

# OIL RIG DISASTER IN THE GULF

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HEARING  
BEFORE THE  
COMMITTEE ON  
ENERGY AND NATURAL RESOURCES  
UNITED STATES SENATE  
ONE HUNDRED ELEVENTH CONGRESS  
SECOND SESSION

TO

RECEIVE TESTIMONY ON ISSUES RELATED TO THE DEPARTMENT OF  
THE INTERIOR'S MAY 27TH REPORT: INCREASED SAFETY MEASURES  
FOR ENERGY DEVELOPMENT ON THE OUTER CONTINENTAL SHELF,  
INCLUDING OVERSIGHT OF RECENT ACTIONS RECOMMENDED BY  
THE DEPARTMENT TO ADDRESS THE SAFETY OF OFFSHORE OIL DE-  
VELOPMENT

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JUNE 9, 2010



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## OIL RIG DISASTER IN THE GULF

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WEDNESDAY, JUNE 9, 2010

U.S. SENATE,  
COMMITTEE ON ENERGY AND NATURAL RESOURCES,  
*Washington, DC.*

The committee met, pursuant to notice, at 9:36 a.m. in room SD-366, Dirksen Senate Office Building, Hon. Jeff Bingaman, chairman, presiding.

### OPENING STATEMENT OF HON. JEFF BINGAMAN, U.S. SENATOR FROM NEW MEXICO

The CHAIRMAN. OK. The hearing will come to order. The committee will come to order.

Today, we are holding the fourth committee hearing here in the Energy and Natural Resources Committee on the devastating oil spill in the Gulf of Mexico. As large volumes of oil continue to wreak havoc in the Gulf, our thoughts are first with the people on the forefront of the disaster—the families of those who have lost their lives in the explosion, those who are working day and night to protect the places and the wildlife they care about and often their livelihood as well.

I know all Americans are thinking of the residents of the Gulf region and are grateful to them and to the other responders for their work under these most difficult circumstances.

It is clear that prior to the explosion of the Deepwater Horizon rig neither the companies involved nor the Government adequately appreciated or prepared for the risks involved in a deepwater drilling operation of this type. The results of that failure to properly assess risks and prepare for risks have been disastrous. Lives have been lost. The livelihood and way of life of many Gulf residents has been interrupted and in some cases destroyed. The environmental damage has been immense. Since BP has so far failed to stop the oil gushing into the Gulf, the extent of the further damage that will be suffered is not known.

Our purpose today is to review near-term actions that have been taken and are planned to correct this longstanding failure to properly assess risk and to ensure the safety of this and other ongoing and future energy operations in the Outer Continental Shelf. According to the Department of the Interior, the Gulf of Mexico has nearly 7,000 active leases on the Federal Outer Continental Shelf, 64 percent of which are in deep water. As a result, there are now about 3,600 oil and gas-related structures in the Gulf.

In 2009, 80 percent of all U.S. offshore oil production, 45 percent of natural gas production occurred in water depths in excess of

1,000 feet, and industry had drilled nearly 4,000 wells to those depths. Operators have drilled about 700 wells that—like Deepwater Horizon’s well—are in water depths of 5,000 feet or greater on the Outer Continental Shelf.

In 2009, production from the Gulf accounted for 31 percent of total domestic oil production and 11 percent of total domestic natural gas production. Offshore operations provided direct employment estimated at 150,000 jobs.

We are all aware of our country’s demand for oil. As a result of this accident, we are aware perhaps in a way that we were not before of the true potential costs of that demand.

The challenge for regulators, and for Congress in enacting statutory responsibilities and authorities to those regulators, is to put appropriate requirements in place ensuring that this horrible price is not paid again. At the same time, we are reminded that we must continue with renewed vigor to find ways to reduce our dependence on oil for both national security, economic, and environmental reasons. It is particularly challenging to do so while we are still in the midst of a crisis.

Investigations are ongoing into the cause of this disaster. We do not have certainty about what happened. The best minds in the country must be focused on stopping this oil leak and cleaning up the affected areas. Yet we must make sure, as an urgent matter, that ongoing operations are safe.

Today, we hear from the Secretary of the Interior about the administration’s actions in this regard. At the President’s direction, his team has produced a report, on a 30-day timeline, to identify near-term safety measures that need to be taken. The regulators have acted quickly to impose some of these new safety requirements immediately on ongoing operations. In addition, the administration has taken measures to halt certain operations to ensure their safety, while allowing others to continue.

We appreciate the Secretary’s efforts and his work to ensure that there is an adequate response to the environmental and safety crises presented by this accident. We also appreciate his presence here today, look forward to working together with the administration on our shared and urgent goal of ensuring the safety of these operations.

Let me turn now to Senator Murkowski for her opening remarks.  
[The prepared statement of Senator Landrieu follows:]

PREPARED STATEMENT OF HON. MARY L. LANDRIEU, U.S. SENATOR FROM LOUISIANA

Thank you, Mr. Chairman for holding this important hearing. I begin each hearing remembering those whose lives were lost in this terrible accident. Our nation lost 11 men and our thoughts and prayers remain with their families of those lost and injured.

Today we are here to discuss the Department of Interior’s May 27th report that was requested by the President on April 30th. Only 10 days after the Deepwater Horizon explosion, the President requested a thorough report on additional safety mechanisms that could be put in place immediately to improve the safety of oil and gas exploration and production operations on the OCS.

The intent of this report was to improve the safety of oil and gas production in the Gulf of Mexico, not shut it down. Unfortunately, the recommended 6 month drilling moratorium on deepwater leases, including shutting down the 33 rigs that were already in the process of drilling new wells, has halted all future production. And currently, no one knows when companies will be allowed to drill again.

As such, this moratorium will exacerbate, rather than alleviate, the impacts of this spill upon Louisiana's economy and the environment.

The immediate impacts to the economy are devastating. The idled 33 rigs employed approximately 36,300 crewmen, deck hands, engineers, welders, ROV operators, caterers, helicopter pilots, etc. Many of these offshore crewmen and women are from Louisiana and the neighboring states.

That's like closing 12 large motor vehicle assembly plants at once—with the impacts disproportionately in my state.

In addition, all the service jobs will also be impacted. Losing tens of thousands of jobs will be a catastrophic blow to an already tragic situation.

I know that many in the environmental community believe that shutting down offshore oil and gas production will protect our coastlines from oil washing ashore, but this is contrary to the facts.

The reality is our country will continue to rely on oil and gas for years into the future as we move to more renewable and less carbon intense sources of energy. If we are not going to produce oil and gas domestically, then we will have to get it from somewhere else and transport it by tanker.

On average, today's tankers carry about 2 million barrels of oil each, and according to the National Research Council, are four times more likely to be the cause of oil in the sea vs. an offshore drilling facility. Increasing tanker traffic will only increase this risk—and put our coastlines at greater peril—the opposite intent of the report.

I agree that we must ensure that we are doing everything possible to increase the safety of OCS oil and gas production. I am supportive of a pause on drilling to ensure that all the right safety mechanisms are in place, but I do not believe a 6 month moratorium achieves the results intended.

Once these drilling rigs get moved to international locations, they will not return immediately. It could be years before they return, leaving the U.S. more dependent on foreign oil, exporting jobs abroad, weakening our economy and putting our shorelines at greater risk.

That is why I have asked the President to immediately reconsider the six-month moratorium on deepwater drilling.

I hope for the sake of Louisiana's economy and shoreline, he listens.

Thank you Mr. Chairman

#### **STATEMENT OF HON. LISA MURKOWSKI, U.S. SENATOR FROM ALASKA**

Senator MURKOWSKI. Thank you, Mr. Chairman. Good morning.

Good morning to you, Secretary. It has been a couple of weeks now since you have been before the committee. I think last time you were here, the oil from the spill had not yet reached—

[Interruption from audience.]

Senator MURKOWSKI. Mr. Chairman.

The CHAIRMAN. Let me ask the protesters to please exit the room and allow us to proceed with our hearing.

Senator MURKOWSKI. Thank you, Mr. Chairman.

Mr. Chairman, again, as I was saying, it has been several weeks now since you have been before the committee. At that time, the oil had not yet reached the shores and marshes of southern Louisiana. A couple of weeks ago, we had the opportunity, along with the chairman, to go, fly over that spill. I think we all recognize the gravity of the situation and the nightmare that it has become for the residents of the Gulf region.

Today, we are examining the measures that the Interior Department has recommended and implemented so far in response to the Deepwater spill. We are examining not only the 4-page report on immediate recommendations for improved safety and environmental protections, but also we need to discuss the moratorium that the Interior Department has implemented for all deepwater

exploration and the additional requirements and suspensions for some shallow water exploration as well.

There can be no doubt, most certainly, that the public outrage and the political pressure has mounted for the Government to do more about this still-worsening situation, and I think we are all sympathetic to those demands. Yesterday, I had an opportunity to meet with an Alaskan—he is going to be testifying this morning in another committee here on the Hill, speaking on the long-term impacts of oil spills on fisheries as we experienced after the Exxon Valdez. Unfortunately, his story is familiar, very familiar to me and my constituents.

But our conversation wasn't just about the fisheries. It was about the constant struggle in finding a balance between the exploration and the production of oil, which our State depends upon for the majority of its economy, against the critical and very compelling interests of maintaining our ecosystems, which support the remaining building blocks of our fisheries and our tourism economies. The Gulf is certainly faced with a stark picture of the associated trade-offs right now.

So I applaud the Interior Department for its efforts, as you have stated in the report, to address the fact that America's energy security is likely to carry exploration increasingly into very deep water environments, and how to reevaluate whether the best practices for safe drilling operations developed over the years might be adjusted for the unique challenges of drilling so very far under the sea.

These are not just technical challenges, but they are human challenges as well, which we recognize can be difficult to regulate without successfully creating a culture, both at the regulatory and the industrial level, that prioritizes safety and, in turn, protects from anything like Deepwater Horizon ever happening again.

I am sure that we will look back at the lessons that have been learned not only from what happened on April 20th, but from the various operational responses to the spill, and most certainly, we will learn lessons from our policy responses as well. I think we just need to look to the news yesterday that one of the largest independent offshore operators announced that it is packing up and moving three of its rigs to foreign waters.

So, I think the question that needs to be asked is, is this consequence unintended? Is it something we are willing to accept?

Mr. Chairman, there is certainly a lot to talk about here. I want there to be no effort or expense spared to bring the well under control and see to it that the victims of this spill are compensated fairly and expeditiously, and I am certainly working to make that happen. As we look at the policy moving forward, I simply reiterate that we carefully consider the impacts of this spill on long-term energy policy. We have got to get it right.

Energy Secretary Chu announced yesterday that the department is providing online access to diagnostic results and other data about the malfunctioning blowout preventer. He said, and I quote, "Transparency is not only in the public interest, it is part of the scientific process. We want to make sure that independent scientists, engineers, and other experts have every opportunity to review this information and make their own conclusions."

Mr. Chairman, I would echo Secretary Chu's statements. Let us reform policy in a transparent, reasoned manner where the public and the scientific community and all interested parties can review it. We certainly have a lot of work to do.

With that, I appreciate the opportunity and look forward to the comments from the Secretary.

The CHAIRMAN. Thank you. As Senator Murkowski said, we welcome you back to the committee, Mr. Secretary. Of course, your deputy David Hayes and your counselor Steve Black, we welcome them as well. So please go ahead with your statement.

**STATEMENT OF HON. KEN SALAZAR, SECRETARY,  
DEPARTMENT OF THE INTERIOR**

Secretary SALAZAR. Thank you very much, Chairman Bingaman and Ranking Member Murkowski and all the U.S. Senators, and I think all of you are former colleagues on this committee. So it is always good to come to this committee, even when we are dealing with difficult challenges that are facing our Nation.

I have prepared a statement for the record that we will submit for the record. But I think in the interest of having a dialog with you, what I want to do this morning to is to focus in on a couple of key issues. The first is the status of offshore drilling and the safety program which the President has directed, which we are in the process of implementing. The second is the reform that we have underway at the Department of Interior with respect to the Minerals Management Service and moving forward with efforts to develop a new organization there.

It may be useful at the outset, before I speak to those two central points here, to also just give you a quick overview of what is happening even this morning. We are in a position where we are directive of BP relative to making sure that they are doing everything humanly and technologically possible to stop the leak, to fight the oil on the seas, and to fight the damages as they occur on shore.

This morning, Secretary Chu and I had our morning call with BP executives. We were informed that the Enterprise vessel, which is what they call the vessel that is doing the short-term containment, is capturing about 15,000 barrels of oil a day. At our insistence, they have moved forward with additional capacity to be able to capture additional amounts of oil and to make sure that the redundancies are built in over time so that at the end of the day, as much of the pollution as is leaking can be captured, will be captured.

Our goal is to get to zero pollution emanating from this well and doing so in the interim, while they get to the final effort, which will be to kill the well through the relief wells which are penetrating the subsea and which now are close to 8,000 feet below the surface of the sea. So those efforts continue. They are continuing in parallel, not in sequence, and nothing is being spared to bring this problem under control.

In the headquarters at Houston, where I have now spent probably 10 days in the last 3 or 4 weeks, the scientists from the United States of America, from Sandia Labs, from Livermore, and from Los Alamos Laboratories, along with scientists from the United States Geological Survey, the Department of Defense ex-

perts are all assembled there, making sure that the best minds are being brought to focus in on the problem. That is at the direction of the President.

Let me comment just then on two of the issues, and I know that the committee will have many questions on these matters. First, Deputy Secretary David Hayes has been involved on this effort—now I think we enter day 51 or 52—nonstop, like the rest of us. We are relentless. We haven't taken a day off from the beginning, and we will continue to work at this same level until we get this problem under control and we figure out the future with respect to oil and gas and the Outer Continental Shelf.

Steve Black, who is the counselor to the Secretary, has been involved in all the energy issues at the Department of Interior and was one of the key architects of the safety report that was submitted to the President at his direction. So, he may have answers to some of the questions with respect to the safety report.

Let me speak to the status of offshore drilling because I think that is something which many of you on this committee are very interested in, wanting to find out where we are. No.1, the President, following the Deepwater Horizon, directed the Department of Interior to develop safety recommendations within 30 days.

The goal is simple. If we are going to move forward with any kind of oil and gas production in the Outer Continental Shelf, it must be done in a safe manner, and assumptions that were made about safety in the past are not assumptions that will be made in the future. To the extent that offshore drilling will continue, it has to be done in a manner that we can assure that it can be done in a safe way. So, the multiple recommendations that came out to the President in the report are now in the process of being implemented at the Department of the Interior.

Those recommendations include additional enforcement and safety measures. They include requirements, which essentially amount to a recall of blowout prevention mechanisms and the recertification of those blowout prevention mechanisms in the Outer Continental Shelf.

They include requirements with respect to cementing and with respect to casing, with respect to rig safety and a whole host of other safety initiatives. They are being implemented through Notices to the Lessees, which we implemented yesterday by sending a Notice to Lessees that affects both deep water and shallow water. So there is a panoply of safety measures which are significantly enhanced from what had existed in the past that are already being implemented as we speak here.

No.2, with respect to the status of offshore drilling, I wanted to comment on the moratorium and also what we are doing with respect to shallow water development. First of all, with respect to the moratorium that the President and I have put into place, it was our view that we needed to get to the bottom, that we needed to find out exactly what it is that happened out at the Deepwater Horizon so that as we move forward with any kind of deepwater exploration that we can assure the American public and we can assure everyone who is watching that, in fact, it can move forward in a safe way.

The President's commission, which will take a look at all of these issues, will have a recommendation based on the President's directive within 6 months. Those recommendations will then be incorporated into how we move forward with Outer Continental Shelf drilling.

But between now and then, it was our view, it was the President's directive that we press the pause button. That is important for all of you on this committee to know that word. It is the pause button. It is not the stop button, but it is the pause button. It is a pause button so that we can make sure that if we move forward with OCS drilling in the Outer Continental Shelf that it can be done in a way that is protective of people and protective of the environment as well.

With respect to the shallow waters, which I defined essentially at a 500-foot level, we have allowed those oil and gas shallow water production efforts and drilling efforts to move forward if, in fact, the operators can certify to us that they can meet the safety requirements. For most good operators, they will be able to give us the requirements that we have imposed on them, including certification that their blowout prevention mechanisms, that their redundancies, that their cementing procedures, that their casing procedures are all working.

So, we wanted to allow shallow water drilling to move forward if it could be done in a way that can assure safety, and the Notice to Lessees that went out yesterday hopefully will achieve that.

Let me then speak to the second point I wanted to cover this morning, and that is with respect to the Minerals Management Service and the changes that we are undertaking within that agency. It is important to reflect back also at the work that has gone on with MMS over the last 16, 17 months at the Department of Interior, and there has been massive work that has gone on.

From day one, we imposed ethics requirements on MMS that had not existed before. We made ethics requirements a part of the performance plans of supervisors within MMS. Those who were involved in wrongdoing were referred to prosecution, or other personnel action was taken with respect to people who had been involved in wrongdoing.

