the same pressure level that you would find in a home pressure washer. The sound itself lasts about a tenth of a second. Depending on the size of the survey, several of these cylinders will be used and released in a synchronized manner.

We take seriously our responsibility to conduct our work with minimal impact on the environment and to protect marine life. Industry supports implementation of mitigation measures that are commensurate to the potential risk and supported by the best available science, and its members comply with mitigation and monitoring measures required after BOEM and NMFS conduct site-specific environmental assessments. The industry utilizes a number of measures to reduce or eliminate any risk to marine life. (Exhibit C) The potential impact of our operations on marine life is considered as a part of every permit to perform geophysical surveys. The Bureau of Ocean Energy Management reviews the daily reports of our activities offshore and has spent more than $50 million studying the impact of surveys on ma-

rine life, especially marine mammals. Our industry has participated in additional research costing several more millions of dollars. As a result of these measures and based on careful review of research, BOEM has stated that "To date, there has been no documented scientific evidence of noise from air guns used in geological and geophysical (G&G) seismic activities adversely affecting animal populations."[1] The National Oceanic and Atmospheric Administration has also written within the last year that, "[T]here has been no specific documentation of temporary threshold shift (TTS) or permanent hearing damage, i.e., permanent threshold shift (PTS) in free-ranging marine mammals exposed to sequences of airgun pulses during realistic field conditions."[2]

The reason I have gone into this detail is to stress that each step of the process involves a high level of care, expense and, significantly, time. Each step—planning the survey, applying for the proper permits, performing the survey and then processing the data—may take months.

How does this all fit into the 5-Year Plan? BOEM needs geophysical data to assess and confirm the hydrocarbon resource potential on the OCS and ensure the government is receiving market value on lease bids. Energy companies need the information to make informed decisions on what to lease and how to plan their drilling programs. Modern seismic imaging reduces risk by increasing the likelihood that exploratory wells will successfully tap hydrocarbons and decreasing the number of wells that need to be drilled in a given area, reducing the overall footprint for exploration. Ultimately it helps determine what areas are worth considering for exploration and what are not. In fact, surveys result in more areas being removed from consideration for drilling than actually being drilled—yet another way in which surveys are environmentally beneficial. Most importantly, geophysical data acquisition and interpretation should take place long before a lease sale can be held.

A hundred years ago, wildcatters studied the land below their feet and made their decisions about where to drill based on rudimentary knowledge of geology, personal experience and large amounts of guess work. That is why old pictures of drilling fields show dozens of drilling rigs scattered over the horizon. Today, using quality geophysical surveys, energy companies can drill with an ever increasing sense of confidence that they have a high probability of finding recoverable hydrocarbons. Without surveys, offshore exploration would ultimately prove impractical.

Interior Secretary Jewell has said the Administration wants to build up its understanding of resource potential in the Atlantic. Our surveys will provide that understanding. The need is pronounced. According to Professor James Knapp, PhD, of the University of South Carolina, who testified before this subcommittee in January of 2014, more than 60 percent of the Atlantic area under consideration for leasing has *never* been surveyed. And the last survey of any of the potential lease areas took place in the 1970s and early 80s. Compared to the level of detail that we can produce today, those surveys can be described as primitive.

Here is one example. (Exhibit D) The image on the left was produced from that earlier survey. Yes, it contained valuable information, but compare it to the image on the right, in this case a modern 3-D survey. Technological advances and the enormous strides in computing power tell us so much more than we could have imagined when these areas were last surveyed more than 30 years ago. Very clearly, we need newer, better surveys to answer Secretary Jewell's call to build up our understanding.

Unfortunately, the Administration's plans for an Atlantic lease sale have added a level of uncertainty to the process. Because the first sale is not planned until 2021 and only one sale is scheduled, BOEM has lost any flexibility if the sale is postponed for any reason. The long wait will not encourage more thorough surveys. It creates an unnecessary level of unpredictability and risk, and for this reason we have encouraged the Administration to schedule an Atlantic lease sale in 2019, providing ample time to collect and analyze the needed geophysical data. These concerns were outlined in joint trade association comments on the Draft Proposed Program.[3]

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[1] BOEM Science Notes, March 9, 2015.

[2] Environmental Assessment of an Incidental Harassment Authorization incidental to a National Science Foundation marine geophysical survey in the Atlantic Ocean off North Carolina, at 31 (September 2014).

[3] "The Associations feel that BOEM should reconsider its overly conservative decisions regarding potential Atlantic leasing. Scheduling only one lease sale in the Atlantic OCS and having the sale near the end of the program (2021) does not provide BOEM the flexibility required should the need arise to postpone the sale. Scheduling the sale in 2019 would provide ample time to collect and analyze the needed geophysical data, set the appropriate sale area, and hold the lease sale, it and would provide extra time that would allow BOEM to postpone the sale should there be any administrative delays. The Associations request that BOEM consider ad-

We also believe it is important that the agencies streamline the process of obtaining permits to perform geophysical surveys of the Mid- and South Atlantic OCS. The current process is estimated to take more than a year to accomplish. At least 10 applications for geophysical surveys in the Atlantic OCS have been pending since BOEM completed its programmatic environment review last July. We encourage the Administration to timely conduct the additional environmental reviews necessary to authorize these pending permit applications.

We should also stress that the information that surveys provide on the potential resources are important for the long-term development of the Southeast. Just as offshore exploration and production require long lead times, regional development also is a long-term commitment. Businesses look for factors like inexpensive sources of energy that they can rely on many years down the road. Our conversations with business groups in the southeastern states indicate very clearly that they are looking for the roadmap that the 5-Year Plan process was intended to deliver.

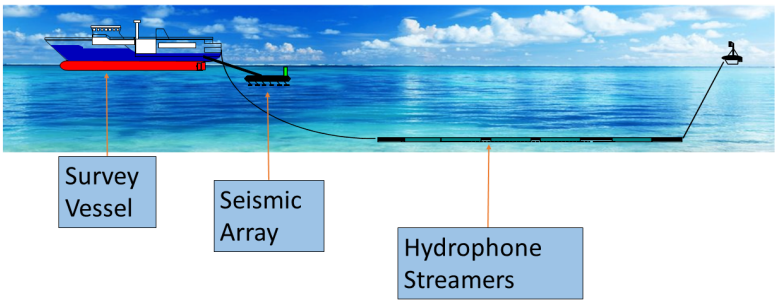
We have similar concerns over the Administration's plans for leasing offshore Alaska. In March, the National Petroleum Council advised the Secretary of Energy that America needs to plan 30 years into the future in order to meet the country's long-term energy needs, especially given the extraordinary lead time needed to explore in Arctic waters. We agree. Exploration of the Arctic—safely, effectively and with an absolute commitment to environmental stewardship—requires planning, preparation and extraordinary levels of investment. However, the Government is sending mixed messages on how much of the arctic will be leased and whether lease sales will actually take place. As geophysical companies, we need some sense of certainty in order to survey the right areas within the right time frame. More than that, the country needs to have a clear roadmap that industry can follow.

Finally, the geophysical industry stands ready to provide government and industry with the information necessary to make rational decisions—both economically and environmentally—on energy policy. The geophysical industry uses cutting edge acoustic, geophysical and computer technology to allow us to peer back into history all the way to formation of our planet. In the process, we are able to look miles beneath the ocean floor to determine where valuable, recoverable energy resources lie and, importantly, where they do not. But we need a 5-Year Plan that is predictable and reliable in order to address the long-term energy needs of our country.

Thank you and I will be happy to answer any questions.

