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IMPROVING OIL SPILL PREVENTION AND RESPONSE, RESTORING JOBS, AND ENSURING OUR ENERGY SECURITY: RECOMMENDATIONS FROM THE NATIONAL COMMISSION ON THE BP DEEPWATER HORIZON OIL SPILL AND OFFSHORE DRILLING

(112–4)

JOINT HEARING

BEFORE THE

SUBCOMMITTEE ON
COAST GUARD AND MARITIME TRANSPORTATION

AND THE

SUBCOMMITTEE ON
WATER RESOURCES AND ENVIRONMENT

OF THE

COMMITTEE ON
TRANSPORTATION AND
INFRASTRUCTURE
HOUSE OF REPRESENTATIVES

ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

FEBRUARY 11, 2011

Printed for the use of the
Committee on Transportation and Infrastructure



Available online at: http://www.fdsys.gov/

U.S. GOVERNMENT PRINTING OFFICE

65–484 PDF WASHINGTON : 2011

For sale by the Superintendent of Documents, U.S. Government Printing Office
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Washington, DC 20515

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February 9, 2011

MEMORANDUM

TO: Members, Subcommittee on Coast Guard and Maritime Transportation
Members, Subcommittee on Water Resources and the Environment

FROM: Staff, Subcommittees on Coast Guard and Maritime Transportation and Water Resources and Environment

RE: Hearing on "Improving Oil Spill Prevention and Response, Restoring Jobs, and Ensuring Our Energy Security: Recommendations from the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling".
FRIDAY, FEBRUARY 11, 2011
10:00 a.m., 2167 RAYBURN HOUSE OFFICE BUILDING

PURPOSE

The Subcommittee on Coast Guard and Maritime Transportation and the Subcommittee on Water Resources and Environment will hold a joint hearing to examine the recommendations from the members of National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling (Commission) to improve oil spill prevention and response. The Subcommittees will also receive testimony from the spill's former National Incident Commander, United States Coast Guard Admiral Thad Allen (Ret.) on lessons learned from the spill. The prevention of, and response to, oil spills is governed by the Oil Pollution Act of 1990 and the Federal Water Pollution Control Act of 1972 (commonly known as the Clean Water Act).

BACKGROUND

Explosion and Sinking of the DEEPWATER HORIZON

The DEEPWATER HORIZON was a dynamically positioned mobile offshore drilling unit (MODU) owned by Transocean Ltd. Transocean was under contract with British Petroleum (BP) to use the DEEPWATER HORIZON to drill an oil and natural gas well at the Macondo exploration site in an area of the Gulf of Mexico known as the Mississippi Canyon Block 252 (MC 252). BP purchased the lease rights to MC 252 in 2008 for $34 million and became the legal "operator" for any activities on that block. For the purposes of the Macando site, BP partnered with two other companies, Anardarko Petroleum Corporation and MOEX Offshore to drill the well. BP owns a 65 percent share of the well, followed by 25 percent for Anardarko Petroleum, and 10 percent for MOEX Offshore.

On the evening of April 20, 2010, workers aboard the DEEPWATER HORIZON had completed the process of drilling the well and were conducting "temporary abandonment" procedures. The temporary abandonment process involves stabilizing the pressure in the drilled well, testing the integrity of the well and its casement, installing a cement plug, and in the case of the Macondo well, setting a lockdown sleeve over the well head. Once this process is complete, the MODU is free to remove its blow out preventer (BOP) and detach from the well. Later, a production rig is moved into place over the well to begin the extraction of oil and natural gas.

According to the Commission's findings, as workers were conducting integrity tests, pressure readings indicated problems with the well. At approximately 9:40 p.m. drilling mud began spewing into the DEEPWATER HORIZON followed shortly thereafter by natural gas. Efforts to close off the well by activating the rams and annular preventers on the BOP failed. At 9:49 p.m. the first explosion occurred. Eleven workers who were aboard the MODU at the time of the blowout and explosion were killed.

The United States Coast Guard (USCG) and the Department of the Interior's Bureau of Ocean Energy Management and Regulatory Enforcement (BOEMRE), a successor entity to the Minerals Management Service, are currently conducting a joint investigation into the causes of the blowout, explosion and subsequent sinking of the DEEPWATER HORIZON. The results of the joint investigation are expected to be released by April 2011.

BP Response and Containment Efforts

On April 22, 2010, the DEEPWATER HORIZON sank and oil and natural gas began spewing from the uncontained well. The evening before, BP began efforts to contain the well by trying to activate the rams, annular preventers and deadman switch on the BOP using remotely operated underwater vehicles. For reasons that are still under investigation, these efforts failed.

Over the course of the next 87 days, BP followed these efforts with attempts to place a containment dome over the leaking riser pipe, inserting a tube into the riser pipe to collect some of the oil, pumping heavy drilling mud and other material into the BOP in a "top kill" procedure, and placing a "top hat" over the riser pipe. Each of these efforts failed to completely cut off the flow of oil into the Gulf.

On July 15, 2010, BP was successful in bolting a capping stack to the top of the BOP which finally shut in the well. The well was finally "killed" on September 10, 2010 when a separately drilled relief well was complete and the Macondo well was filled and sealed with cement.

In addition to the subsurface efforts to shut in the well, BP initiated a "vessel of opportunity" program and hired local fishermen and other workers displaced by the oil spill to aide in the skimming and clean up process. The program augmented the response efforts of the BP contracted Oil Spill Response Organizations, Federal, state, and local government employees and contractors. More than 5,000 vessels were contracted to participate in the vessel of opportunity program.

The Federal government estimates a total of 4.9 million barrels of oil were released into the Gulf of Mexico during the 87 days the well went uncontained (a barrel of oil is equivalent to 42 U.S. gallons).

Federal Government Response

United States Coast Guard:

The Coast Guard was the first Federal entity to respond to the DEEPWATER HORIZON incident and subsequent spill. In total, the Coast Guard deployed over 70 aircraft, 46 cutters, and 37 boats to respond the spill. Dozens of vessels and aircraft were "surged" to the Gulf from other areas of the country to augment the Service's assets stationed in the area. In addition, over 7,500 Coast Guard personnel were deployed to support operations. This includes two separate call ups of Coast Guard Reservists.

After initially focusing efforts on the search and rescue of survivors of the explosion and sinking of the DEEPWATER HORIZON, the Coast Guard began managing the spill response. The Coast Guard primarily focused on managing surface clean up operations: directing the deployment of containment boom, managing the safety and operations of oil skimming vessels, conducting controlled burns of collected oil, reviewing the safety and efficacy of new response technology, and maintaining a safe operating environment in the spill area.

Under the National Contingency Plan (NCP), the Coast Guard is charged with directing the response efforts for spills occurring in coastal waters (including all waters of the United States subject to the tide, the Great Lakes, specified ports and harbors, and the waters of the exclusive economic zone). The Coast Guard was designated the Federal

On-Scene Coordinator (FOSC) for the Gulf oil spill. The FOSC is a Coast Guard officer invested with the authority to direct and coordinate the response efforts of the unified command (the Federal and state agencies and the responsible party). On April 21, 2010, Rear Admiral Mary Landry was named the first FOSC for the DEEPWATER HORIZON oil spill. On May 1, as the size and complexity of the spill grew, the spill was designated a Spill of National Significance (SONS) and Admiral Thad Allen was named National Incident Commander. Admiral Allen had ultimate authority over the response effort of Federal and state government, as well as the response and well containment activities of BP.

Environmental Protection Agency (EPA):

While the U.S. Environmental Protection Agency (EPA) is responsible for directing the response efforts for spills occurring in inland waters and onto land, the Coast Guard had the lead for the BP spill, since the spill occurred offshore. Therefore, EPA's role was one of providing support to the Coast Guard-led Federal response to the spill.

EPA's response efforts included monitoring air, water, sediment, and waste generated by the cleanup operations. EPA collected samples along the shoreline and beyond for chemicals related to oil and dispersants in the air, water, and sediment; supported and advised Coast Guard efforts to clean the reclaimed oil and waste from the shoreline; and monitored the effects of dispersants in the subsurface environment. EPA also approved waste management plans and oversaw the disposal of solid wastes, recovered oil, oily fluids, oiled debris, and other wastes and recyclable materials collected during the response. EPA lists, on the National Contingency Plan (NCP) Product Schedule, all dispersants and other chemicals that have been authorized for use in responding to an oil spill, and approved the dispersants used in responding to the BP oil spill.

EPA's monitoring and sampling activities provided the Coast Guard, states, and local government with information about the potential impacts of the oil spill and response on human health of residents and aquatic life along the shoreline. The data EPA collected also were used to inform decisions by the Coast Guard, Food and Drug Administration (FDA), National Oceanic and Atmospheric Administration (NOAA), and state and local agencies, among others, about seafood, habitat, and beach closure issues.

Minerals Management Service (MMS) (now Bureau of Ocean Energy Management Regulation and Enforcement (BOEMRE)):

MMS's primary role is the issuance of drilling permits to offshore rigs operating in the Outer Continental Shelf (OCS) and the maintenance of safety regulations through inspections. As such, the MMS is not directly involved in oil spill cleanup, but rather in future rulemaking and other efforts to ensure that an oil spill in the OCS does not happen again. However, in response to the DEEPWATER HORIZON incident, MMS was the primary source of government oversight and expertise in controlling the spill at the well head. MMS is the agency with the best understanding of deepwater drilling technology

including the BOP functions. Thus, MMS focused on analyzing and minimizing the risks associated with BP's early efforts to contain the well.

National Oceanic and Atmospheric Administration (NOAA):

NOAA had several roles in response the DEEPWATER HORIZON incident. The agency projected the trajectory and size of the oil spill on a day-to-day basis, providing satellite maps that detailed the location of the oil. NOAA's Office of Response and Restoration provided daily estimates on damage and potential damage to wildlife and natural resources. NOAA's National Marine Fisheries Service determined which areas of the Gulf needed to be closed to fishing. Finally, the National Weather Service provided daily weather updates to all organizations involved with the oil spill cleanup. NOAA is currently one of the Federal government agencies designated as a "Trustee" and charged with developing a natural resources damages restoration plan.

Fish & Wildlife Service (FWS):

The FWS deployed hundreds of personnel to the Gulf during the spill to assess the damage to critical habitat, including the 36 National Wildlife Refuges along the Gulf coast. The FWS also oversaw the recovery and rehabilitation of oiled or injured wildlife. FWS is currently one of the Federal government agencies designated as a "Trustee" and charged with developing a natural resources damages restoration plan.

United States Geological Survey (USGS):

The USGS provided scientists that assisted with NOAA's primary role of charting the progress of the oil spill. Specifically, USGS scientists were responsible for developing maps that interfaced the NOAA oil spill projections with maps showing Department of the Interior lands, thus allowing the best estimation of the effects of the oil on wildlife and natural resources along the Gulf Coast. USGS scientists also conducted tests to determine the effect of the tides on the advancement of oil over barrier islands and onto Gulf Coast beaches.

Department of Energy (DoE):

The DoE has no formal role in the Federal government's oil spill response system. However, DoE Secretary Chu was directed by the President to lead a team of scientists to work with BP on source control. Once established into the command structure, the DoE's advisory team reviewed the efficacy of BPs source control efforts and advised the NIC on whether the government should authorize BP to move forward with source control efforts. The advisory team also helped the government develop a flow rate and spill volume estimate.

Federal Oil Spill Laws and Regulations

Clean Water Act

The Federal Water Pollution Control Act (commonly known as the "Clean Water Act" or "CWA") is the principal Federal statute for protecting navigable waters and adjoining shorelines from pollution. Since its enactment, the CWA has formed the

foundation for regulations detailing specific requirements for pollution prevention and response measures. Section 311 of the CWA addresses pollution from oil and hazardous substance releases, providing EPA and the U.S. Coast Guard with the authority to establish a program for preventing, preparing for, and responding to oil spills that occur into navigable waters of the United States. EPA implements provisions of the Clean Water Act through a variety of regulations, including the National Contingency Plan and the Oil Pollution Prevention regulations.

1. Prohibition of Discharges: Clean Water Act Section 311(b) prohibits the discharge of oil or hazardous substances into the navigable waters of the United States and adjoining shorelines, except where permitted under international protocol or under conditions that the President determines not to be harmful. EPA issued regulations as to the quantities of oil and hazardous substances that may be harmful to the public health or welfare or the environment.

2. Penalties: Section 311(b) authorizes EPA to assess Class I or Class II administrative penalties for violations of Section 311. A Class I penalty may be assessed in an amount of up to $10,000 per violation, not to exceed $25,000. A Class II penalty may be assessed in an amount of up to $10,000 per day of violation, not to exceed $125,000. Each violation may be tabulated on a daily basis.

Judicial sanctions also may be assessed. A person who violates Section 311 of the Act is subject to a civil penalty of up to $25,000 per day of violation, or up to $1,000 per barrel of oil discharged. In instances of gross negligence or willful misconduct, these penalties increase to a $100,000 minimum and a maximum of $3,000 per barrel discharged.

Section 309(c) authorizes criminal penalties for knowing or negligent violations of Section 311. Criminal penalties may include fines of between $2,500 - $25,000 per day of violation, or by imprisonment for up to one year, or both.

(The forgoing statutory penalty amounts have increased since enactment to account for inflation, pursuant to the Debt Collection Improvement Act of 1996.)

Any penalties paid pursuant to Section 311 of the Clean Water Act, or criminal penalties paid pursuant to Section 309(c) of the Clean Water Act as a result of violations of Section 311, are to be paid into the Oil Spill Liability Trust Fund, and not into the general Treasury. (*See* 26 U.S.C. §9509(b)(8).)

The issues of how many barrels of oil were discharged during the BP DEEPWATER HORIZON oil spill, and whether the discharge was the result of gross negligence or willful misconduct, will be important in the determination of possible penalties for the discharge.

3. Federal Removal Authority: Section 311(c) requires the President to institute means for the removal of an oil discharge and mitigation or prevention of the

threat of a discharge (a) into the navigable water of the U.S. or adjoining shorelines; (b) into or on the waters of the exclusive economic zone; or (c) that may affect natural resources of the U.S. In doing so, the President has the authority to make any arrangements for removal or prevention, direct removal actions, and remove or destroy a vessel releasing or that has the threat of releasing. The President also has the authority to direct all Federal, state, and private actions to remove a discharge or mitigate or prevent the threat of a discharge from onshore or offshore facilities which is determined to be a substantial threat to the public health or welfare of the United States.

Under Section 311(d), the President is required to prepare and publish a National Contingency Plan (NCP) for the containment, dispersal, and removal of oil and hazardous substances discharged into jurisdictional waters. The National Contingency Plan is published at 40 C.F.R. Part 300. The NCP places responsibility for command and control in managing serious disaster response with the Federal government and not a private company. The NCP played a major role in the Federally-coordinated response to the BP oil spill.

4. National Response System: Under Section 311(j), the President is required to establish methods and procedures for the removal of discharged oil and hazardous substances as part of a National Response System, and is authorized to issue regulations establishing procedures, methods, equipment, and other requirements to prevent discharges of oil from vessels and facilities. EPA and the Coast Guard have developed a series of regulations for facility and vessel response plans, and for preventing and responding to discharges. The President also is authorized to establish Area Committees. These committees are to prepare Area Contingency Plans that detail methods and procedures for responding to a worst case discharge, including the division of responsibilities among various authorities in a response. Location-specific area plans have been developed along the Gulf Coast.

Oil Pollution Act of 1990 (OPA)

OPA was enacted following the EXXON VALDEZ oil spill in 1989. OPA consolidated existing laws and enacted new provisions to create a comprehensive Federal legal framework to govern liability and bolster the national response to oil spills. OPA allows instant response to oil spills by ensuring that either the Coast Guard for marine spills or EPA for land based spills has the authority to perform cleanup immediately using Federal resources, monitor the response efforts of the spiller (responsible party), or direct the responsible party's cleanup activities.

1. Response Plans: OPA requires U.S. tank vessels, offshore facilities, and certain onshore facilities to prepare and submit oil spill response plans to the relevant federal agency. The Coast Guard is responsible for the review and approval of response plans from vessels. BOEMRE reviews and approves response plans from offshore facilities. In the case of MODUs like the DEEPWATER HORIZON, operators are required to file two response plans: one to the Coast Guard for when the MODU operates as a vessel, and one to BOEMRE for when the MODU acts as an offshore facility. In general, vessels and facilities are prohibited from handling, storing, or transporting oil if

they do not have a plan approved by the appropriate agency. The plans require the owner or operator of a vessel or facility to identify how it would respond to a worst-case scenario spill.

2. Liability Limits: Under OPA, responsible parties are liable for all cleanup costs incurred, not only by a government entity, but also by a private party. In addition to cleanup costs, responsible parties are liable for injuries to natural resources; loss of personal property; lost revenues, profits and earning capacity resulting from destruction of property or natural resource injury; and costs of providing extra public services during or after spill response. OPA provided limited defenses from liability: act of God, act of war, and act or omission of certain third parties.

Except for certain behavior, including acts of gross negligence or willful misconduct, OPA set liability limits for cleanup costs and other damages. However, OPA liability limits do not affect liabilities that may be owed under states laws. The current OPA liability limits are as follows:

Single-Hulled Vessels	$3,200/gross ton
Double-Hulled Vessels	$2,000/gross ton
Other Vessels	$950/ gross ton
Onshore Facility	$350 million
Deepwater Port	$350 million
Offshore Facility	Total of all removal costs plus $75 million

MODUs, like the DEEPWATER HORIZON are first treated as tank vessels for its liability cap. If removal and damage costs exceed this liability cap, a MODU is deemed to be an offshore facility for the excess amount.

Under amendments to OPA made in 2006, the President is required to update liability limits every three years to reflect changes in the Consumer Price Index. In 2009, the Coast Guard updated the liability limits for vessels and deepwater ports. BOEMRE has yet to update the liability limits for offshore facilities.

In the case of the DEEPWATER HORIZON, BP is liable for all removal costs plus $75 million. BP has publicly stated they will not exercise the $75 million limit and will continue to pay "all legitimate claims". The $75 million cap would not apply if the responsible parties are found grossly negligent, have engaged in willful misconduct, or violated a statute or regulation.

3. Financial Responsibility: OPA requires vessels and offshore facilities maintain evidence of financial responsibility (e.g., insurance). The Coast Guard

implements the financial responsibility provisions for vessels; BOEMRE implements this requirement for offshore facilities.

In the case of vessels and deepwater ports, current law requires responsible parties to demonstrate the sufficient financial responsibility to meet their liability limit. Responsible parties for offshore facilities in Federal waters must demonstrate $35 million in financial responsibility ($10 million for facilities in state waters), unless the President determines a greater amount (not to exceed $150 million) is justified based on the volume of oil that could be released in a worst case spill.

Responsible parties are able to demonstrate financial responsibility through the purchase of insurance, surety bond, letter of credit or self insurance. In the case of the DEEPWATER HORIZON incident, BP was self-insured for $150 million.

4. Oil Spill Liability Trust Fund (OSLTF): Congress first authorized the use of the OSTLF in OPA, and in complimentary legislation enacted a barrel tax on the oil industry to capitalize the fund. Currently, the OSTLF is funded through an industry paid 8 cent per-barrel tax which is scheduled to rise to 9 cents per-barrel in 2017 before expiring at the end of 2017. The fund currently has a balance of approximately $1.7 billion.

The OSTLF is authorized to provide reimbursement for the following activities:

- payment of costs for responding to and removing oil spills;
- payment of the costs incurred by the federal and state trustees of natural resources for assessing the impacts to natural resources caused by an oil spill, and developing and implementing the plans to restore or replace the injured natural resources;
- payment of individual claims for uncompensated removal costs, and for uncompensated damages (e.g., financial losses of fishermen, hotels, and beachfront businesses);
- payment for the net loss of government revenue, and for increased public services by a state or its political subdivisions; and
- payment of certain Federal administrative and operational costs, including Coast Guard oil spill research and development and operating expenses.

Under the OSLTF claims process, individuals seeking reimbursement for eligible costs must first attempt reimbursement from the responsible party. If the responsible party refuses to pay or fails to provide sufficient payment within 90 days, individuals may seek reimbursement from the Coast Guard's National Pollution Funds Center (NPFC) which administers the OSLTF.

In the case of the DEEPWATER HORIZON incident, BP established a $20 billion escrow fund to pay claims arising from the oil spill. President Obama named Kenneth Feinberg as the fund's administrator. As of February 1, 2011, BP has paid more than 250,000 claims totaling more than $3.3 billion. Individuals who believe they are

subject to reimbursement from the OSLTF due to the failure of BP to pay or provide sufficient payment may apply to the OSLTF for reimbursement. However, they may not receive OSLTF reimbursement for damages already compensated by the responsible party. As of February 1, 2011, NPFC has 307 claims pending from individuals.