Our purpose in taking those reforms was to change the culture at MMS, and I believe that we have made significant progress in moving on that agenda. Second, we also move forward with a whole new agenda with respect to renewable energy, recognizing oil and gas is important. We also have recognized that there is tremendous opportunity with respect to wind power in the offshore.

Yesterday, I signed a memorandum of understanding with 10 Governors along the Atlantic coast because we believe that a very significant amount of the electricity needed along the eastern seaboard can, in fact, be generated from wind power off of the Atlantic, and the States along the Atlantic coast are very interested and supportive of those initiatives. So we have moved forward with a major renewable agenda, energy agenda within MMS.

Finally, on reform efforts, the plans which we announced at the end of March were a culmination of a very significant amount of work taking into account and consideration two different plans that have been put forward by the prior administration, the 2007–2012

plan, as well as their 2010–2015 plan. The plan that we came out was very different from what had been proposed.

We ended up postponing leases that had been planned in the Chukchi and the Beaufort Sea, as Senator Murkowski well knows, in large part because of the fact that we felt we needed additional science and we needed additional information with respect to oil spill response capability. We looked at places like Bristol Bay in Alaska, and we said it was too special and had the kind of ecosystem values there that needed to be protected for the long term.

But we were also looking at making sure that those areas where you had the right infrastructure, where you had the support of, say, governments, where we had the geophysical information, that we allowed oil and gas production to move forward. Certainly, that was what we put forward with respect to the Gulf of Mexico.

There are other places on the Atlantic, and I know Senator Menendez and others have been very interested with respect to the Atlantic. In the North Atlantic, we took that off the table from any drilling exploration. In the Mid-and South Atlantic, what we said we would do there is essentially develop additional information so that we can make thoughtful decisions relative to the future of the OCS. So that a plan that we came up with, in fact, was a part of what I consider to be one of the most significant changes that we came up with MMS.

Now, moving ahead, how do we take this very critical function of the Department of the Interior of the United States of America and organize it in a way so that we can make sure that the functions of Government are being performed and being performed well?

We have, through Secretarial Order, ordered the dismantling of MMS as we knew it into what now will be three components going forward. You all know on this committee that MMS exists by virtue of a Secretarial Order. The Secretarial Order that I have signed envisions the creation of a new direction forward in terms of how we are organized, and let me just quickly walk through that, and I will conclude my testimony.

The first is that we are separating the revenue collections of MMS totally away from that part of the department. MMS has historically been located within the Assistant Secretary of Land and Minerals Management. There are approximately 900 people who work in that part of the department. Their job is to go out and collect the money on behalf of the American citizens, which they have done in good ways for a long time, including an average of \$13 billion a year.

Thirteen billion a year that comes into the Federal Treasury from oil and gas, and most of it coming from offshore. They do that day in and day out. Those functions of revenue collections will be moved away from Land and Minerals and put over into the Assistant Secretary of Policy Management and Budget, who is an Assistant Secretary appointed by the President, confirmed by the Senate. So, that will be a complete separation of the revenue collections from the permitting and the enforcement side.

Then what we will do with the rest of the agency is we will divide it into two bureaus. One will be the Bureau of Ocean Energy Management, which will have the responsibility for moving forward

with the lease sales, moving forward with the environmental analysis, and moving forward with making sure that the resource in the Outer Continental Shelf, both with respect to conventional energy and renewable energy, is being managed in the appropriate way.

We will also create a Bureau of Safety and Environmental Compliance, which will be separate and apart from the agency that has the responsibility for giving out the leases. That will allow essentially the police function of Government to operate independently of the part of the Government that will be providing the leases and the planning with respect to the OCS.

Now, how did we come up with this plan? I mean, we have been working on a new reorganization for MMS for several months. This plan, in large part, reflects what has happened as well in places like the UK and Norway, where after horrific incidents that they also had in their outer continental shelf, they reorganized their departments relative to how they oversee the outer continental shelf.

So as we move forward with the reorganization, Chairman Bingaman and Senator Murkowski and the distinguished members of this committee, I want to work closely with you to make sure that the organization that we put into place will ensure the goals which were articulated by you, Senator Bingaman, and that is that we have safety and environment as a critical concern of how we move forward with development in the OCS.

With that, Mr. Chairman, I would be happy to take your questions.

[The prepared statement of Secretary Salazar follows:]

PREPARED STATEMENT OF HON. KEN SALAZAR, SECRETARY, DEPARTMENT OF THE  
INTERIOR

Thank you, Chairman Bingaman, Ranking Member Murkowski, and Members of the Committee for the opportunity to be here today. I appreciate the opportunity to discuss our ongoing safety and management reform efforts related to offshore energy activities.

Since I last appeared before you several weeks ago, we have continued our aggressive response to the BP oil spill in the Gulf of Mexico and efforts to improve the Department of the Interior's ability to respond to help prevent such events in the future.

I will discuss these reforms in more detail later in my statement, but I want to be clear from the beginning that the changes that we have been making are substantive and systemic, not just cosmetic. These reforms are critical to help us prevent future occurrences of events like the Deepwater Horizon drilling rig explosion and the subsequent BP oil spill.

SUSTAINED EFFORT IN THE GULF

At the direction of the President, Department of Energy Secretary Chu and I returned to Houston last week. Secretary Chu and I spent most of the week with BP officials and engineers and federal scientists continuing our work on ways to leverage the best science and engineering minds from across the federal government, academia, and the private sector to contain the BP oil spill. We have been monitoring BP's containment operations, conducting independent analysis of the data and operational plans to help maximize the chances of success.

Under the command of Admiral Thad Allen, I directed Dr. Marcia McNutt, Director of the U.S. Geological Survey, to lead the effort for an independent estimate of the flow rate for the out-of-control well. We carried out this effort because we wanted our own assessment, independent of the estimates provided by BP. This preliminary scientific assessment, performed in collaboration with federal scientists and respected members of the academic community, is an independent estimate of the flow rate that will ensure that BP and other responsible parties will be held accountable for the oil spill, and will inform the response effort that is underway. The Flow Rate

Technical Group, chaired by Dr. McNutt, is now in the process of determining a revised estimate of flow that takes into account the cutting off of the riser.

Deputy Secretary David J. Hayes has continued to work virtually around the clock on Gulf-related response activities, coordinating the many efforts undertaken by the Department in responding to the spill, both in terms of capping the well, implementing new safety measures included in my recent report to the President, and in working to protect our trust resources from damage from the spill.

Recently I named Bob Abbey, Director of the Bureau of Land Management, as the acting director of the Minerals Management Service (MMS) while we transition to new leadership. Bob has been one of our leaders on onshore energy reform and I believe he has the kind of experience we need as we continue moving forward with our reform and restructuring of the MMS offshore leasing and development and revenue collection programs.

My top natural resources and science leadership continue their collective efforts on the Gulf Coast. Tom Strickland, Assistant Secretary for Fish and Wildlife and Parks; Jon Jarvis, Director of the National Park Service; and Rowan Gould, Acting Director of the U.S. Fish and Wildlife Service are working hard and leading the efforts to protect and assess damage to the complex ecology of the Gulf Coast in our National Wildlife Refuges, National Parks, and National Seashores. They and their bureau staffs are helping to develop and provide data and information for use by the Unified Command.

#### A BACKDROP OF REFORM

When I appeared before you last time, I reviewed the major changes that we have made at MMS. Since January 2009 we have taken the bureau in a bold new direction, as exemplified by our massive undertakings to tackle the ethics challenges at MMS, develop a new plan for oil and gas development on the Outer Continental Shelf, and create the renewable energy program.

We have worked to reform the MMS's culture of doing business by issuing new ethics standards for all MMS employees during my first weeks here at the Department in January 2009. I terminated the Royalty-in-Kind program. I have implemented recommendations to improve MMS's royalty collection program that came from the Department's Inspector General and a committee chaired by former Senators Bob Kerrey and Jake Garn.

We have also made major changes to the way that the offshore program does business. I cancelled lease sales in the Chukchi and Beaufort Seas because of concerns about the sensitivity of the Arctic and its unique vulnerability to oil spills. I cancelled the oil and gas lease sale scheduled for the magnificent fishing grounds of Bristol Bay in Alaska. The President formally withdrew Bristol Bay from any oil and gas leasing through June 30, 2017.

Taking a similar, bold approach to change the direction at MMS, I extended the public comment period by 180 days on the Draft Proposed 5-year Program for the OCS produced by the previous Administration. I held regional meetings with thousands of stakeholders in Alaska, California, Louisiana, and New Jersey.

The information and input gained from these additional meetings led to our announcement, on March 31st, of a new and balanced strategy for exploring and developing our oil and gas resources on the OCS. This plan is intended to focus on development in the right ways and in the right places, provide order and certainty to industry and investors, and deliver a fair return to American taxpayers for the use of their resources.

As we evaluate new areas for potential exploration and development on the OCS, we will conduct thorough environmental analysis and scientific study, gather public input and comment, and carefully examine the potential safety and spill risk considerations.

Even before this occurred, I directed the National Marine Board, an arm of the highly respected National Academy of Sciences, to conduct an independent review of MMS's inspection program for offshore facilities. And our fiscal year 2011 budget request provides funding to increase the number of inspectors available for the offshore oil and gas program by more than 10 percent.

This tragedy has also served to underscore the need to develop clean, renewable sources of energy. Since the beginning of the Obama Administration, the Department has been focused on these issues and has set priorities for the environmentally responsible development of renewable energy on our public lands and the OCS. As we have moved forward to implement the President's clean energy goals, we have expanded the scope of the MMS's portfolio to include a stronger and more effective renewable energy program.

On March 11, 2009, I issued a Secretarial Order that made facilitating the production, development, and delivery of renewable energy on the Outer Continental Shelf and on public lands top priorities at the Department. These goals are being accomplished in a manner that does not ignore, but instead protects our signature landscapes, natural resources, wildlife, and cultural resources, and working in close collaboration with all relevant federal, state, Tribal and other agencies with natural resource stewardship authority.

In April 2009 Chairman Wellinghoff of the Federal Energy Regulatory Commission and I signed an agreement clarifying our respective agencies' jurisdictional responsibilities for leasing and licensing renewable energy projects on the OCS. This agreement allowed us to move forward with the regulatory framework for OCS renewable energy development that standardized the process and brought certainty to the application process for OCS wind, solar and hydrokinetic resources. This framework is important as it provides the "rules of the road" for states and companies to pursue development of projects on federal submerged lands.

I also approved the Cape Wind project off Massachusetts' coast, and we have taken the first steps to stand up major wind projects off the coasts of New Jersey and Delaware. I am working with the Atlantic Coast Governors to give renewed impetus to developing the potential for offshore wind projects. In keeping with this goal, yesterday I announced that the governors of East Coast states and I signed a Memorandum of Understanding formally establishing an Atlantic Offshore Wind Energy Consortium to promote the efficient, orderly, and responsible development of wind resources on the Outer Continental Shelf through increased federal-state cooperation. Under the MOU, the consortium will develop an action plan setting forth priorities, goals, and specific recommendations and steps for achieving the objectives outlined in the agreement.

I also announced the establishment of a regional renewable energy office, located in Virginia, which will coordinate and expedite, as appropriate, the development of wind, solar, and other renewable energy resources on the Atlantic Outer Continental Shelf.

The effort that we have put forward at the Department since January 2009 has been a massive effort to chart a new direction for the Department of the Interior, including MMS.

#### SUBSTANTIVE AND SYSTEMIC IMPROVEMENTS

The tragedy and the massive spill for in the Gulf have made the importance and urgency of this reform agenda clear. I have issued Secretarial Order No. 3299 announcing the reorganization of the MMS and the establishment of the Bureau of Ocean Energy Management; the Bureau of Safety and Environmental Enforcement; and the Office of Natural Resources Revenue.

Under the supervision of the Assistant Secretary for Land and Minerals Management, the Bureau of Ocean Energy Management will ensure the environmentally responsible and appropriate development of the Outer Continental Shelf for both conventional and renewable energy in a predictable and effective manner. The Bureau of Safety and Environmental Enforcement will ensure that all production operations are safe and that potential negative impacts on marine ecosystems and coastal communities are appropriately considered in each phase of development and mitigated to the fullest possible extent through its independent regulation, oversight, and enforcement powers.

Under the supervision of the Assistant Secretary for Policy, Management and Budget, the Office of Natural Resources Revenue will be responsible for the royalty and revenue management function ensuring the full and fair return to the American people for the utilization of these resources.

I have asked the Assistant Secretary for Policy, Management and Budget, Rhea Suh, the Assistant Secretary for Land and Minerals Management, Wilma Lewis, and one of my Senior Advisors, Chris Henderson, to oversee these reorganization and reform efforts. They all have strong organizational skills and outstanding experience and expertise in strategic planning, business administration, and performance management in the public and private sectors that will be invaluable assets as we move forward to implement this effort, which will ensure the independence of the agency's inspections and enforcement mission.

Mr. Chairman, I have testified before your Committee in support of organic legislation for the functions now performed by MMS. The OCS currently provides 31 percent of the Nation's domestic oil production and almost 11 percent of its domestic natural gas production. The MMS is one of the largest collectors of non-tax and non-trust revenue for the Treasury, and has collected an average of more than \$13 bil-

lion annually for the past 5 years. Agencies with responsibilities of this magnitude should be governed by thoughtfully considered organic legislation.

The President submitted to Congress, along with other Administration proposals to address the BP oil spill, legislation requesting additional funds for the Department to inspect offshore oil and gas platforms, draft enforcement and safety regulations, and carry out studies needed in light of this event. The legislation would also extend the time allowed by statute for MMS to review and approve oil and gas exploration plans from 30 to 90 days.

#### A STEADFAST FOCUS ON SAFETY

Following the tragic and unprecedented explosion of the Deepwater Horizon drilling rig, I ordered immediate inspections of all deepwater oil and gas drilling operations in the Gulf of Mexico, and we issued a safety notice to all rig operators reminding them of their responsibilities to follow our regulations and to conduct full and thorough tests of their equipment.

I also established an Outer Continental Shelf Safety Oversight Board comprising top Departmental officials charged with strengthening safety and improving overall management, regulation, and oversight of operations on the Outer Continental Shelf.

On May 27th I delivered to the President the results of the 30-day safety review that he ordered us to undertake. The purpose of that Safety Report was to evaluate oil and gas safety measures that could be put in place on an interim basis before the on-going investigations to identify the root cause of the BP oil spill disaster have been completed. We consulted with a wide range of experts from industry, government, and academia in drafting this report, and the draft recommendations contained in it were reviewed by independent engineering experts.

The report recommends a number of specific measures that can be taken on both a short and longer term basis to improve the safety of offshore oil and gas activities, including aggressive new operating standards and requirements for offshore energy companies. Key recommendations include a recertification of all Blowout Preventers for new floating drilling operations; stronger well control practices, blowout prevention and intervention procedures; tougher inspections for deepwater drilling operations; and expanded safety and training programs for rig workers.

After reviewing the report, the President ordered us to immediately implement a number of actions, including a continuation of the existing moratorium and a suspension of the issuance of new permits to drill new deepwater wells until the Presidential Commission investigating the BP oil spill has completed its six-month review. We are taking these immediate actions now, and we are laying the groundwork for additional measures in the future. Just yesterday, for example, I announced the release of a "Notice to Lessees" that provides an initial set of new safety requirements that all offshore operators must meet, based on the Safety Report.

#### CONCLUSION

Mr. Chairman, I look forward to working with you over the coming weeks as we continue to implement real reform to improve the safety, transparency, and efficiency of oil and gas exploration and production operations on the Outer Continental Shelf.

The CHAIRMAN. Thank you very much.

Let me just start, ask about the moratorium that you put in place. You have referred to it as "pressing the pause button." How does that affect producing wells in the Gulf? Are there requirements you are putting on the wells that are currently producing wells, not those that are being developed, but those that have been in production and closed in and operating?

Secretary SALAZAR. Senator Bingaman, with respect to the moratorium and its application, we have the moratorium in place, including with respect to the 33 deepwater drilling operations that were underway. What we have ordered those drilling rigs to do is to continue drilling to the point where they can get to a safe place and then secure the well. At that point in time, drilling will stop until we complete the safety reviews and the Presidential commission reports and we can make a determination about how we are going to move forward.

With respect to your question on production, production continues in the Gulf of Mexico. There has been very little interruption because of the Deepwater Horizon on production from the Gulf of Mexico. We continue to do inspections and have asked for additional inspectors through the request to the Congress so that we can continue to inspect those facilities, including those production facilities.

The CHAIRMAN. Let me ask on the—you mentioned the 15,000 barrels per day that were captured, I believe you said, by BP in this effort they are making yesterday. Obviously, the key question is not how many barrels are captured, but how many barrels are coming into the Gulf that are not captured and how much oil is there that is continuing to add to the environmental damage and economic damage that that part of our country is suffering.

Can you give us any more insight into how large that number is?