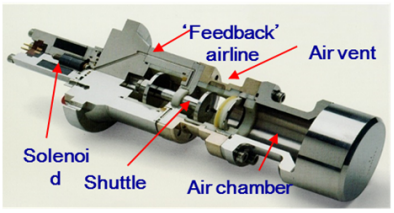
Attachments

Exhibit A – Seismic Vessel with Array



justing the lease sale schedule to have the Atlantic sale earlier in the program. In addition, the Associations requests BOEM consider adding another Atlantic Regional Sale to the DPP. Our recommendation would be to have one Atlantic Sale in 2019 and another in 2021 or early 2022." March 30, 2015 letter to the docket signed by IAGC, NOIA, API, IPAA, U.S. Oil & Gas Association, AXPC, PESA and AOGA.

Exhibit B – Seismic Source



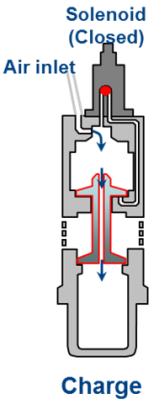


Exhibit C – Industry Mitigation Measures

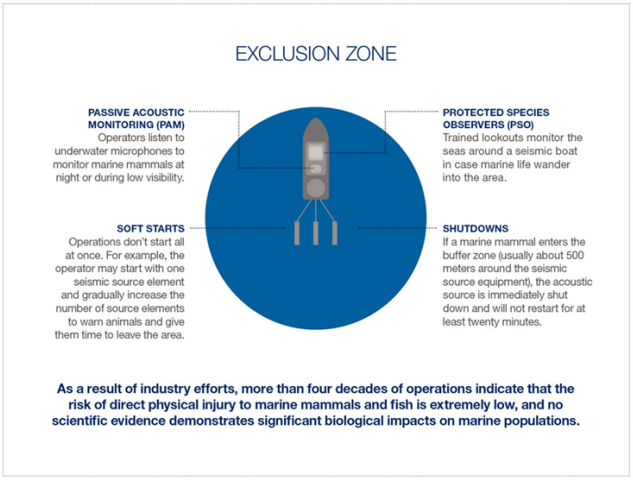
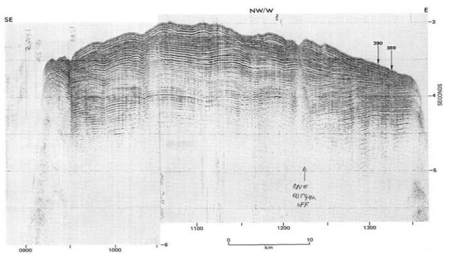
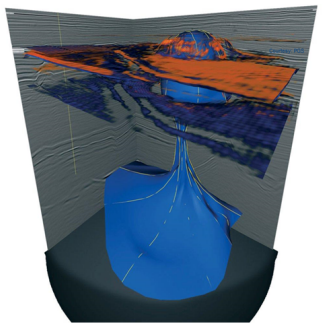


Exhibit D – 1970's Atlantic 2D/Modern 3D

Survey From Offshore Atlantic – South Rim of Blake Nose:
DSDP Volume 44, Site 392, 1978



Modern 3D Seismic Image



QUESTION SUBMITTED FOR THE RECORD BY CHAIRMAN LAMBORN TO ROBERT HOBBS, CHIEF EXECUTIVE OFFICER, TGS

Question. The hearing delved into the promising resource potential that is currently off limits in the Eastern Gulf of Mexico Planning Area as a result of the Gulf of Mexico Energy Security Act of 2006. Can you provide further details, if available, on the potential economic and energy security benefits that would result from safe and responsible exploration and development in that area once the moratorium expires in 2022?

Answer. In November 2014, Quest Offshore Resources, Inc. published a report entitled *The Economic Benefits of Increasing U.S. Access to Offshore Oil and Natural Gas Resources in the Eastern Gulf of Mexico*. The report concludes that developing oil and natural gas resources in the Eastern Gulf would require an estimated $115 billion in cumulative investment and operational spending, primarily inside the United States and mostly in the Gulf Coast states; produce nearly 1 million barrels of oil equivalent per day (MMboe/d); generate nearly 230,000 jobs; contribute over $18 billion per year to the U.S. economy; and generate $70 billion in cumulative government revenue.

A copy of the full report can be found at http://www.noia.org/wp-content/uploads/2014/11/The-Economic-Benefits-of-Increasing-US-Access-to-Offshore-Oil-Natural-Gas-Resources-in-the-Eastern-GoM.pdf.

Specific excerpts from the report's Executive Summary are included below:

Summary

> *This report constructs a scenario of oil and natural gas development in the Eastern Gulf, based on the resource potential of the area, geologic analogs, and the full value chain of oil and natural gas development and production. It quantifies the capital and other investments projected to be undertaken by the oil and natural gas industry, identifies linkages to the oil and gas supply chain at both the state and national levels, and estimates job creation, contributions to economies associated with oil and natural gas development and, government revenues due to lease bids, rents, and production royalties. The report relies on Quest Offshore Resources, Inc. (Quest) proprietary database on the offshore oil and natural gas supply chain.*

Projects

> *Offshore projects are complex, requiring a multitude of diverse engineers, contractors, and equipment suppliers working over a number of years prior to the start of production. For the purposes of this study, offshore project development was generalized into six project types based on project size and water depth. This study estimates that 82 projects could begin oil and natural gas production in the Eastern Gulf, of which 51 would be deep water projects and 31 would be shallow water projects.*

Production

Production is projected to reach nearly 1 million barrels of oil equivalent per day (MMboe/d), with production expected to be around 65 percent oil and 35 percent natural gas. Over 60 percent of production is expected to be from deep water projects.

Spending

Total cumulative spending is projected to be $134 billion, of which $115 billion will be spent domestically. Spending is projected to grow from an average of $270 million during the first five years of initial leasing, seismic, and exploratory drilling to over $14 billion per year. The largest amounts of expenditures are for drilling, operational expenditures, engineering, manufacturing and fabrication of platforms and equipment.

Employment

Eastern Gulf oil and natural gas development is expected to lead to significant employment gains, both in the Gulf Coast region and nationally. Employment impacts are expected to grow throughout the forecast period, with total incremental U.S. employment reaching nearly 230 thousand jobs.

Government Revenues

Eastern Gulf oil and natural gas development has the potential to increase government revenue from royalties, bonus bids, and rents on leases by an estimated $69 billion cumulatively. The majority of cumulative revenues are from royalties on produced oil and natural gas which total approximately $61 billion. Leasing bonus bids are projected to account for around $6.6 billion while rental income from offshore blocks is expected to account for approximately $1.8 billion. This report assumes that associated government revenue is split 37.5 percent to the coastal states and 62.5 percent to the federal government.

Once again, I appreciate the opportunity to provide input to such an important issue.

I remain available to further assist your committee should it prove necessary.

Dr. FLEMING. Mr. Chiasson—I don't know why I am having trouble today. I guess, when I get outside of Louisiana, I can't articulate the words. But you are now recognized for 5 minutes.

STATEMENT OF CHETT C. CHIASSON, EXECUTIVE DIRECTOR, GREATER LAFOURCHE PORT COMMISSION

Mr. CHIASSON. Good morning, Mr. Chairman. Thank you, Ranking Member and members of the committee. I appreciate the opportunity to appear before you today. My name is Chett Chiasson, and I am the Executive Director of the Greater Lafourche Port Commission, otherwise known as Port Fourchon. I have submitted for the record a more detailed written testimony, including findings of a recent study detailing the economic impact of Port Fourchon to the local, state, and national economies. I will summarize my remarks now.

Over the past several years, I have had the pleasure of appearing before this committee, as well as other committees here in the House and in the Senate. Similarly, Port Fourchon has, over the years, hosted at our facilities quite a number of Members of Congress, officials from a number of presidential administrations, local governments across the country, U.S. industry, and representatives of foreign governments, and non-U.S. industry, as well.

You see, Port Fourchon is rather unique. Our port is located on the Gulf of Mexico and is the only Louisiana port directly on the Gulf. Sitting between two of the most abundant estuaries in the

world, we certainly have our share of commercial and recreational fishing within our jurisdictional boundaries.