Current law limits the per incident exposure to the fund to $1 billion which includes no more than $500 million for natural resource damages. Reimbursements of expenses paid out of the OSLTF by the responsible party are not charged against the $1 billion cap. As a result of the DEEPWATER HORIZON incident, the Coast Guard has paid approximately $685 million in claims out of the OSLTF to date which count against the cap. The Coast Guard anticipates it may reach the $1 billion cap in FY2011.

Finally, OPA authorizes the Coast Guard to spend up to $50 million annually from the OSLTF to pay for response costs and claims arising from a spill without seeking an appropriation from Congress. The Coast Guard may seek one additional $100 million advancement from the OSLTF after providing notification to Congress. In the case of the DEEPWATER HORIZON incident, the Coast Guard approached its $150 expenditure limit by June 2010. On June 15, 2010, S. 3473 was signed into law (P.L. 111-191) which provided authority for the Coast Guard to seek unlimited additional $100 million advancements from the fund to pay for costs associated with the DEEPWATER HORIZON incident. To date, the Coast Guard has used the authority six times.

5. Natural Resources Damages: Under OPA's Natural Resources Damage Assessment (NRDA) process, Federal and state government officials known as "Trustees" survey and collect data on damages to natural resources occurring as a result of an oil spill. The Trustees develop a plan to restore, replace or rehabilitate the damaged natural resources. Under OPA, responsible parties are required to pay the costs of natural resources damages to the extent they do not exceed responsible parties' limit on liability. The responsible parties may contest the Trustees' plan in court. If a responsible party exercises its liability limit, or otherwise fails to pay for the cost of NRDA process, the Trustees may seek reimbursement from the OSLTF.

In the case of the DEEPWATER HORIZON incident, the Trustees are currently in the preassessment phase of the NRDA process and are expected to begin the restoration planning process in FY2011. BP has publicly committed to paying natural resource damages.

Report of the National Incident Commander

On October 1, 2010 Admiral Allen stepped down as the National Incident Commander for the BP DEEPWATER HORIZON oil spill and provided a report to the Secretary of Homeland Security on his actions during the spill and his recommendations for improvements to spill prevention and response.

In his report, Admiral Allen made the following recommendations to improve response to future spills:

- Ensure all appropriate Federal, state, local and tribal governments authorities and response structures are written into response plans and their elected leadership is invited to participate in oil spill response exercises;
- De-conflict and reconcile the role of the NIC and the Principal Federal Officer to ensure that both regulation and policy provide for a single designated individual serve as the President's designee;
- Ensure the NIC has the appropriate organic authorities;
- Empower and grow the National Response Team roles and responsibilities to better serve as the primary body for planning, policy, and coordination for oil spill response; and
- Incentivize the private sector to develop 21st century oil spill response capabilities.

National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling

Commission Background:

On May 22, 2010, the President signed an executive order creating the National Commission on BP Deepwater Horizon Oil Spill and Offshore Drilling. The bipartisan Commission was charged with examining the relevant facts and circumstances concerning the root causes of the Deepwater Horizon oil disaster, developing options for guarding against oil spills associated with offshore drilling, as well as making recommendations for changes to Federal laws, regulations and industry practices to improve the safety of the offshore drilling industry. On January 11, 2011, the Commission presented its report to the President.

The Commission is co-chaired by former Senator Bob Graham (D-FL) and former Environmental Protection Administration Administrator William K. Reilly. Other members of the Commission include Frances Beinecke, President of the Natural Resources Defense Council; Donald Boesch, President of the University of Maryland Center for Environmental Science; Terry Garcia, Executive Vice President for Mission Programs for the National Geographic Society; Dr. Cherry Murray, Dean of the Harvard School of Engineering and Applied Sciences; and Fran Ulmer, Chancellor of the University of Alaska Anchorage.

Commission Recommendations:

The Commission made several recommendations to change offshore oil drilling industry practices and revise Federal government oversight of the industry through amendments to existing laws and regulations. The following recommendations fall within the jurisdiction of the Transportation and Infrastructure Committee:

1. *Congress should create an independent agency within the Department of the Interior with enforcement authority to oversee all aspects of offshore drilling safety...:*

The Commission recommends consolidating the responsibility for offshore drilling safety, as well as spill prevention and response into one agency housed at the Department of the Interior. Under current law, the Coast Guard is responsible for inspecting and ensuring compliance with regulations governing the structural integrity and safety of life at sea systems aboard vessels and MODUs. The Coast Guard also reviews and approves oil spill response plans for vessels and MODUs operating as vessels. Finally, the Coast Guard is the lead Federal agency in charge of oil spill response. BOEMRE is responsible for conducting inspections of the drilling apparatus and related components aboard MODUs and offshore facilities. BOEMRE also reviews and approves oil spill response plans for offshore facilities and MODUs operating as offshore facilities. The Coast Guard has an MOU with BOEMRE, enabling BOEMRE inspectors to check certain life saving systems aboard offshore facilities when conducting its regular inspections. The Commission does not specify which Coast Guard functions should be transferred to this proposed new agency.

2. *Congress should enact legislation creating a mechanism for offshore oil and gas operators to provide ongoing and regular funding of the agencies regulating offshore oil and gas development:*

The Commission recommends increasing current inspection fees on industry or imposing new fees or lease provisions to raise revenue which would be used by regulating agencies, including the Coast Guard to ensure the safety of the offshore drilling industry. According to the Commission, current inspection fees paid by industry offset approximately 3 percent of BOEMRE's annual budget. None of these fees are currently available directly to the Coast Guard to conduct its regulatory activities.

3. *Congress should significantly increase the liability cap and financial responsibility requirements for offshore facilities:*

The Commission finds the liability cap for offshore facilities (the total of all removal costs plus $75 million), as well as the current levels of financial responsibility ($35 to $150 million) are inadequate. While the Commission recommends a "significant" increase in both, it does not propose a specific level for either. The Commission does encourage Congress to consider authorizing the use of mutual insurance pools when increasing financial responsibility levels to "keep competent independents in the market".

4. *Congress should increase the limit on per-incident payouts from the Oil Spill Liability Trust Fund:*

In order to avoid a situation where the taxpayer would have to foot the bill of the response to an unprecedented oil spill like the DEEPWATER HORIZON, the Commission recommends raising the current $1 billion per incident cap on the payment of response costs from the industry funded OSLTF. The Commission does not propose a specific level of increase.

5. *Congress should dedicate 80 percent of the Clean Water Act penalties to long-term restoration of the Gulf of Mexico:*

The Commission contends that dedicated, sustained funding is necessary to accomplish long-term Gulf of Mexico ecosystem restoration after the oil spill. Therefore, the Commission recommends directing additional funds to the Gulf region to support a region-wide restoration strategy by dedicating, for that purpose, 80 percent of Clean Water Act penalties that may be collected from responsible parties as a result of this spill.

Any penalties paid pursuant to Section 311 of the Clean Water Act, or criminal penalties paid pursuant to Section 309(c) of the Clean Water Act as a result of violations of Section 311, are to be paid into the Oil Spill Liability Trust Fund, and not into the general Treasury. (*See* 26 U.S.C. §9509(b)(8).)

The Commission also recommends that, should Clean Water Act penalties not be redirected toward Gulf ecosystem restoration, Congress should consider other mechanisms for a dedicated funding stream not subject to annual appropriations.

6. *EPA and Coast Guard should establish distinct plans and procedures for responding to a "Spill of National Significance" (SONS):*

The National Contingency Plan defines a SONS as a "spill that due to its severity, size, location, actual or potential impact on the public health and welfare or the environment, or the necessary response effort, is so complex that it requires extraordinary coordination of federal, state, local, and responsible party resources to contain and clean up the discharge." It can be declared by the Commandant of the Coast Guard or the Administrator of the EPA. Under the NCP, the only additional authority provided under a SONS declaration is the creation of a National Incident Commander, whose duties appear to duplicate those of the Federal On-Scene Commander. The Commission recommends amending the NCP to better define roles and procedures when a SONS declaration is made.

7. *The Department of the Interior should create a rigorous, transparent, and meaningful oil spill risk analysis and planning process for the development and implementation of better oil spill response:*

The Commission recommends implementing a new process for reviewing oil spill response plans for offshore facilities which include robust examination of source control measures. Currently BOEMRE is responsible for the review and approval of offshore facility oil spill response plans. The Commission recommends an interagency review process which includes the Coast Guard, EPA, and NOAA.

8. EPA and the Coast Guard should bolster state and local involvement in oil spill contingency planning and training and create a mechanism for local involvement in spill planning and response similar to the Regional Citizens' Advisory Councils mandated by OPA:

The Commission recommends the Coast Guard include representatives of local government in oil spill response planning and training activities, as well as establish liaisons between the Unified Command and local communities at the outset of a spill. Under the NCP, local government is already eligible to take part in these in spill training and response activities.

The Commission further recommends the establishment of citizen advisory councils similar to the Prince William Sound and Cook Inlet Citizens Councils which were created by OPA in the wake of the EXXON VALDEZ spill. The Commission recommends the oil industry fund the activities of the councils and the Coast Guard regularly consult with them on spill planning and response.

9. Congress should provide mandatory funding for oil spill research and development and provide incentives for private sector research and development:

Federal funding for oil spill research and development is discretionary (subject to annual appropriations) and is appropriated predominantly from the OSLTF. The Commission notes the level of funding for research has decreased from $13.4 million in FY 1993 to approximately $7.4 million in FY 2010. The Coast Guard spent approximately $500,000 on oil spill related research and development in FY10 and the EPA spent approximately $600,000. The remaining $6.3 million was spent by BOEMRE to conduct joint research with industry on oil spill response and containment techniques and technology. The Commission recommends mandatory funding for oil spill research at a level equal or greater than the amount authorized by OPA ($22 million annually).

The Commission also recommends the EPA revise its oiled-water discharge permitting regulations to allow more open water testing of oil spill response technology. It further recommends the Coast Guard update its Effective Daily Recovery Capacity regulations (baseline spilled oil recovery standards for response technology such as booms) to promote research investment by industry. Finally, the Commission recommends incentivizing private oil spill research and development through public private partnerships and tax credits.

10. The Coast Guard should issue guidance that offshore barrier berms and similar dredged material barriers generally will not be authorized as an oil spill response measure in the National Contingency Plan or any Area Contingency Plan:

Offshore barrier berms were constructed off the shores of Louisiana in response to the BP oil spill. The Louisiana berms project was one of the most controversial response measures deployed. Many felt that the Louisiana berms project was expensive and not very effective. The Commission concluded more generally that offshore barrier berms do not constitute a viable spill response measure because of the time and cost of construction, and the highly variable and dynamic marine environment that limits effectiveness and poses the potential for negative environmental impacts resulting from dredging and filling.

11. The National Response Team Should develop and maintain expertise within the Federal government to oversee source-control efforts:

The National Response Team consists of 16 Federal agencies with expertise in various aspects of emergency response to pollution incidents. It is co-chaired by the Coast Guard and EPA. The NRT is a planning, policy, and coordinating body; providing national level policy guidance prior to an incident and does not respond directly to an incident. The Commission found that, at the time of the well blowout, the Federal government had inadequate expertise and resources, and thus was unprepared, to oversee a deepwater source-control response and supervise BP's well-containment efforts. The Commission recommends EPA amend the NCP to boost the NRT's expertise in source-control technology and procedures, and to create a mechanism for involving outside experts in source control technology.

12. The National Response Team should develop and maintain expertise in the Federal government to obtain accurate estimates of flow rate or spill volume early in a source-control effort:

The Commission noted that early flow rate estimates were highly variable and difficult to determine accurately, and concluded that the understated estimates of the amount of oil spilling from the well appear to have impeded planning for and analysis of source-control efforts. The Commission recommends EPA should amend the NCP to create a protocol for the government to obtain accurate estimates of flow rate or spill volume from the outset of a spill, and that this protocol should require the responsible party to provide the government with all data necessary to estimate flow rate or spill volume.

13. EPA should update and review its dispersant testing protocols for product listing or pre-approval, and modify pre-approval process to include temporal duration, spatial reach, and volume of the spill:

Considerable controversy arose during the BP oil spill response regarding the use of, and ingredients in, dispersants. The decision to use dispersants involves difficult tradeoffs; if dispersants are effective, less oil will reach shorelines and fragile marsh environments, but more dispersed oil will be spread throughout the water column. The Commission recommends that EPA update its dispersant testing protocols and require more comprehensive testing prior to listing or pre-approving dispersant products. The Commission also recommends that the Coast Guard and EPA, as co-chairs of the Regional Response Teams and leaders of the Area Contingency Plan drafting process, should modify preapprovals of dispersant use under the National Contingency Plan to establish procedures for further consultation based on the temporal duration, spatial reach, or volume of the spill and volume of dispersants that responders are seeking to apply. The Commission further recommends that EPA and NOAA should conduct and encourage further research on dispersants, including research on the impacts of high-volume and subsea use of dispersants, the long-term fate and effects of dispersants and dispersed oil, and the development of less toxic dispersants.

14. The Coast Guard should provide scientists with timely access to the response zone so that they can conduct independent scientific research during an oil spill response and long-term monitoring in the future:

The Commission recommends a more rapid approval process for the Coast Guard to establish which would enable private scientists access to an oil spill zone to conduct research immediately after the spill.

WITNESSES

The Subcommittees will hear testimony from the following witnesses:

- Dr. Donald F. Boesch
  Member, National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling

- Mr. Terry D. Garcia
  Member, National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling

- Admiral Thad Allen (Ret.)
  National Incident Commander
  BP DEEPWATER HORIZON Oil Spill

IMPROVING OIL SPILL PREVENTION AND RESPONSE, RESTORING JOBS, AND ENSURING OUR ENERGY SECURITY: RECOMMENDATIONS FROM THE NATIONAL COMMISSION ON THE BP DEEPWATER HORIZON OIL SPILL AND OFFSHORE DRILLING

Friday, February 11, 2011

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON COAST GUARD AND MARITIME TRANSPORTATION, JOINT WITH THE SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT,
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
Washington, DC.

The subcommittees met, pursuant to call, at 10:00 a.m. in room 2167, Rayburn House Office Building, Hon. Frank A. LoBiondo, [chairman of the Subcommittee on Coast Guard and Maritime Transportation] presiding.

Mr. LOBIONDO. Good morning. The joint subcommittee hearing will come to order. As this is the first meeting of the Subcommittee on Coast Guard and Maritime Transportation, I want to welcome all of our members, and congratulate Mr. Larsen on his selection as ranking member. I can't tell you how thrilled I am that you have that position. Rick and I have a long-time working relationship. We are going to be off to a great start, and I think it's going to be a great session, working together. And I certainly look forward to working closely with all the Members of the Committee.

The Subcommittee on Coast Guard and Maritime Transportation is meeting in a joint hearing today with the Subcommittee on Water Resources and Environment to hear testimony from members on the National Commission on the BP Deepwater Horizon Oil Spill, as well as Admiral Thad Allen, former Coast Guard commandant and national incident commander for the oil spill.

The BP Deepwater Horizon oil spill was unprecedented in size and duration. It left a tremendous natural and economic disaster in its wake. The joint Coast Guard and Department of Interior investigation into the causes of the explosion and sinking of the Deepwater Horizon, as well as the failure of the blowout preventer to contain the spill is still ongoing. The subcommittee will examine the findings of the official investigation, once it is complete.

While we await the findings of the investigation, the National Commission on the BP Deepwater Horizon Oil Spill, as well as the

report of the national incident commander has helped highlight significant questions regarding the best methods for the industry and the Federal Government to use to prevent and respond to future oil spills.

This hearing provides the subcommittees with the opportunity to hear recommendations of the Commission and the national incident commander on the changes needed to Federal laws and regulations to help reduce the likelihood of a similar event happening in the future.

I am concerned with the findings of the Commission and the national incident commander that officials at all levels of government were unfamiliar with the national contingency plan, our Nation's 42-year-old blueprint for how to respond to oil spills. But I am particularly alarmed that the senior leaders of the Department of Homeland Security were either unaware or simply misunderstood how the plan functions.

I am troubled at the failure of the Department's leadership to recognize, accept, and follow the plans, and—that slowed up the command and the control in the days after the spill, undermined public confidence in the government, and may have impeded the response.

But this speaks to a larger issue this subcommittee has been concerned about since the Coast Guard was transferred to the Department of Homeland Security, and that is the Department does not understand nor appreciate the traditional missions of the Coast Guard, something we have talked about, something we have worried about, and unfortunately, I think, something that we see happening.

While critically important, port security accounts for only 20 percent of what the Coast Guard does on a daily basis. The remaining 80 percent are traditional missions like oil spill response. These missions require the Department's leadership to understand that they need to commit adequate resources and attention, as well as participate fully in training and preparedness activities. Unfortunately, that was not the case with the BP Deepwater Horizon incident.

Nearly 20 years ago, the Oil Pollution Act of 1990 was created and was a national framework for preventing and responding to oil spills in U.S. waters. Since the passage of the act, there have been significant changes in the offshore production, storage, and transportation of petroleum products. And with these changes, the requirements to respond to potential incidents have grown more complex. This bill demonstrates that we may need to re-examine the requirements under current law to ensure they are applicable to present-day operations.

Finally, I would be remiss if I did not take this opportunity to remember the 11 Transocean crew members who were lost as a result of this tragedy, and to express my sympathy to their families, friends, and their coworkers.

With that, I would like to yield to ranking member, Mr. Larsen, for any comments you may have.

Mr. LARSEN. Thank you, Mr. Chairman. And I, as well, am excited to be a ranking member here, and working with you. We do have a good working relationship over the last several years here

in Congress, and I look forward to working here on the Coast Guard Maritime Transportation Subcommittee with you. Thanks, Frank.

I want to thank you for conducting this joint subcommittee hearing, and I welcome the opportunity to discuss these recommendations today. I think today the message is clear: undertaking deepwater drilling requires a deeper understanding of the risks that accompany the clear benefits of deepwater drilling.

Now that we have these recommendations in hand, Congress should act to ensure that our policies for offshore drilling are rigorous, that they safeguard workers, they benefit the economy, and they protect the environment. Too many lives are at stake, and too many jobs are at risk for the Congress to fail to act. If we cannot tap these offshore resources in a way that protects lives and the environment, there will be pressure to restrict the use of those resources. That would be devastating to the maritime industry, the jobs they support, and our economy, as a whole.

We also need to have Federal agencies with adequate resources to prevent another tragedy such as this from happening again, and to respond, should we have to respond.

I want to welcome Admiral Allen today to the subcommittee. I have appreciated your willingness to serve the United States as commandant of the Coast Guard, as well as the commander of this response effort, even following your retirement. And I look forward to hearing your observations and recommendations.

The Deepwater Horizon oil spill was a major human and environmental disaster of unprecedented proportions. As a representative from the Puget Sound, I understand how devastating oil spills would be to a coastal region, and I want to do everything we can possible to prevent oil spills from any sources occurring in my area of the country, or any other area of the country.

The Commission report today clearly demonstrates that we have a long way to go to prevent similar disasters from occurring again. Unfortunately, Congress is proposing budget cuts into the muscle and to the bone of investments needed for economic growth, and to protect our environment. If nothing else, the BP spill shows the need for more robust public capacity to respond quickly and safely to oil spills, and that's reflected in the report.

The public depends upon Federal agencies to ensure the safety of deepwater drilling, and the safety of the men and women who work on these platforms. Diminishing this capacity through budget cuts is irresponsible, especially considering the Commission's call for increased investment.

Now, some voices in Washington, D.C. argue that we must reduce or eliminate regulatory burdens, and in some places I agree. But, once again, the BP spill demonstrated that the oil and gas industry was subject to too little regulation, and not too much. Improved regulation is both necessary in how BP implemented safety measures during drilling, and ensuring effective, meaningful response plans once the spill occurred. So, in fact, some of this does fall on the Federal Government.

No one is suggesting that we eliminate deepwater drilling off our coast. Given what we know now about the risks of this drilling, we should put pieces in place to ensure the highest level of safety.

The report revealed what many of us expected to learn about the spill. First, the Federal Government's oversight of offshore and oil gas drilling was too lax. We didn't do the job. Second, Federal agencies and the industry were inadequately prepared to effectively stop, track, contain, and clean up a spill of this magnitude. And third, we learned that the Jones Act, the law which protects and supports a domestic maritime industry, was not a hindrance to the Federal Government's response to this environmental calamity, and we will find—and we will hear this later. And I know that the Commission report and Admiral Allen concur with this finding.

I proposed last year, along with many others, that—at the committee's May 19th hearing on the spill, that the country take a step back to ensure that any future offshore drilling in the Gulf of Mexico lives up to claims of safety and reliability. And, if anything, the National Commission's report only reaffirms my convictions.

I look forward today to evaluating the Commission's recommendations, and expect that our witnesses this morning will provide additional insights on these points.