Secretary SALAZAR. Senator Bingaman, I hope that in the next several days we will have a number that is based on science and includes pressure readings and the visuals of the plume that is coming out. We have, at my direction and under the command of Admiral Thad Allen, had Marcia McNutt, the Director of the United States Geological Survey, come up with our own independent numbers. We did not want to rely on BP to come up with their numbers.

Before the riser was cutoff, the scientific group had come up with an estimate that was between 12,000 and 19,000 barrels per day. Now that the riser has been cutoff, there is an additional effort to take a look at what is coming out of the leaking well, and we hope to be able to have the scientists that are looking at that issue have some numbers that we will share with the American public and obviously with the members of this committee relatively soon.

The CHAIRMAN. Is there any thought that perhaps the procedure that BP went through to cutoff the riser added to the quantity of oil coming out?

Secretary SALAZAR. You know, Chairman Bingaman, I will say this and something that you might want to confirm with Secretary Chu and the scientists from the labs that have been involved in this. But their view, as it has been communicated to me, is that the range of increase may have been somewhere between 4 and 5 percent over what it was before.

The CHAIRMAN. OK. All right. Let me ask what do you expect this other report, the one the President continues to refer to, which is this 6-month report, what do you expect that to yield in the way of is it going to make another series of recommendations similar to the recommendations that came out of your 30-day report? Or is it going to be trying to do something different?

Secretary SALAZAR. I will have the Deputy Secretary David Hayes respond to that because he is in charge of the investigations and helping with the setting up of the commission. But there are multiple investigations that are going on, many reports that are coming in, and we are getting to the root causes. Everything that is happening here and will happen over the next several months will be fed into the Presidential commission.

So, at the end of the day, there will be one report. But I will have the Deputy Secretary provide some additional information on that question.

Mr. HAYES. Senator, could I ask you again which report is—

The CHAIRMAN. The President has said that the moratorium will be in place until he gets his 6-month report, and that is the one that I am just interested in knowing what are we going to learn from that report, or is it going to be another series of recommendations in addition to an investigation, or what is it going to be?

Mr. HAYES. Yes. Yes, thank you.

That is a report from the new commission that has been established with Senator Graham and Bill Reilly. That commission we will be working with closely, per the Secretary's comments, to fold in everything that is going on so that they have in front of them the full record.

There is, of course, a Minerals Management Service-United States Coast Guard joint report that is going on right now, joint investigation that will be fed into the Presidential commission. There is an independent evaluation by the National Academy of Engineering that will be fed into the commission, and the commission itself will be undertaking its own investigation. So we will be looking to the commission ultimately, and we expect to be in dialog to make sure that they have every piece of information potentially important for their deliberations on what their long-term recommendations are.

The CHAIRMAN. Senator Murkowski.

Senator MURKOWSKI. Thank you, Mr. Chairman.

Secretary Salazar, you mentioned the decision as it related to the Chukchi and the Beaufort and your request for additional science and information. I don't know whether you have had an opportunity to review the white paper that has been presented by the U.S. Arctic Research Commission. They essentially are advocating for additional research in sub Arctic conditions.

It is something that this commission has been focused on for some time, spent a fair amount of study on. It is a final draft, but I want to make sure that you have had an opportunity to at least review that. So we will make sure that you get a copy if you and your staff haven't.

I wanted to ask you about the study or the review that was conducted, this 30-day review, prior to the new deepwater ban. There was an immediate inspection ordered by you to review all the deepwater OCS facilities. Can you give any more detail in terms of the results of those inspections, and did you unearth anything that was particularly revealing in terms of possibly a culture of unsafe activities?

I know it was a very quick review, and you are now going into the longer term review. But was there anything that was noticeable in that initial review?

Secretary SALAZAR. No, we ordered the immediate inspection of all 33 operations that were underway, and as I recall, the information that came back to us is that they were all in compliance with the requirements of the regulations and with the exception of two or three. The incidence of noncompliance were relatively minor.

I will say this, Senator Murkowski, that one of the things that has been learned here is that there is much more that can be done with respect to what we are doing concerning the safety requirements imposed on companies. For example, the testing of blowout prevention mechanisms, one of the things that I think has already been learned by the Deepwater Horizon incident as they have moved forward and started to drill the relief wells, the two relief wells, which are the ultimate solution to this particular spill, they have done the testing of these blowout preventers in the subsea in ways that they haven't done before.

So, the new requirements that we imposed through the Notice to Lessees that we sent out yesterday has significant additional requirements, and so there will be a whole panoply of those requirements that will now have to be met.

Senator MURKOWSKI. Let me ask you specifically about that because it was my understanding that the blowout preventer with the Deepwater Horizon had actually undergone a couple of tests only days before it failed, and those tests actually were successful. So how are we going to—I mean, I understand the purpose and don't disagree with additional testing. But do we really believe that recertification of the BOP would have done anything to enhance the reliability of that testing? Are we doing the right test I guess is the question?

Secretary SALAZAR. There is a whole host of things that are going to come out with respect to blowout preventers, including the kinds of redundancies that are built in, additional casing shear rams which we will be requiring and additional redundancies in their actuation. So the safety report sets out a number of recommendations, and I will ask Steve Black to comment just briefly on the report because he was the principal author of the report on the safety recommendations.

Senator MURKOWSKI. When you do that, Mr. Black, in addition to understanding that, I am curious to know there is going to be a lot of new technical requirements that will be required going forward, and I understand that. But what about instituting some minimum training standards? For instance, if you are going to have new standards on certification, will you also require certification of people on the rig that are working in these areas that are related to safety and control?

So you have got the technological side, but you also have the human side. I think we recognize that there has been human error here as well. So how does that integrate as well, if you can address that?

Mr. BLACK. Thank you, Senator Murkowski. Mr. Chairman, thank you for the courtesies of sitting here today with the Secretary.

To your first question, Senator Murkowski, with respect to the blowout preventer and the testing, I think it is important to remember that this safety report doesn't presuppose any investigation or the outcome of any investigation that is currently ongoing. It instead attempts to identify safety measures that can be taken immediately and improve the margin of safety with respect to offshore drilling.

The blowout preventer on the Deepwater Horizon was, in fact, tested. But I think what we have learned is that those tests, as you suggest, didn't reveal perhaps modifications to the blowout preventer equipment or incompatibility between the ROV hot stabs and the ROV interface panel on the blowout stack.

So we want to make sure that all blowout preventers, all subsea BOPs and surface BOP stacks, are reinspected in accordance with the original manufacturer specifications and that any repair or modification that has been made to the BOP stack is properly reported and understood so that in the event of an emergency, an intervention can occur.

With respect to training, the report does, in fact, recommend that MMS, in conjunction with other stakeholders, develop new guidance and new regulations with respect to training, inspections, and a variety of other safety measures. So those, in fact, will occur. The department will lead that effort through workgroups that we set up at the department, but we do very much intend to work with industry, work with other stakeholders to develop that kind of requirement.

Senator MURKOWSKI. Thank you, Mr. Chairman.

The CHAIRMAN. Senator Udall, is he here? I don't see him at this point.

Let me go to Senator Shaheen.

Senator SHAHEEN. Thank you, Mr. Chairman.

Mr. Secretary, I appreciate the efforts that you have taken and that you have talked about this morning to reform the culture of corruption that has existed within MMS and recognize that this is a culture that has been created over a number of years, that you inherited when you took over this job. But I continue to be concerned about whether reorganization efforts will really address some of the corruption that exists there and the individuals who may have been part of that.

Whether it is a reshuffling of the deck or whether it will really allow you to deal with that culture and get rid of the folks who have not been operating in a manner that they should be as they are looking at what needs to be done to regulate this industry. So can you talk a little bit about how confident you are about the reorganization that you have underway?

Secretary SALAZAR. Senator Shaheen, it is a very good question, and let me say our reorganization is not cosmetic. Our reorganization is essentially blowing up MMS and putting it into different parts of the department and separating functions to avoid both perceived and real conflicts of interest. So it is an overhaul of this function of the Government in every complete sense of the way.

Now it doesn't mean that things that we did before will be taken away. For example, still requiring ethics training and having ethics counselors and having ethics part of the performance standards, that all will be done as well. But what we have done under the Secretarial Order and will be implementing is a complete reconstruction of the MMS function.

Deputy Secretary David Hayes would like to comment on that as well.

Mr. HAYES. Senator, you raise a point that is central to our thinking in terms of the reorganization effort, and our view is that what is most necessary is a clarity of mission.

Under the current structure, where you have the folks forward leaning under the statute leasing and being encouraged to do more and more leasing, more and more permitting, almost by virtue of the statutory structure, you have the employees accepting that mission and executing it. There has not been as clear a mission on the enforcement and safety side, candidly. We think that, structurally, by separating these functions, creating a clear mission, there will be execution.

It has become evident to us, frankly, in the last 50 days that the employees can execute a mission. We have asked them to turn on a dime, to put in place some significant new safety requirements, and they are doing it. So we have some views that we can do this if we get clarity of mission by separating these functions.

Senator SHAHEEN. Thank you.

I want to switch the topic a little bit. I know that everyone is focused right now on ending the current spill and dealing with the cleanup. But one of the things that struck me when we had the principals from BP, Halliburton, and Transocean here before this committee was their response when I asked them what they were doing to address research on deepwater spills and cleanup. The answer from all three was zero. They are committing no resources to doing anything about how we deal with these kinds of situations in the future.

As I am sure you all know, right now, we are spending about \$50 million a year as the Federal Government to fund R&D for exploration and production of oil and gas in ultra deep waters, but we are not spending nearly that amount to address cleanup and containment and what happens when we get into the kind of situation that we are in right now.

We are fortunate at the University of New Hampshire to have the Coastal Response Research Center, which is one of the premier centers in the country that is looking at these issues, and in talking to their director, Dr. Nancy Kinner, one of the points that she made to me is that right now what we really lack is any funding, either in the industry or from the Federal Government, to address this kind of research.

So can you talk about whether you think we should be spending at least as much on cleanup and containment as we are spending right now on how to drill in deep water and if you have thoughts about how we should be looking at this issue in the future and where the resources should come from?

Secretary SALAZAR. Senator Shaheen, this will be and is one of the questions that will be addressed by the Presidential commission and we are addressing as well. The fact is that BP did have an oil spill response plan. The fact is that that plan contemplated the ability to respond to a spill of several hundred thousand barrels per day. The fact also is that that plan has not been effective in protecting the sensitive ecology of the Gulf of Mexico and the people of the Gulf of Mexico. So, there will be a review of all of these issues to determine what is it that is needed.

There is research underway with respect to oil spill issues all of the time. In fact, in Senator Menendez's State of New Jersey, there is an oil spill laboratory which looks at oil spills and how to contain oil spills. So, this is an area, obviously, which will be one of those lessons to be learned.

Senator SHAHEEN. But would you agree that, in fact, the resources to really look at this issue have not existed?

Secretary SALAZAR. The answer to that is yes. I mean, the resources in terms of looking at spill response and dealing with some of the deepwater issues I don't think have been there.

Senator SHAHEEN. Thank you.

The CHAIRMAN. Senator Sessions.

Senator SESSIONS. Thank you, Mr. Chairman.

Thank you, Mr. Secretary, for your directness. You have talked to us directly. You haven't used notes. You obviously have got your head straight on the challenges you face, and we appreciate that. I want to work with you to deal with this crisis.

We are now in the 51st day, and the people I talk to in my State are concerned. They are concerned that we are not doing enough to stop the flow, and they are concerned about the effectiveness of our barriers and so forth.

I will say that Thursday and Friday of last week, I was in Mobile and met with the Coast Guard and BP officials. We met Friday with local mayors, county commissioners, State representatives under the leadership of Governor Riley, who has personally been committing much of his time to this effort, and the mood was not good. People felt like that there had been a lot of promises made, a lot of uncertainties there that they still haven't gotten true facts about. But I believe our people are determined. They want to bounce back from this, and I am confident that we will. But we don't need to make any more mistakes. We need to be as effective as we can.

So with regard to particularly a problem that I believe resulted from a violation of an agreement with the Governor of Alabama concerning the boom material that was removed from our State, I do believe that you have responded to that, and there has been some progress in restoring at least some of that. I think that is important. It is just a matter of good faith.

If you are working with the Governor and you make commitments, you need to try to make sure that that happens. I guess this was a Coast Guard decision, but it is a matter that was important as we build the kind of State, local, and Federal teamwork that we need to deal with this crisis.

To follow up on the chairman's question about the flow, first of all, I would like to get a little better picture about the flow, how much is coming out. You have indicated that it was originally projected to 12,000 to 19,000 barrels a day? Is that correct? That is the last report you have, and you have another report coming out soon?

Secretary SALAZAR. Yes, and I will speak more to it when you finish your question.

Senator SESSIONS. That would be my question. What is the status of the flow today? Do you expect to see any changes in your report in the future, and I would like to follow up on about how

much is being captured and how much there has been a reduction in the flow, if any?

Secretary SALAZAR. Let me make a comment, and then I will have David Hayes, who has been working for most of the night on this issue of the flow rate, also comment on it.

It was important for us to have our own independent assessment with respect to the flow rate because there are legal consequences, as you well know, from every barrel that is spilled. So we have not relied on BP for the flow rate analysis that has been done. Under the command of Admiral Thad Allen, there has been a flow rate group that has been established, which is headed by Marcia McNutt, the Director of the U.S. Geological Survey.

A group of scientists came up with those initial ranges of 12,000 to 19,000. There is additional information that has been developed now, post riser cut, which those scientists are working on very hard to try to come up with a clear answer so that the American public knows what the flow rate is and so that we can make sure that we are as prepared as possible to carry out the response—

Senator SESSIONS. Can I interrupt you? The information is so different. For example, you indicated that after the cut of the riser, we may have had a 4 or 5 percent increase in flow rate, but originally, I think there was a projection from some official source of a 20 percent increase. I see some people have projected far more than that. How confident are you that we have sustained just a 4 to 5 percent increase?

Secretary SALAZAR. Let me say that it is important for us to have the right number, and that is what is being worked on right now. In fact, Secretary Chu and Marcia McNutt and I have a meeting on this coming up today to make sure that we get to the right number.

We will get to that right number because the American people need to know it. It has been difficult to get to the right number because of the subsea conditions that have been operated, and I am going to have David comment on that.

But I want to just respond, Senator Sessions, my friend, that the issues relating to Alabama and the issues of boom, the President and Thad Allen, who is the national incident commander on this, he calls it as he sees it, and I think he has resolved those issues with the Governor, including putting in writing what was supposed to happen.

So let me just say that on the part of Thad Allen with whom I work with multiple times every day, no effort is being spared to make sure that the people of the Gulf coast are being protected. If you find that there are things that are not going on, Senator Sessions, in your State, please give me a call, and we will get to Thad Allen immediately.

I would like, just because he has been working on it all night and may have more recent information on the flow rate, maybe to kind of give you a sense of what is going on because I think it is of interest to the chairman, as well as to all the members of the committee. So if that would be OK with you, Mr. Chairman?

Senator SESSIONS. While you do that, Mr. Hayes, my question is over. I would just hope that you would talk about how much is

being captured and what you project is a reduction, if any, in the flow.

Mr. HAYES. Certainly, Senator. Let me sort of paint the picture here of the Government's effort to identify the flow rate. As the Secretary testified, a flow rate technical group was formed, and Dr. Marcia McNutt, the Director of the USGS, is in charge of that. There are seven independent scientists that are on that group.

A couple of weeks ago, they—before the riser was cut, looked at a variety of data streams to do an estimate of how much might be leaking out. At that time, there were some leaks in the kink of the riser and then at the end of the riser. Also at that time, there was a tool that was bringing some of the material up from the end of the riser, you will recall, and collecting some of that material.

They had several different work streams. They had video that they ordered, the Government required BP to provide the video so they could look at the video and attempt to calculate how much might be coming out. They also did a mass balance based on aerial work and subsea work to try to estimate how much was on the surface, how much had evaporated, and sort of back-calculate how much might be coming out. Those were the primary approaches.

What they came up with was a range. Two of the workgroups came out with a range of 12,000 to 19,000 barrels a day. The video workgroup came up with 12,000 to 25,000 barrels a day as the potential estimate with a lot of uncertainty because there was not good information about what the oil-to-gas ratio was. So when you are looking at the video, it was difficult to figure out, essentially, how much would be oil versus the gas, which behaves differently.

They also were asked to estimate—this is to your question, Senator—how much if we cutoff the riser would there be an increase in the amount of flow. The Government scientists in Houston, including Dr. McNutt, with the BP folks did a variety of calculations and came up with a range of 6 to 20 percent as a potential increase by virtue of losing some of the resistance in the riser.

The Government scientists came out and said it could be as much as 20 percent. That is not something BP wanted to say. In fact, they did not say that. The Government said it could be as much as 20 percent. The decision was made to do the riser cut anyway because of the potential to capture more of that oil through the top hat, which is now occurring.