However, our principal business is serving as an intermodal, offshore energy supply port. We don't import and export containers or grain or oil, for that matter. Rather, more than 250 companies utilize Port Fourchon in carrying equipment, supplies, and personnel to offshore oil and gas exploration and production locations throughout the Gulf. Port Fourchon's tenants provide services to 90 percent of all deporter rigs in the U.S. Gulf of Mexico, and roughly 45 percent of all shallow-water rigs in the Gulf. In sum, the activities at Port Fourchon impact 20 percent of the Nations' entire oil supply.

It is for this reason that this committee and the others I just mentioned often turn to Port Fourchon for insight to the workings of the domestic offshore energy industry, as well as pointing to Port Fourchon as a leading example of the positive economic impact to not only our local area and our state, but to the entire Nation.

Port Fourchon is the epicenter of offshore oil and gas activities, and the companies in and around Port Fourchon and their technologies and innovations developed as a result of these activities, would not only continue to sustain future offshore domestic oil and gas activities, but will foster growth in our budding offshore renewable energy industry, as well.

For Port Fourchon to continue to grow and have a successful future creating jobs throughout the economy and facilitating development for our community, continued Gulf of Mexico lease sales are critically important. Robust lease sales have the ability to energize oil and gas service companies, and their suppliers throughout the country, who are planning for future development. It facilitates critically needed investment by entities that service these offshore activities, which has a positive ripple effect throughout the national economy.

But this economic activity shouldn't be confined only to certain areas within the Gulf or Alaska. To achieve and maintain our Nation's energy security, and to enable communities across our country to benefit from this activity, the geography of offshore leasing must be expanded, and I would say not just expanded leasing for oil and gas activities, but for offshore renewable activity, as well.

As an example of this point, just 2 weeks ago an official from the Hampton Roads area of Virginia visited Port Fourchon to better understand the scope of our operations. And, as I mentioned earlier, over the past few years I have had a number of similar visits or conversations with government and industry representatives from Florida, South Carolina, and Alaska.

Just as there are communities across the country that have benefited from this recent boon of onshore energy production, coastal communities have also been anticipating expansion of offshore energy activities, welcoming the opportunity for economic benefits of increased employment, educational development, revenues, and the like.

Two final points, if I may. First, as important as current and future offshore activity is to our coastal communities, offshore activity is not without its burdens to local communities, either, par-

ticularly the toll it takes on our roads, water supply systems, and other infrastructure. There are a variety of means on the Federal and state levels to address these local infrastructure needs, some more successful than others. And I appreciate that these needs are but a small part of the overwhelming infrastructure needs across our country.

But what is also critical in this entire offshore leasing equation is the ability for states with energy activities off its coastline, including the Federal waters, to be able to share in the revenues that are generated from energy activity on offshore Federal lands. States where oil and gas production occurs on onshore Federal lands within the state boundaries are entitled to revenue sharing, but not for offshore production. Congress has attempted to address this inequity to varying degrees of success over the years. But the ability for local communities to fully reap the benefits of additional offshore energy activity requires parity with onshore activities.

With that, the state of Louisiana has dedicated revenue sharing dollars that it will receive through GOMESA to coastal restoration, hurricane protection, and infrastructure critical to accessing the Gulf of Mexico. To take those provisions away now would be irresponsible.

I will go ahead and wrap up now. Mr. Chairman and members of the committee, Port Fourchon should be seen as an example of what could happen in areas along the coastal communities. These areas would be available for conventional renewable energy development. Billions of dollars of investment throughout the country, low unemployment rates, high-paying jobs, more revenue for our local and Federal Government, and making great strides toward energy independence. What is not to like about that?

Thank you.

[The prepared statement of Mr. Chiasson follows:]

PREPARED STATEMENT OF CHETT CHIASSON, EXECUTIVE DIRECTOR, GREATER LAFOURCHE PORT COMMISSION

Good morning Mr. Chairman and members of the committee. I appreciate the opportunity to appear before you today. My name is Chett Chiasson, and I am the Executive Director of the Greater Lafourche Port Commission, otherwise known as Port Fourchon.

I am pleased to appear before you today to provide testimony on the future of domestic offshore energy exploration and production. Over the past several years, I have had the pleasure of appearing before this committee, as well as other committees here in the House and in the Senate. Similarly, Port Fourchon has, over the years, hosted at our facilities quite a number of Members of Congress, officials from a number of presidential administrations, local governments across the country, U.S. industry, and representatives of foreign governments and non-U.S. industry as well. You see, Port Fourchon is rather unique. Our Port is located on the Gulf of Mexico, and is the only Louisiana port directly on the Gulf. Sitting between two of the most abundant estuaries in the world, the Terrebonne and Barataria Estuaries, we certainly have our share of Commercial and Recreational Fishing within our jurisdiction boundaries, however, our principal business is serving as an intermodal offshore energy supply port. We don't import and export containers, or grain, *or oil* for that matter. Rather, more than 250 companies utilize Port Fourchon in carrying *equipment, supplies and personnel* to offshore oil and gas exploration and production locations throughout the Gulf of Mexico. Port Fourchon's tenants provide services to *90 percent* of all deepwater rigs in the Gulf of Mexico, and roughly 45 percent of all shallow water rigs in the Gulf. In sum, the activities at Port Fourchon impact 20 percent of the Nation's entire oil supply.

A study by Dr. Loren Scott, Professor Emeritus of Economics at Louisiana State University, has depicted the economic impact of Port Fourchon. What it showed was

remarkable: the economic impact of the Port's activities on the Houma-Thibodaux MSA Annually is:

- Business Sales: $2.67 Billion
- Household Earnings: $652.9 Million
- Jobs: 8,723
  —1 in every 13 jobs directly connected to Port Fourchon (Multiplier 4.6)
  —$56,963 average annual wage
- Sales Taxes: $12.8 Million to local government
- Property Taxes: $60.4 Million ($41.7 Million of which is from watercraft)

For the State of Louisiana Annually:

- Business Sales: Over $3.3 Billion
- Household Earnings: $823.3 Million
- Jobs: 11,512 (Multiplier 6.2)
- Taxes: $46 Million to the State Treasury

And the national effect is just as impressive. This study is only the most recent of several studies, including one conducted by the Department of Homeland Security, which demonstrates the *negative* impact on the Nation if Port Fourchon was out of service, in this instance, for a 3-week period:

- Business Sales: $11.2 Billion Lost
- Household Earnings: $3.1 Billion Lost
- Jobs: 65,502 Jobs Lost

It is for this reason that this committee, and the others I just mentioned, often turn to Port Fourchon for insight to the workings of the domestic offshore energy industry, as well as *pointing* to Port Fourchon as a leading example of the positive economic impact to not only our local area and our state, but to the entire Nation. Port Fourchon is the epicenter of offshore oil and gas activities, and the companies in and around Fourchon, and their technologies and innovations developed as a result of these activities, will not only continue to sustain future offshore domestic oil and gas activities, but will foster growth in our budding offshore renewable energy industry as well.

For Port Fourchon to continue to grow and have a successful future creating jobs throughout the economy and facilitating development for our community, continued Gulf of Mexico Lease-sales are critically important. Robust lease sales have the ability to energize oil and gas service companies', their suppliers and their suppliers' suppliers throughout the country, who are planning for future development. *It facilitates critically needed investment* by entities that service these offshore activities, which has a positive ripple effect throughout the national economy.

But this economic activity shouldn't be confined only to certain areas within the Gulf of Mexico or Alaska. To achieve and maintain our Nation's energy security, and to enable communities across our country to benefit from this activity, the geography of offshore leasing must be expanded. And I would say not just expanded leasing for oil and gas activities, but for offshore renewable activity as well.

As an example of this point, just 2 weeks ago, I had officials from the Hampton Roads area of Virginia visit Port Fourchon to better understand the scope of our operations. And as I mentioned earlier, over the past few years, I have had a number of similar visits or conversations with government and industry representatives from Florida, South Carolina, and Alaska. Just as there are communities across the country that have benefited from the recent boon of *onshore* energy production, coastal communities have also been anticipating expansion of *offshore* energy activities, welcoming the opportunity for economic benefits of increased employment, educational development, revenues and the like.