When the Exxon Valdez ran aground on Bligh Reef in Alaska in 1989, Congress responded with the Oil Pollution Act. Now, 22 years later, the BP spill demonstrated the need to amend and to strengthen that act. And I stand ready to work with Chairman LoBiondo and with Chairman Gibbs, with our ranking Democratic member, Congressman Rahall, and with Mr. Bishop and the other Members of this Committee in shaping legislation to strengthen our Nation's oil spill response and prevention laws.

Mr. Chairman, the Deepwater Horizon spill exposed the real risks and costs of energy production on the outer continental shelf. We have before us an opportunity to make the necessary course correction in our production of offshore energy. And I urge that we not let the current debate on the Federal budget or regulations deter us from making the necessary investments to ensure that offshore drilling can be done safely, efficiently, and with minimal harm to our environment and to the workers who work on the platforms in the Gulf. Thank you, Mr. Chairman.

Mr. LOBIONDO. Thank you, Mr. Larsen. I would now like to yield to Chairman Gibbs of the Water Resources Subcommittee—and Environment—for his statement.

Mr. GIBBS. Thank you, Mr. Chairman, and I look forward to working on the Transportation and Infrastructure Committee, and also chair the Water Resources and Environment, as we work to improve our infrastructure and oversight in those agencies that work on the infrastructure issues dealing with water.

There are two major Federal laws that relate to oil spills like the one in the Gulf of Mexico last year: The Oil Pollution Act, and the Clean Water Act. The Oil Pollution Act of 1990, OPA, was largely enacted in response to the Exxon Valdez oil spill, and has improved the Nation's ability to prevent and respond to oil spills. Under OPA, the Coast Guard takes the lead in organizing Federal oil spill responses and prevention efforts in tidal waters, while the EPA is responsible for coordinating efforts in non-tidal and inland waters.

OPA authorized the use of the oil spill liability trust fund, which is capitalized by a per-barrel tax paid by the oil industry and pen-

alties paid by responsible parties. That trust fund is used to pay for the cost of responding to and removing oil spills.

The second law is the Clean Water Act, which is the principal Federal statute for protecting navigable waters and adjoining shorelines from pollution. Specifically, section 311 of the Clean Water Act addresses pollution from oil and hazardous substances releases, providing EPA and the Coast Guard with the authority to establish a program for preventing, preparing for, and responding to oil spills that occur in navigable waters of the United States.

The Act clearly establishes the responsibilities of the Federal Government, states, and the maritime transportation industries to establish liability and to carry out clean-up, restoration, and rehabilitation of natural resources that were damaged as a result of the oil spill.

While the BP oil spill was a monumental disaster, and caused the tragic loss of 11 dedicated oil field workers, we must ensure that we do not use this as a catalyst to halt or hinder domestic energy production. Rather, the Nation requires a safe, secure, domestic supply of energy products, now more than ever.

The National Commission on the BP Deepwater Horizon Oil Spill has studied this recent oil spill and has made several recommendations regarding the Federal response. Many of the proposals by the Commission are worth careful review and consideration as we move forward.

Thank you, Mr. Chairman. I look forward to the testimony of the witnesses.

Mr. LOBIONDO. Thank you, Mr. Gibbs. I would like to yield now to Ranking Member Bishop for his statement.

Mr. BISHOP. Thank you, Mr. Chairman. Thank you for holding this important hearing to review the recommendations of the National Commission on BP Deepwater Horizon Oil Spill and Offshore Drilling.

Mr. Chairman, as you know, in the last Congress this committee held a series of hearings in the aftermath of the BP Deepwater Horizon disaster to investigate what went wrong, what actions were being undertaken by BP and other responsible parties to stop the ongoing flow of oil, and to restore the lives and livelihoods of those impacted by the spill, and what measures were necessary to restore the Gulf Coast ecosystem.

These hearings also focused on what efforts needed to be undertaken by the Federal agencies and the Congress to ensure that a similar preventable disaster could not occur in the future.

Last year, members of the Subcommittees on Water Resources and the Coast Guard recalled a similar joint hearing of these subcommittees on the 10th anniversary of the Oil Pollution Act of 1990, and the warnings given by Federal agencies and other stakeholders that our Nation was rapidly becoming unprepared to address future oil spills.

Specifically, witnesses testified about the then-growing concern that the technologies to extract, process, and transport oil were well outpacing the development of technologies to quickly and safely control and clean up potential oil spills.

Over the intervening years, our subcommittees also receive testimony from representatives of the Coast Guard that currently liabil-

ity limits for both vessels and facilities such as the Deepwater Horizon were falling desperately behind the levels necessary to adequately address a worst-case release of oil. Unfortunately, this committee did not heed the warnings given to it over a decade ago, and this Nation grew complacent that a future oil disaster was unlikely to occur again.

Fast forward 10 years, and unfortunately, our complacency proved wrong. In the summer of 2010, our Nation was again faced with a massive oil spill, although this time the release was not from the grounding of a ship, but from the seemingly limitless release of oil directly from the sea floor. Again, the questions arose on how this could have happened, why it was taking so long to stop the flow of oil, and whether this tragedy that resulted in 11 lives lost and impacted countless families along the Gulf Coast should have been prevented.

Mr. Chairman, in the days following the Deepwater Horizon disaster, this committee took aggressive action to understand what happened and what changes were needed to take to prevent a similar disaster in the future. This committee drafted and moved legislation to address many of the shortcomings identified in the aftermath of the Deepwater Horizon disaster. This legislation reported from this committee by voice vote was later combined with proposals from our colleagues on the Natural Resources Committee under the then-leadership of our new ranking member, Mr. Rahall, and was passed by the House in early summer. Unfortunately, no further action was taken on that bill.

However, with the beginning of the new Congress, we have the opportunity to start anew. Today, Mr. Chairman, we will hear testimony from two distinguished representatives from President Obama's National Commission. In my opinion, we should not be surprised by the findings of the Commission into the likely causes of the Deepwater Horizon disaster, or the systemic failures of the oil industry that contributed to this incident. Many of these findings are consistent with what we heard during hearings before this committee in the last Congress.

Similarly, many of the statutory and administrative changes recommended by the Commission are consistent with those included in both this committee's bill and the Consolidated Land, Energy, and Aquatic Resources Act of 2010, or the CLEAR Act, that was approved by the House last year.

Mr. Chairman, in my view, the prudent choice is for this committee to once again move legislation to address the warnings raised by this Commission and other stakeholders on the very real threat of future oil spill disasters. While some of the recommendations of the Commission can be addressed administratively, we all know that several critical issues, such as the currently inadequate liability and financial responsibility limits and issues related to maritime safety can only be addressed by the Congress.

Preventing the next Exxon Valdez or Deepwater Horizon is far too important to allow complacency to take over again. As noted by one of the witnesses last Congress, "We cannot let the months that have passed without a massive oil spill give us a false sense of security that everything is fine. We must recognize that

vulnerabilities remain, and take decisive action to address the recommendations made by this commission this year."

Thank you, Mr. Chairman. I yield back.

Mr. LOBIONDO. Thank you, Mr. Bishop. Now I would like to recognize Mr. Rahall, the ranking member of the full committee.

Mr. RAHALL. Thank you, Mr. Chairman. I commend you and Ranking Member Larsen for conducting this hearing today. We will hear from the Presidential Commission examining the Deepwater disaster and retired Admiral Thad Allen regarding the recommendations for ensuring that offshore oil and gas development in the U.S. is far safer now and in the future, and that the devastation of the Deepwater Horizon is not repeated.

I certainly want to commend our witnesses—you, in particular, Admiral Allen—and the Commission, all of the people representing our government at all levels for the around-the-clock work that they did, and for our country, in trying to ensure the safety and return to well-being of so many of our citizens.

While the round-the-clock television coverage of oil spewing into the Gulf has long since faded to black, the urgency we once felt to identify the causes of the disaster and take the steps necessary to minimize the likelihood it would happen again should not fade with the coverage. This truly cannot become a case of out of sight, out of mind. We cannot forget the 11 good men who lost their lives, and countless families lost their incomes when fishing grounds were shut down and tourists canceled their visits to the Gulf. We cannot forget the environmental and economic impacts of the spill that will last long after the oil can be seen floating on the surface of the sea.

Yet, in the weeks since the Commission released its broad range of recommendations for reforms and business practices, regulatory oversight, and broader policy concerns, we have heard an outcry of indignation from those who claim that it is too soon to take action, that we must wait until every aspect of every investigation has been completed.

But we do not need to wait to know that we were not prepared for this type of blow-out, that our ability to clean up oil spills is woefully inadequate, that regulators were too cozy with the industry, and that a $70 million cap on liability is too small.

That is why, in my former capacity as Natural Resources chairman, to which Mr. Bishop has referred, I did lead the House in writing and passing the CLEAR Act last summer. That legislation would have provided for a major overhaul of offshore drilling operations and regulations, decreasing the chances that another blow-out would happen in the future, and making sure that we could do a better job of containing one, if it did.

Many of my friends who voted against that bill argued that we should not act until the Presidential Commission had completed its work. Well, the recommendations are now before us. And again and again, they urge us to do the exact same things we did in the CLEAR Act.

Recently, we introduced a new bill to implement all the Commission recommendations. But again, we're told by some that we need to wait. But we cannot wait. The Commission itself said—and I quote—"Inaction runs the risk of real cost too, and more lost lives,

and broad damage to the regional economy and its long-term viability, and its—and further tens of billions of dollars of avoidable clean-up costs."

We should not wait to reform the ranks of the inspectors who were supposed to be keeping an eye on—not playing around with—industry operators in the Gulf. We cannot wait to reform the laws that govern containment, response, and clean-up of spills, or to improve the technologies that these activities rely upon. Nor should we wait to improve safety and environmental protection provisions that will ensure the long-term sustainability of this industry, as well as the other industries that coexist in the Gulf and other areas of the country, where offshore energy development continues.

We have a responsibility. We have a responsibility to the families of those who lost loved ones in the Gulf, who lost businesses in the aftermath of this disaster, and to the American people. We need to act on these recommendations, restore the economy and the ecosystems of the Gulf, and make sure offshore drilling is done in an efficient and safe manner. No one should have to risk their lives to earn a livelihood. Thank you, Mr. Chairman.

Mr. LOBIONDO. Thank you, Mr. Rahall. We are going to—we will entertain brief opening statements from Members, if they so choose. I will try to limit them to three minutes. If you can do it in less than that, I would appreciate it, so we can get to the meat of the hearing.

Are there—Mr. Cravaack?

Mr. CRAVAACK. Thank you, Chairman LoBiondo and Gibbs, and Ranking Members Larsen and Bishop, for holding this imperative hearing. Welcome, Admiral Allen. It's good to see you, sir. And thank you for your service to this country. Welcome, Dr. Boesch, and Mr. Garcia, and I look forward to learning from your testimony today, as well.

A lot of the difficulties our country has faced attempting to cap the BP oil spill—it's an imperative that we improve our ability to prevent future spills, and expand our country's capability to respond and contain an oil spill in order to prevent another region-wide catastrophe.

While understanding the immense technical difficulties involved with capping BP's Deepwater blow-out, I am hopeful we can apply the lessons learned from BP's oil spill and never again have 87 days of oil spewing into our waters, and have a government bureaucracy impede recovery in an extremist situation.

In closing, I would just like to extend my sympathy and concern for the American families on our Gulf Coast that have suffered not only from the effects of BP's oil spill, but also because of loss of jobs to the Federal Government's knee-jerk reaction in initially banning offshore drilling, and its disjointed response to the emergency situation.

Thank you again, and I do look forward to your testimony.

Mr. LOBIONDO. Thank you. Now I would like to recognize Mr. Cummings, former chair of the committee. And I want to publicly thank you for your work and cooperation over the last couple of sessions, and welcome your remarks.

Mr. CUMMINGS. Thank you very much, Mr. Chairman, and congratulations on your chairmanship. I want to thank the chairman

of the Subcommittee on the Coast Guard and Maritime Transportation and the Subcommittee on Water Resources, Congressman LoBiondo and Congressman Gibbs, and certainly our ranking members, Larsen and Bishop, for today's hearing to enable us to examine the recommendations of the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling.

Also, take a moment to thank Dr. Boesch, president of the University of Maryland Center for Environmental Science, and Mr. Terry Garcia for their service on the National Commission on the BP Deepwater Horizon Oil Spill.

Further, I take a moment to thank Admiral Allen for his service managing the Deepwater Horizon incident, and of course for service as commandant of the Coast Guard. It's good to have Admiral Allen appear before us today.

And during the 111th Congress, as chairman of the Coast Guard Subcommittee, I convened a subcommittee hearing to examine foreign vessel operations in the exclusive economic zone. And the Committee on Transportation and Infrastructure convened two separate hearings to examine the Deepwater Horizon accident. I also traveled to the Gulf and had the opportunity to observe the on-scene operations at the Macondo site several times. And I appreciate the thoroughness of the National Commission's report, and the thoughtfulness of the Commission's recommendations.

Last year, under the leadership of then-chairman Rahall and former chairman Oberstar, the House passed the CLEAR Act, which would have implemented many of the reforms which the Commission is calling for today, including increasing the financial responsibility requirements for offshore drilling facilities.

Responding to the issues we examined in the Coast Guard subcommittee, this legislation would also have required that vessels involved in resource development in the EEZ be owned by U.S. citizens who would pay U.S. taxes. The legislation would also have required such vessels to be crewed by U.S. citizens who would be protected by U.S. safety regulations.

Further, to help those in the Gulf who were failed by the BP claim processing system, the legislation included a provision I authored that would have reduced from 90 days to 45 days the amount of time a responsible party has to settle claims before claims could be presented to the oil spill liability trust fund. I continue to believe that the CLEAR Act is the kind of strong legislation we need to ensure that our laws and regulations are equal to the risk involved in offshore drilling. My belief is only reconfirmed by the Commission's findings and recommendations.

And so, I look forward to our testimony—to the testimony today. I thank the witnesses for being with us. And with that, Mr. Chairman, I yield back.

Mr. LOBIONDO. Thank you, Mr. Cummings. Master Chief Coble.

Mr. COBLE. Thank you, Mr. Chairman. I appreciate that promotion. I will not take the three minutes. You and Mr. Larsen have invited an outstanding panel. I'm looking forward to hearing from them. Admiral, good to have you back on the Hill. Thanks for what you did. Yield back, Mr. Chairman.

Mr. LOBIONDO. You scored extra points. Good job. Congresswoman Richardson.

Ms. RICHARDSON. Thank you, Mr. Chairman. Thank you for having this joint hearing this morning, and also our ranking members. And I would like to thank our distinguished witnesses who are here today, who are helping us as we progress through this very difficult tragedy for this country.

I asked to speak because I had kind of a unique role. In addition to being on Transportation, I was also, at the time, chair of the emergency communications preparedness and response with the Homeland Security Committee, and so I actually visited the Gulf several times to observe the progress from multiple areas.

Within those visits there were some key things that I would like to acknowledge. One, I want to thank the Coast Guard and the EPA and the other Federal and local agencies who were involved in the response, who I thought took tremendous care and, really, effort to preserve our coastline and to resolve the problem of the millions of gallons of crude oil that was streaming into our shores.

But I think, when we look at, overall, the observations of the trip—and I made a report, myself, of that—I want to underscore the large challenges that the response teams faced, and the lessons that ought to be learned in the aftermath of this catastrophe.

For example, the failure or the confusion about the number of booms and skimmers that were located, and where they needed to be placed. The confusion surrounding the chain of command was exacerbated by the number of governmental agencies that comprised the unified response. And, moreover, the magnitude of the disaster rendered many of the Federal Government agencies' contingency plans almost inoperable.

I represent California's 37th Congressional District. We have offshore drilling in my district. And I am concerned about what happened there, and how it can happen again.

Finally, I brought forward legislation, Securing Health for Ocean Resources and Environment Act, called the SHORE Act, one, to look at improving at NOAA's spill response and containment and prevention capacity; two, better to define to the coordination between Federal, state, and local responses—and I am disturbed to say that the same problems we had with Hurricane Katrina didn't seem to be resolved in our response with Federal, state, and local elected officials—to clarify the existing authority for NOAA to receive funds from the oil spill liability trust fund, to double the amount that Coast Guard may receive from the OSLTF each year, with a percentage dedicated towards oil spill research and development; to mandate the improvements in the frequency and quality of the Coast Guard's safety inspections and certification requirements; to require prompt posting by the Coast Guard unified command of oil spill incident plans publicly, utilizing all resources, not depending upon cable TV to tell the message; and finally, to strengthen the coastal state oil spill planning and response.

I plan on reintroducing this legislation. But, more importantly, I am also very thankful for the report that all of you did. And we look forward to working together. I yield back.

Mr. LOBIONDO. Thank you. Congresswoman Miller.

Mrs. MILLER OF MICHIGAN. Thank you, Mr. Chairman, to all the chairmen. And, you know, with all deference, sitting next to a great Marine here, Duncan Hunter—and my dad was a Marine and my

son-in-law is a Marine, and my husband was in the Air Force—hats off to the Coast Guard, and to our witness. I am looking forward to hearing Admiral Allen because, as we all know, if it's wet and impossible, always ready, send in the Coast Guard. And I just want to echo what's been said here this morning.

But just a quick comment, Mr. Chairman, in regards to the Jones Act, which is, I think, going to be coming up in the witnesses' testimony, and I'm sure there will be some questions about that today. I personally believe that the Jones Act is a very critical component of America's maritime heritage. And during this tragic incident, and the terrible incident in the Gulf, Jones Act suffered from an unfortunate, misguided, really untrue sort of media campaign against the Jones Act. They were saying that the Jones Act actually hindered the clean-up efforts, and had a lot of—created a lot of the confusion in the Gulf.

And actually, looking through the admiral's testimony here, in regards, as he says, to the application of the Jones Act, there was a misperception that the Jones Act impeded the use of foreign flag vessels for Deepwater Horizon response operations. In reality, the Jones Act had no impact on response operations.

And just one other quick quote from the report that we all have in front of us. We did not reject foreign ships because of Jones Act restrictions. These restrictions did not even come into play for the vast majority of vessels operating at the wellhead, because the act does not block foreign vessels from loading or then unloading oil more than three miles off the coast. And when the act did apply, the national incident commander appears to have granted waivers and exemptions when requested.

So, I just point that out. I think this hearing is a great way to explore everything that happened in the Gulf, and in particular set to rest a lot of misperceptions that many people in our country and around the globe found out about the Jones Act. As we see now, it had no negative impact.

Again, thanks for calling this hearing, Mr. Chairman.

Mr. LOBIONDO. Thank you. The gentlelady from Hawaii, Mrs. Hirono.

Mrs. HIRONO. Thank you, Mr. Chairman. And I, too, would like to thank the Coast Guard for everything that they do there. They are a major part of our response teams in Hawaii.

And I also would like to echo the sentiments of Congresswoman Miller in her explanation of the impact of the Jones Act and the misinformation that arose about the Jones Act as a result of this BP disaster.

What strikes me about the Commission's report, moving on to that, is that this disaster could have been prevented. And the companies that were involved did certain things—commissions and omissions—that we really need to ensure never happens again. And, as far as I am concerned, there should be some—there should be major accountability of these companies in the follow-up of the disaster.

And so, what I would like to see the committee do is move forward in supporting the recommendations of the Commission. And with that, I yield back.

Mr. LOBIONDO. We have the gentleman from coastal Louisiana wants to say something. Mr. Landry? There you are.

Mr. LANDRY. Yes.

Mr. LOBIONDO. OK.

Mr. LANDRY. Thank you, Mr. Chairman. Thank you, Chairman Gibbs, for calling this hearing today. I also thank Dr. Boesch, Mr. Garcia, for agreeing to serve on the President's Commission, and for giving their time to testify today. Admiral Allen, I thank you for your service to the country, and for everything you have done for the Gulf Coast.

As our chairman and ranking members have already stated, the accident that happened on April 20, 2010 was an economic, environmental, and human tragedy that cannot be minimized or forgotten now that the images of the accident have stopped playing out on the news.

As the representative for coastal Louisiana, the Macondo incident is still seen in every corner of my district. A hundred thousand men and women of my district either work or are affected by both the commercial fishing industry and the oil and gas industry. And while our shrimpers, oystermen, and fishermen are doing their best to return to work, my neighbors in the oil and gas industry continue to sit at home, sidelined by the President's de facto moratorium.

Every day we fail to utilize our own energy resources in the Gulf of Mexico is a day America is held captive on ongoing crises in the Middle East, the turmoil in the rest of the world. And I wish the Commission's report would have addressed the economic impacts of this moratorium.