What is happening now is a reevaluation of all of this, both in terms of the original estimates and also we have new information now that the riser is cut. We have ordered BP to give us high-resolution video that the same group that looked at and estimated the flow based on the video looked at. It is much harder, frankly, to discern and evaluate leaks in the kink and at the end of the riser, they are now looking at a single point with high-resolution video.

We now have much better information on the oil-to-gas ratio because of the material that has been coming up to the riser. So we think that that group that is now looking at the video and applying a gas-to-oil ratio will come up with a much better estimate of how much is coming out of the riser.

As the Secretary alluded to, we are also getting additional data. We have more information about relative pressure points, and there is a lot of speculation, frankly, that the increase may have

been substantially less than 20 percent from the cutting off of the riser. But we are going to find out very soon from this group that is looking at this issue very hard.

In fact, all seven of these scientists just received what they required of BP; very specific segments of the video from the post riser cut. They actually had to take it—they got the whole hard drive from BP, we required it. They got some specialists to take the segments that they needed to look at. They are now reviewing it. We expect to have additional information very soon on that point.

They are also relooking at the earlier estimates. So you will see a new Government estimate very soon on the flow rate. In terms of the amount collected, we want that new flow rate, and we will have it very soon and then can back-calculate essentially how much we believe, therefore, has been out from day one. I don't have that number, Senator, right now, but we expect to have a much better number very, very soon. Thank you for your patience.

Senator SESSIONS. You said 4 to 5 percent increase. Is that some sort of an estimate to date that you think is accurate? Is that Secretary Chu's—

Mr. HAYES. I think there is in terms of the group of Government scientists that are looking at this, they are seeing some data that suggests that the increase that occurred when the riser was cutoff was less than we were afraid it might be. So we hope to confirm that soon.

Senator SESSIONS. Soon? Soon, this is almost 2 months—

The CHAIRMAN. Let me move on to other questions here. You have had more than 10 minutes.

Senator SESSIONS. Over time, I know.

The CHAIRMAN. Yes. Senator Menendez, go ahead.

Senator SESSIONS. I think they need a good number soon.

Senator MENENDEZ. Thank you, Mr. Chairman.

Mr. Secretary, let me start off by applauding the administration's decision, at least at this point, to cancel lease sale, Virginia lease sale 220. I opposed it from the very beginning. It puts the New Jersey shore directly at risk. You know, that risk I think is more palpable today, as we have tried to make the case for some time that oil cannot be contained in neat little boxes in the ocean. It is certainly not being contained in the Gulf of Mexico.

Now that we are entering hurricane season, even the natural loop current and where the projections of the trajectory of that oil is, is subject to mother nature. If you have hurricane season and the hurricane hits the Gulf, the consequences of where that oil goes for those of us on the east coast is increasingly of concern. So I think it was smart at this point.

I appreciate the administration's decision to support moving toward unlimited liability as it relates to the responsibility of oil companies. It seems to me that if you take and create unlimited consequences that you should have unlimited liability. I think it is an opportunity for oil companies to also have discipline knowing that if that is their liability obligations that they will discipline themselves not to take short cuts or to cut corners, as some have suggested happened in this particular incident. I think that is important as well.

But I heard when you said we are only having a pause button. For those of us along the Atlantic, we want to see much more than a pause button. We want to see an effort that clearly makes it clear that we are not looking to put multi-billion dollar—just New Jersey alone is a \$50 billion coastal tourism industry. So I hope that we understand that.

Let me just ask two questions that I think are critically important. All the regulations in the world are good, but if they are not enforced, it doesn't mean much. I know you know that as a former Attorney General. The reality is, is that when I look at BP's response plan, it doesn't take a rocket scientist to know they couldn't have been very serious because when they had sea otters, walruses, and seals as part of the response that they would have to animals in the Gulf, last time I looked, we don't have those animals in the Gulf.

Obviously, they didn't really have a plan to deal with the worst-case scenario. It is something we have to look going forward as to what, in fact, we permit. I mean, I don't understand who reviewed that plan and saw those elements in their plan and said you can't be serious. Maybe in the Arctic, but not in the Gulf of Mexico. It doesn't take a rocket scientist to figure that out. So you really have to question who is reviewing these things.

Second, MMS—a Houston Chronicle review of accidents investigated by MMS found that of nearly 400 offshore safety investigations, MMS collected only 16 fines of 400 investigations. So I know that you are reforming MMS. The question is are we going to have the right regulatory oversight and vigorous oversight so that we don't relive this, including on response plans?

Last, are we—in challenge, there have been some reports that there is another drilling rig near the Deepwater Horizon called the Ocean Saratoga that appears to be leaking with a 10-mile long slick visible from satellite images. It was only discovered because of the images of the Deepwater Horizon. Do you have any information on whether that is, in fact, a spill that is occurring? If so, what is being done to stop it?

Secretary SALAZAR. Let me, Senator Menendez, I appreciate your comments and I know your passionate views on these issues for a long time. Let me assure you that they are taken into consideration.

With respect to the other spill that you speak about, my understanding is that it is a remnant left over from Hurricane Ivan and that it is leaking, I guess, at approximately about a third of a barrel a day. But we will get some additional information for you on that.

With respect to your—

Senator MENENDEZ. Can you get for the whole committee, but certainly I would like to know—

Secretary SALAZAR. Sure.

Senator MENENDEZ [continuing]. How long that has been going on as well?

Secretary SALAZAR. Sure. We will—

Senator MENENDEZ. What is the intent to close it down?

Secretary SALAZAR. We will get that information to you.

With respect to the enforcement of regulations, it is precisely the reason why we are moving forward with the creation of a Bureau of Safety and Environmental Enforcement. It needs to have the kind of police power to make sure and the personnel and the culture to make sure that regulations are, in fact, enforced. So, that is part of the reorganization and overhaul of MMS that we are undertaking.

The goal is one which I very much share with you, Senator Menendez, and that is we must have vigorous and complete enforcement mechanisms in place with respect to any oil and gas activities in the Outer Continental Shelf.

Senator MENENDEZ. I will close. My time is finished. But let me just say you can't be coach and referee. MMS has, as it was constituted before, been both an advocate for the industry and supposed to be the referee of making sure that safety and soundness and a whole host of other things were observed. That simply didn't happen. We had a police officer that was asleep at the switch.

If you look at the response plan and see that it doesn't make any sense, then alarm bells should have risen that, in fact, these people really are not prepared for the worst-case scenario. I hope we learn from that as we move forward.

Thank you, Mr. Chairman.

The CHAIRMAN. Senator Corker.

Senator CORKER. Thank you, Mr. Chairman, and thanks for having this hearing.

Mr. Secretary, I welcome you back. I am struck by the dignity and directness with which you have presented today. I thank you for that—and your two colleagues who are with you. It actually has raised a question as I have watched you. I watched, on the other hand, the White House, which seems to exhibit some characteristics of adolescence or something like that. I am wondering what is the relationship that we have at present with BP?

I know you talked about the fact is that you don't have the equipment. They have the equipment. What is that true relationship? Do the machinations that come out of the White House, do they contribute in a positive way toward that relationship? Where are we with BP as far as carrying it out? What is the actual direct relationship that you have with them in causing this crisis, which is a national tragedy?

For what it is worth, I have said no critical comments regarding that because it is just a national tragedy. We need to all figure out the best way of dealing with it, and we can, after the fact, do some quarterbacking. But what is that relationship, and how are you carrying out these daily operations?

Secretary SALAZAR. Thank you, Senator Corker.

The relationship is one in which we, the U.S. Government, are directive of the things that are going on with BP. There is a structure which is part of the national framework and the national contingency plans, which are required by law which have been effectuated. So, we have a commander, a unified commander in Thad Allen, who is overall responsible for everything that is going on.

But I think perhaps, to answer your question, even over the last several days, what we have done is crafted orders that have gone to BP that require them to move forward with leak containment

mechanisms, expanded beyond the amount that they had contemplated initially. So they are responsive to the orders and directives that we have given them.

Related in part to Senator Sessions's questions on flow rates, for example, we are requiring them to provide additional pressure information and take additional pressure readings so that we can have better estimates with respect to flow rate. So the relationship under the law and under the President's direction has been to be one of being directive to BP, and we have been carrying that out every day, whether it is in Houston, whether it is in any of the Gulf States, or whether it is—

Senator CORKER. So, on a daily basis, do you get up and you direct BP as to what to do?

Secretary SALAZAR. On a daily basis, 51 days into this spill, let me just say we are on top of it with everything that we have, and that is the President of the United States. It is the White House personnel who have been involved in this effort with us. It is my colleagues on the Cabinet, including Secretary Napolitano, who oversees the Coast Guard.

Senator CORKER. But let me just—and again, I really respect you, and you know that. We have had a good friendship. Do you all like tell them on a daily basis what activities to engage in?

Secretary SALAZAR. We—

Senator CORKER. I mean, that is what I am taking from this. I am just—

Secretary SALAZAR. I receive, and it was at my order and Thad Allen's order, a review from BP of what their work streams are, all running in parallel because we didn't want them to run sequentially. Those are received daily. That is at our direction.

I have a personal conversation with Andy Inglis, who is the head of BP running the operations out of Houston, to get an update every morning. Secretary Chu joins me on some of those meetings. When we find deficiencies, such as looking at the fact now that we believe they need to have additional redundancies in place, as you look at hurricane season before you get to the ultimate sealing of the relief wells, we order them to provide those additional containment capacities and redundancies.

So it is a dynamic relationship, but it is a directive relationship between the United States and BP, which is what is contemplated, Senator Corker, by the law. I mean, the law is very clear. BP is the responsible party.

They are responsible with respect to dealing with the oil spill. They are responsible for dealing with all the damages that flow from the oil spill. They are responsible for compensating those that are damaged from the oil spill, and the President has been very clear and very direct, as all his team has been, that we will hold BP accountable.

The CHAIRMAN. Are you through with your—

Senator CORKER. I have more questioning, but I will opt to honor the time. Again, thank you for the way you conducted yourself today. I appreciate that very much.

The CHAIRMAN. Senator Stabenow.

Senator STABENOW. Thank you, Mr. Chairman.

Welcome, Secretary Salazar. It is always wonderful to see you, although these circumstances are ones that we all wish we were not having to be involved in. To all of you, thank you for your service. This is a horrendous situation.

I appreciate the efforts that you are taking and have taken since the beginning of your term to focus on reforming what has clearly been a broken process. I think it is important that we learn lessons from history, from the past. Otherwise, we are condemned to repeat them. That is certainly a very famous phrase, and I think it is very, very true today in terms of the way we approach the public interest in our jobs as it relates to overseeing what is done in the private sector when it relates to public risk.

In my judgment, this has been a perfect storm of a particular company that has had, according to the records, 97 percent of all of the egregious and willful safety violations being brought by this company, coupled with a philosophy that has been in place for the last decade and other times in our history that basically said step back and let industry police itself, even when there is tremendous risk to the American public if they cut corners.

We have seen that on Wall Street. We saw it with miners' lives being lost. We are now seeing it with oil companies. So, I would like you to respond to how we move forward to correct that a little bit more.

But I do want to enter into the record something, a piece of what was in the Washington Post yesterday because I think it is very important. The headline was "BP Had A History of Problems." This goes to how we go forward on these kinds of situations with companies with these kinds of histories. "A series of internal investigations over the past decade warned senior BP managers that the oil company repeatedly disregarded safety and environmental rules and risked a serious accident if it did not change its ways. The confidential inquiries, which have not previously been made public, focus on a rash of problems at BP's Alaska oil drilling operations. They describe instances in which the management flouted safety by neglecting aging equipment, pressured employees not to report problems"—and we have heard the same thing here with this instance—"cut corners, delayed inspections to reduce production costs.

"Similar themes about BP operations elsewhere were sounded in interviews with former employees in lawsuits and little-noticed State inquiries, as well as emails. Taken together, these documents portray a company that systematically ignored its own safety policies across its North American operations from Alaska to the Gulf to California. Executives were not held accountable for the failures. In fact, some were promoted despite them."

It is pretty outrageous. Pretty outrageous. So, my question relates to knowing that this landed in your lap. I mean, I understand with the new administration, whether it was trying to put us back from the edge on the financial crisis or millions of people unemployed that landed in the laps of this administration or whether it is this situation, the reality is we have got to make sure that going forward we are changing the philosophy.

The philosophy that got us here doesn't work in the public interest. Just it hasn't worked. Millions of people are paying the price—

taxpayers, people who have lost their jobs, the environment, and so on.

So, Secretary, as we look at going forward, the ethics reform you have put in place, the March plan that you put in place to begin to review permits and so on, the dismantling of MMS, dividing it up, all of the important work that you are doing now, do you see these kinds of things, a company like this with their track record, coming forward that there will be the new tools in place for you and for MMS or for the new entities to be able to say no, to be able to stop these kinds of things that have gone on in the past?

Secretary SALAZAR. Senator Stabenow, the answer is yes. That is what our full intent and purpose is as we move forward. I would respond in two ways. First, the Presidential commission that has been formed and the investigations that are underway will get to the root cause of what happened here. We have preliminary information that points some to human error, some to signs that were not caught, problems with cementing, problems with casing, problems with some of the backup redundancy systems, the safety systems, and so on.

So all that is going to be made public, and the American people and the U.S. Government will know what exactly happened here. With the root cause known and the actors known, it will lead to whatever results they will lead, including whatever culpability under the laws of the United States of America. So that is our intention there.

We, in our overhaul of MMS, understand the importance of the critical missions of MMS and the importance of separating out the functions from the revenue collector from the part of the agency that gives out the leases. So the Bureau of Safety and Environmental Enforcement, which we are creating, will provide us with that kind of vigorous enforcement, which you want and which the American people want.

Senator STABENOW. Thank you.

The CHAIRMAN. Senator Burr.

Senator BURR. Thank you, Mr. Chairman.

Mr. Secretary, welcome. I am not going to ask you about what went wrong because I truly believe that the President understands that this is going to take a great deal of review, and that is the purpose of the commission. I want to commend you because I think that you have stayed focused on the 3 most important things—one, to stop the leak; 2, start the cleanup; three, then assess what went wrong and, more importantly, what changes we need to make. I believe I have consistently heard that out of you.

Let me ask you, can you comment on the agency's involvement in preparing the Atlantic coast for any potential oil fallout from the loop current?

Secretary SALAZAR. Let me just say that Thad Allen, who is the commander on this, has been working tirelessly on making sure that we are anticipating for the problems that will occur. Right now, in terms of the States that are at risk are the ones that are in the Gulf coast, but we are prepared for the worst-case scenario. He is preparing for the worst-case scenario.

Senator BURR. I would encourage at the earliest point that you can share that with the Atlantic coast States, we would be happy to hear that and, more importantly, prepare as well.

Do you believe the areas in which you have implemented new safety requirements cover the issues that caused Deepwater Horizon's accident?

Secretary SALAZAR. I think that the areas where the safety recommendations are being implemented will help have a safer environment for drilling activities in the Outer Continental Shelf. Those recommendations, which Steve Black led on my behalf, came about through input, including from the National Academy of Science's arm of engineering. So, my view is that they are very good, and we are headed in the absolute right direction.

Whether there will be additional requirements that will come forward from the Presidential commission, we are open to ideas. The goal is here that we need to have assurance of safety whenever we are conducting any kind of OCS operations.

Senator BURR. Sure. Let me ask you for a very candid answer, and David is closer to it, in case he wants to comment. Has BP at any point refused to do what the Government has asked?

Secretary SALAZAR. We have had a directive relationship with them. So, we have wanted them to do something, it is ordered and—

Senator BURR. Have they ever refused?

Secretary SALAZAR. They have not refused anything that I have ordered them to do. Now, whether—but I am not running the operation, and this is a national incident. So, it is—

Senator BURR. If you would like to check back on that and—

Secretary SALAZAR. I will check with Secretary Napolitano and with Thad Allen.

Senator BURR. I was told by an industry technician that I called in that didn't work for BP what steps the entire industry and the science community were attempting, and he said, Senator, everybody, every smart person is at the table. Everybody from industry, regardless of the company, everybody from the science community that might have input is at the table making the decisions, evaluating the steps forward. Is that an accurate statement?

Secretary SALAZAR. Let me just respond to that because I have spent—the last 51 days on this and it has consumed most every waking moment that I have had. I will say this, that in the day or days after the explosion, I pulled together all of the CEOs of companies that have operations in the Outer Continental Shelf, directed BP to take their input and to make sure that they were reaching out and getting the best science of the world.

The President directed Secretary Chu and the Federal labs also to be involved in making sure that those minds were being brought to bear on the problem. So, from the point of view which I have the best minds of the world are focused on this issue and stopping the leak and resolving the problem.

Senator BURR. I appreciate the confirmation of what I have been told.

The last question, Mr. Chairman, is the purpose of the Graham commission to determine what failed and to make recommendations on what changes should be made for the future?

Secretary SALAZAR. Yes.

Senator BURR. All right, thank you, Mr. Secretary.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Senator Cantwell.