Two final points—first, as important as current and future offshore activity is to our coastal communities, this activity is not without its *burdens* to local communities either, particularly the toll it takes on our roads and other infrastructure. There are a variety of means on the Federal and state levels to address these local infrastructure needs, some more successful than others. Several years ago, the then-Minerals Management Service, in a programmatic Environmental Impact Statement on offshore leasing in the Gulf of Mexico, specifically cited the impact on Louisiana Highway One, the only road leading to and from Port Fourchon, from the yearly truck and vehicle traffic as a result of the offshore energy activity. I appreciate that these needs are but a small part of the overwhelming infrastructure needs across our country. But what is also critical in this entire offshore leasing equation is the

ability for states with energy activities off its coastline—including in Federal waters—to be able to share in the *revenues* that are generated from energy activity on offshore Federal lands. States where oil and gas production occurs on *on-shore* Federal lands within the state's boundaries are entitled to considerable revenue sharing, but not so for *offshore* production. Congress has attempted to address this inequity, to varying degrees of success over the years, but the ability for local communities to fully reap the benefits of additional offshore energy activity requires parity with on-shore energy activities. With that, the state of Louisiana has dedicated revenue sharing dollars that it will receive through the Gulf of Mexico Energy Security Act (GOMESA) to Coastal Restoration, Hurricane Protection, and Infrastructure Critical to accessing the Gulf of Mexico. To take those revenue sharing provisions away now would be irresponsible.

Finally, from the standpoint of Federal policy impacting offshore energy activity, whether we're speaking of Federal lease-sales or Federal or state regulatory oversight—industry and local communities like ours need to have confidence that the investments made in domestic offshore energy production will not be overly impeded by governmental regulations, or inconsistent policies, and that our Nation's domestic energy policy will sustain investment of all energy types, over the long term.

Mr. Chairman and members of the committee, Port Fourchon operates on the premise that Industry and the Environment are not mutually exclusive, they must work together, and they do. This Port should be seen as an example of what could happen in areas along Florida's Coast, and communities along the East and West Coasts if these areas would be available for conventional and renewable energy development. Billions of dollars of investment throughout the country, low unemployment rates, high paying jobs, more revenue for our local and Federal Government, and continuing strides toward energy independence—What's not to like about that!

I appreciate the opportunity to testify before you today, and would be please to address any questions that the committee might have. Thank You!

Mr. LAMBORN [presiding]. Thank you. And I thank Representative Fleming for chairing this committee until I got back.

The Chair now recognizes Ms. Swearingen to testify.

STATEMENT OF EMILIE SWEARINGEN, COMMISSIONER, TOWN OF KURE BEACH, NORTH CAROLINA

Ms. SWEARINGEN. Chairman Lamborn, Ranking Member Lowenthal, and members of the subcommittee, my name is Emilie Swearingen. I am a member of the Kure Beach Town Council. We are a small community located on an island between the Atlantic Ocean and the Cape Fear River. We have approximately 2,000 year-round residents, and anywhere from 400,000 to 700,000 visitors every year.

I am not here today to speak on behalf of our Town Council, but rather, on behalf of the residents of Kure Beach, our tourists, our fishermen, our seafood industry and small businesses, and everyone in this country who cares about the future of our coastal communities and our quality of life.

Now, most of you probably have never been to Kure Beach. Well, we have about a half-dozen residents that show up for Town Council meetings once a month. But on January 27, 2014, more than 300 showed up to protest the Mayor's position in support of seismic testing and East Coast drilling. Since that night, opposition has been mounting up and down the coast. More than 300 national, state, and local elected officials have taken a public stance against seismic testing and offshore drilling, including more than 50 coastal towns passed resolutions opposing or voicing their concerns. Copies of these letters and resolutions can be found in Oceana's "Coastal Resolution Toolkit."

You know those public hearings that Ms. Hopper talked about earlier that were held over the past few months? Well, attendance on the East Coast exceeded 1,800. North Carolina, of course, had the highest attendance. In addition, more than half-a-million citizens in this country have submitted comments directly to BOEM, opposing the inclusion of the Atlantic and Arctic Oceans in the 5-year plan.

So, why are so many of your constituents concerned about this? Well, like many communities on the East and West Coast, tourism drives our economy. Our two little towns on Pleasure Island, Kure and Carolina Beach, generate more than $124 million a year in beach expenditures. Direct seafood processing and packing generates over $5 million, for-hire fisheries generates almost $6 million. If we look at this on a larger scale, say, along the entire Atlantic Coast, offshore drilling could put at risk nearly 1.4 million jobs, and over $95 billion in gross domestic product. Both of these rely on healthy oceans, mainly through fishing, tourism, and recreation. And you may find a breakdown of those figures in another one of Oceana's reports that I would be glad to provide for you.

I understand that the BP disaster, however, killed and injured more than 25,000 dolphins and whales, plus tens of thousands of sea turtles. It also killed numerous types of fish, and at least 700,000 birds. More than 100 species were affected, and more than 1,000 miles of shoreline, from Texas to Florida, were contaminated. Many of these areas are still devastated by oil.

Spilled oil is nearly impossible to clean up entirely. What remains stays in the environment, causing harm for years and years. But it is not just the disasters, or the hundreds of smaller spills that go on throughout the year. There continue to be other consequences of another source, and that is industrialization. I am sure everyone here is familiar with that terminology, but this is not an issue that many of our citizens are aware of.

Representative Lowenthal mentioned earlier about South Carolina State Republican Senator Chip Campsen and his editorial. I would like to continue the Senator's comments. "This perspective is rarely raised, and is not contingent upon an improbable catastrophic event. If we embrace offshore drilling in South Carolina, this factor will impact our coast continuously." He has seen, firsthand, the devastation by the land-based infrastructure for offshore drilling. "It is not a pretty sight," he says. "It is extensive, dirty, highly industrial, and there is no place for it in South Carolina. Our coast is dominated by residential and resort communities, wildlife, and extensive ecosystems."

Well, Congressmen and Congresswomen, there is no place for this on the coast of North Carolina, either. Please listen to the people in this country who are begging you to protect their quality of life. And thank you for giving me the opportunity to testify today.

[The prepared statement of Ms. Swearingen follows:]

PREPARED STATEMENT OF EMILIE F. SWEARINGEN, COMMISSIONER, TOWN OF KURE BEACH, NORTH CAROLINA

Chairman Lamborn, Ranking Member Lowenthal and members of the Subcommittee on Energy and Mineral Resources, I appreciate the opportunity to testify today. My name is Emilie Swearingen. I am a member of the Kure Beach Town Council. We're a small community located on an island between the Atlantic

Ocean and the Cape Fear River. We have approximately 2,000 year-round residents and anywhere between 400,000 and 700,000 visitors every year. I am NOT here today to speak on behalf of our Town Council, but rather on behalf of the residents of Kure Beach, our tourists, our fishermen, our seafood industry and small businesses, and everyone in this country who cares about the future of our coastal communities and our quality of life.

Most of you have probably never been to Kure Beach. About a half-dozen residents occasionally show up for our monthly Council meetings; but on January 27, 2014, more than 300 showed up to protest our mayor's position in support of seismic testing and East Coast drilling. That night Kure Beach became ground zero for these issues. Since that night, the opposition has been mounting up and down the coast. More than 300 national, state and local elected officials have taken a public stance against seismic testing and offshore drilling, including more than 50 coastal towns that passed resolutions in opposition or voicing their concern. Copies of the letters and resolutions can be found in Oceana's grassroots "Coastal Resolution Toolkit." http://usa.oceana.org/seismic-airgun-testing/coastal-resolution-toolkit

You know those public meetings the Bureau of Energy Management (BOEM) held over the past few months. Attendance on the East Coast exceeded 1,800. North Carolina, of course, had the highest attendance! In addition, more than half a million citizens in this country have submitted comments directly to BOEM opposing the inclusion of the Atlantic and Arctic in the 5-Year Plan.