I am also concerned with the Commission's recommendation to increase the liability cap in financial responsibility requirements. Make no mistake. I do not believe that any oil and gas company should be able to cause massive damage to our national economy and skate away into bankruptcy. However, I also believe that small oil and gas producers have a role to play in the Gulf of Mexico. And any action which drives these producers away will ultimately hurt this Nation.

I am confident that the system—a system can be implemented that protects the environmental health of the Gulf, while still ensuring independent drillers are not pushed out of the industry.

More broadly than the recommendations, I disagree with the Commission's apparent stance that the entire offshore industry can be characterized or quantified by the mistakes or failures that happened on April the 20th. There have been more than 50,000 wells drilled in the Gulf of Mexico, 3,200 of which we drilled in deep water. Of these wells, Macondo was the first major incident.

I believe we should always keep in mind—I do agree with the Commission's report that we should always keep in mind the safety of the men and women who ply their trade in the Gulf of Mexico. And with that, I yield back the balance of my time.

Thank you, Mr. Landry. Mr. Cohen?

Mr. COHEN. Thank you, Mr. Chairman. I, first, appreciate the opportunity to serve on this committee with you, and look forward to working with you. And I am pleased to receive the testimony that we will be having today from Admiral Allen, and the distinguished

members of the Commission here on this BP Deepwater Horizon oil spill.

The spill spewed oil into the Gulf of Mexico for 86 days, and was a human economic and environmental disaster, unparalleled in our country's history, both—but it was both foreseeable and it was preventable. Thanks to the swift response of Admiral Allen, the administration, and the recovery workers in the Gulf, the negative impacts were dramatically reduced, yet still great. And as a result of the work performed by this Commission, we have a better understanding of the—why this spill occurred, and how we can prevent similar tragedies in the future.

The Valdez taught us some things, but the Valdez was about property damage, and environmental damage, and maritime damage, ecological damage. But there were not a loss of lives. And in this situation, we're dealing with the loss of human lives. We lost 11 individuals on that rig, and we owe it to those individuals and to the thousands of Americans who risk their lives every day by stepping on to those type of rigs to heed the warnings and try to prevent future tragedies by looking at the recommendations and passing them.

There are tens of thousands of people in the Gulf area whose economic livelihoods were devastated, and we owe it to them as well. But the main thing is the lives that were lost. If you don't learn from history, you're doomed to repeat it. And if there are people that die in the future, and we don't do things to protect those oil workers there, their blood will be on our hands.

The recommendations laid out are reasonable and practical. They're improvements and updates to outdated regulations that no longer protect the health and well-being of American people and our economies. So I thank the Commission for their work.

I hope that this Congress will heed the warning signs and respond with legislation that will save lives in the future, as well as the economies. I thank the witnesses for their work in trying to safeguard the people and our environment, and I look forward to hearing their testimony and working to try to see that American vessels in the future are safer, and that they are—approve their American vessels, and not necessarily ones that were flagged in the Marshall Islands. Thank you. Thank you, Mr. Chairman.

Mr. LOBIONDO. Thank you, Mr. Cohen. Were there any other Members that we missed who wanted to say a few opening remarks?

[No response.]

Mr. LOBIONDO. Seeing none, we will now go to our witnesses. And our witnesses today include two members of the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling. Dr. Donald Boesch is the president of the University of Maryland's Center for Environmental Science, and he is joined by fellow commissioner, Terry Garcia. Mr. Garcia is the executive vice president for the mission programs for the National Geographic Society.

Mr. Boesch, thank you, and please proceed.

TESTIMONY OF DONALD F. BOESCH, MEMBER, NATIONAL COMMISSION ON THE BP DEEPWATER HORIZON OIL SPILL AND OFFSHORE DRILLING; TERRY D. GARCIA, MEMBER, NATIONAL COMMISSION ON THE BP DEEPWATER HORIZON OIL SPILL AND OFFSHORE DRILLING; AND ADMIRAL THAD ALLEN (RET.), NATIONAL INCIDENT COMMANDER, BP DEEPWATER HORIZON OIL SPILL

Mr. BOESCH. Mr. Chairman and members of the subcommittees, thank you for giving me and my colleague, Terry Garcia, an opportunity to testify on behalf of the National Commission. It's an honor to present the Commission's findings concerning the explosion and spill, as well as our recommendations for change in U.S. policy concerning offshore drilling.

As a native of Louisiana, and having lived for the difficult decade of the 1980s in Houma, Louisiana, I understand the importance of the oil and gas industry, both to the local economy and the Nation's energy supply. Anyone familiar with the region understands the need to maintain a thriving energy industry, along with the healthy natural environment, and the many benefits that both provide.

So, it was really deeply personal to me as I witnessed, as you did, the damage that was done to our coast, our wetlands, our economies, and communities as a result of this spill.

In May of last year, President Obama created our Commission, and asked us to determine the causes of the Deepwater Horizon disaster, evaluate the response, and advise the Nation about how future energy exploration could take place responsibly.

As you know, on January 11th, exactly 1 month from today, we released our final report. As co-chairman Bob Graham has previously noted, our report was completed on time, under budget, and contains no dissents among our members.

Our final report includes recommendations directed at the administration, at Congress, and at the industry that will help to improve the safety of offshore drilling and substantially reduce the risk of something like this happening again.

Today, however, I would like to focus my opening remarks on the equally important portion of our recommendations: ways to improve the government's oil spill response and containment capabilities. In their response to the Deepwater Horizon disaster, let's face it, both the government and the industry fell short.

Although many responders acted quickly, and in some cases heroically, and although Admiral Allen provided effective and valuable leadership during this response, the Commission concluded that neither BP nor the Federal Government was adequately prepared to respond to a spill of this magnitude and complexity. There was a failure to plan in advance, a failure to coordinate effectively with state and local governments, and a lack of information concerning what response measures would be most effective.

In addition, neither the industry nor the Federal Government has invested in the research and development needed to improve spill response technology. Much of the technology was the same as used during the Exxon Valdez spill 20 years earlier.

Equally troubling at the outset of the spill, the industry was unable to contain the flow of oil from the well, and neither the gov-

ernment or the industry had sufficient expertise to determine the rate at which the oil was flowing. The lack of accurate knowledge impeded the efforts to determine the appropriate control technology, and determine it quickly.

All of these factors together made for a long and costly response effort that, at least in the early stages, did not meet the standard of what the law presently requires. In our report, the Commission makes a number of recommendations to improve response and containment.

Among the recommendations: first, the Department of the Interior, consulting with other agencies, should develop a more rigorous set of requirements for industry response plans, and should require companies to submit containment plans, along with the oil spill response plans; second, EPA and the Coast Guard should involve state and local governments as significant players in the spill response planning; Congress should provide mandatory funding for oil spill response research and development; industry should fund a private organization to develop, adopt, and enforce the standards of excellence to ensure improvement and equipment for large-scale response and containment and rescue; and finally, the Federal Government should ensure that this has the needed expertise to oversee these industry containment efforts.

The Commission's recommendations are far-reaching in this area. There is a role for Congress, to be sure, the executive branch, and the industry, in significantly improving capabilities. There is also a role for Congress in conducting oversight, as our government takes these actions.

I will conclude my remarks by noting that the drilling offshore is inherently risky. The risk will never be reduced to zero. But as a Nation we can take concrete steps that will dramatically reduce the chances of another Macondo well blow-out, and that will substantially improve our ability to respond, should an oil spill like this occur again.

The Commission believes these steps are vitally necessary, that people of the Gulf who have suffered so much deserve to know that their government and industry are doing so. So, Mr. Chairman, thank you for this opportunity. You have our written testimony and our report for the record. Thank you.

Mr. LOBIONDO. Thank you, Mr. Boesch.

Mr. Garcia?

Mr. GARCIA. Good morning, Mr. Chairman, members of the subcommittee. Thank you for giving us this opportunity to testify concerning the findings and recommendations of the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling.

Any severe catastrophe of national significance, like the explosion of the Macondo well and the subsequent oil spill in the Gulf of Mexico, strains public confidence, fosters widespread concern and anxiety, and creates an urgent need for candid explanation. But it can also create an opportunity to bring a renewed focus to existing challenges. As tragic as this disaster was, it can play a positive role in restoring one of our Nation's most valuable ecosystems.

So, today I would like to focus my remarks on the Commission's recommendations for the restoration of the Gulf of Mexico.

As a result of the Deepwater Horizon spill, over 170 million gallons of oil went into the Gulf, with some portion remaining in the ocean and possibly settling on the ocean floor. But even before the highly visible damages caused by the spill became clear, many crucial Gulf economic and ecological resources—fisheries, transportation, tourism—faced long-term threats.

First, more than 2,300 square miles of coastal wetlands, an area larger than the State of Delaware, have been lost to the Gulf. Powerful hurricanes, always a threat to the region, struck the coast in 2005 and 2008, causing even more wetland loss. Last summer, even before the spill, a massive dead zone, extending up to 7,700 square miles, was forming in the Gulf.

And finally, the Deepwater Horizon disaster made matters worse. Eleven rig workers were killed by the explosion, seventeen were injured. Many thousands of people were exposed to contaminated waters, coast, beaches, and seafood. Thousands were out of work. Birds and sea animals killed and significant habitats damaged or destroyed.

Restoring the Gulf to its condition just before the oil spill would certainly improve the environment, but it is not enough. Our goal here should not be to simply maintain an already degraded environment. We believe the country must aim higher, and that the region deserves better. That's why we have recommended that the Federal Government, working closely with the Gulf states, make a renewed and national commitment to the Gulf of Mexico and its natural resources.

Currently, no funding source exists to support comprehensive regional restoration efforts. Estimates of the cost of Gulf restoration vary widely. But according to testimony before the Commission, fully restoring the Gulf will require $15 billion to $20 billion, or a minimum of $500 million per year over 30 years.

The litigation process related to the Deepwater Horizon spill is likely to generate at least some of the needed funding. But congressional action would be required to ensure that those funds reach the Gulf. The Commission recommends that 80 percent of any Clean Water Act penalties and fines be directed to Gulf restoration. Should Clean Water Act penalties not be redirected to the Gulf, Congress should consider other mechanisms for a dedicated funding stream not subject to annual appropriations.

The Commission also recommends that Congress create an effective state/Federal authority to administer Gulf ecosystem restoration policy. This council should implement a restoration strategy for the region that is compatible with existing state restoration goals. If funding is to be efficiently directed at long-term ecosystem restoration, a decision-making body should see that binding priorities are set, and funding criteria are adhered to.

Congress should also ensure that the priorities and decisions of that council are informed by input from a citizens advisory council that represents diverse stakeholders, and that restoration decisions are rooted in sound science.

While coastal restoration is critical, we must also devote greater attention to the marine environment. Scientists have emerged from this incident with more precise questions to investigate, as well as a better sense of the monitoring needs in the Gulf of Mexico which,

because of its multiple uses and economic value, should be a national priority.

The Commission recommends that, as part of management and restoration efforts, greater attention should be given to new tools for managing ocean resources that have the potential to improve overall efficiency and reduce conflicts among ocean users.

This country's need for oil will continue for the foreseeable future. The simple truth is that the bulk of new finds are offshore and in the deep water of the Gulf. We simply cannot walk away from these resources, even as we remain cognizant of the very real risk. And because we know that drilling will continue in the Gulf, it is vital that we take this opportunity to invest in this valuable ecosystem, and undo past damage, and improve its resiliency.

Mr. Chairman, thank you very much.

Mr. LOBIONDO. Thank you, Mr. Garcia. We are now going to go to Admiral Thad Allen. And, Admiral Allen, I want to take the opportunity to publicly thank you for your service to our country.

Very few people in our Nation's history have been called upon to do what you have been called upon to do: one of the largest disasters in the form of a hurricane with Katrina that you were called in to, to oversee putting the pieces back together, and got extremely high marks across the board; commandant of the Coast Guard at a very critical time, when the Coast Guard needed exceptional leadership, and you went above and beyond the call with that; and then certainly the issue that we're here with today, one of the disasters that our Nation could never imagine it would deal with, and you were asked and you responded to serve your country.

We owe you a great debt of gratitude, and we thank you for being here today.

Admiral ALLEN. Thank you very much, Mr. Chairman. And Chairman Gibbs, Ranking Member Larsen, Ranking Member Bishop, thanks for having me here today, and thanks for the opportunity to speak.

I have a longer statement for the record, and I will limit my remarks here this morning.

A couple of caveats before I begin, if I could. As the subcommittee is aware, I am no longer in public service, having retired from the Coast Guard on 1 July 2011, and having departed government service as a senior executive on 1 October. Accordingly, my association with spill response and recovery activities, current legislation and regulatory reviews, and policy discussions regarding offshore oil and gas development has been limited to information pretty much contained in the public realm.

I have been assisted by the Coast Guard in information that has been held regarding my duties as a national incident commander, but that assistance has been guided by the Anti-Lobbying Act, and has been complied with fully.

I am currently employed as a part-time senior fellow at Rand Corporation, and am teaching at George Washington University. In my capacity here today I am representing myself only, and none of those entities.

I have reviewed the findings of the Commission. I commend the Commission for the detailed work and their rigor by which they went about their business. I would say that there are a number of

other inquiries, as was noted by Ranking Member Rahall earlier on, that are in progress, including the joint investigation by the Department of Interior and the Coast Guard, and other inquiries being done by the Department of Justice.

I realize there will be attention between wanting to act on what the Commission has reported, but I think there is information that will be developed in those inquiries that somehow should be taken into consideration, even if there are two phases associated with this. And I would commend to both committees it is my personal recommendation that the subcommittees take advantage of these additional investigative efforts to be included in any legislation that may be considered, going forward.

For the purposes of my testimony here today I would like to focus on eight areas. There will be a Federal on-scene commander's report that will be coming out, as well. I am trying to focus on issues that were related to my responsibilities as national incident commander, which only comes about when there is a spill of national significance, and where we need to focus, moving forward, to make sure that we have an effective way to do that, if it's needed in the future.

The first is oil spill governance and the role of the national response team. Throughout the entire response, even before I assume my duties as a national incident commander, there was significant misunderstanding about what the national contingency plan is and what it does. A lot of that was juxtaposed against the statutory underpinnings of the Stafford Act, and what is done pursuant to an emergency declaration, especially in relation to state and local governments and their authorities and jurisdictions.

I think we need to have an open, frank conversation, moving forward, about what that means. And in the future, I think it's undeniable that we will have to have greater participation at the state and local level regarding our area contingency planning process, and our oil spill exercising process.

Spills of national significance in the national incident command. I believe, going forward, we need to consider having a presidential declaration when these things are occurring. And then, subsequent to that declaration, a number of things that could kick in that would be automatic authorities would not have to be sought during the actual event, itself. And these would be things like giving an authority the jurisdiction to act under the Clean Water Act and the national incident commander, the authority to reduce stand-by requirements for response equipment elsewhere in the country, and make that available, should we need it in some other part of the country.

There has already been some comments made about oil spill preparedness and research and development. Members, I can tell you, as the national incident commander, the very worst time to do oil spill R&D is in the middle of an oil spill.

And the atrophy of the R&D system following the passage of the Oil Pollution Act of 1990 and the inter-agency forum that was set up to do that is something we really need to seriously look at, and I highly commend the recommendations to establish a recurring stream of fund, and to make sure we have a robust search—I mean rescue—sorry, research and development program, moving forward.

We did not make consequential progress beyond burning, skimming, and dispersant use from the legislation that was passed after the Exxon Valdez.

There has been talk about the oil spill liability trust fund. Obviously, we have to take a look at the overall limit, what could be funded out of the oil spill liability trust fund, which currently stands at $1 billion. That needs to be seriously looked at, because there is a limiting factor on what the government could do if there was no responsible party that had the deep pockets that BP did.

Inter-agency coordination was key. My goal, as the national incident commander, was to create unity of effort. I think we need to seriously look at the role of the national response team, moving forward, and how they are employed. We established an inter-agency solutions group at the national incident command to handle unique challenges that were presented to us, like the flow rate problem. I think, in the future, that needs to be institutionalized in the national response team, and made part of the national contingency plan doctrine, moving forward.

Regarding the international offers of assistance, as was previously stated, we accepted every reasonable offer of assistance from foreign countries. And regarding the application of the Jones Act, there was no impact of the Jones Act on this response. There were seven waivers that were requested for foreign vessels that were never utilized, and those waivers were requested in the event that heavy weather would require us to bring those foreign flag vessels inside state waters. That was done as a contingency, but never utilized. So the Jones Act, as was stated, was not a factor.

Two final issues. One, air space coordination. We took a lesson learned from Haiti when we took control of the air space to control the landing slots. Partially through the response, we took control of the air space in the Gulf and it substantially improved our performance. Had I to do it over again, I would have done that on the first day.

And I would be glad to answer any questions you may have for me regarding the implication of these lessons for future operations in the Arctic. And I thank the chairman for inviting me here today. Thank you.

Mr. LOBIONDO. Thank you, Admiral Allen. I am going to start off by yielding my time to Mr. Young.

Mr. YOUNG. Thank you, Mr. Chairman. I thank the panel. I especially thank the admiral.

In the aftermath of—the Deepwater Horizon spill response was purely inadequate. But I say it was also inadequate with the Exxon Valdez spill, and we learned from that spill. I am not real excited about the Commission's recommendations. And I do thank you, Admiral, for saying maybe we ought to look at the rest of it, because it doesn't give us the answer to why the explosion occurred, the Deepwater Horizon.

And I think that's what we ought to address, what human factors were involved, and was there a mechanical, was there a criminal action. And until we find that out, I don't believe we should rush into write any legislation.

Actually, what we came—after the Valdez it was for harbors. We had no protection for harbors until we had Exxon Valdez. It worked. But it wasn't good in the deepwater area.

BioMar says they're going to require response capability of 400 percent of worst case scenario discharge, yet they're asked how they are going to insure it, the plan to actually meet that goal, and they say, "That's not our job. We're not boat people."

And then, the Coast Guard—all due respect, Admiral, you're no longer with them—says, "That's not our job. Our job is not to say how much oil gets picked up, or how it gets picked up. Our job is to ensure that whatever method is employed is safe."

As you can see, there is a gap, a regulatory gap. And, as a result, the industry is left to police itself, the very thing that every report has concluded is a major part of the problem of Deepwater Horizon. Some are proposing to have the American Bureau of Shipping fill that gap. ABS already does work for both agencies—as you know, Admiral—and it has expertise in evaluating the specifications and maintenance of the equipment and plan.

What would you think about the ABS taking over that program? Either one or all of you. I don't care. Admiral?

Admiral ALLEN. Well, I'll take a stab at that. First of all, I think it's clear and unequivocal there needs to be third-party inspection of drilling systems. We shouldn't be left to industry standards. And that can be done by a variety of institutions. ABS does have a process whereby they drill that—I'm sorry, inspect that—and then review the plans.

Several components of these drilling systems have to be the subject, in my view, of third-party investigations: the preventers, blue and yellow control pods, and the choke and the kill lines, at a minimum. And I think this is something that needs to be done.

Mr. YOUNG. But right now it's not being done. So we could do that. We could set that up, where there is a——

Admiral ALLEN. Right now there is a——

Mr. YOUNG. Frankly, Admiral, I don't want the government to do it right now.

Admiral ALLEN. Right now there is a certification industry standard, sir.

Mr. YOUNG. Let's get somebody—you guys agree with that?

Mr. BOESCH. Yes, that's consistent with our recommendations.

Mr. YOUNG. OK, I'm glad to hear that, because that's one of our biggest problems.

Last summer's spill in the Gulf of Mexico reminded us of the risks associated—there are risks, by the way. This is the first blowout we had in deep water, I believe—42,000 wells drilled in shallow wells and how many drilled in deep water? This is the first blowout we had. It was unexpected. And we did not have the capability to do it.

But there was—in Mexico there was a number of vessels nearby to assist in recovery and clean-up immediately. What steps has the industry taken to mitigate the risks and effects of a spill in rural areas of the Arctic? See, I'm from the Arctic, guys. I want to drill in the Arctic. And your report is not too enthusiastic on that.

And I heard some comments of the admiral—I'm not enthusiastic about that, either—like, "We can't do it until we have proper ice

breakers, et cetera." And, by the way, Admiral, we're not going to get the ice breakers out of this Congress. I helped build those three, and we got two in dry dock right now are not working, and you're not going to get any more ice breakers. We do it, we can have them leased, as they should be, at a cheaper rate—I've been pushing that for a long time—than buying them, because we're not going to get the money for it. And we do need them in the Arctic.

But what steps have been taken by the industry, like Shell, et cetera, in the Arctic that actually—it's different than the Gulf—to work on it? Is there any steps that you know of?

Mr. GARCIA. Yes, Congressman Young. We do address the Arctic in the report, and we do indicate in our report that drilling can be done in the Arctic. We are suggesting that there are certain steps that should obviously be taken before drilling commences. You've noted most of them, which is that industry should demonstrate it has the capacity to respond and to contain a blow-out.