Senator CANTWELL. Thank you, Mr. Chairman.

Secretary Salazar, good to see you. I wanted to ask you a couple of questions about your recommendations today and just to make sure that I am clear about them. Many of the recommendations that are in your report apply to floating vessels and floating drilling operations. But I think this could potentially leave out about one-third of what are called mobile offshore drilling units because only about one-third of these are considered floaters and would be under this definition of regulation.

So are you considering that definition and how to have a tighter consideration and make sure we don't have a loophole there, or is there something I am missing about the difference between these facilities? Maybe Mr. Black is better to answer this, I don't know.

Secretary SALAZAR. Let me just say we are aware of the distinction, and the moratorium in place applies to deepwater drilling. The Notice to Lessees that I talked about earlier that imposes safety requirements for drilling that will occur is now in the shallow waters that we define to be 500 feet or less.

I will have Steve Black comment on the concept of the floating vessel because that was a central component of the report.

Mr. BLACK. Senator Cantwell, thank you.

If I understand your question correctly, floating rigs are rigs that are not either jack-up rigs and anchored on the sea floor or moored rigs, but instead mobile rigs that are dynamically positioned and, therefore, have different risks, a different risk profile and usually a subsea BOP stack. So the recommendations are intended to cover all of the mobile drilling rigs.

We may need to get more information from you just to clarify that answer, but that is our intent.

Senator CANTWELL. Yes, I think that in the term and in definition I think you are missing some of those mobile offshore drilling units. So I think a big number. So we should look at that.

Then also I wanted to clarify the report has recommendation to include third-party verification and validation of technology in use and aspects of blowout preventers, but it doesn't include a requirement for a full top-to-bottom look at a system or classification by somebody like ABS, the American Bureau of Shipping. So why not do that?

Mr. BLACK. Senator Cantwell, the third-party verification requirement is an attempt, it is sort of one of the principles of the safety recommendations. In addition to ensuring redundancy, the Secretary recommended to the President, and the President agreed, that with respect to recertification of blowout safety equipment that those inspections should be verified by a third party not affiliated with the company or the drilling contractor.

That third party and the qualifications of that party, you know, in the Notice to Lessees that the Secretary put out yesterday, we specified that the company needs to hire a qualified third-party

verifier. So it may very well be that someone with those qualifications would meet that test.

Senator CANTWELL. I think we need to be more specific here, too, on your recommendations because you don't want somebody looking just at a blowout preventer and whether that works. You are looking at the blowout preventer as part of a system, and you want to understand whether the system is going to fail.

Or I am just going off of some of the testimony we have had before us from the various people involved, and everybody down the line pointed the finger at somebody else. "Oh, well, it was supposed to work, but you didn't have the right hydraulic fluid," or this was supposed to happen.

So we want to make sure that we are looking at a validation of this, I believe, by third parties. So, we would like to suggest some language to you on that as well.

Secretary SALAZAR. Senator Cantwell, if I may, we are obviously open to whatever recommendations that you might want to give us. The safety recommendations dealt with much more than just the blowout prevention mechanisms. They dealt with cementing. They dealt with casing. They dealt with training and a whole host of other things.

So there is a panoply of recommendations that we are implementing at this point. If there are things that we have missed, please let us know, and I am sure that as we go forward, including getting the recommendations from the Presidential commission, there will be additional requirements that will have to be imposed.

Senator CANTWELL. I think the American Bureau of Shipping has provided a good third-party validation of these various technologies, and I think we should continue to use them. But I think getting the definition right so that people don't just do a cursory look at it, but actually a systematic operation that is going to be critical for moving forward.

So I thank the chairman and also the Secretary.

The CHAIRMAN. Thank you very much.

Senator BARRASSO.

Senator BARRASSO. Thank you very much, Mr. Chairman.

Mr. Secretary, I want to thank you for all of your hard work on this. As you said, you have been working relentlessly, and I think every member of this panel, both sides of the aisle, think absolutely you have been working relentlessly on this national tragedy. So I want to thank you.

A couple of questions, and you referred specifically to pushing the pause button with regard to the 6-month moratorium. I am concerned about jobs and the economy and want to visit with you a little bit about that.

According to the Houston Chronicle, there are about three dozen deepwater drilling rigs that are affected by the moratorium that are expected to exit the Gulf and have new multiyear contracts in Brazil, other deepwater hot spots. That could lead to costly delays of projects and endanger jobs that would otherwise be there for folks in the Gulf.

I think the Interior Department's May 27 report highlights the importance of offshore oil and gas production. It said that the OCS

oil and gas industry provides high-paying jobs in drilling and production activities. It estimated 150,000 jobs.

So there was an editorial in the Wall Street Journal today called "A Second Oil Disaster," and it talked specifically about the specifics of the economics of those jobs. I am wondering if, in any way, you are looking at or giving consideration to lifting the moratorium, pushing that pause button sooner than the 6 months in order to help protect the jobs and the economy of that region from suffering a second hit?

Secretary SALAZAR. Senator Barrasso, the importance of the jobs that are at stake here has been very much on the mind of the President and my mind as well. What we want to assure is that as we move forward with programs on the OCS, that they are going to be safe and that this circumstance that we are facing with the Deepwater Horizon never happens again.

If it can be done before 6 months, then there is a possibility that we could take a look at it before then. But right now, we have multiple investigations that will culminate through the President's commission, and I think it would be unwise for us to move forward with deepwater drilling until we have those recommendations that are in front of us that we can then implement.

Senator BARRASSO. Just looking at the BP 58-page oil spill response plan for the region that was approved, I am trying to think how long it is going to take to work through all of this. For this specific well, the plan includes how to protect walruses, sea lions, and seals, none of which actually live in the Gulf. There was really minimal discussion on how to actually stop a worst-case scenario oil spill.

So, I look at that and say can we be assured that at 6 months that the pause button will be pushed, or do we look at possibly having a stop button and extending this even a longer period of time, again focusing on the economics in that region.

Secretary SALAZAR. Senator Barrasso, the frank answer to that question is I don't know today, and that is because information is still being developed as to the root cause of this particular incident, as to recommendations that we will implement with respect to safety, as to the reorganization of parts of the Department of Interior which I think are essential, which I hope to work with the members of this committee on so that we have organic legislation for these functions.

But we are not waiting. The 30-day report that we submitted to the President, we worked on that very hard and included outside experts, including the engineering academy that was very helpful with their recommendations. So we are not waiting. We are moving forward to developing information and the implementation of programs even in the interim as we speak.

Senator BARRASSO. You had mentioned Admiral Thad Allen and his involvement. He had said that BP has the means to fix the problem, and they need to be held accountable to do it, but with proper oversight, he said, and that is our job.

I was struck yesterday to hear that the CEO of BP said he had not actually talked directly to the President of the United States, and the President of the United States confirmed that in an interview I think with Matt Lauer yesterday. I think a lot of Americans

were surprised because you would think that there would be some value in the two of them talking.

Senator Burr a little earlier asked had BP refused to do anything that the Government asked? Kind of a follow-up to that is has the Government refused to do anything that BP has asked in terms of trying to be helpful to stop this leak?

Secretary SALAZAR. I am not aware that the Government has refused any request in terms of science from the labs, in terms of Department of Defense capabilities if they are needed. Thad Allen has the power and the ability to call on those resources.

Let me respond to your first question, if I may, Senator Barrasso, and your comment on the President. The fact of the matter is from the very beginning of this, we have been having a directive relationship with BP. Whether it is Tony Hayward or Andy Inglis or Lamar Alexander, I met with them on multiple times. I pushed them to give the statement they have made to the America people that they will not hide behind liability caps and that they will pay for every cent of response cost, as well as any damages that occur from this national tragedy.

So we have had the directive relationship, which I characterized at one point as the Buddha on the neck of BP. I told BP at the beginning that that was what the relationship was going to be, and we will continue to have that kind of relationship until we get a conclusion of this incident.

Senator BARRASSO. Thank you, Mr. Secretary, for your hard work.

Thank you, Mr. Chairman.

The CHAIRMAN. Senator Landrieu.

Senator LANDRIEU. Thank you, Mr. Secretary. I appreciate your focus and attention on this issue, which is, of course, extremely important to the people of Louisiana and the Gulf coast in a very particular personal and emotional way because of what is happening right off of our shore.

But it is what is happening on the shore that has me concerned right now. You know what my question is going to be, and it is one that everyone in Louisiana is asking, as well as people from Mississippi, Texas, and Alabama.

In the appendix of this report, May 27, it lists the names of 15 experts that you consulted with on your report. I received a letter yesterday from 8 of them, a majority, that say they disagree with your decision to impose the 6-month moratorium.

In their words, "The report does not justify the moratorium as written. The moratorium as changed will not contribute measurably to increased safety and will have an immediate and long-term economic effect."

These experts believe, and I agree, that this report includes some important recommendations. But I don't believe, like they don't believe, that this temporary pause, if it lasts very much longer than a few months—not 6, just a few months—it could potentially wreak economic havoc on this region that exceeds the havoc wreaked by the spill itself.

I am going to submit to the record testimony from companies that no one on this panel will recognize because they are not oil companies. Aker Solutions employs 750 employees in Texas and

Alabama. Bollinger Shipyards has been in business for 64 years. They have testified to us they have never experienced such an uncertain future. They could be laying off thousands of workers.

Broadpoint, Inc., 27-year-old privately held company, 100 employees based in the Gulf coast, their operations will be 99 percent affected almost immediately. C&C Technologies, they provide mapping. They are not even an oil company. They expect layoffs immediately.

The consequences of this moratorium on the 33 deepwater rigs where 100 to 200 people work on each one, and for every one on the rig, there are four or five jobs directly supporting that job, not counting the 10,000 jobs, this could be devastating to our State and to the Gulf coast, an area that is fragile economically from the ravages of the storms just recently.

So, on behalf of the people I represent, I am asking can you give any time certain, can you give any confidence that we can keep our people at work, get our people back to work, understanding there are some safety issues. If not, what are you going to tell the potentially—according to the documents that I am going to submit to the record, Mr. Chairman, it could affect 330,000 people in Louisiana alone. I don't have the Mississippi numbers. I don't have the Texas numbers. I don't have the Alabama numbers.

Three hundred thirty thousand people, that is 13.4 percent of Louisiana's work force. Now I know not this whole work force is focused on deep water. It is on shallow. But if not a time certain, a shorter time than 6 months, some confidence that you are doing everything and the President is doing everything they can to get to the root of safety implemented so we can produce the oil not just for ourselves, Mr. Secretary, but for the country that needs it.

Secretary SALAZAR. If I may, Senator Landrieu, respond to the question in three ways. First, the experts that were involved in crafting the report gave us their recommendations and their input, and I very much appreciate those recommendations. It was not their decision on the moratorium. It was my decision and the President's decision to move forward with the moratorium, but I do appreciate the experts and their involvement and their point of view.

Second, the jobs are a concern to us. But we want to make sure that as OCS development takes place that it is going to be done in a safe way. That is why the Notice to Lessees that went out yesterday will allow the shallow water development programs still to continue.

The third point I would make, Senator Landrieu, to frame the discussion perhaps in this committee, it seems to me that we have three options. One would be to say full speed ahead. The 33 drilling rigs that are out there—

Senator LANDRIEU. Nobody is suggesting—

Secretary SALAZAR [continuing]. Just go, don't stop. Move forward. Another option would be what some Members of the Congress would want us to do and other members of the public, and that is just to stop and say no more drilling or exploration activities in the Outer Continental Shelf.

The place where the President of the United States and I have arrived at this issue is we have put the pause button until we can have a sense of safety that this is never going to happen again.

Now when we lift our hand from the pause button will be dependent on when we can get to that point.

Senator LANDRIEU. OK. Let me ask this and submit one thing to the record, and I appreciate the chairman's leeway here. But for the record, Texas uses, just the State of Texas, 1.1 billion barrels of oil a year. California uses 750 million. New Jersey uses 226 million. Connecticut is the least. It is 795.

Now, nobody is suggesting these consumption numbers are going to go down any time soon. So there are some economic risk, some national security risk in terms of less oil being produced domestically, as well as environmental risk. I am just saying that needs to be balanced, and I know that you understand that.

Then, finally, the question is, and you can answer it now or in writing, if these long list of companies that are not oil companies, but oil service companies have to either go out of business or take bankruptcy or lay off thousands of works, are you going to ask BP to pick up their salaries and to make them whole?

Secretary SALAZAR. The answer to that is, yes, we will. BP is responsible, and BP is responsible for all the damages that flow from the BP oil spill, and these are some of the consequences from that oil spill.

Senator LANDRIEU. Thank you.

The CHAIRMAN. Senator Bennett.

Senator BENNETT. Thank you very much, Mr. Chairman.

I have listened through the testimony waiting to ask my question, and no one else did until Senator Landrieu just covered all of the issues I had in mind. She did it very eloquently. So I won't take my full time, but simply call your attention, which Senator Landrieu has done, to the comments made by the outside experts that you turned to.

Specifically, the National Academy of Engineering recommended a group of people as contributors and reviewers of the department's 30-day review of the oil spill. A group of them have signed a statement saying we were chosen because of our extensive petroleum industry expertise and independent perspectives.

Then they quote the report, say we broadly agree with the detailed recommendations in the report and compliment the Department of Interior for its efforts. However, we do not agree with the 6-month blanket moratorium on floating drilling. The moratorium was added after the final review and was never agreed to by the contributors. Then they quote the report as they reviewed it and then quote the report as it was changed.

You are correct, Mr. Secretary, you made the decision, and it is your legal and proper right to make that decision. I am not questioning that in any way. But simply quote the comments of these folks, they say, "We believe the moratorium as defined in the draft report addresses the issues evident in the case. We understand the need to undertake the limited moratorium and actions described in the draft report to assure the public that something tangible is being done. A blanket moratorium is not the answer. It will not measurably reduce risk further, and it will have a lasting impact on the Nation's economy, which may be greater than that of the oil spill."

So this is signed by Kenneth E. Arnold, Dr. Robert Bea, Dr. Benton Baugh, and Ford Brett. Along with the material—oh, I am sorry—Dr. Martin Chenevert, Dr. Hans Juvkam-Wold, and Skip Ward, and Thomas Williams. I would ask unanimous consent that their statement be included, along with that of Senator Landrieu as presented.

Mr. Secretary, I join with the comments of all of my colleagues in thanking you for your diligence and recognizing the kind of burden that this has put upon your department. You didn't sign up to deal with an oil spill. You thought you were going to be worrying about jack rabbits in the West and an occasional wilderness issue, and you have had to take this on, and you deserve all of the compliments that you have received from this committee.

I don't want to add to your burden, but I do want to put this in the record as my own observation with respect to the issues that Senator Landrieu has raised.

The CHAIRMAN. We will be glad to include whatever you have there in the record and what Senator Landrieu offered as well.

Do you wish to respond to anything there, Secretary Salazar?

Secretary SALAZAR. Just very quickly. I think I answered the question already. I appreciate the comment on the role that the engineers played and will continue to play as we try to move forward with the new safety regime for OCS.

Let me also just comment, Senator Bennett, that when I signed up for this job, I signed up for it in large part because it is, in my view, the Department of America, and I often describe it as going from sea to shining sea as well as the 1.75 billion acres of the Outer Continental Shelf. We have a job to do all over this country, and one of the jobs that we have to do right now is to deal with this spill and to deal with the future plans for the OCS, and we will get it done.

The CHAIRMAN. Senator Johnson.

Senator JOHNSON. Thank you, Mr. Chairman.

Welcome, Secretary Salazar. You have been doing a great job. I associate myself with the remarks of Senator Stabenow, and the last decade has been a hands-off policy, and you are responsible for changing that policy.

Do you know whether the moratoriums and other actions will have any effect on U.S. oil production? If so, what effects do you anticipate?

Secretary SALAZAR. Senator Johnson, there will be, I think, a report from the Energy Information Agency indicates that there will be an economic consequence and a production consequence that rises from this moratorium that we have imposed. So we are aware of the fact that there will be some reduction in oil and gas production. I don't have this document in front of me, but I recall reading it sometime late last night.

I think it said that there could be about a 5-day amount of production that is consumed in the United States that would be affected by the moratorium. So there will be an effect, and I would be happy to get back to you with a more specific number.

Senator JOHNSON. What percentage would that accrete to, daily production of the United States?

Secretary SALAZAR. I don't have those specific numbers in front of me, but I would be happy to get those to you, Senator Johnson. I don't know if Deputy Secretary David Hayes or Steve Black, whether you have those numbers?

We would be happy to get those to you, Senator Johnson.

Senator JOHNSON. Are any shallow water production operations halted as a result of Mr. Abbey's June 2 memorandum, or does the action only affect wells currently in development and not yet producing oil?

Secretary SALAZAR. Senator Johnson, the shallow water drilling activities still have to comply with these safety requirements, and our view is that companies that are out there that are doing a good job will be able to comply with these safety requirements to make sure that we have this added level of safety which we must have with respect to OCS. So our view is that shallow water development will be able to proceed and that the safety requirements are ones that will be able to be met by most of the companies.