So . . . why are so many of your constituents concerned? Like many of the communities on the East and West Coast, tourism drives our economy.

Our two little towns on Pleasure Island, Kure and Carolina Beaches, generate more than $124 million a year in beach expenditures. Direct seafood processing and packing on our little island generate almost $5 million; and our for-hire fisheries generate almost $6 million. Tourism is the largest industry in our county and one of the largest industries in the state.

Oceana's report, "An Economic Analysis of Offshore Drilling and Wind Energy in the Atlantic," found that "offshore oil and gas development along the Atlantic could put at risk nearly 1.4 million jobs and over $95 billion in gross domestic product that rely on healthy ocean ecosystems, mainly through fishing, tourism and recreation.

But it's not just about our economy.

I understand the BP Deepwater Horizon disaster killed or injured more than 25,000 dolphins and whales in the Gulf, plus tens of thousands of sea turtles. It also killed blackfin and bluefin tuna, blue marlin, mahi-mahi, sailfish, red snapper; and killed at least 700,000 birds. More than 100 species were affected, including one-third of all laughing gulls in the Gulf region and 12 percent of the Gulf's brown pelicans, which had just been removed from the endangered species list.

More than 1,000 miles of shoreline from Texas to Florida were contaminated, and many of these areas are still devastated by oil that may be hidden under sand until exposed by storms . . . storms like we have every year on the East Coast.

But the damage went far beyond the Gulf, according to Environment America. "Migratory birds, poisoned by oil, carried toxic chemicals across the country. As far away as Minnesota, white pelicans laid oil-contaminated eggs in their breeding grounds after returning home from the Gulf. In Tennessee evaporation from the oil created a cloud of minuscule airborne tarballs exposing local residents to pollutants linked to heart and lung disease."

Cynthia Sarthou, Exec. Director at Gulf Restoration Network, reported that even now, 5 years after the disaster, "Almost a mile of Louisiana's coast is still considered heavily oiled.. . . The dolphins are dying, tar mats as big as 2,000 pounds are affecting beach communities 100 miles away, and lucrative coastal businesses and industries have lost millions of dollars and continue to struggle today."

Spilled oil is impossible to clean up entirely. What remains stays in the environment, causing harm for years. But it's not just the disasters we're concerned about or even the hundreds of smaller spills that go on throughout the year. There continues to be consequences from another source: industrialization. This is NOT an issue many of our residents are aware of.

To quote South Carolina State Senator Chip Campsen, a Republican and Isle of Palms resident, "This perspective is rarely raised and is not contingent upon an improbable catastrophic event, such as an oil spill, to impact our coast. If we embrace offshore drilling in South Carolina this factor will impact our coast definitively and continuously."

"Let me explain . . . I have observed firsthand the land-based infrastructure necessary to support offshore drilling. It is not a pretty sight. It is extensive, dirty and highly industrial. There simply is no place on South Carolina's coast appropriate for

this kind of industrialization. Our coast is dominated by residential and resort development, wildlife and extensive protected ecosystems . . .''

Well, Congressmen (and women) there is *no* place for such industrialization on North Carolina's coast either.

Now I'm going to jump to the other end of the world for a minute. A couple of months ago I had an opportunity to visit Antarctica. It is the most pristine, most beautiful place in the world. While there, I thought about another pristine area, the Arctic, and the proposed drilling in the Arctic Ocean. What a tragedy it would be to destroy that part of our planet. The areas in the Arctic Ocean off the north coast of Alaska support very vibrant communities, iconic wildlife, and some of the last wild places that are relatively untouched by industrial development. The healthy waters are home to walrus, whales, seals, polar bears, and other wildlife species. These important resources are a part of a way of life practiced in those coastal communities for millennia. To destroy all of that would be a travesty for the entire world.

Citizens living and working on our coasts have a right to decide for themselves if they want to allow drilling off their shores. Please . . . listen to the people in this country who are begging you not to destroy their quality of life.

Thank you once again for the opportunity to testify today.

Mr. LAMBORN. OK. Thank you to you and to all of the witnesses who have testified on this panel.

Let's see. The letter from Mayor Dean Lambeth of Kure Beach in favor of Atlantic OCS energy development has been mentioned. I would like to enter that into the record.

If there is no opposition, so ordered.

I will begin the round of questioning now, and I will start with Mr. Chiasson.

Currently, production in the Gulf accounts for about 16 percent of U.S. oil production and about 5 percent of natural gas production. Yet coexistence among other industries is key. When I toured an offshore facility in the Mississippi Canyon in 2013, I remember flying over quite a few fishing trawlers, which was a sign of healthy coexistence.

And, as you said, offshore oil and gas operation is pivotal to operations at Port Fourchon, but all of this activity is occurring along recreational fishing, military operations, and other tourism along beaches and coastal cities, including New Orleans. Can you elaborate on how these activities all coincide successfully together, as people on the Atlantic Coast look to that as an example?

Mr. CHIASSON. Sure. In our community, growing up, you know, we are a fishing community first, and have grown into servicing the oil and gas industry, in particular, the deport oil and gas industry.

Like I said in my testimony, we sit between two of the most abundant estuaries in the world, and that is why fishing is so good in that area. As well as, within a 40-mile area of our port are over 600 rigs and platforms. When I look at that, I see it as beautiful, because what we are seeing is that every one of those platforms and rigs is an artificial reef.

There is an abundance of fishing capability there, and it is a huge other side of industry. It is another industry that we have in our community, because of the abundance of wildlife feeding off of those rigs and platforms in the Gulf, as well as fishing and crabbing, shrimping, and all of the other sides. We are a community

that embraces both, and we enjoy it. I grew up in the marsh, I grew up fishing and hunting, but I love the industry, as well.

Mr. LAMBORN. Thank you. Mr. Shuster, I have a question for you. When people look at the Macondo oil spill disaster, and the environment where it took place, I believe it was over a mile deep, in deep water. How is that the same, or how is that different from the offshore environment off of Alaska and off of the Atlantic, where the possibility of the 5-year plan allowing for a lease sale would take place?

Mr. SHUSTER. Yes, thank you for the question. So, first, let me just respond. At least with the targets that are being addressed in Alaska, these are in different pressure regimes. It is much simpler and much shallower drilling than is required in the deeper water, deeper parts of the Gulf of Mexico.

In the Atlantic, I would say that it is too premature, based on the data that we have, to actually make a comment on how those types of prospects would be different from the Macondo example that you mentioned.

Mr. LAMBORN. But how about in Alaska? What is the difference in depth, for instance?

Mr. SHUSTER. You know, I don't know the exact numbers, but it is several tens of thousands of feet different.

Mr. LAMBORN. So what is the depth off of Alaska that the proposed lease sale would be for?

Mr. SHUSTER. Now, the water depth is a couple hundred feet.

Mr. LAMBORN. So what does that mean? If there is, God forbid, but if there is the beginning of an oil spill, or oil leak, what can be done to remedy that that could not be done in the deep water off the coast of Gulf of Mexico?

Mr. SHUSTER. Yes. So Alaska is not part of the area that I am focused on within Shell. Certainly we can provide details from my colleagues in Shell to be able to answer that question.

But I can say, in general, we have put together significant resources, both to contain and also to respond to oil spills in Alaska.

Mr. LAMBORN. OK. Mr. Hobbs, are you able to address that?

Mr. HOBBS. No, I agree with Mr. Shuster's testimony in regards to the environment in Alaska, certainly.

Mr. LAMBORN. OK. And what I was understanding is that, because of the much shallower depth, it is a lot easier to get at it with all kinds of equipment that you can't if it is 1 or 2 miles below the surface, like in the case of Macondo.