There are clear differences in the Arctic from the Gulf. It's shallower water, it's much deeper in the Gulf. But we were concerned about the government's and the industry's ability to respond. If they can show that they have the capability of adequately overseeing and responding to a spill, then drilling may commence.

Mr. YOUNG. But my problem is it is shallower. It's low pressure, is that correct?

Mr. GARCIA. Yes.

Mr. YOUNG. So we—the chance of blow-outs are minimum, and—because I don't believe we have ever had one in the Arctic, anywhere. Now, maybe over—now I have Iceland drilling now, I have China drilling now, I've got—I believe Russia is drilling now. Greenland is drilling now. Everybody is drilling in the Arctic but us.

And I want to suggest respectfully that—Mr. Chairman, if we keep delaying this action, we're doing this country a disservice, because they have done the job. As far as I can tell—and I've reviewed their reports—now, we don't have the ice breaker. We've got the Healy, which is on its last legs.

We need to figure out what can be done in the Arctic. It may be easier to clean up in the Arctic if there was a spill, because it's a much colder climate. And I don't want to keep saying no, no, no, because it's not failsafe. You said that, Mr. Garcia.

Mr. GARCIA. Yes.

Mr. YOUNG. Is there——

Mr. GARCIA. Sir——

Mr. YOUNG. Yes, go ahead.

Mr. GARCIA. I agree. There are clear differences. But also, as you know, in the Arctic there are challenges. The remoteness of certain areas, the ability to stage equipment and personnel, as well as the fact that—weather factors, ice, darkness throughout much of the year. So all of that has to be factored in. But nothing in our report has suggested that we should not be drilling in the Arctic. We are only saying that the lessons that we learned from this incident should be incorporated into any decisions to move forward.

I would also—if I could just add one other thing, the report—and I just commend it to the record and to your reading—but the report does address the root causes and the immediate causes of the blow-

out, and our chief counsel is also coming out with a report next week that will be highly detailed, going through each of the factors that caused the blow-out of the Macondo well.

Mr. YOUNG. Well, that may be, but I know I've checked the background of every one of the Commission, and their support in the past, and I want you to know that. And I am —some got critical. We had two people before the Natural Resources Committee, and I did chew on them a little bit. I haven't chewed on you.

Mr. GARCIA. And I appreciate that.

Mr. YOUNG. I might. I might. I just think there is a pre-thinking process, and—for offshore drilling.

And, gentlemen, we have a problem in this country. As you mentioned, we're not going to get off this kick for oil. There is no way for a long, long period of time.

And I have—as you know, you talk about an economical disaster in the Gulf. Really, it's because of the moratorium. That's been the biggest hardship, other than the oil. The lack of work. It's been lost—we're buying that oil from Venezuela. Now all the ships that I know of are going down to Brazil. And we, as a Nation, have to do where the oil is. We have to do it and do it correctly.

Thank you, Mr. Chairman. I appreciate it.

Mr. LOBIONDO. Thank you, Mr. Young. Mr. Larsen.

Mr. LARSEN. Thank you, Mr. Chairman. Just like to recommend that we get Representative Young maybe some bear meat he can chew on, and leave the folks alone that are testifying.

Mr. YOUNG. You know me.

[Laughter.]

Mr. LARSEN. I want to thank the folks for testifying. I also want to be sure I thank the employees at the BP refinery in Cherry Point Ferndale, the Coast Guard and Federal employees out of the Coast Guard from district 13, and those from EPA, the Federal employees from EPA region 10 out of Seattle for being willing to take an assignment to go down to the Gulf and help with response and clean-up during the response over the summer, before we get started. Working side by side and hand in hand, everybody pulling on the same oar last summer.

I have some questions with regards to something in my opening statement, and that's about the costs and the budget. And first off, for Admiral Allen, you know, this Congress is exploring some fairly deep cuts to discretionary spending. Even assuming that the Coast Guard funding remains constant, there are recommended investments that would take funds from other Coast Guard accounts.

In your—based on your experience with the Coast Guard, would that allow the Coast Guard to still adequately perform its existing missions, if we were to follow through on some of the things we're looking at right now in congress?

Admiral ALLEN. Well, sir, as you rightly pointed out, I'm not the commandant right now. So any comments I had would be reflective on the experience I had in the last couple budget years moving forward. And I would just say, as a general statement, you get faced with a choice in any constrained budget environment about what you're going to do with capital investment and replacing your aging assets. If you don't do that, you create a hollow force that collapses on itself.

I made some very difficult decisions, as commandant, to make sure I sustained, to the extent it was possible, acquisition funding to keep building our cutters, because we need those desperately. If you're going to do that in a constrained budget environment, then you're going to have to look at your operating accounts as an offset to do that.

What is needed is a frank, open conversation about the inherent opportunity costs of doing that. I talked last year in the budget development inside the administration about risks associated operations to be able to make capital investment. There is nothing wrong with talking about that, you just need to have a frank, open conversation and be clear about what it is you're trading off.

But I think we have a real hesitance and reluctance to talk about those things, and when they're actual realties that we have to deal with in the budget. So my decisions, as it related to budget, reflected my need to build Coast Guard cutters. And if that was at the expense of some operating expenses, then you take a short-term position when you're going to have to manage with fewer resources to make sure you ensure the long-term viability of the service.

Mr. LARSEN. Thanks. And I know that current Admiral Papp has made some comments recently about the budget environment in the Coast Guard currently, and about what might have to occur there at the Coast Guard coming in to the future.

For Mr. Garcia and Mr. Boesch, did—does the report—did you look at the amount of the investments that would be needed to implement your recommendations, but for the 80 percent of the——

Mr. BOESCH. Our staff has done a general appraisal. We're obviously not in a position to cost out each of the activities that we recommend, in terms of improving the review and regulatory capacity in the Department of the Interior, including the studies and the like.

But in a general estimation, just to put it in a context that we can understand, I think, our estimate is that it might induce a cost of somewhere between 7 and 12 cents on a barrel of oil that's produced. And you put it into terms of a gallon of gasoline, it's less than a quarter of a cent per gallon of gasoline.

And we recommended that these fees not be recovered from the general taxpayers, who are the landowners in this case and are being paid by the oil companies for the right of exploiting the land and the resources, but by the industry itself, much as the Federal Communications Commission is funded by that industry.

So, we think that this can be done in a cost-effective way that would actually increase the efficiency of regulation. Right now there are not enough folks to review the permits under these new standards. But also, do it in a way that doesn't affect the Federal tax situation and our own fiscal health in this Nation, but also a very modest cost, which is easily affordable for the industry.

Mr. LARSEN. Admiral Allen, I only have a few seconds. I will ask the question with the chairman's indulgence, and perhaps have an answer.

In your report and testimony, you discuss the initial difficulties of working with certain—well, with state and local officials, perhaps because of the difference between how people approach a nat-

ural disaster versus a disaster like we see in the Gulf. Did you have specific recommendations that you think we ought to be looking at, with regards to the Stafford Act, or any other legislation?

Admiral ALLEN. I do. First of all, the area of contingency plans that identify sensitive areas and how they will be protected have been developed over the last 20 years, after the revisions made from the Oil Pollution Act of 1990. I think it's absolutely essential that we get state and local governments more involved in that. Heretofore, those agreements have been made with the states representing the counties or the parishes.

It was clear during this bill that the determinations that were made and the priorities established in that planning process were not understood by the local leaders in the areas that were impacted. I can see no other way of moving forward to solve that problem than to bring them in to the process, and make sure they are consulted and have a role in it.

Mr. LARSEN. OK. Thank you. Thank you, Mr. Chairman.

Mr. LOBIONDO. OK, thank you. Mr. Gibbs.

Mr. GIBBS. Thank you, Mr. Chairman. First of all, I wanted to thank Admiral Allen for his service to our country, and appreciation of all he's done. Your eight points for response coordination, I think that's something we should look at.

My first question that I wanted to address to the other two witnesses, in your oral testimony you talked a lot about ecosystem restoration. And obviously, that's important. But I noticed in your oral testimony you didn't mention what was the root cause of the disaster. Now, in your written report, you do. The Commission talks about several key human errors, engineering mistakes, and management failures.

Specifically, there was flaw design in the cement to seal the bottom of the well. A negative pressure test was conducted that identified the cementing was a failure. Flawed procedures in securing the well with the mud, and getting the mud out of the well door—apparent inattention by key initial signals for an impending blowout. And so it was obviously human errors; management and engineering errors. You say that in your report.

Now, where I come from, we in Ohio don't have deepwater drilling. But I know in instances—my experience in the Ohio legislature—we have had problems. A lot of that was similar problems, somebody didn't do the right thing. And what's really been bothering me is when you think of all the challenges in deepwater drilling and the technical challenges and all that, and the amount of investment and all, compared to just drilling a normal well in Ohio.

What is the function of the regulatory person? In one part of the report it talks about creating a new regulatory structure. Before I would want to support that, I need to know, on a deal like that, there is no regulatory person on these rigs, or—what's the oversight? Can you expound on that a little bit?

Mr. GARCIA. Sure. The—thank you for the question, Congressman.

One of the findings of the Commission was that there was a failure of oversight. There was a serious failure. You had an agency that had an inherent conflict. Individuals who were responsible for overseeing safety were also involved in the collection of royalties

and making leasing decisions. We've suggested that we need to separate those functions, and the Department of Interior is moving in that direction. We think that they should probably go much further. So we've suggested removing it from the political process within the Interior Department.

Inspectors from MMS did go out and visit rigs. But clearly, the oversight was inadequate. And we have made a number of recommendations on how the government can be more effective, as well as how the industry can be more effective in monitoring its activities and policing itself, rather than having the government be solely responsible for that.

Mr. GIBBS. OK. So I see independent agency—that's your response for that, because you think for regulation——

Mr. GARCIA. Well, independent agency within the new BOEMRE, however they pronounce their new acronym.

But also we have suggested that the industry follow the example of the nuclear industry, and set up an industry watchdog that would police its members, would set standards of excellence, so that an outlier would not be able to impact the entire industry, as happened in this case.

Mr. GIBBS. OK. And my last question, Mr. Chairman, dealing with the Commission's reasons why state and local authorities were not more involved in spill planning. And I think that would probably go to all three, with the recommendations on how the Coast Guard can be more effective working with local authorities for a response.

Admiral ALLEN. I don't think there is any disagreement between the Commission's finding and at least where I stand as the national incident commander, that if you're going to have an effective local response, the local political leaders can't feel they're disenfranchised and didn't have a say in the priority.

There was an assumption made that when we approved the area contingency plans with the state representatives, that they reflected the representation of the state and the local governments. That was not the case, especially in Louisiana. And I think, moving forward, there has to be visibility of what's going to be protected, and how it will be protected, the tactics, including exercises in preparedness, that must involve local governments.

Mr. GARCIA. I would just add that we heard a lot about this. I traveled throughout the Gulf, as did Dr. Boesch. Clearly, a better job needs to be done of bringing elected state and local officials into the planning process, so they understand what's happening. And so that was one of the disconnects in this incident.

Mr. GIBBS. Thank you.

Mr. LOBIONDO. Thank you. Mr. Bishop.

Mr. BISHOP. Thank you very much, Mr. Chairman, and thank you all for your testimony. And, Admiral Allen, thank you for your service. It's nice to see you again.

I want to focus in on the issue of financial liability, because I believe this is an area that the Deepwater Horizon disaster clearly demonstrates where our current law is insufficient. Current liability limits for deepwater drilling are—the responsible parties responsible for the cost of the clean-up and the removal, 100 percent of that, and then for $75 million of other costs. That's the cap.

Now, thankfully, and responsibly, BP has indicated that they will not be constrained by that cap.

The legislation that we passed last summer, the CLEAR Act, had completely eliminated a cap. There was no cap that the responsible party would be responsible for all costs associated with the spill. The Commission has recommended an increase in the liability cap, but without specifying it.

So, my question is, how exposed are we? What are the consequences of our continued failure not to have passed legislation that addresses just that one narrow issue? Dr. Boesch?

Mr. BOESCH. Well, there is pretty substantial exposure, because if an incident like this, or even much less than this, occurred, and the party didn't have the deep pockets of BP, and did make the commitments that BP has, we would have been in a difficult situation.

The Commission recommended raising the cap. The need to do this is clear from what had gone on. We did not recommend unlimited liability, nor a specific amount, because this requires more analysis than we were able to do within the remit that we had: specifically, the issues of insurance, and how that insurance market would work; and secondly, as Mr. Landry had pointed out, there are some smaller companies that are involved in this industry, and we didn't want to, by making a recommendation without further analysis, exclude the participation of those companies in this industry.

Mr. BISHOP. Understood. Admiral Allen, you have indicated—I don't want to put words in your mouth, but I believe you have indicated that we should take somewhat of a go-slow approach with respect to legislation, wait until we have all of the reports in hand, and so on.

But in this area of liability cap, isn't it fair to conclude that we already know that the current liability cap is insufficient, given the enormity of the tragedy in the Gulf, and that at least that one area is an area that really demands that we move much more quickly?

Admiral ALLEN. I think you can separate out what we know to a certainty needs to be fixed right now, and what we need to know from the detailed investigations and forensics that are going on right now with the joint investigative team. I don't know how that translates to the agenda that you have regarding legislation, but there obviously is attention here. I think we just need to recognize that it exists, and what is the best way to move forward.

I don't think there is any issue regarding the liability cap and the total overall amount that could be spent on a response. I think the question is finding that right amount and the balance between the impact on the insurance industry and the small operators in the Gulf that Mr. Landry represents, and others. I think there needs to be some serious research done in that regard, and what the impacts would be on that liability.

We did have a case in the Delaware River several years ago in LoBiondo's area, where we had a vessel ran against an object in Delaware Bay. We had a significant spill. They reached the limits of liability, and basically the company walked and the government was insured. So, I think we need to go back and take a look and understand what's going on.

And I would make one other comment. Under the Oil Pollution Act of 1990 we required certificates of financial responsibility for vessels that are entering the U.S. waters carrying crude oil. There was a lot of talk at the time that that might have a significant negative impact on the tanker business. It did not. They adjusted, and we moved forward.

Mr. BISHOP. Thank you. I—just to put a—you know, make the point even more pronounced, Mr. Garcia, your testimony was that fully restoring the Gulf will require, over the next 30 years, at least an expenditure of $15 billion to $20 billion, if we have the existing cap in place, and the responsible party is not being as responsible as BP is doing. That amount would very quickly dwarf the amount of money available in the oil spill liability trust fund, and so either the work would remain undone or it would revert to the taxpayers to take on that obligation. Is that right?

Mr. GARCIA. Well, actually, what we're recommending is that the penalties under the Clean Water Act, which are separate from the natural resource damages—and those penalties could be substantial; they're based on the amount of oil that is spilled into the water per day——

Mr. BISHOP. And those remain to be calculated, correct?

Mr. GARCIA. Those remain to be calculated. But whatever amount should be directed—80 percent should be directed to the Gulf. Congress will need to take action to allow that to happen. Because if you don't, those funds would then revert to the treasury.

And so, what we're suggesting is that Congress authorize that 80 percent of the Clean Water Act penalties from this incident be directed to the Gulf for restoration.

Mr. BISHOP. A, that would require legislation.

Mr. GARCIA. Yes.

Mr. BISHOP. And—thank you, Mr. Chairman. I will yield back.

Mr. LOBIONDO. Thank you, Mr. Bishop. Mr. Cravaack?

Mr. CRAVAACK. Thank you, Mr. Chairman. One of the things I'm concerned about is chain of command failure and breakdown. One of the things that I was concerned about when I was reading about this up in Minnesota, one of the things—I saw a governor enlisting 16 barges, trying to save his shoreline—I will be gentle—and they were shut down by the Coast Guard.

Admiral, I would like to know who made that command? Who shut those barges down?

Admiral ALLEN. I'm not sure I know the specific incident, but it might have to do with the barges that were used as a protection——

Mr. CRAVAACK. Skimmers.

Admiral ALLEN [continuing]. And harbors that were moved with incoming predicted weather associated with a potential hurricane.

The Coast Guard has overriding jurisdiction regarding the safety of Federal waterways, and this is separate from oil spill responsibilities. With hurricanes approaching, decisions had to be made about——

Mr. CRAVAACK. This wasn't for hurricanes, sir. It was because they didn't have fire extinguishers on board. Or they were checking—not they didn't have them.

Admiral ALLEN. Oh, I understand now. I was trying to figure out which barges you were talking about.

Mr. CRAVAACK. OK.

Admiral ALLEN. What the state did is they brought in barges, put vacuum trucks on the barges, and took the barges out, and were going to try and skim oil with it. We were trying to make sure that when they went out there, there wasn't a maritime accident associated with the fact that you don't normally put skimming trucks on barges and use that as an oil spill response capability.

The company operators were completely supportive of making sure the inspections were done correctly and they were safe to operate before they did that. The state did not understand why we were holding them up, but there was an overriding safety need on those particular barges that you're talking about, sir.

Mr. CRAVAACK. Would you agree, sir, this was an extremist situation the governor was trying to work in?

Admiral ALLEN. I believe that you don't complicate a problem by putting people's lives at risk in the middle of the response, sir.

Mr. CRAVAACK. Would you agree it was an extremist situation, sir?

Admiral ALLEN. It was an extremist situation, but I would not put people's lives at risk, and that's what we were looking at, sir.

Mr. CRAVAACK. OK. In the—BP Deepwater Horizon oil spill was the first spill designated as a spill of national significance. Admiral Allen was the first national incident commander. The national contingency plan does little to define the roles of authority of the national incident commander, or the additional resources and procedures necessary to mitigate a spill of national significance.

What changes—and I can ask all of you—what changes to the national contingency plan are necessary to better define the authority and chain of command responsibilities during the spill of national significance?

Mr. BOESCH. We didn't get into the specifics of all of that, other than to indicate that, obviously, there was not sufficient forethought and definition of the complexities of dealing with a spill of national significance.

Admiral Allen will note it in his written testimony that there had been plans for an exercise that would engage the government on a spill of national significance that took place just a month before the incident. And there was not an adequate involvement of the appropriate officers at the right level in government to get learning from that experience.

So, it's not only the question of having the criteria that would move it to that level of response, but also making sure that the government is evergreen, is ready to actually exercise and perform under those capacities in an incident which could occur once every decade or so.

Mr. GARCIA. As I mentioned a moment ago, one of the big problems was the failure to involve in the planning process state and elected officials who clearly need to be involved in and understand the procedure when you have a spill of national significance. And we have recommended that steps be taken to make sure that all levels of government are familiar with it.

I would say, though, that the professional career oil spill experts and responders at both state and Federal levels were fully trained in responding. It's just that many of them had to be moved aside, because this thing was so big that elected state and local officials understandably wanted to be and had to be involved.

Mr. CRAVAACK. I understand. One of the—I'm sorry, sir. Go ahead.

Admiral ALLEN. I think you were specifically asking about the national incident commander and the authorities that might be needed. Currently, the protocol calls that the commandant would designate a national incident commander. And it was previously understood that would be one of our two or three-star area commanders, either Atlantic or Pacific. We were in the process of a succession change in the Coast Guard, and I was designated.

First of all, I think the national incident commander should be presidentially designated. I think there ought to be a standing delegation of clean water authorities, once that designation is made, and that that commander should have the authority to redirect assets nationally, and drop stand-by requirements to move response equipment where it's needed, sir.

Mr. CRAVAACK. Thank you, sir. And I am out of time, sir. I yield back.

Mr. LOBIONDO. Thank you. Mr. Cohen.

Mr. COHEN. Thank you, Mr. Chairman. Let me ask a question here. Admiral Allen, I guess, might be the appropriate party.

The vessel was flagged by—under rules in the Marshall Islands, I guess, was it—the Marshall Islands. And they have different standards than we have. Do you believe that that was—that we should have all of these vessels under United States safety regulations, and flagged by the United States standards?

Admiral ALLEN. Sir, I would submit to you there is an effect that we need to achieve, and it is this. Right now, for those vessels to operate in our waters, they have to be compliant with international standards that have been promulgated through the International Maritime Organization. To do that, the Coast Guard does a verification of whether or not the country of registry has met those international standards, and issues what's called a certificate of compliance, where we would normally, for a U.S. flag ship, issue a certificate of inspection.

I would submit that we need to take a look at the protocol that we use for cruise ships that are foreign flagged that carry a large number of U.S. passengers, and we do something called a control verification exam, which actually involves a physical inspection. There are two ways going forward. You can have the discussion whether they should be U.S. flagged or not, but they certainly should be held to a higher standard, and inspected. And I would say that the current regime we use to insure the safety of cruise ships is a good model to use for offshore drilling units.