Senator JOHNSON. Would you explain which oil and gas operations are continuing in the Gulf of Mexico and which have been halted by your moratorium?

Secretary SALAZAR. The oil and gas operations in the Gulf of Mexico that continue are in large part all the production activities. Production from the Gulf of Mexico has not been significantly affected. It has only been minimally affected by the Deepwater Horizon spill. So the production that was online continues to produce much of the energy that we are using here in this Nation today.

What has been affected, as Senator Landrieu and others spoke about, has been the continuation of drilling activities, especially in the deep water. Those have been halted, including the wells that were being drilled from the 33 deepwater drilling rigs that were out there. We ordered those companies to get to a place where they could secure the well and then to stop until we give them further orders.

Senator JOHNSON. Will you be revisiting the MOUs to confirm that each operation has been temporarily suspended and complies with the system regulations for a temporary plug and abandonment?

Secretary SALAZAR. Senator Johnson, we will be making sure that the orders that we have given to lessees are, in fact, followed. The latest of those notices was one that was sent out yesterday, and that went to all lessees in the Gulf, including those in shallow and deep water.

Senator JOHNSON. Thank you, Mr. Secretary.

Secretary SALAZAR. Thank you very much, Senator Johnson.

The CHAIRMAN. Senator Dorgan.

Senator DORGAN. Mr. Chairman, thank you very much.

Let me just say my colleague Senator Corker, I don't think he meant it quite as harshly as it sounded with respect to the issue of adolescence and actions by the White House. You know, my sense here is I agree with Senator Corker that this is a natural disaster. The President didn't punch that hole in the planet. He can't plug it either.

But this President, the administration, you, Mr. Secretary, the Secretary of Energy, Dr. Tom Hunter, who I met with this morning

are all working hard. There is a seriousness of purpose here that has brought together the best minds we have in this country to work with all of you, and I know this is very tough. You are as frustrated as we are on this committee that that hole hasn't been plugged yet. I wish it had been plugged the next day.

But this proves to be very difficult and raises questions about regulations with respect to particularly deepwater drilling and so on. But I don't think it was meant as harshly as it sounded to me. I don't think there is any adolescent behavior here at all. I think there has been a seriousness of purpose by this administration and by everybody that is interested in trying to stop this gusher in the Gulf of Mexico.

Let me ask a couple of questions. No. 1, you talked about BP, their responsibility, their pledge and their commitment. The fact is there is nothing legally binding in that. I asked the Justice Department if the fact that BP made a pledge was that binding on them? The answer is no.

I think it is time now, and I think BP should be standing behind their pledge, as they have indicated they will. But who knows 6 months or 16 months or 6 years from now whether that will remain the commitment. I think it is time to ask for a portion of funds. I propose \$10 billion, which is a bit more than the first quarter profits of BP, \$6 billion or \$7 billion, be put in a Gulf coast recovery fund that is run by a master who would be selected and perhaps a counselor from BP so you would have joint management of that designated fund.

But in any event, I think it is time to move from a pledge to some sort of binding requirement by BP. If BP would say, no, we are not at this point going to direct money in a Gulf coast recovery fund, then I think Congress ought to be considering what we would do to secure that funding from BP, which is a possibility.

There are people now who are sitting on an empty dock in a small town on the coast who own a boat, a fishing boat that is not being used, and they have got to make a payment at the end of the month. That is a substantial cost. There is a person perhaps there that is running a small cafe and nobody is going there, and they have got to make payments.

So my point is I think it is time to start finding a way to create a binding requirement here, and I won't ask your evaluation of that. But I will ask you to consider that, and I have passed that recommendation along to Justice and the administration as well.

Let me ask two other things. One is this issue of shallow water versus deep water. My guess is this gusher is going to change everything about underwater drilling and probably certainly for the better because there will be more regulations and more requirements that have a greater margin of safety as we do these things in the future.

Is there a substantial difference in shallow versus deepwater drilling with respect to this type of accident? Had this accident occurred in water of 500 feet or 750 feet, do you think that the flow would have now been stopped?

Secretary SALAZAR. The answer to that is yes because it is much easier to deal with these kinds of issues in shallower water than in deep water. When you are 5,000 feet below the sea, you can see

the effort that BP has put together to try to stop this leak, and we are now 51 days into the continuing leak. It speaks for itself just the difficulty of operating at those depths.

Some ask the seriousness of BP in stopping the leak. I have seen the multiple plans that are running parallel in nature to stop or contain this leak. As I have said before publicly, it is an existential issue for BP. So I do believe that they are throwing everything that they have at the problem and trying to contain it.

We also believe that we ought not to allow BP to do it by themselves, and that is why the President's directive has been to bring people like Tom Hunter and other scientists to make sure that we are riding herd, as the President has said, over BP.

Senator DORGAN. There is a public interest here. BP has its interest. Clearly, its interest must be to shut down this gusher. I understand that. But it also, in terms of evaluating various alternatives, is going to find a way to make certain on behalf of its shareholders its interest is met. There is also a public interest.

They may well run parallel in all cases, but at times maybe not. But that is why there needs to be this concerted effort by those who represent the public interest. I want to——

Secretary SALAZAR. If I may, just on that point?

Senator DORGAN. Yes.

Secretary SALAZAR. Because you mentioned Tom Hunter. I have gotten to work with people like Tom Hunter a lot over the last 51 days. They are truly the best of scientists that America has, and as it is at the President's direction that you have people like Secretary Chu and Tom Hunter and Marcia McNutt, a whole host of others essentially that are overseeing these efforts.

Senator DORGAN. Dr. Tom Hunter, for those that don't know, is the Director of Sandia National Laboratory, an extraordinary American. But he is just one of a group of the best thinkers in our country brought together by the administration to try to figure out what do we do here.

If I have just another moment, and let me just say that you all look like you could use like 10 to 15 hours of sleep. I know the hours that you are likely working, and we thank you for that.

Let me ask about when a hurricane enters the Gulf of Mexico, in normal times rigs and production platforms are prepared, are shut down, and personnel are evacuated to land. Is there now a written plan for that? Because we are now going into that season, and you have got a catastrophe out there with this gusher. Yet, we may well have during hurricane season something come along, and companies normally have had procedures to deal with that situation. Is there a written plan at this point for this circumstance?

Secretary SALAZAR. The answer to that is, yes, Senator Dorgan, with respect to hurricanes that when they happened in the past there is a shutdown that occurs within the Gulf of Mexico. The answer also with respect to this particular leak is that it is one of the issues which Secretary Chu and I have insisted there be the capacity to deal with these issues even as this leak continues in the month or two ahead as they get to the relief well. So it is part of the program.

Senator DORGAN. Let me say I don't mean that the three of you look awful——

[Laughter.]

Senator DORGAN [continuing]. When I said you need sleep. But I know that you are weary because this has been a long period of time, and you have not had a day off, I guess, in 51 days. So, thanks for your work, good for you. I think this Congress wants to do everything possible it can do to be supportive.

The CHAIRMAN. Senator Wyden.

Senator WYDEN. Thank you, Mr. Chairman.

Mr. Secretary, the folks in the Gulf are hurting. As Senator Dorgan noted, you all are putting in prodigious numbers of hours at this point. I just want to ask you about two policy questions that relate to the report that you are making actually are, in my view, areas that the report doesn't get into.

I feel very strongly that for the future, it is going to be absolutely critical to close the revolving door between the Interior Department and the oil and gas industry. There is a specific law governing officers and employees of the department involving the Outer Continental Shelf oil and gas program, but it sure doesn't look to me like it is closing the revolving door. Let me give you two examples.

The first comes from the Bush administration. An MMS inspector applied for, got a job with the company that he was inspecting. The second one I think concerns me even more. That is, as of March 1, 2010, the previous Director of MMS is now the president of the Ocean Industries Group. This is the offshore oil and gas industry that he used to regulate. This is as of March 1, 2010.

Now I am not saying this is breaking the law, but it sure suggests to me that the rules to block this revolving door are not tough enough. The report doesn't go into this. My question, the first question is would you be willing to work with me—we have worked together often—to toughen the conflict of interest and ethics requirements in this area to finally, once and for all, shut the revolving door?

Secretary SALAZAR. Senator Wyden, the answer to working with you, absolutely. If there are things that need to be done to enhance the ethics mandates which we have put into place since I became Secretary of Interior and they can be enhanced, we obviously would want to do that.

You know the history of MMS perhaps better than I think almost anybody else that I have worked with, and there were huge problems there. That is why people have been terminated. People have gone to jail. People have been reprimanded. Ultimately, what is essentially this blowup of MMS and the reconstruction of it and the way that we have ordered under the new Secretarial Order I think is essential, and the revolving door issue is an issue which we need to make sure doesn't happen.

Senator WYDEN. Let us follow up on it, Mr. Secretary, and particularly look at this one that I cited involving March 1, 2010, because that is an example to me where my initial take is that the law may not have been broken. But for somebody who is the previous director now at the offshore oil and gas industry, let us follow it up.

Here is my second question. With respect to the emergency response issue, I think there is a general consensus now that the emergency response has not been adequate. The Federal Govern-

ment doesn't have the equipment to stop a gusher or deal with it as fast as you and I would like. BP doesn't either.

What do you think about the idea of Congress requiring the oil industry, not on a company by company basis, to establish a permanent oil spill response capability. I am just putting this out by way of trying to get an initial assessment of it. The Congress has looked at previous approaches. The industry has a check-off program for R&D, for propane, the oil heat industry. There are other approaches that resemble this.

But if it is going to be important to strengthen the oil spill response capability, do you think that this is an issue that ought to be examined?

Secretary SALAZAR. Senator Wyden, it is an issue that needs to be examined and will be examined. I know the President himself has an interest in this and that we will look at the report from the Presidential commission that I think will very much address this issue.

Senator WYDEN. So that would be—I appreciate the answer, and I think what you have told me, it is on the table. That is what I was hoping for. Let us go to work, as you and I have so often in the past. Let us toughen up the conflict rules, particularly as it relates to the revolving door. Let us work on the emergency response capability, and we will look forward to talking to you some more after you get some sleep.

Thank you, Mr. Chairman.

Secretary SALAZAR. Thank you, Senator.

The CHAIRMAN. That completes one round of questions. I have no questions in addition to that.

I think Senator Murkowski indicates she does not have additional questions.

Senator Corker, do you have—

Senator CORKER. I have just one.

The CHAIRMAN. Go ahead.

Senator CORKER. Just I wasn't going to bring up the issue again. I know Senator Dorgan has elaborated. I want to say that I was trying to contrast what appears to me to be a very professional response from your department and other professionals to the political responses that occur, and that is all I was trying to do. I was trying to say that I appreciate the maturity that it seems that you have displayed.

I realize on the political side people sort of move around, try to figure out where best to be. I do think, for what it is worth, that does affect the chain of command. It does affect how professionals end up dealing with a crisis when, in fact, the political side of it is trying to figure out where to be. I think that creates some issues, and I think I may talk with you offline about that. But if there are concerns about how you carry out a rescue mission like this with all the flitting around that seems to be taking place through the political side.

But my question is one of Senator LeMieux—and he may have already talked to you about this—has been on television I know a couple of times and talked in our caucus a little bit about a story that appeared in the Mobile Register on April 29, and it talked about having nonflammable boom available so that when a spill

like this occurs—and apparently, there was a preapproval process that took place so that when an emergency happens, you burn off the oil immediately. But you have to do that within 24 hours, or the oil ends up being mixed up with the water, and you cannot burn it.

That didn't occur in this case, and I know he has raised that several times with Admiral Allen, and I think he has written a letter to the Administrator of NOAA. But since you are here and since I know he has been talking about that publicly, I am sure you have a point of view on that, and I wondered if you might share it?

He seems to think that 90 percent of the oil could have been burned if that process—I am just repeating, OK? I hope I am not repeating inaccurately. But much of it could have been done away with very quickly if that had occurred in the first 24 hours.

I have heard people talk about the weather and other kinds of things that may have been impediments, and I just thought I might give you the opportunity to respond since I know it is out there moving around in the public.

Secretary SALAZAR. Senator Corker, Secretary Napolitano in so many ways, with Admiral Allen, has really moved forward to do everything within human capacity to deal with the boom issue. I know that they are doing everything that they can with respect to the boom.

In terms of burns and booms that could contain oil close to the vicinity of the blowout and then having burns conducted, there have been literally dozens, in fact, I think over 100 burns that have already been conducted to basically burn the oil on the sea. So it is a very active part of the leak containment program that is underway.

As Admiral Allen often says, we are fighting the battle on multiple fronts. We are fighting it in the subsea to stop the leak. When the oil comes to the surface, we are fighting it on the surface. When the oil comes close to the shore, we are fighting to keep it from coming onshore. When it has come onshore, we are fighting it there as well.

So, it has been a relentless effort. I would only comment on this last point, Senator Corker, with respect to the President's own involvement in this, I can tell you because I work with him a lot. He has been relentless in terms of pushing not only BP, but also the U.S. Government to do everything possible to protect the people of the Gulf coast and to protect the environment of the Gulf coast, and I can tell you that from Cabinet meetings to meetings that I have had with him in the Oval Office.

He is the reason some people may say I am tired today. It is because there is a 51-day march that we have been on, and we will continue on this march under the President's direction until this problem is fixed and we figure out the way forward.

Senator CORKER. Back to the question at hand then, what you are saying is that is absolutely not an issue, that having flammable boom available to jump on that right away, for somebody to make a comment in that regard you are saying is totally off base?

Secretary SALAZAR. Let me do this, Senator Corker. I will have either Secretary Napolitano or Admiral Allen get back directly to Senator LeMieux on the issue.

Senator CORKER. That would be good. But since I have raised the issue, too, I would love to hear about that.

Secretary SALAZAR. I will have them get back to you as well.

Senator CORKER. All right. Thank you.

The CHAIRMAN. Secretary Salazar, thank you very much for your time, and Godspeed in getting this problem solved.

That concludes our hearing.

Secretary SALAZAR. Thank you, Senator.

[Whereupon, at 11:44 a.m., the hearing was adjourned.]



## APPENDIXES

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### APPENDIX I

#### Responses to Additional Questions

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##### RESPONSES OF HON. KEN SALAZAR TO QUESTIONS FROM SENATOR MENENDEZ

*Question 1.* Relief wells are the only proven effective way to stop major oil spills—should operators be required to drill a relief well alongside and at the same time they drill exploratory wells in case a major accident happens? If not, why not? If the Department has determined that costs outweigh the benefits, where can I access that analysis?

Answer. Regarding the drilling of relief wells, it may seem reasonable to assume that relief wells reduce risk, and that we could save time responding to any blowout by requiring operators to drill a relief well alongside each well drilled in the Gulf of Mexico. However, the risk of a blowout in the relief well may be the same as the risk of a blowout in the initial well. This increased risk is a direct result of drilling twice as many wells into a formation. Each well drilled increases the risk of a blowout simply because each well presents its own unique geologic and engineering risks. Relief wells have historically been an effective method to stop the flow of oil from the bottom of a well blowout and begin the process of pumping cement to abandon the well. However, both the risk and costs of drilling relief wells dictate that they are typically only drilled when necessary to respond to a well blowout. As demonstrated with the Deepwater Horizon response, there are other deepwater well containment options that may be faster and equally effective in reducing or stopping the flow of oil into the ocean. BOEMRE is in the process of establishing enforceable mechanisms to ensure the availability of blowout containment resources. And industry commitments have been made for new investments in designing and developing a multi-scenario, multi-component containment system.

In fact, on July 21 four of the nation's largest oil companies announced that they have committed \$1 billion to set up a rapid oil spill response system to deal with deep-water blowouts in the Gulf of Mexico. Exxon Mobil Corp., Chevron Corp., ConocoPhillips and Shell said the system of underwater capture devices and surface containment vessels will be similar to those used by BP to control the Macondo well and will be designed to capture up to 100,000 barrels of oil a day before it spills into the sea from wells sitting in water as deep as 10,000 feet.

The reality of future wells and production from the Gulf of Mexico is that most of the remaining oil and gas resources are located in deep formations with high pressures and temperatures, and exploratory and development wells as well as any potential simultaneously drilled relief wells all carry a risk of a blowout.

*Question 2.* Has the Interior Department been submitting all government expenses to BP for reimbursement, including travel, lodging, and even meals, for all federal employees who have gone to the Gulf to respond to this spill? Is BP paying for your personal travel to Louisiana? Your meals? Your lodging? If not why not?