I now recognize the Ranking Member for any questions he might have.

Mr. LOWENTHAL. Thank you, Mr. Chair. Before I begin, I would like to ask unanimous consent to introduce into the record resolutions passed by more than 50 towns opposing offshore drilling or seismic exploration.

Mr. LAMBORN. Any objection?

[No response.]

Mr. LAMBORN. If not, so ordered.

Mr. LOWENTHAL. Thank you. I would like to begin with Mr. Shuster. First, I want to thank you for coming by yesterday and visiting. I certainly enjoyed our conversation.

As I mentioned to Director Hopper, we would like BOEM to look at all the impacts of the proposed leasing program, including impacts on climate.

Now, I understand that Shell uses an internal price for carbon when evaluating potential projects. Could you describe that in a little bit more detail?

Mr. SHUSTER. Yes. Representative Lowenthal, we ascribe a $40-per-ton price in our project economics for all the projects that we consider.

Mr. LOWENTHAL. So I am going to ask you. It sounds like Shell believes climate change is real, we need to do something about it. So, the question I am going to ask about that, first, do you? Do you support putting a real price on carbon, such as through a carbon tax?

Mr. SHUSTER. Yes, we do support putting a real price on carbon. Our view is that carbon is something that we have to be able to plan for. And certainly our concern is about long-term development.

Mr. LOWENTHAL. Shell's CEO, Ben van Beurden, has talked positively about EPA's clean power plan, as well. Could you mention what Shell's position is on that?

Mr. SHUSTER. So our position is to look at the changing energy mix over the next several decades. And, essentially, we want to be able to address that in the context of new energies that are coming along, new technologies that are underway, both to address the amount of carbon that is being put in the atmosphere, as well as to look at what the mix of energy opportunities is going to be in the future.

Mr. LOWENTHAL. So, I have to say, Mr. Shuster, although I may not agree with much of what Shell does on the Outer Continental Shelf, I certainly think it is laudable that you are taking the issue of climate change seriously. Whether we agree on this particular path forward or not, acknowledging the cost is a critical first step. I hope that the Department of the Interior follows your lead on this issue, and factors these costs into the analysis of the 5-year leasing program.

I would like to turn to Commissioner Swearingen. The Governor made it clear that, in the state of North Carolina, he would only support offshore drilling if it came with the diversion of Federal monies to the state. What is your position on this issue? And does the question of revenue sharing affect your support or opposition?

Ms. SWEARINGEN. To answer your question, sir, no, it does not change my position. Revenue sharing from oil and gas drilling could never compensate for the loss of our coastal way of life. Also from industrialization of the coast, oil spills, loss of tourism, fishing, and recreational businesses.

But let me expand some here. Only four Gulf States have a regional sharing system for OCS drilling: Alabama, Mississippi, Louisiana, and Texas. The system was established by a Federal law in 2006. Note that this law was not retrospective. Revenue is being shared from recent leases only, not from all the leases in the Gulf. And there is a cap on it. There is no sharing of Federal revenues from offshore oil anywhere else in the country, especially California, Alaska, and the East Coast. There is revenue sharing for onshore.

You know, it would be difficult for Congress to change this and pass a revenue sharing law, because revenue sharing money would take away from the Federal budget. Congress has sort of pay-as-you-go rules that require any reduction in Federal revenues be replaced with increased revenues from another source, and it is very hard to generate those revenues in our Congress.

But let's say all of this were to come true. Here, in North Carolina, and there is a copy in your package, North Carolina Governor McCrory and our legislature passed a bill a couple of years ago on revenue from offshore energy. They indicated the first $250,000 would go to an emergency fund. The other funds would be distributed in different percentages. None of them, absolutely none of them, would go to local communities, counties, or municipalities.

Mr. LAMBORN. OK, thank you.

Representative Fleming.

Dr. FLEMING. Thank you, Mr. Chairman. And my question, first, is for Mr. Shuster. There is an inference in these discussions always that why should we lease more land, there is leased land out there now that is not producing. Can you shed some light on that?

Mr. SHUSTER. Happy to do that. So, as I mentioned previously, for every 100 OCS blocks that we see, we can identify about 10 prospects. And of those 10 prospects, typically we will see one commercial discovery made from that. And that really reflects a geology, the underlying prospectivity of the areas. And the point is that not all areas are the same. More areas, more perspective, and prospects are only limited to areas——

Dr. FLEMING. So to simplify, what you are saying is you drill where the oil is.

Mr. SHUSTER. That is correct.

Dr. FLEMING. OK. Now, why can't we bring that kind of common sense to Washington? Wouldn't that be nice?

[Laughter.]

Dr. FLEMING. But I am going to shift to Mr. Hobbs. How do we know where the oil is?

Mr. HOBBS. You have to acquire new data with today's technology.

Dr. FLEMING. All right. And you gave a good demonstration there. And that technology centers around ultrasound. That is ultrasonic technology. The sound emitted, I believe you said, lasts only a tenth of a second. Did I hear that correctly?

Mr. HOBBS. A single pulse of the seismic source is only a tenth of a second.

Dr. FLEMING. Now, to hear some of the discussion here, you would think that that is a very dangerous technology. But it happens to be, and by the way, I am a physician, it happens to be the very same technology that we use during pregnancy, early pregnancy, mid-pregnancy, late pregnancy. We have been using it for many years. We have never found one single problem with it.

But the preciseness now that we can treat fetuses and, ultimately, babies, even to the point of now doing surgery interuterally, because of what we find out through 3D and 4D ultrasound is just amazing. So the preciseness of that, if you expand that to what you are doing out there in the field, suggests to

me that by using seismic technology you are not drilling places that you don't belong. Is that correct?

Mr. HOBBS. Absolutely correct. You actually, in many cases, can reduce the number of wells drilled in a particular area to find the amount of oil that, ultimately, will be found.

Dr. FLEMING. Would that have a potential benefit for the environment?

Mr. HOBBS. Absolutely, yes.

Dr. FLEMING. If you dig less useless wells, you end up with less damage to the ecology, less cost. Therefore, the savings are transmitted to the end user, the consumer.

So, I am sure some studies have been done. Has there been found any damage or injury to wildlife or to, really, any part of natural resources, when it comes to seismic technology?

Mr. HOBBS. BOEM, the government themselves, has spent over $50 million looking at the impact of sound on marine life. Our industry has spent many millions of dollars looking at the impact of sound on marine life. And, really, all of the studies that have been done support BOEM's conclusion that seismic is not harmful to marine life.

Dr. FLEMING. OK. Very good. With that, I will yield back.

Mr. LAMBORN. Representative Beyer.

Mr. BEYER. Thank you, Mr. Chairman, very much. And thank all of you for being here to testify on the 5-year leasing program.

I am from Virginia, and the Navy and NASA have repeatedly said that offshore drilling could significantly affect their abilities to carry out training and testing activities. And a May 2010 Department of Defense report found that nearly 80 percent of the proposed leasing area off Virginia's coast would interfere with U.S. Navy training and operations. And I know there is the 50-mile buffer, but we have Wallops Island, a launch site, and NASA has even expressed concern that that 50-mile buffer zone won't be sufficient.

I understand the governor of North Carolina was here recently to urge BOEM to reduce the buffer zone currently in the plan. I think, from Virginia, from Virginia Beach, we just look south to off the Virginia coast to be able to see the offshore drilling. And we know that oil spills don't respect offshore state boundaries. We have the Gulf stream, and so Virginia would bear the risk for North Carolina.

What is equally interesting about his statement is that North Carolina could certainly benefit from offshore wind energy. A Chapel Hill UNC study found that North Carolina has some of the most potent wind energy off the Atlantic Coast. But it is interesting that his administration has recommended a buffer zone, 24 nautical miles for wind energy, but reducing it for oil.

So, Commissioner Swearingen, you are directly affected by that. Can you give us your take on offshore wind? How would your community react to it? Do you support it, off the coast of your town? And what do you make of the Governor's inconsistency on the buffer zones?