Mr. COHEN. The Marshall Islands was the standards, and I think they had somebody perform the safety standards that was from that area, and it was like a four to eight-hour examination, if I'm correct. If I'm wrong, correct my premise. But is that accurate? That was——

Admiral ALLEN. I'm not sure what you're referring to, sir. But what we would do with a cruise ship, there would be an extensive inspection while that ship was being built in the shipyard. There would be initial exam when it entered into service, and there would be quarterly inspections.

I have taken a part in those myself, as a field commander. I think that type of regime should be applied to foreign flag vessels operating in our waters, sir.

Mr. COHEN. You mentioned, I think in response to Mr. Young's questions—and it might have been Mr. Garcia, I'm not sure, but somebody—that the government should not be the one that determines these standards. Is that what I understood? What was it?

Mr. Garcia, it was something Mr. Young asked about, and he didn't think the government should be the party, there should be a third party doing this—I think it was the safety inspections, and I think you——

Admiral ALLEN. I think what he was referring to was certification of drilling systems. Right now, let's take a blow-out preventer. That is built by industry to certain standards that are issued by the American Petroleum Institute, and that constitutes the level of due diligence that's applied to the construction and operation.

I think what we're saying is, as with vessel inspection, an independent third party such as American Bureau of Shipping or other classification societies, should be the ones that come in and verify especially blow-out preventers, killing choke lines, and the blue and yellow pods on these operations.

Mr. COHEN. All right, that's—thank you for refreshing my recollection.

But let me ask you this. Do you think that—are there systems that make sure that there is not influences there that would make those standards more to the industry's liking, rather than maybe the public's needs?

And government—it's a bad rap, and government can and have proper regulations and proper oversight. That's one of the issues in this Congress, is about regulation and regulation hurting the government, or hurting business. And yet there is a lot of regulations here that need to be adopted and implemented.

And these might cost—I don't know, what—there is something about the Raines Act, $100 million, and whether or not this would be determined as $100 million. I imagine it would. And if you couldn't get the Senate to go along with what the House had in some regulation on standards, we would have no standards.

Admiral ALLEN. Yes, sir. If I could make a comment, there is an issue that was raised in the Commission report. It hasn't been alluded to in this hearing yet today, but it probably needs to be discussed.

If you look at the rest of the world and how they manage oil exploration off their coast, they do it through something called a safety case regime, where there is a risk assessment conducted. And as part of the regulatory process, the companies have to produce a plan on how they will mitigate risk and manage the overall process through a safety management system. That is going to be the subject, I think, of some pretty detailed discussion.

My personal view is you probably need a hybrid system, where there is some command and control issues related to inspection of drilling systems, and a way to assess risk and have them present a plan on how they would manage risk. But the commissioners may want to comment on that.

Mr. GARCIA. And, in fact, that is exactly what we have recommended, that there be a hybrid system where—we need to obviously change and strengthen the regulations——

Mr. COHEN. Let me stop you for one minute, because I've got 12 seconds before a red light goes off, and then you can go on.

If we had some—passed this Raines Act, and you had regulations from the government that couldn't go into effect unless the House and Senate approved them, you could have a disastrous oil spill, because we don't have regulations. And how much would that cost business in the Gulf: fisheries, tourism, et cetera? Would the lack of ability to promulgate and enforce rules and regulations cost business a lot of money?

Mr. GARCIA. Yes, sir. It would cost business a lot of money.

Mr. COHEN. Great answer.

Mr. GARCIA. If I could just answer one of your other points, we did recommend a hybrid system. The regulations that are governing the oversight of the offshore industry by the Department of the Interior need to be strengthened. They need to be brought into the 21st century, frankly. We should be setting the standard for the world.

But we also suggested that we need to follow the lead of the United Kingdom and Norway, who had their own catastrophic events. And, following those events, they instituted a system that is called a safety case approach. And what that requires is that the operator and the driller must demonstrate on a site-specific basis that they have put into place all of the safeguards and measures necessary to properly drill in a particular place.

And then, third, we recommended that the industry—it's in the industry's interests that it should set up its own watchdog that would be of and by and for the industry, to provide oversight, similar to what the nuclear industry has done, and which has been very effective.

Mr. COHEN. Thank you, sir. Thank you, Mr. Chairman, and thank you——

Mr. LOBIONDO. Thank you. We're going to try to be very accommodating in this committee. But I think it's important in the initial session—Mr. Cohen, you pointed out a good point. You were in your last couple of sessions, I wasn't going to cut off the witnesses. But that's really not fair to the folks who don't squeeze in a question right at the last moment.

And if it's really important, we will go to a second round. We won't cut you off if you have your questions. But I would just ask the Members to keep that in mind. Mr. Coble?

Mr. COBLE. Thank you, Mr. Chairman. Mr. Chairman, I've got a Judiciary Committee hearing going on simultaneously, so I missed some of the testimony. But I appreciate the contribution that the panel has made.

Mr. Garcia, Mr. Boesch, let me put this question to you. The President's moratorium on oil and gas drilling was technically lift-

ed mid-October, I think. But I'm told that there have been very few permits granted.

Let me put to you all a three-part question. Did the Commission conclude that deepwater energy exploitation can be done safely? Did the Commission conclude that deepwater energy exploitation should continue to ensure our energy independence and national security? And, finally, how critical is offshore oil and gas drilling industry to the economy in the Gulf?

Mr. BOESCH. I think the answer to the first two questions is yes. The first answer is yes, it can be done safely, and it is important to our energy supply. And, finally, it is very important to the economy of the northern Gulf of Mexico.

We did not partake in the moratorium. We didn't act on it. In fact, two of our co-chairs spoke that it was ill-advised to have a blanket moratorium. As I understand, though, the state of play is that in deepwater drilling, one requirement, which is actually in our recommendations and the Secretary of Interior is applying now, is the need to demonstrate, certify, that one has the capacity to control a blow-out if it occurs.

I understand, from a comment made just the day before yesterday by the head of exploration and development of Chevron, that they're just days away of coming to that agreement, and on the basis of his comments, we anticipate that these permits for deepwater drilling would be granted for those companies that have actually met the standard pretty soon.

Mr. COBLE. I thank you, sir. Admiral, let me put a three-part question to you, as well, but playing Monday morning quarterback.

Do you believe the Department of Homeland Security's senior leadership was fully aware of how oil spill response is supposed to function under the national contingency plan? And I am told, Admiral, that some of the senior leadership at DHS in some cases failed to adhere to the plan. And did their misunderstandings of the process affect oil spill response efforts?

Admiral ALLEN. Sir, let me start with a contextual comment. The Oil Pollution Act of 1990 and the national contingency plan predate the development of the Homeland Security Act, and the establishment of the Department of Homeland Security. The major incident command doctrine under which the Secretary operates is Homeland Security Presidential directive number five.

From the start, we have never been able to align, integrate, or deconflict the role of the Secretary of Homeland Security and incident management across the entire country with the specific doctrine that's called out in the national contingency plan.

The first impulse by political leaders is to go with what they understand and know. And, in this case, it is the role of the Secretary under HSPD 5. Since that was never deconflicted, there was never a determination of what supersedes and how they're integrated.

Now, we worked that out. But one of the recommendations I have made and continue to make is, going forward, the differences in the two regimes and the authorities and the accountability of senior leaders needs to be resolved, sir.

Mr. COBLE. I thank you, sir. I thank you, Mr. Chairman, and I yield back.

Mr. LOBIONDO. OK. Mr. Larsen, you have a unanimous consent request?

Mr. LARSEN. Mr. Chairman, I ask unanimous consent that the statement of Congresswoman Johnson be entered into the record.

Mr. LOBIONDO. Without objection, so ordered.

The gentleman from coastal Louisiana has some questions here.

Mr. LANDRY. Yes, sir. Thank you, Mr. Chairman. On a lighter side, Admiral Allen, your favorite parish president, Bill Nungesser, told me to tell you hello today.

[Laughter.]

Admiral ALLEN. I'm feeling the love.

Mr. LANDRY. I have three questions, and I would appreciate your keeping the answers as short as possible. They are very important.

A lot has been said about the Jones Act. And my question to you, Admiral Allen, is do you feel that the waiver provisions in the Jones Act provide sufficient flexibility during emergencies, currently?

Admiral ALLEN. Yes, they do.

Mr. LANDRY. OK, great. After reviewing the Commission's report—and this is for you, Admiral Allen, with you gentleman, certainly—after reviewing the Commission's report, and based upon my experience in listening to people back home who have worked, you know, 50-plus years in the oil and gas industry, it's apparent that there were regulations that were already in place that were being supervised by MMS that seemed to have been violated.

In comparison, I have not seen that there were any regulations that were under the purview of the Coast Guard that caused the accident. Would you agree with that?

Admiral ALLEN. Sir, that relates directly to my earlier statement, that we need to understand the results of the joint investigation team. If you think about it, what we had was a vessel that was attached by a riser pipe to a well. At the bottom of that riser pipe was a system that was regulated by the Department of Interior. At the top of that riser pipe was a vessel that was regulated by the Coast Guard.

Mr. LANDRY. Right.

Admiral ALLEN. There are issues with well control.

Mr. LANDRY. Right.

Admiral ALLEN. There were issues with the cementing job. There were issues with the gas that came up. Once the gas was released, then you have gas enveloping a vessel that was issued a certificate of compliance by the Coast Guard to see that—to ensure they complied with international standards.

So, what the joint investigative team is going to be doing is not only looking at the cause of the loss of control of the well, but, for instance, how did the gas that came up be brought into the intake systems, into the engine room and possibly—so you're looking at fire suppression systems and safety issues related to the vessel itself. So it's a much more complicated system, because you have a floating platform connected to a well, and there are jurisdictional issues at both ends of that.

And that's the reason I think we need to take a very, very close look at everything associated with it, including the performance of the fire suppression systems on the vessel, itself.

Mr. LANDRY. Well, I hope not to have to get to the fire suppression systems on a rig.

My only point to you all is that I have—it seems as though the inspections done by the Coast Guard out on the Gulf of Mexico are very, very sufficient, and MMS may have missed the boat on this, I guess you could say—and the recommendations to build additional bureaucracies within the same department that held oversight of MMS, which is now the BOEM.

So, I don't have a lot of confidence in BOEM. I've got a lot of confidence in the Coast Guard. I guess that's my point here.

The last question, very quickly, the motor vessel was on location at the time. And of course, this incident occurred in the spring, when water temperatures were certainly starting to warm up. But the Bankston—it's not required to be at that platform while it's drilling. There is no regulation that mandates that that vessel be there. If that vessel would not have been there, and this would have been in the winter time, and the men and women who had to jump off of that facility would have ended up in the water, do you believe we would have been able to recover all of those who did survive?

Admiral ALLEN. Sir, you're getting back to my original point. I think we need to look at the entire event, including the issue with the loss of life and the search and rescue——

Mr. LANDRY. If I may cut you—but, I mean, do you believe that? It's like a yes or no——

Admiral ALLEN. I think we need to do an assessment of whether the resources on the scene were capable of rescuing in all conditions. I think that's a legitimate point.

Mr. LANDRY. OK, OK. But wait, wait, wait. On September 2nd, the Mariner platform had an accident where 10 gentlemen ended up in the water, one of them without a life preserver. Again, in the summer. It took 10 hours—there was no stand-by vessel there—it took 10 hours before we recovered them.

My question to you is this. If that would have happened in the winter, would we have lost more—would all 10 of those men have survived?

Admiral ALLEN. It would depend on their adherence to procedures, their safety suits and the systems they're supposed to use, sir.

Mr. LANDRY. No—well, evidently——

Admiral ALLEN. There are systems in place that will protect them——

Mr. LANDRY. Well, evidently, one of the systems—one guy ended up in the water without a life preserver.

My question is that you would agree that they are—that they can be—that hypothermia can certainly affect them.

Admiral ALLEN. Yes, it can.

Mr. LANDRY. And ultimately lead to death.

Admiral ALLEN. Yes.

Mr. LANDRY. OK. Thank you.

Mr. LOBIONDO. OK. Mr. Farenthold.

Mr. FARENTHOLD. Thank you. Just, first off, a real quick follow-up from the question from the gentleman from the coast of Louisiana.

You indicated that you felt like the waiver provision of the Jones Act was adequate to deal with this situation. My understanding was the waivers were taking 10 days to get processed. You think 10 days is a reasonable enough time, in the event of a disaster like this blow-out, or something like Katrina?

Admiral ALLEN. Well, the waivers that were requested were stand-by waivers in the event we had to move these vessels due to heavy weather. So there wasn't an extremist or urgency situation attached to that.

I have been involved in other environmental responses in my career, where we needed timely waivers, and received them as part of an environmental response, sir.

Mr. FARENTHOLD. Great. I think one of the other points we talked about, both in Arctic drilling and the Gulf of Mexico is the United States isn't the only participant there, United States oil companies, and there is land out there that isn't regulated by the United States. In the Gulf of Mexico, you've obviously got drilling from the state oil company of Mexico. China is operating off the coast of Cuba. And what I see out of this report is a plethora of new regulations and taxes on the domestic oil company with no thought about what's going to happen in the event of an accident like this occurring on a foreign government-owned drilling platform or rig.

What contingencies do you gentlemen see there? And do you think maybe the focus might be on developing more—on developing better responses for anything that happens regardless, as opposed to putting our domestic oil companies at a competitive disadvantage?

Mr. GARCIA. Well, Congressman, certainly there is a challenge right now in international waters. You're right. The Gulf of Mexico is shared by several nations. And the Arctic has a number of nations whose companies are beginning to examine the possibility of drilling. And we need to address that.

If there were a blow-out by one of these other companies—and some of these companies are very safety-challenged—it would be a serious problem for us. And the Commission did, in its report, identify that as a problem. That's going to require a transnational solution, though.

We did recommend changes for U.S. industry. Again, we think that there are changes that can be done that would involve minimal cost, and would make this industry safer. The Commission's report was designed to get the industry back to work. And I think that, if you have read it, hopefully you would agree with that.

Mr. FARENTHOLD. I have—I will admit it was a big report, I was skimming during some of the opening statements, but have not read it cover to cover. I look forward to reviewing it thoroughly.

There was also a comment regarding fully restoring the Gulf. And I would be interested to know how that is defined. As you know, oil in the Gulf of Mexico is not strictly a result of manmade operations. Obviously, we have got a huge point source over a short period of time. But, I mean, fossil evidence back—and arts and crafts of the Karankawa Indians indicate there is an ecosystem in place to take care of that.

What do we define as fully restoring the Gulf, and what do we leave to Mother Nature to restore?

Mr. BOESCH. Sure. First of all, let me just, if I can, amend Terry's comment, but also reflect on Mr. Young's point about the oil and gas development taking place in many Arctic nations. We have some recommendations specifically for the Arctic, but also internationally, that it is in the U.S.'s interest to work with the international industry, but also the other nations, to develop common standards, both in terms of safety, as well as response.

And in the Arctic, I want to point you to the last part of Admiral Allen's written testimony, in which he says a really key part of that is the ratification of the Law of the Sea, the U.S. ratification of the Law of the Sea, which is greatly supported by the industry, by the military, and we really need to do it in order to have a level playing field in dealing with these international issues.

Specifically with respect to restoring the ecosystems, I think we recognize that you can't fully restore the evolving, changing Gulf of Mexico to the way it was at a certain time. What we are interested in, what we are recommending, is that the environment be restored to the point where it recovers a certain resilience. From the current state of dysfunction, it's able to function so if you have future oil spills, it's in much better capacity to withstand those impacts. And that's what we recommend for this restoration program.

To restore the longer-term damages, there is the natural resources damage assessment, which specifically addresses the impacts of this oil spill, and to try to correct those to the way it was——

Mr. FARENTHOLD. All right. And finally, just for one second, the Hart Institute at Texas A&M Corpus Christi, is very active in coordinating state and local responses with the Federal Government. I commend them to you as a resource. Thank you very much.

Mr. BOESCH. We have used them, right.

Mr. FARENTHOLD. Thank you.

Mr. LOBIONDO. OK. Thank you. Mr. Bucshon.

Dr. BUCSHON. Thank you, Mr. Chairman. I have a background in medicine. I was a cardiovascular surgeon prior to doing this. And one thing I have learned from medicine is that the international community can be very valuable in understanding health care.

And my question goes to the fact that there obviously have been oil spills in other parts of the world that we have not been involved in. And, other than from what the government response has been from a regulatory standpoint or otherwise, are there things that we have learned, or we could be learning about their platforms, about how they actually handle their clean-up afterwards? And were those countries offering advice, in our case, that U.S. regulations prevented us from utilizing those resources, and helping us?

Admiral ALLEN. I will make a short comment and pass it to my colleagues here.

First of all, I think the two best examples are probably Norway and the UK. In the 1980s there were 2 very serious accidents with significant loss of life in Norway and the UK. That resulted in a refinement of the regulatory environment to move to the safety

case-based system that we talked about earlier, and safety management systems.

There was a recent blow-out of the Montera oil right off the northwest coast of Australia in 2009. They operate under that same system, and that was reviewed as part of their response. And that still supports a safety case way to go forward, as we said earlier, and I am supportive of a hybrid system that would take advantage of what we learned overseas, both with the requirement for third-party validation of their drilling systems.

Mr. GARCIA. Yes, I fully agree with the admiral. One of the other things that we found was that the industry was not sharing best practices and information. And so the industry could do a better job of that.

And, Congressman Farenthold, if I could say I'm on the board of the Hart Institute, so I agree with your assessment.

Dr. BUCSHON. I think I—again, I understand the regulatory changes and the structural changes from the government level, but—and what you—your comment about the industry sharing technology, were there—are there clean-up methods that they have used that we could have used that our U.S. regulations prevented? I am naive to those, that's not my area.

But—and if there were—like I said, in medicine, the information from the international community is usually very valuable. And I have always found, as a citizen of the United States, that people always ask us to help, and we usually help. But when people ask—we don't generally ask for as much help as we can. And I think sometimes there are things to be learned and things to take advantage of that maybe we don't properly utilize. That's my overall assessment. Thank you.

Admiral ALLEN. Sir, the overwhelming majority of foreign offers of assistance that we dealt with had to do with actual physical equipment, and this had to do with more of how much we could get and how we needed it and how fast we needed it. This usually involved skimming equipment, a boom, especially a fire-retardant boom, and dispersants, when we were using dispersants.

Some of the more novel things we might have used, like bioremediation and some of the new technologies, fall into the comments that I made earlier, where, because of the paucity of research and development that took place in the last 15 years, we were at the point where we were trying to do research and development and bring new products to market during the spill itself. We can't allow that to happen again. And I think the real challenge was, domestically, to bring those technologies in and get them into the game.

Mr. GARCIA. And, sir, I would just say that, you know, one of the sad facts of this incident is that the industry simply did not have the response and containment technology that was adequate to contain this blow-out in a reasonable amount of time. It took them almost three months.

Dr. BUCSHON. Just a comment, and then I will finish. Again, going back to medicine, I have learned that there is—international studies in health care, especially in the heart surgery area related to prosthetic devices and the like that have been utilized in Europe and other areas around the world for many, many years that, in

the United States, are prevented from being utilized by medical professionals, based on our very slow and very onerous regulatory process.

And so, I guess I will—my question was directed at are there things like that in your industry that are out there, but that we want to do our own R&D, and we don't rely on international data, and that our structure really prevents us from using for decades when they have been found to be effective in other areas?

Admiral ALLEN. I guess I would say, in regard to well control and containment of the well, because it was operating offshore and basically in waters outside state waters, and BP and the industry were the ones that had the means to control that well and cap it, that the free market was flowing just about whatever was working and could be used there to that site.

Mr. BOESCH. Let me just say also on that issue, there are two organizations which the industry is standing up to be able to provide that capacity, to contain a blown-out well.

And so, they represent some substantial investment that they know they now need, and they are going to be based right there in the Gulf of Mexico, probably Mr. Landry's district, this standby capacity. And the research and development associated with it is part of that evolving economy in the new world of how we do offshore oil and gas development.

Dr. BUCSHON. Thank you.

Mr. LOBIONDO. Mr. Harris?

Dr. HARRIS. Thank you very much, Mr. Chairman. First of all, Admiral Allen, it's a—thank you very much for coming and appearing. And you were a great face for the U.S. Government, really, during this entire crisis. And I thank you for that.

Dr. Boesch, it's good to see you. Of course, sitting on the environmental committee in the State of Maryland, I have seen you many times, and I'm glad to see you here——

Mr. BOESCH. I don't have to call you "Senator" now, though.

Dr. HARRIS. That's right. Let me just ask a question. I had the privilege of attending a briefing by Mr. Riley and Senator Graham in the Natural Resources Committee, and my colleague from Alaska suggested at that time that the Commission members really all may have had an initial bias against offshore oil exploration and drilling. And I was pleased to see that in the forward to the report, it suggested on the last page that if the offshore energy enterprise is threatened, that the Nation's economy and security are threatened, and I couldn't agree more wholeheartedly.