Answer. Costs which fall within the statement of work under the Pollution Removal Funding Agreement (PRFA) the Department has with the U.S. Coast Guard are being reimbursed through a coordinated department-wide process. Every bureau and office with a Deepwater Horizon related PRFA is tracking these costs according to the USCG's PRFA reimbursement guidance. Currently efforts to prepare and process reimbursement packages for costs incurred beginning on April 21, 2010 within the various PRFA agreements throughout the Department are underway. These packages will be prepared and submitted to the USCG on a regular basis until all Deepwater Horizon work is complete and expenses under the PRFA's are reimbursed. The Administration regularly bills responsible parties for oil removal

costs, and has sent seven bills, to-date, of which the first six have been paid in full by BP, totaling \$518.4 million. More information about oil spill costs and the reimbursement process—including copies of the bills that have been sent to responsible parties—is available here: <http://www.restorethegulf.gov/release/2010/10/13/oil-spill-cost-and-reimbursement-fact-sheet>.

Departmental costs that are identified as not currently being reimbursed through one of the various PRFAs will be tracked in accordance with interagency guidance and provided to DOJ for their determination of whether to pursue reimbursement from the responsible parties.

*Question 3.* What specific, near-term actions are being taken at MMS to ensure that all existing oil response plans accurately describe operators ability to respond to a worst-case scenario spill?

Answer. BOEMRE has been proactive in assuring that operators of offshore facilities are able to respond to such an event in the Gulf of Mexico. Relevant, near-term actions taken by the bureau include the following:

- On May 19, 2010, BOEMRE inspected the Marine Spill Response Corporation and the National Response Corporation spill response equipment stockpiles in Tampa, Florida to ensure its operational status and contractor training.
- BOEMRE continuously tracks the spill response equipment inventory for the three major equipment providers here in GOMR.
- BOEMRE worked with USCG concerning allocation of response assets in the event of another spill.
- BOEMRE consulted with USCG and the Environmental Protection Agency regarding the emergency rule for Temporary Suspension of Certain Oil Spill Response Time Requirements to support the Deepwater Horizon Oil Spill Response. This temporary interim rule allowed release of response equipment and vessels from around the country for response to the Deepwater Horizon Spill of National Significance. The USCG and EPA encouraged an increase in available response resources for this response by temporarily releasing these facilities and vessels from USCG and EPA regulatory response time requirements, and EPA response equipment identification and location requirements, if they have had their own or contracted response resources relocated to the Gulf of Mexico in support of the response to the Deepwater Horizon spill. Additional information on this can be found at: <http://edocket.access.gpo.gov/2010/pdf/2010-15853.pdf>
- BOEMRE developed a method to verify the worst case discharge volumes for wells through the Exploration Plan/Development Operations Coordination Document (EP/DOCD) review process as prescribed in NTL 2010-N06, Information Requirements for Exploration Plans, Development and Production Plans and Development Operations Coordination Documents on the OCS that became effective on June 18, 2010.
- BOEMRE is reviewing its ability to plan, implement, verify, and adjust Oil Spill Response Plans given existing regulations, in particular 30 CFR 254.30(e)(2), when relevant staff has identified potential inadequacies based on the Deepwater Horizon response.

*Question 4.* At the hearing, I asked you to confirm reports of a second oil spill from another drilling rig, the Ocean Saratoga, near the Deepwater Horizon, which you confirmed, and said may have begun with Hurricane Ivan, in 2004. I request that you expeditiously provide follow-up information about this spill to the Committee, including when it began, the estimated flow rate, plans to clean up and investigate the spill, and future monitoring plans of the Department to ensure all oil spills are detected and addressed in a timely manner.

Answer. The oil leaks in the vicinity of the Diamond Ocean Saratoga drilling rig are from wells originally drilled from a now downed platform destroyed by Hurricane Ivan in September 2004. The platform is located in 440 feet of water approximately 15 miles southeast of the Mississippi River delta. The Ocean Saratoga is under contract to Taylor Energy LLC, as operator of the Mississippi Canyon Block 20 (MC020) platform destroyed by Hurricane Ivan, to drill relief wells and set plugs in the destroyed wells to prevent future oil pollution.

The Mississippi Canyon Block 20 Project is managed under a Unified Command consisting of the USCG, BOEMRE, and Taylor Energy, which holds monthly operational meetings with Taylor Energy and contractors to manage the well abandonments and site clearance operations for the MC020 platform. Taylor Energy no longer operates active oil and gas leases in the Gulf of Mexico, but is the operator of the MC020 Project under a trust agreement created with the then-Minerals Management Service in March 2008. Taylor Energy is reimbursed for well abandonment and site clearance work from the trust fund after review of completed work by the

Unified Command. The oil leak flow rates in MC020 are generally measured in gallons (i.e. less than one barrel per day). While the wells have periodically discharged volumes exceeding several barrels per day, the leaks have subsided due to the plugging of six wells and the installment of an oil containment system. Taylor Energy LLC and contractors designed, fabricated, and installed a containment system of collection domes and a collection tank for containment of these leaks. Under the direction of the Unified Command, Taylor Energy has also contracted with an oil spill observer contractor to fly over the MC020 site and report estimates of oil leak volumes to the Unified Command.



## APPENDIX II

### Additional Material Submitted for the Record

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THE PRIMARY RECOMMENDATION IN THE MAY 27, 2010 REPORT, "INCREASED SAFETY MEASURES FOR ENERGY DEVELOPMENT ON THE OUTER CONTINENTAL SHELF" GIVEN BY SECRETARY SALAZAR TO THE PRESIDENT MISREPRESENTS OUR POSITION

The National Academy of Engineering recommended us as contributors and reviewers of the recent Department of Interior "30 Day Review" of the BP Oil Spill. We were chosen because of our extensive petroleum industry expertise, and independent perspectives. The report states:

"The recommendations contained in this report have been peer-reviewed by seven experts identified by the National Academy of Engineering. Those experts, who volunteered their time and expertise, are identified in Appendix 1. The Department also consulted with a wide range of experts from government, academia and industry."

The BP Macondo blow out was a tragedy for eleven families, and an environmental disaster of worldwide scale. We believe the blowout was caused by a complex and highly improbable chain of human errors coupled with several equipment failures and was preventable. The petroleum industry will learn from this; it can and will do better. We should not be satisfied until there are no deaths and no environmental impacts offshore—ever. However, we must understand that as with any human endeavor there will always be risks.

We broadly agree with the detailed recommendations in the report and compliment the Department of Interior for its efforts. However, we do not agree with the six month blanket moratorium on floating drilling. A moratorium was added after the final review and was never agreed to by the contributors. The draft which we reviewed stated:

Along with the specific recommendations outlined in the body of the report, Secretary Salazar recommends a 6-month moratorium on permits for new exploratory wells with a depth of 1,000 feet or greater. This will allow time for implementation of the measures outlined in this report, and the consideration of information and recommendations from the Presidential Commission as well as other investigations into the accident.

In addition, Secretary Salazar recommends a temporary pause in all current drilling operations for a sufficient length of time to perform additional blowout preventer function and pressure testing and well barrier testing for the existing 33 permitted exploratory wells currently operating in deep-water in the Gulf of Mexico. These immediate testing requirements are described in Appendix 1.

We agree that the report and the history it describes agrees with this conclusion. Unfortunately after the review the conclusion was modified to read:

The Secretary also recommends temporarily halting certain permitting and drilling activities. First, the Secretary recommends a six-month moratorium on permits for new wells being drilled using floating rigs. The moratorium would allow for implementation of the measures proposed in this report and for consideration of the findings from ongoing investigations, including the bipartisan National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling.

The Secretary further recommends an immediate halt to drilling operations on the 33 permitted wells, not including the relief wells currently being drilled by BP, that are currently being drilled using floating rigs in the Gulf of Mexico. Drilling operations should cease as soon as safely practicable for a 6-month period.

We believe the moratorium as defined in the draft report addresses the issues evident in this case. We understand the need to undertake the limited moratorium and actions described in the draft report to assure the public that something tangible is being done. A blanket moratorium is not the answer. It will not measurably reduce risk further and it will have a lasting impact on the nation's economy which may be greater than that of the oil spill.

The report highlights the safety record of the industry in drilling over 50,000 wells on the US Outer Continental Shelf of which more than 2000 were in over 1000 feet of water and 700 were in greater than 5000 feet of water. We have been using subsea blowout preventers since the mid-1960s. The only other major pollution event from offshore drilling was 41 years ago. This was from a shallow water platform in Santa Barbara Channel drilled with a BOP on the surface of the platform.

The safety of offshore workers is much better than that of the average worker in the US, and the amount of oil spilled is significantly less than that of commercial shipping or petroleum tankers. The US offshore industry is vital to our energy needs. It provides 30% of our oil production, is the second largest source of revenue to the US Government (\$6 Billion per year), and has a direct employment of 150,000 individuals. The report outlines several steps that can be taken immediately to further decrease risk as well as other steps that should be studied to determine if they can be implemented in a way that would decrease risk even more.

This tragedy had very specific causes. A blanket moratorium will have the indirect effect of harming thousands of workers and further impact state and local economies suffering from the spill. We would in effect be punishing a large swath of people who were and are acting responsibly and are providing a product the nation demands.

A blanket moratorium does not address the specific causes of this tragedy. We do not believe punishing the innocent is the right thing to do. We encourage the Secretary of the Interior to overcome emotion with logic and to define what he means by a "blanket moratorium" in such a way as to be consistent with the body of the report and the interests of the nation.

The foregoing represents our views as individuals and does not represent the views of the National Academy of Engineering or the National Research Council or any of its committees.

Kenneth E. Arnold, *PE, NAE*; Dr. Robert Bea, *Department of Civil and Environmental Engineering, University of California at Berkeley*; Dr. Benton Baugh, *President, Radoil, Inc.*; Ford Brett, *Managing Director, Petroskills*; Dr. Martin Chenevert, *Senior Lecturer and Director of Drilling Research Program, Department of Petroleum and Geophysical Engineering, University of Texas*; Dr. Hans Juvkam-Wold, *Professor Emeritus, Petroleum Engineering, Texas A&M University*; Dr. E.G. (Skip) Ward, *Associate Director, Offshore Technology Research Center, Texas A&M University*; Thomas E. Williams, *The Environmentally Friendly Drilling Project*.

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#### SERVICE COMPANIES IMPACTED BY DEEPWATER HORIZON MORATORIUM

##### *Aker Solutions*

- Aker Solutions is a leading global provider of engineering and construction services, technology products and integrated solutions to the offshore oil and gas industry.
- The moratorium will impact Aker Solutions' offshore related operations on the Gulf Coast which include about 750 employees in Texas and Alabama.
- The company has already started to refocus their efforts to international projects that hopefully can replace some of the void.
- Some of their offshore services work is coming to a halt already; and unless they can refocus that workforce, including vessels and tools, to international projects they are at risk of losing jobs in Texas over the next few months.
- Manufacturing jobs in Alabama are at risk from early 2011, as the backlog runs out with no new orders of deepwater subsea equipment coming in.
- Engineering jobs in Houston are at risk of being reduced, but may be able to be refocused internationally.
- In summary, part of their workforce will be affected directly or indirectly by the moratorium. Their goal is to try to mitigate this by securing international projects.

*ATP Oil & Gas Corporation*

- ATP Oil & Gas Corporation is an independent oil and gas producer headquartered in Houston, Texas.
- The moratorium has caused ATP to stop the drilling of a natural gas development well (the Mississippi Canyon 305 # 2 well) and release the deepwater drilling rig. The MC 305 #2 well would have produced approximately 40 million cubic feet of gas per day with a very small amount of condensate.
- Additionally, ATP will not be able to drill and complete two development wells (MC 941 #4 well and MC 942 # 2 well) using a drilling configuration with two blowout prevention (BOP) stacks, one on the seafloor and one at the surface. This is a new design for improved safety, a first in the US Gulf of Mexico and one that the company planned 3 years ago.
- These wells were originally planned to be completed and placed on production in 2010 at a combined rate of approximately 14,000 barrels of oil per day using a platform drilling rig attached to the ATP Titan platform.
- As a result of the moratorium and the suspension of operations, ATP expects to incur additional costs of approximately \$30,000,000 that otherwise would not have been spent.
- Additionally, ATP will defer revenues of more than \$1,000,000 per day as a result of not being able to drill and complete the development wells planned for 2010.

*Bollinger Shipyards, Inc.*

- Bollinger Shipyards, Inc. and its affiliated companies are the leading provider of quality marine construction, repair and conversion products, servicing both the military and commercial marine industry. They also own and operate a fleet of Offshore Supply Vessels that service the deepwater activities of the OCS. Family owned and operated since 1946, Bollinger Shipyards employs 3,000 people.
- “In the 64 years of our existence, we have never been faced with such an uncertain future. This moratorium has created an environment leaving Bollinger Shipyards no choice but to downsize our company thereby eliminating good paying jobs.”

*Broadpoint, Inc.*

- Broadpoint is a 27 year old privately held company with a 100 employees based along the Gulf Coast with its headquarters in Houston and a Network Operations Center in New Orleans with an additional office in Lafayette, LA.
- Their operations are 99% directly related to providing telecommunication services in the Gulf of Mexico through satellite communications and the ownership and management of a 100,000 square mile GSM/GPRS/Edge network operating in the Gulf.
- Broadpoint and its clients will be adversely affected as a result of this shutdown and it will directly affect their ability to operate. Reliable communications is essential for the health and safety of individuals in the Gulf of Mexico.

*CapRock Communications, Inc.*

- CapRock Communications is a 29 year old privately held company employing 750 employees globally with headquarters in Houston and operational offices in Lafayette and New Orleans, LA.
- Their operations are related to providing satellite communication solutions that enable the oil and gas industry to operate more efficiently in today’s environment, serving the communications needs of rig owners, service companies and operators working on drilling rigs, production platforms and other assets in the Gulf.
- They currently have over 50 field service and operations personnel supporting clients in the Gulf of Mexico and this shutdown will directly impact their ability to maintain operations.
- Their field service personnel install and manage communication systems on-board drilling rigs and energy support vessels throughout the Gulf of Mexico. As their customers are now required to cease or limit their operations, the amount of business their company receives and the work they have for their personnel in the region significantly declines.
- They will be forced to redeploy personnel to different regions or support them in finding other opportunities.

*C&C Technologies, Inc.*

- C & C provides a wide range of survey and mapping services for the land and offshore oil and gas industry, the telecommunications industry and the U.S. government.
- C&C expects to lay off approximately 10 employees as a result of the moratorium, and will not be hiring the dozen or so workers they expected to hire in the coming months.

*Cobalt International Energy, Inc*

- Cobalt International Energy, Inc. (Cobalt) is an independent oil and gas exploration and production company focused on the deepwater U.S. Gulf of Mexico and the deepwater offshore Angola and Gabon.
- Cobalt was formed in 2005 and is headquarters in Houston, Texas with an operational base in Port Fourchon, L.A. for their deepwater GOM exploration activities, and an (soon to be established) operational base in Luanda Angola for their Angola exploration activities. At present Cobalt have some 65 employees and 25 consultants.
- The GOM Drilling Moratorium has significantly impacted Cobalt's GOM deepwater 2010 exploration and appraisal program from a multitude of perspectives:
  - Cobalt's exploration and appraisal drilling program for the remainder of 2010 (3 wells of which 1 had all of the necessary permits/insurance in place) is now on hold. Thus, the exploration drilling rigs, services, vessels, tools, people etc., that were contracted to support the drilling programs have been released.
  - Cobalt invoked the Force Majeure provision in a recent rig contract, thus the company is paying capital for a period of time while the rig is idle as well as the associated key services (e.g. vessels). Cobalt has also experienced unanticipated legal costs as a result.
  - There is a follow-on impact in the form of delay in executing their 2011 exploration and appraisal program (approx 9 wells) in the deepwater GOM. Thus the program has been extended further/delayed into the future which will affect the timing and thus cash flow they would have anticipated sooner.
  - As the deepwater GOM is a key focus area for Cobalt in light of the position established (some 227 deepwater leases) in the last few years, the company stock has been significantly impacted (dropped 40%) amid concerns regarding the GOM Drilling Moratorium; the value of the company has thus been impacted by some \$1.5 billion in the market.
  - Cobalt will shift its capital spending program and resources to their West Africa business. Resumption of their investment program in the United States is completely dependent on the termination of the GOM Drilling Moratorium.

*Davis-Lynch, Inc.*

- Davis-Lynch is a privately owned company founded in 1947 that manufactures, sells, and services down-hole equipment for the offshore oil and gas industry.
- They employed over 300 people in 2009, but reduced their workforce by approximately 100 people as a result of an industry downturn. In 2010 with an upswing in business they have recalled some of the people released in 2009.
- Approximately 20% of their business is dedicated to providing products and services to the offshore drilling industry in the Gulf of Mexico, with a large portion associated with water depths greater than 500 feet.
- The moratorium leaves them no alternative other than to implement another reduction in their workforce in locations including Lafayette, LA; Houston, TX; and Corpus Christi, TX.

*Delmar Systems, Inc.*

- Delmar Systems, Inc. is a leader in offshore mooring, providing mooring solutions for the offshore oil and gas industry.
- Delmar is a 42 year old privately held company employing 300 employees based along the gulf coast with a technical office in Houston and large operational base at Port Fourchon, LA.
- Operations are 100% directly related to mooring deepwater semi-submersibles in the Gulf of Mexico and as a result of this shutdown, will directly affect ability to operate.
- Thirteen of the thirty three deepwater wells involved "moored" or anchor semi-submersible rigs owned by four drilling contractors.