Ms. SWEARINGEN. Yes, sir. Thank you for that question. Our governor has reiterated, like you said, that the buffer zone for wind energy needs to be expanded. And, in fact, he said up on the Outer

Banks he has requested that all areas within 33.7 miles of Bodie Island Lighthouse be even excluded from wind energy completely, because it would impair visibility from the lighthouse and from the Hatteras National Seashore, therefore, impacting tourism.

OK. We sit there on the beaches there at Kure Beach, and watch the big tankers go by, and the ships and all, and they are, oh, maybe 5 to 10 miles off the coast. You can barely see them, you need binoculars. And, frankly, from everybody I have talked to, it is almost a tourist attraction for tourists to be able to sit there, use their binoculars, and look at the turbines going, you know, round and round like that.

But, yes, the Governor then wants to do away with buffer zones for oil. And I really don't see an oil rig being nearly as beautiful as a wind turbine. But what he has done has really killed the possibility of wind energy for North Carolina. And I don't really understand this: we should have buffers for wind energy, we should not have buffers for oil rigs. None of us in North Carolina understand that.

Mr. BEYER. Thank you, Madam Commissioner. I am very proud that Virginia, with our governor, we are the first state to actually sign one of these offshore wind leases from the Atlantic Coast. So we will lead the way for you.

Ms. SWEARINGEN. Thank you.

Mr. BEYER. Mr. Shuster, I know Shell is taking really good actions to secure a sustainable energy future. I read all the ads about Shell. And Shell stated, "Government action is needed in that Shell supports an international framework that puts a price on CO2."

Now, a global cap-and-trade system is not in our imagination any time soon. Would Shell consider using the social cost of carbon to estimate the climate impacts before making leasing and drilling decisions?

Mr. SHUSTER. You know, I——

Mr. BEYER. Given your understanding of the larger impact already.

Mr. SHUSTER. I think our view on putting a price to carbon is really based on looking at the opportunities that are out there on a project-by-project basis, so that we can gauge the relative carbon footprint of each of these projects. How exactly we go about pricing it, I wouldn't want to comment on, because I don't think I could make a reasonable comment.

Mr. BEYER. OK. But thank you for considering it.

And, Commissioner Swearingen, if we look at offshore oil, natural gas off the coast of North Carolina, almost certainly we are going to have pipelines crossing the beaches and fundamentally changing the nature of those beaches and all the tourism. Could you speak to that, and what it would do to your community?

Ms. SWEARINGEN. Yes. I believe I had mentioned earlier about industrialization from offshore oil, the refineries, the storage, all of that. And, frankly, it would destroy our beach. I mean our little island isn't even big enough for that. I think what they are looking at is up at the Outer Banks. And if you have ever been to Nags Head or Kitty Hawk, you would no longer have any tourism because it is so narrow, you would have to do away with all the

residences and the commercial development in order to do the infrastructure that would be needed.

Mr. BEYER. Thank you. Thank you, Mr. Chairman.

Mr. LAMBORN. You are welcome. I am wondering if that would be more or less noticeable than high power lines.

Representative Lummis, you are recognized.

Mrs. LUMMIS. Thank you, Mr. Chairman.

Mr. Shuster, we heard earlier from BOEM's testimony that when it develops 5-year programs, it uses estimates. And we know, in its current proposal, it is allowing potential lease sales, 80 percent of estimated undiscovered technically recoverable oil and gas reserves.

Do you think that 80 percent figure captures the resource potential on the Outer Continental Shelf?

Mr. SHUSTER. I think our view, based on the evaluation that we have done in the Eastern Gulf of Mexico and the Atlantic, is that it is reasonable. However, we think that there is potentially much more resource above and beyond those areas that are included in the draft proposed program.

Mrs. LUMMIS. OK. Mr. Shuster, and Mr. Hobbs, I would like you to answer this question as well, after Mr. Shuster has responded. In both of your experience, whether it is onshore or offshore, does allowing development and exploration to move forward lead to discovery of more energy potential?

Mr. SHUSTER. Certainly, from my experience, and I can say that this is experience globally, both onshore and offshore, what we have seen is that when areas are opened up for exploration and production, and if discoveries are found, that it opens up many more discoveries on the back of that.

Mrs. LUMMIS. Mr. Hobbs?

Mr. HOBBS. Every time we acquire a new seismic data set, or every time we see the subsurface by understanding the rocks through a well, we learn so much more about the potential of an area.

So, I can't think of any basin around the world where you have successful exploration and development where you don't ultimately increase the reserves that are believed to be producible within that basin.

Mrs. LUMMIS. Another question, Mr. Shuster. You showed us a map earlier that shows a big gap on the coastline of the Atlantic in the United States, where we don't have the opportunity to explore, produce, or drill. Looking at the proposed 5-year plan, do you believe the Administration is doing enough to keep the United States competitive with its neighbors to the north and to the south?

Mr. SHUSTER. Yes. Based on, certainly, what we see both in North America and Latin America, where there is a very strong commitment from those countries outside the United States to support oil and gas exploration and production, we do not see enough being done in the current program.

Mrs. LUMMIS. Now I would like to switch to the Eastern Gulf of Mexico. Could you talk to me a little bit about the energy potential there?

Mr. SHUSTER. Yes. So the dividing line between the Eastern Gulf and the Central Gulf of Mexico, which is open for business, so to

speak, is an artificial line. Essentially, based on the geology, and there is existing seismic data that covers the Eastern Gulf of Mexico, the prospective trends that we see in the Central Gulf, the areas of production in the Central Gulf, extend into the Eastern Gulf of Mexico.

Mrs. LUMMIS. And where is the infrastructure to produce oil and gas in the Gulf?

Mr. SHUSTER. Yes, the infrastructure is really across the Gulf of Mexico, both offshore and onshore. So that includes producing facilities, that includes pipelines, it includes Port Fourchon. And all that is part of the infrastructure.

Mrs. LUMMIS. And because the infrastructure is in place, where would be the most efficient, expeditious place to add production that would allow further use of that infrastructure?

Mr. SHUSTER. It would be in the Eastern Gulf of Mexico, if you are comparing that with the Atlantic. Just on the basis that, essentially, we would be able to extend the producing areas, and be able to utilize that infrastructure quickly. So it would accelerate production.

Mrs. LUMMIS. How could more production within the Eastern Gulf of Mexico occur while still mitigating for impacts on tourism? Obviously, the Gulf Coast of Florida is a highly desirable tourist location.

Mr. SHUSTER. Right. So, first, let me state that there is ongoing tourism, as was brought up by my co-panelist, in the Gulf of Mexico. And the areas most of interest, at least from our assessment, is in the deeper water, which is far away from the shorelines of Florida or the other coastal states.

Mrs. LUMMIS. Thank you, Mr. Chairman. I yield back.

Mr. LAMBORN. Thank you. And there is another question I would like to ask, so I am going to call for a second round of questions, but limited to 3 minutes a piece. So any last questions that we have, we can get those out there, on the record.

Mrs. LUMMIS. Thank you.

Mr. LAMBORN. And thank you, once again, for being here today, and for your patience.

And, Mr. Hobbs, I would like to direct this last question to you. Can you explain how much seismic acquisition technology has matured since the last time any seismic activity was done off of the Atlantic Coast in the 1970s?

Mr. HOBBS. The technology that we used in the 1970s was using very old sensor technology that we towed behind the vessels. The resolution of the data is far lower than what we can acquire now. We can see a lot deeper into the earth now, with the technology that we have. We can see features, geologic features in the subsurface, that are a lot more detailed that, again, are very, very important, not only for the oil and gas industry to reduce risk before they drill an exploration well or development well, but also for the government, to be able to develop policy, to be able to understand what resources are available. Because simply, right now, with the data available, we cannot accurately predict the resources that are available in this particular basin.