Off Maryland, which is one of the frontier areas that are described in the last part of the book, you know, our coastal counties have an unemployment rate between 10 and 18 percent. It's seasonal employment, but it's high. And I personally feel that perhaps we should be looking at offshore exploration, drilling off the shore.

In the chapter where you talk about—chapter 10 of the report—you do say that the biological and environmental factors are well understood in those areas, unlike the Arctic.

And, therefore, my question is, do you think, if we implement what's found here—and this is specifically for Dr. Boesch and Mr. Garcia—do you think we should, in fact, because of our Nation's

economy and security, go forward with OCS exploration off the mid-Atlantic coast?

Mr. BOESCH. Well, we take no specific position about the expansion of oil and gas exploration and production outside of the two areas that we focused on, other than to indicate that we need to approach this in a different way, where there is more substantive analysis that engages the other agencies, in addition to Interior. The potential environmental risks should be judged in the context of the amount of economic gain and benefit, with respect to the energy supplies that may be there.

One of the things that focused our attention so much on Alaska, quite frankly, in addition to its unique and unusual sensitivity, is that the industry and the USGS are saying that's where most of the remaining oil is, outside of the Gulf. And so there is going to be enormous pressure to develop it. And we need those resources, if they can be developed safely.

Dr. HARRIS. Thank you.

Mr. BOESCH. The other areas are less rich, in terms of resources, and we have to do that analysis.

Dr. HARRIS. Mr. Garcia?

Mr. GARCIA. I would just add that the Commission report was designed to provide recommendations on how to drill safely. Where that drilling might take place would be up to the administration, and perhaps to the Congress.

Dr. HARRIS. Well, let me back into it, because, Dr. Boesch, you kind of indicate that you don't—that you didn't take a position, really, on the safety. I'm going to ask you not as a commissioner, but personally to address Mr. Young's criticism.

Do you feel that if you implement these recommendations in the Gulf, is it safe to do in the Gulf? And should we, in fact, be doing it in the Gulf?

Mr. BOESCH. If these recommendations are implemented, yes. We have said that you can safely drill, and we believe this report sets that out.

And I would also say, in response to Mr. Young's point about whether there was bias, I believe Mr. Riley said that we should let the report speak for itself. And our position is contained in this report.

Dr. HARRIS. Thank you. Then let me take the next step. If your position is that, yes, it's safe to do in the Gulf, and perhaps should be done in the Gulf, and in chapter 10 you say, "Well, you know, off the mid-Atlantic coast, the biology and the environmental considerations are fairly well known, it's not—it perhaps should be treated different than the Arctic," then if there are reserves found off the coast of Maryland, for instance, or Virginia, both of which will help employment in my area, in my district, then would you conclude that, therefore, it should be done in those areas also, if there are reserves that are proven to be economically beneficial?

Mr. BOESCH. As I understand it, the President acted earlier last year to the Congress's lifting the moratorium around a larger area, by saying that the U.S. is going to evaluate these very questions about whether the resources that are there are worth the potential risks, evaluating whether the benefits are there, as well as a more detailed analysis of the existing data.

What our comments were meant to suggest is that in those environments we're not talking about or suggesting that one needs, you know, five years of intense study and data analysis, that we already know a lot about those regions. And that information, just as the proposal, should be brought into consideration of making the determination.

Dr. HARRIS. Thank you, Mr. Chairman.

Mr. LOBIONDO. Thank you, Mr. Harris. Congresswoman Edwards.

Ms. EDWARDS. Thank you very much, Mr. Chairman. Glad I made it back in the nick of time. Thank you very much to the witnesses.

The question that I have actually regards some oversight issues that came up during the 111th Congress, and related to the flow rate and the wide variations of flow rate estimates, and the impact on response coordination. There were some questions that came up in our oversight in the last Congress about risk assessment and contingency planning. And particularly, I raised issues related to the worst-case scenarios, which didn't even seem to come close to the scenario that was reached in the spill.

And so, I wonder if you can talk to me a bit about the recommendation that you have made, and how we can improve the independence of the assessments that are done, so that they have a little bit more validity, because that's also related to what the financial liabilities are, as well. And so, if you could shed some light on that, I would appreciate it.

Mr. BOESCH. Sure. Ms. Edwards, first of all, you're right. We did address this issue of the flow rate. First of all, with respect to the flow rate estimates, they probably had relatively little effect on the spill response, in terms of the assets and resources that could be deployed. That's more of a function of where the oil is going.

However, what we concluded is that there were two important lessons from the underestimation of the flow rate for so long. First is that it became very important to right-size and design the containment effort. So, the initial efforts to try to control and contain the well were doomed to failure, because they assumed a lower flow rate. So for containment, it's really important.

Secondly, for confidence of everyone that the government is on top of this thing, that confidence is not diminished. And so, for that reason alone.

And then finally, as you pointed out, the flow rate becomes important with respect to the assessment of damages under the Clean Water Act.

Mr. GARCIA. And, Congresswoman, if I could just add, the good news is that there are some very simple fixes that we have suggested in our report that would allow the government and the industry to be able to accurately estimate flow rates so that you don't have this problem in the future. It's just a matter of adding some simple instrumentation to the blow-out preventer. And it is a relatively inexpensive fix.

Admiral ALLEN. Could I add a comment, please, ma'am?

Ms. EDWARDS. Sure, thank you.

Admiral ALLEN. First of all, I agree—very low-cost investment. And sensors on the blow-out preventer will give you an accurate

flow rate without any big dispute, I think, among the people that are involved. We have never had to deal with a well blow-out at 5,000 feet, and having to establish a flow rate. That had never been presented to any response in this country in its history.

Into the response—when this became a matter of public concern and political concern, I basically took that function and gave it to the flow rate technical group, which is a spin-off of our inter-agency solutions group that I established in the national incident command, to have an independent government way to assess that, with the means we had, lacking the sensor data that should be in there, and that was due to using the high-resolution video and other means. Once we did that, that allows us to have a baseline to tell BP what capability they had to build out, in terms of a containment.

Ms. EDWARDS. And then lastly, if one of you could please comment on this question of kind of risk assessment and contingency planning, because both the estimates—and when I looked at the standards for what was essentially rubber-stamped from MMS regarding the risk assessments, it almost seems as though the industry could kind of put a risk assessment in front of MMS, there were a few questions that were asked about it, and they were all pretty much the same. And that, in itself, I would guess, had to contribute tremendously to the ability to project what the risk might be, and to establish mechanisms that would allow for appropriate contingency planning.

Mr. GARCIA. Congresswoman, you're right. We have suggested in the report that a better review be done of response plans. I think you're referring to the fact that most of the companies essentially Xeroxed and submitted boiler-plate to MMS for their response plans. And neither the government nor the industry apparently were paying attention, since they referenced species that did not normally make their homes in the Gulf, such as walruses. So, yes, a much better job needs to be done.

And again, it indicates the widespread failure of oversight, as well as a complacency within the industry.

Mr. BOESCH. This is very important, because we've gotten some criticism for the use of the words "systemic problems." And by systemic, we don't mean that all companies were equally negligent as BP was. By "systemic," we mean all companies were using those same irrelevant plans. None of the companies had a containment capacity. Any number of things were widespread problems throughout not only the industry, but also the regulatory regime.

Ms. EDWARDS. Thank you very much, Mr. Chairman, and thank you to the witnesses, particularly for the thoroughness and the expeditious manner in which you got this report done. With that I yield.

Mr. LOBIONDO. OK. Mr. Landry?

Mr. LANDRY. Thank you all. I just got some important questions. I want to kind of—let me just make a comment.

I appreciate you all continuing to edit your comments on systemic. I think you should go back and look. And not all oil companies designed and engineered their wells the same. So you're getting there, Mr. Boesch.

Admiral Allen—you know, and I am—there are parts of this report that I am interested in helping these guys implement, and one of them concerns the safety of the workers. So I just simply want to go back to those scenarios and ask you do you or don't you believe that having stand-by vessels or a vessel within at least an hour's time where there are drilling activities or manned platforms, does that or does that not create a safer environment for those workers?

Admiral ALLEN. Well, obviously, having a vessel standing by is a safer environment.

Regarding the threshold requirements on when you would have a vessel, I think those are the types of determinations that would be made by the current ongoing joint investigation. That's not only looking at how the incident occurred itself, but the performance of the systems on the vessel, and the life-saving systems on the rig itself. And I think those are logical areas for inquiry, and where they need to be adjusted, as they should be.

Mr. LANDRY. Thank you, Mr. Chairman.

Mr. LOBIONDO. Mr. Larsen?

Mr. LARSEN. Thank you, Mr. Chairman. Just quickly here, page 142 and 143 of the Commission report discussed the Jones Act. You said, "These restrictions on the Jones Act did not even come into play for the vast majority of vessels operating at the well head, because the act does not block foreign vessels from loading and then unloading oil more than three miles off the coast. When the act did apply, the national incident commander appears to have granted waivers and exemptions when requested." Did I read that accurately?

Admiral ALLEN. Yes, sir.

Mr. LARSEN. Thank you. Page eight of your testimony, Admiral, "In reality, the Jones Act had no impact on response operations." Did I read that accurately?

Admiral ALLEN. Yes.

Mr. LARSEN. Did my reading of those accurate statements accurately reflect your thoughts, as well?

Admiral ALLEN. Yes.

Mr. LARSEN. Thank you. With regards to oil spill response recovery organizations, the OSROs, this is sort of the flip side of this argument about Jones Act, about wanting to get equipment in there, but then not really needing the equipment, where the OSROs had equipment here in the U.S. And I wouldn't say it was a scramble, but it was briefed by our folks in Washington State and at district 13, and just trying to identify who had what, what would be useful, and how soon can you get it there without impacting state-based needs and operations.

Do you have recommendations about the OSROs and oil spill recovery organizations, and how they can fit in better and create an inventory to know where this equipment is when we need it?

Mr. BOESCH. Well, I think we certainly do. And we identify, first of all, the lack of capacity to have responded to something which was so wide-scale and lasted so long by the OSROs.

But also, related to that is our observations and conclusions about the diminution or the lack of advancement of the technology that they have used, and the degradation of their assets and capac-

ity, if they were mainly dealing with smaller-scale activities on a more routine basis to then deal with something of this consequence. They were clearly out-gunned in that sense. And so we need a more effective way to do that. Perhaps Admiral Allen has——

Admiral ALLEN. Sir, I think what you're referring to is we actually went through an emergency rulemaking that allowed us to lower the stand-by requirements for the conduct of operations at facilities that had oil spill response equipment, but could not legally move it because it was a condition of operations.

Mr. BOESCH. Right.

Admiral ALLEN. This became very, very complicated, because the only way we could do that was actually to issue an emergency Federal rule. And, even then, there were residual issues with state law and state requirement, in some cases, personal liabilities for operators of facilities, and even commanding officers of naval installations, were they to give that equipment up, and something were to occur.

I think, moving forward, we need to look at this, because if you have a spill and you want to bring all available means, we have emergency compacts between states that allow movement of resources when they need that. I think there needs to be a measured discussion and an evaluation of how we can do that.

And that's the reason I said if there is a national incident commander designated, there should be a presidential designation. And with that should come the authority to move those resources, if it is needed, without going through an emergency rulemaking process. That said, I think we all need to understand the threshold of what needs to stay behind, so you have a minimum level to respond, if you do have an incident.

Mr. LARSEN. Something along the lines of when the National Guard might move from one state to the next for firefighting to help with a mutual aid type of situation.

Admiral ALLEN. Exactly, sir.

Mr. LARSEN. Yes, yes. With regards to the Arctic, I will talk to Mr. Young afterwards, so I want to be sure I'm not—we have a good relationship, and I want to be sure I talk to him about these questions, so—I want to be clear about it.

But he mentioned the leasing of ice breakers. From whom could we lease ice breakers for the Arctic operations, if we had to lease?

Admiral ALLEN. Well, sir, if I could just take one step back, there is a de factor implicit assumption in his statement that we need ice breaking capability. How you source that, whether you build an ice breaker or lease an ice breaker, is a second step. We haven't even gotten to the point in this country where we have recognized that there is a capability requirement, and we need to do something about that. The lease is just one way you could remedy that.

I tried unsuccessfully for four years to get this on a national agenda to talk about this, because we have—we will have no floating capability to exert command and control from Point Barrow, unless we have an ship that's capable of doing that. And a lease could be one way. I really think that we probably need to have organic capability inside the United States to do that.

But regardless of that, the real issue is nobody is talking about the ice breaker capability problem, and it's sitting there, staring us right in the face, sir.

Mr. LARSEN. But just to be clear, I understand Russia, China, Sweden all have ice breakers, probably none of whom would be willing to loan them to us or lease them to us unless they can recover the dollars for the lack of opportunity that they would have to use them for the same functions we would want to use them for.

Admiral ALLEN. The National Science Foundation routinely leases foreign vessels to break out McMurdo for the annual resupply, and to stop using U.S. ice breakers.

Mr. LARSEN. Yes, yes. I have other questions.

Mr. LOBIONDO. Blake, you have anything?

Mr. FARENTHOLD. No.

Mr. LOBIONDO. Go ahead, Rick.

Mr. LARSEN. On the capacity of response in the Arctic, can you comment on our capacity to respond to a situation in the Arctic, separate from an ice breaker issue?

Admiral ALLEN. I would be happy to.

Mr. LARSEN. Planes, trains, and automobiles. What do you have? What's going on?

Admiral ALLEN. If I could specifically—I'm trying not to infer from the fact of whether or not there is response capability, there should be a decision on whether or not to drill, and these gentlemen have already stated that themselves.

Mr. LARSEN. Absolutely.

Admiral ALLEN. My premise has always been, in my four years as commandant—because we moved assets to the north slope of Alaska in the summer to see how they operate—is the lack of infrastructure, footprint, and accessibility by equipment up there to be able to stage a response and use command and control that you need to do to do that.

If you were to go to Robert, Louisiana, New Orleans, Houma, Louisiana, or Mobile, and looked at the command posts that were established to try and deal with this oil spill, there is no place on the north slope of Alaska to put something like that. And I am differentiating what an oil exploration company might have out there, in terms of response vessels. The oversight that has to be done, the burning, access to airstrips, all-weather aircraft, all those are issues that come into play on the north slope of Alaska.

And, from my standpoint as a former commandant, my concern was if I am held accountable to conduct a type of oversight that was basically pulled through a knothole by this Commission, there is a lack of a footprint up there to do that. This is independent of the merits associated with the oil and gas exploration.

Mr. LARSEN. Absolutely. Thank you. I want to be clear. I was not implying that trains and automobiles would be part of the response up there. I was only trying to talk about the broad range of infrastructure necessary for the response. For the record, everybody. Thank you.

Mr. LOBIONDO. Admiral Allen—and we talked about this a little bit—the Oil Pollution Act required the Federal Government to conduct exercises every three years to be prepared, and we think that was a good idea.

Was the failure of these officials to participate in the March 2010 a missed opportunity for them to better understand how oil spill response functions under the national contingency plans would work, in your view?

Admiral ALLEN. I do believe it was a missed opportunity, but I think we need to take a look at whether or not this was a problem of omission or commission.

You know, in Washington we are under siege of the—this was not a tier one exercise and did not technically require the participation of cabinet-level officers. So there was basically no foul, but we gained no real benefit from having those folks exposed to the doctrine.

My recommendation contained in my testimony is to hold another drill within one year, have cabinet-level officials involved, and let's immediately test the premises and the notions that are contained in the Commission report, and what comes out of these investigations. Let's not wait through the cycle, let's do one and figure out whether or not we've fixed the problem, sir.

Mr. LOBIONDO. I don't want to second-guess what you might say, but if the officials, whoever these officials may be, had participated, that could have affected in a more positive way the response?

Admiral ALLEN. Well, you just have to look at who was called in when this event occurred. When the rig sunk on the 22nd of April, 2 hours later myself, Secretary Napolitano, and the cabinet were in the Oval Office, briefing the President on what had happened.

The people that were in the office having that discussion were not the people—because it was not a tier one exercise—that would have been involved in the spill of national significance drill in March. That's the reason my premise would be moving forward to schedule another drill and make it a tier one exercise in which cabinet-level officials would participate.

Mr. LOBIONDO. Ms. Edwards?

Ms. EDWARDS. Thank you, Mr. Chairman. To Commissioners Boesch and Garcia, you have made some significant recommendations that really go to what you have indicated—the Commission had indicated—as deep failures in oversight and the regulatory structure. And you've made some very significant recommendations to improve the regulatory structure.

I wonder if you could comment, please, as we are in an environment in which there are deep cuts proposed to some of the agencies that you believe, in your report, need to step up, in terms of their oversight of this industry and the process at the Department of Interior, at NOAA, at EPA, and Coast Guard.

Do you believe there is any inconsistency in the deep cuts that are recommended in these agencies and the ability of the agencies then to fulfill the recommendations you have made to prevent both the safety concerns and environmental concerns that might come to pass if there were another spill of this kind of national significance?

Mr. GARCIA. We certainly have indicated that changes need to be made in the agencies, and that they need to be adequately funded. One of the problems for the MMS was that it was underfunded and undermanned and, thus, incapable of effectively and fully overseeing this industry.

Now, we have suggested that the new BOEMRE be funded through fees that the industry pays—I mean right now, the industry is paying just a tiny fraction of that agency's relatively small budget. And it would not be unreasonable for the industry, which is reaping large benefits from this resource, to pick up the cost of a competent and effective regulator.

Ms. EDWARDS. Dr. Boesch, do you have any comment?

Mr. BOESCH. Yes, we have been through this together, we think alike, and we just about finish each other's sentences, but one thing just to add to that is that the Secretary of the Interior had requested of Congress an appropriation for fiscal year 2011 to enhance the capacity of BOEMRE to meet these high standards and to process these applications.

And so, the lack of those funds obviously presents a handicap, not only to implementing our recommendations, but to getting the industry back to business.

Ms. EDWARDS. If the Congress is unable or unwilling to impose the fees that you have—that are recommended, then inevitably, the cuts that are proposed for the agencies that would have oversight and responsibility in this regulatory framework would simply be unable to implement the regulations that you put forward, opening us up—if you could, comment on it—opening us up to the possibility that we would have another spill in deep water that we would be unable to clean up, and that we will not have been able to properly project.

Mr. GARCIA. Yes. Congresswoman, I would just say that this spill has cost us tens of billions of dollars. And the final price tab is not in yet. So, to the extent that a failure to properly regulate the industry would result from inadequate funding, that would be a tragedy.

Ms. EDWARDS. Yes, and just to conclude and I will yield my time, I mean it does strike me that there is a very significant inconsistency in our desire to make sure that both industry and commerce are not impacted by a spill of this kind of significance in the future, ff we are unwilling, in the Congress, to do what it takes to make sure that the resources are in place so that our agencies can fulfill their obligations. And with that, I will yield.

Mr. LOBIONDO. Mr. Landry, are you looking for more time?

Mr. LANDRY. I just wanted to address the gentleman from Washington's comment and ask Mr. Allen——

Mr. LOBIONDO. Because if you have additional questions, I am going to submit—I am going to suggest——

Mr. LANDRY. Sure.

Mr. LOBIONDO [continuing]. You submit them for the record.

Mr. LANDRY. Sure.

Mr. LOBIONDO. I don't want to cut anybody off, but we could go on for a long time, and I think we need to wind it up.

[No response.]

Mr. LOBIONDO. OK. I want to thank the panel very much. I hope—well, we appreciate it. This was very informative.

The subcommittee stands adjourned.

[Whereupon, at 12:18 p.m., the subcommittees were adjourned.]

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STATEMENT OF CONGRESSWOMAN EDDIE BERNICE JOHNSON

Subcommittees on Water Resources and the Environment and on Coast Guard and Maritime Transportation

Hearing on
Improving Oil Spill Recovery and Response, Restoring Jobs, and Ensuring our Energy Security: Recommendations from the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling

February 11, 2011

Chairmen LoBiondo and Gibbs and Ranking Members Bishop and Larsen, thank you for holding this hearing today to examine the recommendations of the

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National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling.

I would like to start by again recognizing the 11 victims of the *Deepwater Horizon* explosion and fire in the Gulf of Mexico last April. We should never lose sight of the fact that 11 individuals lost their lives by simply showing-up for work on a daily basis.

I recently joined several Members, including the Ranking Member of our Full Committee, Mr. Rahall, in cosponsoring legislation "Implementing the Recommendations of the BP Oil Spill Commission Act of 2011" (H.R. 501).