*Heerema Marine Contractors*

- Heerema is a 48 year old privately held Dutch company who has been working in the Gulf of Mexico for 32 years and has installed approximately 75% of all

deep water facilities currently producing in the Gulf . They own and operate three of the four largest construction vessels in the world and the US Gulf has always been a significant part of the revenue stream of their company.

- They currently employ 50 people between offices in Houston, TX and an operational base at Port Fourchon, LA.
- Their U.S. operations are directly related to installation of new facilities and sub sea infrastructure in the deep water Gulf of Mexico and as a result of this shutdown, their business future is in a state of uncertainty here in the US.

*Laborde Marine, LLC*

- Laborde Marine is a family-owned business headquartered in New Orleans which owns and/or operate 21 vessels, all built in U.S. shipyards; while employing over 300 people with a \$14 million annual payroll.
- They invested over \$150 million to build or acquire this fleet.
- The moratorium is essentially telling them to “park” their vessels for six months.
- For Laborde to move internationally, they would have to compete with vessels built in foreign ship yards at a much lower cost and often subsidized by foreign governments.
- “The moratorium may well be the death-knell for U.S. businesses engaged in the energy service sector.”

*J. Ray McDermott, Inc.*

- J. Ray McDermott is a Houston headquartered Company with approximately 1,200 employees in Morgan City and New Orleans, Louisiana and Houston, Texas.
- The company provides engineering and construction services to the offshore energy sector worldwide as well as in the Gulf of Mexico through the engineering, construction and offshore installation of the infrastructure necessary to develop and produce offshore oil and gas fields.
- According to the company, the shutdown of deepwater drilling in the Gulf of Mexico will create a domino effect (movement of rigs and other equipment out of the area, loss of jobs, etc.) that will no doubt affect the timing of future developments and the economic recovery of the region for years to come.

*Oceaneering International, Inc.*

- Oceaneering is a global oilfield provider of engineered services and products, primarily to the offshore oil and gas industry, with a focus on deepwater applications.
- Oceaneering reduced its 2010 earnings forecast on expectations that the U.S. government’s moratorium on deepwater drilling activity in the Gulf of Mexico will hurt demand for its deepwater services.
- The oilfield-services and products company said it expects the moratorium will cut second-half earnings by 45 cents a share and is now looking for 2010 profit of \$2.80 to \$3.10 a share.
- Nearly one-quarter of Oceaneering’s remotely-operated vehicles operate in the Gulf, with about half of those in drilling support services.
- The company anticipates some early terminations and revised contracts.
- The stock is down 27% this year amid concerns about the Gulf oil spill.

*Otto Candies, LLC*

- Otto Candies is a marine transportation company started 68 years ago with a fleet of 40 vessels.
- 500 of their 600 U.S.-based employees could be impacted by the moratorium, with some possibly needing to be relocated to Brazil, Mexico, or West Africa.

*Stone Energy Corporation*

- Stone Energy Corporation is an independent oil and natural gas exploration and production company headquartered in Lafayette, Louisiana, with additional offices in Houston, Texas and Morgantown, West Virginia.
- Stone has already experienced a 40% drop in the value of their company in anticipation of punitive legislation and regulation.
- They will be forced to reduce jobs as will other operators.
- Stone has a shelf platform rig at MC 109 which has been shut down, wasting over \$10 million dollars by having an idle rig sitting there doing nothing.
- This cash cost will be far exceeded by the lost revenue of the five wells being drilled from the facility.

- The 5 wells were anticipated to each produce approximately 1,000 barrels per day, assuming \$70 per barrel, resulting in \$350,000 per day in potential lost revenues.
- Stone also has a half-dozen exploratory wells that will be delayed a year or more. This hurts their ability to sustain reserves to convert to future production and growth.
- One rig that was going to be used in this exploratory program, the Deepwater Mariannas, is expected to be leaving the Gulf for opportunities in foreign countries.

*Southern States Offshore, Inc.*

- Southern States Offshore, Inc. is a privately held company incorporated in 1996 and wholly owning and operating seven offshore service and supply vessels, six of which were built and delivered in Louisiana and Alabama in 1998, 2005, 2007, 2009 and 2010 at a cost of 48 million dollars.
- They employ 53 mariners who live in Texas, Louisiana and Alabama; with an office staff in Houston, Texas of ten employees, all Texas residents.
- According to the company, their employees, their families, the ship yards, vendors, tax authorities, etc. that depend on this industry to pay their mortgage, health care bills, cloth their families and send their children to school all are at risk of losing everything.

*Zupt, LLC*

- Zupt is a privately owned, international service and manufacturing company specializing in the integration and application of inertial technologies to onshore and offshore survey and positioning services to make operations more efficient.
- Were under contract with an operator who was 8 to 12 days away from completing a well and Zupt was preparing to conduct the metrology survey work when the operator was told to shut the well. No metrology survey was conducted, an immediate loss of revenue.
- One of Zupt's engineers was laid off due to the near term lost revenue.
- During the moratorium the company is forced to seek work in West Africa and the North Sea, and if unsuccessful they anticipated being out of business within four months.

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REPORTS AT BP OVER YEARS FIND HISTORY OF PROBLEMS

*By Abraham Lustgarten and Ryan Knutson*  
Tuesday, June 8, 2010; A01

PROPUBLICA

A series of internal investigations over the past decade warned senior BP managers that the oil company repeatedly disregarded safety and environmental rules and risked a serious accident if it did not change its ways.

The confidential inquiries, which have not previously been made public, focused on a rash of problems at BP's Alaska oil-drilling operations. They described instances in which management flouted safety by neglecting aging equipment, pressured employees not to report problems and cut short or delayed inspections to reduce production costs.

Similar themes about BP operations elsewhere were sounded in interviews with former employees, in lawsuits and little-noticed state inquiries, and in e-mails obtained by ProPublica. Taken together, these documents portray a company that systematically ignored its own safety policies across its North American operations—from Alaska to the Gulf of Mexico to California and Texas. Executives were not held accountable for the failures, and some were promoted despite them.

Tony Hayward has committed himself to reform since becoming BP's chief executive in 2007. Under him, the company has worked to implement an operating safety system to create "responsible operations at every BP operation," said Toby Odone, a company spokesman. BP has used the system at 80 percent of its operations and expects to bring it to the rest by the end of the year, he said.

Odone said the notion that BP has ongoing problems addressing worker concerns is "essentially groundless."

Because of its string of accidents before the April 20 blowout in the Gulf of Mexico, BP faced a possible ban on its federal contracting and on new U.S. drilling leases, several senior former Environmental Protection Agency department officials told ProPublica. That inquiry has taken on new significance in light of the oil spill

in the gulf. One key question the EPA will consider is whether the company's leadership can be trusted and whether BP's culture can change.

The reports detailing the firm's Alaska investigations—conducted by outside lawyers and an internal BP committee in 2001, 2004 and 2007—were provided to ProPublica by a person close to the company who thinks it has not done enough to fix its shortcomings.

A 2001 report noted that BP had neglected key equipment needed for an emergency shutdown, including safety shutoff valves and gas and fire detectors similar to those that could have helped prevent the fire and explosion on the Deepwater Horizon rig in the gulf.

A 2004 inquiry found a pattern of the company intimidating workers who raised safety or environmental concerns. It said managers shaved maintenance costs by using aging equipment for as long as possible. Accidents resulted, including the 200,000-gallon Prudhoe Bay pipeline spill in 2006—the largest spill on Alaska's North Slope—which was blamed on a corroded pipeline.

Similar problems surfaced at BP facilities in California and Texas.

California officials alleged in 2002 that the company had falsified inspections of fuel tanks at a Los Angeles area refinery and that more than 80 percent of the facilities didn't meet requirements to maintain storage tanks without leaks or damage. Inspectors had to get a warrant before BP allowed them to check the tanks. The company eventually settled a lawsuit brought by the South Coast Air Quality Management District for more than \$100 million.

Three years later, a Texas City refinery exploded, killing 15 people. An investigation found that a warning system failed, and independent experts found that "significant process safety issues exist at all five U.S. refineries, not just Texas City."

BP spokesman Odone said that after the accident, the company adopted a plan to update its safety systems worldwide. But last year, the Occupational Safety and Health Administration fined the firm \$87 million for not improving safety at that same Texas plant.

#### 'ENVIRONMENTAL CRIMINAL'

BP has had more high-profile accidents than any other company in recent years. And now, with the disaster in the gulf, independent experts say the pervasiveness of the company's problems, in multiple locales and different types of facilities, is striking.

"They are a recurring environmental criminal and they do not follow U.S. health safety and environmental policy," said Jeanne Pascal, a former EPA lawyer who led its BP investigations. Since the late 1960s, the company has pulled oil from under Alaska, usually without problems. But when it pleaded guilty in 1999 to illegal dumping at an offshore drilling field there, it drew fresh scrutiny and set off a cycle of attempted—and seemingly failed—reforms that continued over the next decade.

To avoid having its Alaska division debarred—the official term for a contract cancellation with the federal government—the firm agreed to a five-year probationary plan with the EPA. BP would reorganize its environmental management, establish protections for employees who speak out about safety issues, and change its approach to risk and regulatory compliance.

Less than a year later, employees complained to an independent arbitrator that the company was letting equipment and critical safety systems languish at its Greater Prudhoe Bay drilling field. BP hired independent experts to investigate.

The panel identified systemic problems in maintenance and inspections—the operations that keep the drilling in Prudhoe Bay running safely—and warned BP that it faced a "fundamental culture of mistrust" by its workers.

"There is a disconnect between GPB management's stated commitment to safety and the perception of that commitment," the experts said in their 2001 report.

The report said that "unacceptable" maintenance backlogs ballooned as BP tried to sustain North Slope profits despite declining production. The consultants concluded that the company had neglected to clean and check valves, shutdown mechanisms and detection devices essential to preventing explosions.

In May 2002—less than seven months later—Alaska state regulators warned BP that it had failed to maintain its pipelines. Alaska struggled for two years to make the firm comply with state laws and clear the pipeline of sedimentation that could interfere with leak detection.

Soon after, BP hired another team of outside investigators to look into worker complaints on the North Slope. The resulting 2004 study by the law firm Vinson & Elkins warned that pipeline corrosion endangered operations.

It also offered a harsh assessment of BP's management of employee concerns. According to the report, workers accused the company of allowing "pencil whipping,"

or falsifying inspection data. The report quoted an employee who said employees felt forced to skip key diagnostics, including pressure testing, pipeline cleaning and corrosion checks.

The report said that Richard Woollam, the manager in charge of corrosion safety in Alaska at the time, had “an aggressive management style” and subverted inspectors’ tendency to report problems. “Pressure on contractor management to hit performance metrics (e.g. fewer OSHA recordables) creates an environment where fear of retaliation and intimidation did occur,” it said. Woollam was soon transferred.

#### MORE ACCIDENTS

Two years later, in March 2006, disaster struck. More than 200,000 gallons of oil spilled from a corroded hole in the Prudhoe Bay pipeline. Inspectors found that several miles of the steel pipe had corroded to dangerously thin levels.

When Congress held hearings later that year, Woollam pleaded the Fifth Amendment. He now works in BP’s Houston headquarters. Reached at his Texas home last week, he referred questions to the BP media office, which declined to comment.

In August 2006, just five months after the Prudhoe Bay spill, a pipeline safety technician for a BP contractor in Alaska discovered a two-inch snaggletoothed crack in the steel skin of an oil transit line. Nearby, contractors ground down metal welds, sending sparks across the work site. Technician Stuart Sneed feared that the sparks could ignite stray gases, or that the work could worsen the crack, so he ordered the contractors to stop working.

“Any inspector knows a crack in a service pipe is to be considered dangerous and treated with serious attention,” he told ProPublica.

Sneed said he thought the Prudhoe Bay disaster had made BP management more amenable to listening to worker concerns about safety. The company had replaced its chief executive for North America with Robert Malone, who focused on reforming BP’s culture in Alaska.

But instead of receiving compliments for his prudence, Sneed—who had also complained that week that pipeline inspectors were faking their reports—was scolded by his supervisor, who hadn’t inspected the crack but believed it was superficial, according to a report from BP’s internal employer arbitrators.

The next day, the report said, that supervisor criticized Sneed at a staff briefing, then solicited complaints from colleagues that could be used to justify Sneed’s firing. Two weeks later, Sneed was gone.

During the investigation, BP inspectors substantiated Sneed’s concerns about the cracked pipe. The arbiter also confirmed his account of what happened when he reported the problem. His dispute with the company is unresolved.

The following year saw another BP shakeup. The company had replaced its chief executive of Alaskan operations with Doug Suttles—who is now in charge of offshore operations and cleanup of the gulf disaster. In May 2007, it also named Hayward its new global chief executive.

But worker harassment claims continued in Alaska and elsewhere, and more problems with the Alaska pipeline systems emerged.

In September 2008, a section of a gas line on the slope blew apart. A 28-foot-long section of steel—the length of three pickup trucks—flew nearly 1,000 feet through the air before landing on the Alaskan tundra. Sneed had raised concerns about the integrity of segments of the gas line system.

Three more accidents rocked the same system of pipelines and gas compressor stations in 2009, including a near-catastrophic explosion. According to a letter that members of Congress sent to BP executives, obtained by ProPublica, the near-miss resulted from malfunctioning safety and backup equipment.

Odone said that BP is continuing to roll out a company-wide operating management system to help track and implement maintenance. He said the company reduced corrosion and erosion-related leaks in Alaska by 42 percent between 2006 and 2009.

#### NONCOMPLIANCE

As BP battled through the decade to avoid accidents in Alaska, another facility operating under a different business unit, BP West Coast Products, had similar problems.

For years, the subsidiary that refined and stored crude oil was allowed to inspect its own facilities for compliance with emission laws under the South Coast Air Quality Management District, the agency that regulates air quality in Los Angeles.

In 2002, inspectors with the management district thought BP’s inspection results looked too good to be true. Between 1999 and 2002, BP’s Carson Refinery had nearly perfect compliance, reporting no tank problems and making virtually no repairs.

The district suspected that BP was falsifying its inspection reports and fabricating its compliance.

According to Joseph Panasiti, a lawyer for the management district, the agency had to get a search warrant to conduct inspections required by state law. When the regulators finally got in, they found equipment in a disturbing state of disrepair. According to a lawsuit the management district later filed against BP, inspectors discovered that some tanker seals had extensive tears, tank roofs had pervasive leaks and there were enough major defects to lead to thousands of violations.

“They had been sending us reports that showed 99 percent compliance, and we found about 80 percent noncompliance,” Panasiti said.

The district sued BP for \$319 million. After lengthy litigation, the firm agreed to pay more than \$100 million without admitting guilt. Colin Reid, the plant’s operations manager, was later promoted to a vice president position in the United Kingdom. He recently left BP and did not respond to requests for comment.

Allegations that BP or its contractors falsified safety and inspection reports are a recurring theme. Similar allegations were attributed to workers in 2001 and 2004 internal reports on Alaska, but the internal auditors did not confirm that fraud had occurred.

Among the safety equipment that BP was criticized for not having in place in its Alaska facilities, according to its own 2001 operational integrity report, were gas and fire detection sensors and emergency shutoff valves.

Now investigators are learning that similar sensors and their shutoff systems were not operating in the engine room of the Deepwater Horizon rig that exploded in the gulf.

In testimony before a Deepwater Horizon joint investigation panel in New Orleans last month, Deepwater mechanic Douglas Brown said that the backstop mechanism that should have prevented the engines from running wild apparently failed—and so did the air-intake valves that were supposed to close if gas entered the engine room.

He said the engine room wasn’t equipped with a gas alarm system that could have shut off the power.

Minutes later, the rig exploded in a ball of fire, killing 11 workers before sinking to the seafloor, where it left a gaping well pipe that continues to gush oil and gas.

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From: Kenneth E. Arnold, PE, NAE,  
 3031 Shadowdale, Houston TX.

A group of those named in the Secretary of Interior’s Report, “INCREASED SAFETY MEASURES FOR ENERGY DEVELOPMENT ON THE OUTER CONTINENTAL SHELF” dated May 27, 2010 are concerned that our names are connected with the moratorium as proposed in the executive summary of that report. There is an implication that we have somehow agreed to or “peer reviewed” the main recommendation of that report. This is not the case.

As outlined in the attached document, we believe the report itself is very well done and includes some important recommendations which we support. However, the scope of the moratorium on drilling which is in the executive summary differs in important ways from the recommendation in the draft which we reviewed. We believe the report does not justify the moratorium as written and that the moratorium as changed will not contribute measurably to increased safety and will have immediate and long term economic effects. Indeed an argument can be made that the changes made in the wording are counterproductive to long term safety.

The Secretary should be free to recommend whatever he thinks is correct, but he should not be free to use our names to justify his political decisions.