Mr. LAMBORN. What kind of potential is there to find more energy resources than the last time any seismic exploration was done over 40 years ago?

Mr. HOBBS. It is extremely important for us to acquire the data sets that will allow us to understand what just the broad regional geology is, but also to understand what potential might be there to direct future license rounds.

With the data that is currently available right now, it is impossible to do that. We have been able to try to reprocess the current data through our computer systems. And we have pretty much squeezed everything we can out of that old data. And what is absolutely necessary right now is to acquire new information. And these are surveys where we can come in, acquire the data, and leave, and process that data, and have that data available, both to the government, as well as to the oil and gas industry.

Mr. LAMBORN. And, Mr. Shuster, could you take a crack at that same question?

Mr. SHUSTER. Yes. I certainly share the same view as my colleague. We need new data to be able to effectively characterize the resource. But we also need new seismic data in order to be able to actually determine where we want to drill. And, because of the improvement in the technology of the seismic methods, we certainly view that new data will let us see things that we haven't seen before, previously.

Mr. LAMBORN. Would you both agree that there is the potential for sizable amounts of oil or gas to be found, using advanced, current techniques?

Mr. SHUSTER. Certainly. The view from Shell is that we see significant resource potential, both in the Atlantic and in the Eastern Gulf of Mexico.

Mr. HOBBS. I would agree with that.

Mr. LAMBORN. OK. Thank you very much. And, with that, we will go to the last questions by Representative Beyer.

Mr. BEYER. Thank you again, Mr. Chairman.

Mr. Shuster, obviously, the great nightmare for all of us considering offshore drilling is the Deepwater Horizon, and what happened in the Gulf. Can you tell me what is going to be different, in terms of the drilling, technology, methodologies, science that will give us more comfort that this is not going to lead to massive oil spills along the Atlantic Coast?

Mr. SHUSTER. Yes. So let me share with you what has already changed. So, the Macondo incident occurred in 2010, about 5 years ago. And subsequent to that, the U.S. Government established a new organization, which is the Bureau of Safety and Environmental Enforcement, to ensure that new regulations that also had been put in place, like the new final drilling safety rule, could be enforced.

In addition, industry moved forward and took steps with the formation of, for example, the Center of Offshore Safety, to ensure that the proper approaches to safety and environmental management systems could be put in place, that there were appropriate third-party audits being conducted on any offshore operation, including drilling.

And, in addition, there have been technological advances and additional resources put on oil spill response that cover the Gulf of Mexico, including looking at new companies that are focused on containment. For example, the Marine Well Containment Company has been formed, and is active. And there is also the Helix Containment Group that is out there to be able to contain and intervene in the unlikely case that a spill should occur.

Mr. BEYER. Can you tell us the current state of oil spill recovery, and the use of dispersants?

Mr. SHUSTER. I can comment at a general level on that. I certainly can provide more information in detail from my colleagues. But the oil spill response has improved dramatically in the Gulf of Mexico. We have a much clearer understanding of how dispersants need to be used, and what sort of dispersants should be used in the case of a spill.

Mr. BEYER. One last question for Commissioner Swearingen. I understand the Governor said that your Mayor was in favor of offshore drilling, and the Ranking Member submitted a bunch of letters of jurisdictions, towns that are opposed that are around the country. Do you know of any towns in North Carolina that have passed a resolution encouraging offshore drilling?

Ms. SWEARINGEN. No. As a matter of fact, of the 14 towns that submitted resolutions, absolutely none of them were in favor of offshore oil.

And let me point out, because I also was going to ask to have our Mayor's letter inserted, because it is not from the town, it is not from the council. It is a letter he picked up at an oil industry conference. It is a canned letter on their letterhead, which he signed, supposedly as an individual, even though he did indicate he was with the Town of Kure Beach.

Mr. BEYER. Are you going to run against him next time?

Ms. SWEARINGEN. Yes, I am running against him this year.

[Laughter.]

Mr. BEYER. Just kidding, actually. Thank you, Mr. Chairman.

Mr. LAMBORN. OK, thank you. And I appreciate the opportunity that we have had to ask all kinds of questions. I appreciate the knowledge and information that you have shared with us.

And there are Members who may give you written questions for the record in the next couple of days. So I would ask that you respond to those in writing, as well, within 10 days. Let me clarify that.

And the last business to do, I would like to enter into the record in support of Atlantic Coast energy exploration from the Lieutenant Governor of North Carolina; the Carteret County Economic Development Council in North Carolina; the North Carolina Farm Bureau; the OCS Governors Coalition, signed by the governors of North Carolina, Alabama, Mississippi, Virginia, Maine, and South Carolina; North Carolina's Joint Legislative Commission on Energy Policy; North Carolina State Senator Phil Berger; the city of Virginia Beach. And put these into the record, if no objection, so ordered.

Last, I would like to enter into the record a recent letter led by Senators Mark Warner of Virginia and Tim Scott of South Carolina

that expresses support for offshore energy development in the Mid- and South Atlantic, and revenue sharing for that development.

Hearing no objection, so ordered.

Let me lastly point out that next Wednesday we will have a full committee hearing on the changes that have taken place with advanced technology since the Macondo oil spill and government regulations to enhance safety.

If there is no further business before the committee, we will be adjourned.

[Whereupon, at 12:12 p.m., the subcommittee was adjourned.]

[ADDITIONAL MATERIALS SUBMITTED FOR THE RECORD]

[LIST OF DOCUMENTS SUBMITTED FOR THE RECORD RETAINED IN THE COMMITTEE'S OFFICIAL FILES]

Documents Submitted by Chairman Lamborn

Congressional Research Service Report, "U.S. Crude Oil and Natural Gas Production in Federal and Non-Federal Areas," by Marc Humphries, Specialist in Energy Policy, dated April 3, 2015. Available on the Internet at: http://www.crs.gov/pdfloader/R42432

The following letters are submitted in support of OCS activity:

—Carteret County Economic Development Council, Eric Gregson, President, March 23, 2015 Letter to Governor McCrory, State of North Carolina

—City of Virginia Beach, William D. Sessoms, Jr., Mayor, March 9, 2015 Letter to Ms. Kelly Hammerle, BOEM

—North Carolina Farm Bureau Federation, Inc., Larry Wooten, President, July 10, 2014 Letter to Ms. Kelly Hammerle, BOEM

—North Carolina Lieutenant Governor Dan Forest, August 14, 2014 Letter to Ms. Kelly Hammerle, BOEM

—North Carolina State Senator Philip Berger, August 14, 2014 Letter to Ms. Kelly Hammerle, BOEM

—North Carolina State Senator Philip Berger, March 30, 2015 Letter to Ms. Kelly Hammerle, and Mr. Geoffrey Wikel, BOEM

—North Carolina State Senator Bob Rucho and North Carolina State Rep. Mike Hager, North Carolina Joint Legislative Commission on Energy Policy, July 29, 2014 Letter to Ms. Kelly Hammerle, BOEM

—Outer Continental Shelf Governors Coalition, March 30, 2015 Letter to Secretary Sally Jewell, U.S. Department of the Interior

—Town of Kure Beach, North Carolina, Dean Lambeth, Mayor, December 19, 2013 Letter to Mr. Tommy Beaudreau, BOEM

—U.S. Senators Warner, Scott, Graham, Kaine, Burr, Isakson, Perdue, and Tillis, April 7, 2015 Letter to Senate Energy and Natural Resources Committee, Chairman Lisa Murkowski and Ranking Member Maria Cantwell

Documents Submitted by Ranking Member Lowenthal

Numerous Resolutions (53) from various towns and cities in Florida, Georgia, New Jersey, North Carolina, and South Carolina, opposing offshore drilling and seismic activity

The following letters are submitted in opposition to OCS activity:

—City of St. Augustine, Florida, April 15, 2014 Letter to Mr. Gary D. Goeke, BOEM

—Group of Marine Scientists, Letter to President Obama

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