While I find all of the recommendations compelling, I am particularly interested today in hearing more about three of the Commission's recommendations:

- **Calling on the EPA to update and review their dispersal testing;**

- **Dedicating 80 percent of the Clean Water Act penalties to long-term restoration of the Gulf of Mexico;**

- **And, the creation of plans and procedures for responding to a "Spill of National Significance."**

In my capacity as a Member of the Water Resources and Environment Subcommittee and as the Ranking Member of the Science, Space, and Technology Committee I look forward to us all working together to continue making progress towards ensuring that all stakeholders – including the Federal government, industry, and academia –

are better equipped in the future to prevent and respond to incidents such as the devastation of last April in the Gulf of Mexico.

STATEMENT OF THE
HONORABLE FRANK A. LoBIONDO
SUBCOMMITTEE ON COAST GUARD AND MARITIME TRANSPORTATION
JOINT OVERSIGHT HEARING
IMPROVING OIL SPILL PREVENTION AND RESPONSE, RESTORING JOBS, AND ENSURING OUR ENERGY SECURITY: RECOMMENDATIONS OF THE NATIONAL COMMISSION ON THE BP DEEPWATER HORIZON OIL SPILL AND OFFSHORE DRILLING
FEBRUARY 11, 2011

The Subcommittee on Coast Guard and Maritime Transportation is meeting in a joint hearing today with the Subcommittee on Water Resources and Environment to hear testimony from members of the National Commission on the BP Deepwater Horizon Oil Spill, as well as Admiral Thad Allen, former Coast Guard Commandant and National Incident Commander for the oil spill.

The BP DEEPWATER HORIZON oil spill was unprecedented in size and duration. It left a tremendous natural and economic disaster in its wake. The joint Coast Guard and Department of Interior investigation into the causes of the explosion and sinking of DEEPWATER HORIZON, as well as the failure of the blowout preventer to contain the spill is still ongoing. The Subcommittee will examine the findings of the official investigation once it is complete.

While we await the findings of the investigation, the National Commission on the BP Deepwater Horizon Oil Spill, as well as the report of the National Incident Commander has helped highlight significant questions regarding the best methods for the industry and the Federal government to use to prevent and respond to future oil spills.

This hearing provides the subcommittees with the opportunity to hear recommendations of the Commission and the National Incident Commander on changes needed to Federal laws and regulations to help reduce the likelihood a similar event happens in the future.

I am concerned with the findings of the Commission and the National Incident Commander that officials at all levels of government were unfamiliar with the National Contingency Plan, our nation's 42 year old blueprint for how to respond to oil spills. But I am particularly alarmed that senior leaders at the Department of Homeland Security were either unaware or simply misunderstood how the plan functions. I am troubled the failure of the Department's leadership to recognize, accept, and follow the Plan slowed the stand up of command and control in the days after the spill, undermined public confidence in the government, and may have impeded response.

But this speaks to a larger issue this subcommittee has been concerned with since the Coast Guard was transferred to the Department of Homeland Security. And that is the Department does not understand, nor appreciate the traditional missions of the Coast

Guard. While critically important, port security accounts for only 20 percent of what the Coast Guard does on a daily basis. The remaining 80 percent are traditional missions like oil spill response. These missions require the Department's leadership to understand that they need to commit adequate resources and attention, as well as participate fully in training and preparedness activities. Unfortunately, that was not the case with the BP DEEPWATER HORIZON incident.

Nearly 20 years ago, the Oil Pollution Act of 1990 created a national framework for preventing and responding to oil spills in U.S. waters. Since the passage of that Act, there have been significant changes in the offshore production, storage, and transportation of petroleum products, and with these changes the requirements to respond to potential incidents have grown more complex. This spill demonstrates that we may need to reexamine the requirements under current law to ensure they are applicable to present day operations.

Finally, I would be remiss if I did not take this opportunity to remember the 11 Transocean crewmembers who were lost as a result of this tragedy and to express my sympathy to their families, friends, and co-workers.

Written Testimony
Admiral Thad W. Allen
U.S. Coast Guard
(Retired)

Good morning Chairman LoBiondo, Chairman Gibbs, Ranking Member Larsen, and Ranking Member Bishop.

Thank you for the opportunity to speak before this joint hearing regarding "Improving Oil Spill Prevention and Response, Restoring Jobs, and Ensuring Our Energy Security: Recommendations from the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling."

As the subcommittees are aware I am no longer in public service having retired from the Coast Guard on 1 July 2011 and having departed government service as a senior executive on 1 October 2011. Accordingly, my association with spill response and recovery activities, current legislative and regulatory reviews, and policy discussions regarding offshore oil and gas development has been limited to information contained in the public realm.

However, in regard to information pertaining to my service as the Commandant and National Incident Commander, I have had access to Coast Guard assistance. That assistance has been guided by the "Anti-Lobbying Act" (18 U.S.C. § 1913), which prohibits activities that are intended or designed (directly or indirectly) to influence in any manner a member of Congress, a jurisdiction, or an official of any government (Federal, state or local) to favor or oppose any legislation, law or appropriation.

I have been provided a copy of the Report of the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling. I have reviewed the recommendations of the Commission. I am limiting my comments to the areas of the report that relate to my duties as the former Commandant and National Incident Commander. I would also add that while the Commission has issued its report there are still several inquiries underway that will provide further detailed information and recommendations regarding the accident, its causes, the response, and needed changes to the current legal and regulatory structures. It is my personal recommendation to the subcommittees that these additional investigative efforts be included with the Commission Report in considering any legislative or regulatory changes that may be considered.

For the purpose of this testimony I am providing what I consider are the high level, strategic and policy issues that need to be considered as we move forward to improve our safety and spill response preparedness in the future. The most important areas for discussion in my view are:

1. Oil Spill Response Governance and The Role of the National Response Team (NRT)
2. Spills of National Significance and the National Incident Command
3. Oil Spill Preparedness and Research and Development
4. Use of the Oil Spill Liability Trust Fund
5. Interagency Coordination
6. International Offers of Assistance and Application of the Jones Act
7. Air Space Coordination
8. Implication of Deepwater Horizon Lessons Learned for the Arctic

OIL SPILL RESPONSE GOVERNANCE

The doctrinal response to an oil spill in the United States has evolved over 4 decades and is codified at 40 CFR 300. Major changes were made to this doctrine following the EXXON VALDEZ spill and those changes have been implemented over the last 20 years. Any discussion of oil spill response governance must start here. I defined, as the National Incident Commander, "governance" to be the use of institutions, structures of authority, and even collaboration to resource and coordinate or manage activities.

Despite a governance structure that has been in place for over twenty years and the proven effectiveness of the National Contingency Plan (NCP) in countless spills, the system did not function as effectively as it could or should have in this event. While there are number of factors that were considered by the Commission in their review, I will discuss two here today that I feel merit attention.

The first is what I have termed the political and social nullification of the National Contingency Plan and associated response doctrine during the response. The two primary reasons for this were (1) a lack of understanding and acceptance of the statutorily defined role and responsibility of a "Responsible Party" (RP) at all levels of government and (2) the rejection of some state and local officials of the federal authority, direction, and control of resources in the response.

On the first issue, the public's fundamental concern, a concerned shared by many political leaders, was that BP was not "trustworthy" to meet their responsibilities under the law. Additionally, the response doctrine that calls for the RP to contract response resources under the overall supervision and authority of the federal on scene coordinator was not understood or accepted.

The latter issue can be best understood in the context of the very different assumptions and legal authorities that form the basis for a response to a natural disaster under the Stafford Act and the National Response Framework. In those instances the federal role is restricted to providing resources and assisting local governments who have the legal responsibility for the response. In oil spill

response there is a clear federal role that preempts local authority under the Clean Water Act and federal regulations.

At the federal level the governance of this spill was also complicated by the overlapping structures contained in the National Contingency Plan which predates the creation of the Department of Homeland Security and the role of the Secretary of Homeland Security as outlined in Homeland Security Presidential Directive 5 and the Homeland Security Act which designate the Secretary as the Principal Federal Official for incident management. While these roles were adjudicated and integrated during the response, work remains to clarify how the two structures interact to create unity of effort and a whole of government response.

Finally, an opportunity to address these key issues was lost in March 2010 (just prior to the accident) when a Spill of National Significance exercise was held in the Northeast United States. Because this exercise was not considered a Tier One Exercise there was no mandatory participation by cabinet-level leaders. In my opinion there should be another SONS Exercise scheduled and held within one year to turn around lessons learned and increase our preparedness, including resolution of NCP/HSPD-5 overlaps and gaps.

THE ROLE OF THE NATIONAL RESPONSE TEAM (NRT)

When the Deepwater Horizon sank on 22 April, I requested a meeting of the National Response Team (NRT) as the Commandant. My intent was to employ this long-standing interagency coordinating body in support of the deepening crises and potential for a catastrophic oil release. However, since we had not exercised the NCP with DHS leadership, the role of the NRT was not fully understood. The NRT, an interagency body, is comprised of 15 federal agencies responsible for developing, de-conflicting, and reconciling intergovernmental policy issues that surface during oil spill response. The EPA serves as the Chair and the Coast Guard serves as the Vice Chair of the NRT. When a spill involves a substantial threat to public health and welfare, substantial amounts of resources or substantial threats to natural resources, the NRT can be activated as an emergency response team to monitor the response actions and provide counsel and recommendations to the NIC to assist in the response. Rather than serving its intended purpose, direct engagement by Cabinet-level officials from the outset of this response essentially redirected the NRT to the role of support to intra-Cabinet communications and briefings, diminishing its ability to serve as a deliberative body and its value to the response organization. To provide the originally intended functions of the NRT, a new organization named the Interagency Solutions Group (IASG) was created within the NIC. The IASG essentially assumed the doctrinal responsibilities of the NRT, and proved exceptionally adept in promoting interagency unity of effort.

In the future any recommendations made in this testimony or proposed changes the Commission or other entities should be closely reviewed for integration into the existing roles and responsibilities of the NRT. Most of the functions of the IASG (discussed later) should be institutionalized in the NRT.

SPILLS OF NATIONAL SIGNIFICANCE AND THE NATIONAL INCIDENT COMMAND

The only current official doctrine related to the designation of a National Incident Commander is contained in 40 CFR 300.323. Those responsibilities were further refined in a draft Coast Guard Commandant Instruction (16465.1A), *Spills of National Significance Response Management System.*

Before the *Deepwater Horizon* incident was designated a SONS and prior to my designation as the NIC, Rear Admiral Mary Landry assumed the role of FOSC and served as the Coast Guard lead federal official for strategic communication and operational decision-making. In this capacity, RADM Landry worked with other federal partners, senior BP officials, state, and local representatives to establish a unified response organization. As the Federal On Scene Coordinator (FOSC), by law, she was responsible for:

Providing access to federal resources and technical assistance.

Coordinating all federal containment, removal, and disposal efforts and resources during the oil spill.

Serving as the point of contact for coordination of federal efforts with the local response community.

Coordinating, monitoring, and directing response efforts.

As this incident expanded across the entire Gulf Region, so did the need to involve other national-level and international resources outside the span of control of the FOSC. This response clearly called for a NIC. By design, the FOSC's responsibilities are complementary to the NIC responsibilities. Strategic objectives and intent should be clear and transparent and designating a single individual, responsible for all aspects of the federal government's response, established a clear chain of command for communications and decisions.

As the NIC, I followed the doctrine outlined in the NCP and assumed the responsibilities for addressing and coordinating national-level issues. In the 10 days that passed between the fire, explosion, and subsequent sinking of the *Deepwater Horizon* and my designation as the NIC, multiple federal government agencies acted within their existing authorities to execute their particular agency responsibilities. Initially, I viewed my role as the Unified Area Command's (UAC) relief valve for political and national pressures and a national-level resource broker. To this end, I created a —thin client, a lean NIC staff with a relatively small footprint located in Washington, D.C., and I traveled to the Gulf region frequently. I was also designated as the primary national spokesperson for the *Deepwater Horizon* response. Given the intensity of media coverage and public interest, I spent a considerable portion of my time briefing and interacting with national and local media to inform the public

of the whole-of government's efforts. Significant effort was also focused on strategic and policy issues using existing interagency resolution bodies as well as creating a new policy resolution group, the Interagency Solutions Group (IASG). By assuming these responsibilities, I enabled the UAC to focus on operational response issues.

Because the development and evolution of the National Incident Command was precedent setting and unique I directed that our operating procedures, decisions, and organizational structure be documented in a living document that was revised continually. My initial guidance, *Deepwater Strategy Implementation Version 1.0,* was issued on 23 June 2010 to codify direction that I had given to date and to memorialize key decisions taken on 14 June during my meeting with the President. It was 43 pages. The final *Version 5.0* that was issued in my last week as NIC is over 600 pages. Finally, a 59-page *National Incident Command Lessons Learned Report* was issued at the disestablishment of the NIC. Both should serve as useful tools in considering a more formal doctrine for future SONS.

I also make the following specific comments and recommendations regarding NIC authorities based on the complexity and size of a SONS in relation to smaller events. These authorities should be established and described in doctrine. I recommend the following legal authorities for future NICs.

Presidential designation of a NIC
Currently the Commandant of the Coast Guard can designate a NIC for a coastal zone SONS and the EPA Administrator can designate a NIC for a inland SONS (40 C.F.R. § 300.323). Since the NIC is responsible for coordinating the whole-of-government response to include the Cabinet, the President should designate the NIC if required for a SONS.

Establish standing delegation of NIC Clean Water Act §311(c) and (e) authorities
A NIC must have the authority to control significant aspects of a response to a major oil spill, including directing the actions of a RP. When I was relieved as Commandant, I was only able to retain the §311(c) authority through delegation by DHS Secretary Napolitano. Without this delegated authority I would not have been able to legally direct the RPs actions, authorize removal, and approve expenditures against the Oil Spill Liability Trust Fund.

In the future, a NIC, by designation, should have §311(c) and (e) authority organic to the position. This should be explicitly articulated in the NCP and Executive Order rather than delegated during a SONS. This will ensure all future NICs and response stakeholders understand the authorities inherent to a NIC *prior to* a major pollution response.

Re-direct response assets nationally
During the response, the Coast Guard and the EPA issued an emergency temporary rule that waived certain Plan Holder requirements across the country to allow resources to be re-directed to the Gulf. Although this emergency rule was drafted, published and became

effective within days, it was an unnecessary step in trying to get oil spill response resources on-scene. The exigent resource requirements of a SONS require flexibility regarding response plan requirements. I recommend that when a SONS is designated, certain requirements contained in response plans be eased in order to free up equipment. This will provide the NIC and the FOSC the ability to rapidly acquire critical resources for response efforts. Area Committees should consider the potential of supporting a SONS outside of their geographic area and incorporate contingencies into their Area Contingency Plans.

OIL SPILL PREPAREDNESS AND RESEARCH AND DEVELOPMENT (R&D)

The Interagency Coordinating Committee on Oil Pollution Research (ICCOPR) has served as the primary governmental body for oil spill response research and development since 1991 directing interagency research and university grant programs. Unfortunately, Congressionally-directed funding to support ICCOPR was discontinued in 1995 and they have struggled to maintain relevance in a post 9-11 security-focused R&D environment. To ensure we have 21st century oil spill response capabilities available before the next major oil spill occurs, we should amend the oil pollution research and development program described in 33 USC §2761 to reinvest funds in the ICCOPR. The ICCOPR should be required to conduct and sponsor research into oil fate and its effects, and the enhancement of capabilities suitable for preventing, responding to, and mitigating the impacts of spilled oil in the maritime environment. The ICCOPR should also be directed to permanently establish a program similar to the Interagency Alternative Technologies Assessment Program (IATAP) to evaluate new technologies *before* a spill occurs. The ICCOPR must receive *permanent* funding for R&D through annual distributions from the Oil Spill Liability Trust Fund or some other recurring funding source.

USE OF THE OIL SPILL LIABILITY TRUST FUND

The Oil Spill Liability Trust Fund (OSLTF) was created under OPA 90 and is used to pay for costs not paid directly by the RP. As of September 19, 2010 (the last date in which I was involved as the NIC), over $580 million in costs had been paid from the OSLTF. To ensure funding remained available for the federal response, Congress passed Public Law 111-191 that allowed for unlimited advancements of up to $100 million from the principal to the emergency fund, but only for the Deepwater Horizon response. As of September 19th this additional advancement authority had been exercised five times, providing $500 million in advancements to the emergency fund. Funding must be adequate to support effective and efficient federal oil removal when there is a major spill or a SONS. Accordingly, the changes made by Public Law 111-191 should be made permanent.

The Deepwater Horizon response has also demonstrated the extraordinary public expectations of prompt and effective compensation. While claims payments are currently available from the OSLTF, the cost to administer such payments, including adjudication costs, are payable only through Coast Guard operating funds. The cost to the federal government to administer and adjudicate claims in the event of a SONS would be

enormous if there were no RP, or if the RP reached their limit of liability and refused to pay. The Deepwater Horizon claims footprint consists of over 35 claims centers and over 1,500 staff with an estimated payroll of $42 million per month. While legislation has been proposed to eliminate this claims funding gap, it was not approved as requested. Their remains an urgent need to enact a legislative provision for surge claims funding out of the OSLTF.

Additionally, there is a $1 billion limit on use of the OSLTF for a particular event, of which only $500 million may be used for Natural Resource Damages. The costs that count against this limit include removal and Natural Resource Damage Assessment (NRDA) Initiate costs as well as any claims that ultimately might get paid from the fund. An underlying tenant of OPA 90 is that "the polluter pays", and as of September 19th BP had reportedly spent over $9.5 billion on the Deepwater Horizon response and has put an additional $20 billion into a trust fund to pay Natural Resource Damages and additional claims. That is nearly $30 billion the American taxpayers were not saddled with – reinforcing the wisdom of the current system described in the NCP and OPA 90. However, even with a viable and cooperative RP, the $1 billion limit is clearly inadequate for a SONS-level event and should be significantly raised if a SONS is designated in the future.

INTERAGENCY COORDINATION

In addition to my NIC staff, the National Response Team (NRT) would normally serve as my primary advisory body to develop, de-conflict, and reconcile intergovernmental policy issues that surface during a SONS. Once the NRT was diverted from its traditional advisory role to provide daily high-level operational briefings to Cabinet members and agency heads, the IASG, led by DHS Assistant Secretary for Intergovernmental Affairs Juliette Kayyem, addressed many of the issues typically adjudicated by the NRT. The IASG become a self-contained interagency body with decision-making authority capable of resolving time-sensitive policy issues. The group was staffed at the action officer level and had representatives from over 20 agencies and Departments.

Along with adjudicating policy issues, the IASG assumed functions that were not anticipated in legal authorities or addressed in doctrine. For example, the IASG created the Interagency Alternative Technologies Assessment Program (IATAP) to evaluate thousands of offers of innovative response technologies from both domestic and international entities. Likewise, the IASG stood up the Flow Rate Technical Group (FRTG) composed of scientific technical experts, from government and academia, to quantify the daily rate of release from the Macondo well and the total amount of oil released into the Gulf. The IASG also chartered an Oil Budget Calculator Science and Engineering Team to estimate the fate of the oil. They developed a tool called the Oil Budget Calculator to estimate the fate of the oil (recovered, dispersed, evaporated, residual, etc.). To provide oversight of BP's claim process, the Integrated Services Team (IST) was created under the IASG. They oversaw over $875 million in claim payments from over 200,000 individuals, businesses, and government entities, and served as a

transition facilitator for the Gulf Coast Claims Center. The IST also deployed experts to promote public awareness of the claims process and other social services programs.

When the State of Louisiana submitted permitting proposals to construct a series of sand berms, rock dikes, and pipe booms to protect sensitive areas from oil, the IASG identified key issues to help address environmental and engineering concerns. The synergies created through the establishment of this group directly supported planning efforts by the Council of Environmental Quality (CEQ) and the Natural Resource Trustee Steering Committee to consolidate countermeasure proposals for consideration by the FOSC as removal projects. The 24 projects submitted, valued at over $500 million, were carefully considered by the IASG and they developed recommendations on the merits of each project against the criteria outlined in the Clean Water Act.

The scope and the magnitude of this spill surfaced a number of other critical issues that would not normally arise during a routine or traditional oil spill response. The IASG was challenged to resolve issues such as immediate and long-term behavioral and public health monitoring, seafood testing, and social and economic impacts. This was especially difficult since OPA 90 limits the use of the Oil Spill Liability Trust Fund (OSLTF) for cleanup and removal of the oil, and compensation for environmental damages. The expectations of the federal government in crisis response grows with each new event and transcends existing legal authorities and limits on the use of federal funding. Going forward, we need to examine law, policy, and doctrine to account for what has become a changing perceived social contract by the American public to provide a range of immediate and long-term services as a result of a major domestic incident.

Cabinet-level Deputies Committee meetings were also convened to ensure senior administration officials were regularly briefed on response efforts. Deputies Committee meetings focused on key policy issues and friction points to ensure alignment throughout the administration and were especially helpful in addressing challenges posed by issues outside traditional oil spill response such as seafood safety. In the future, an incident-specific Deputies Committee should be convened, chaired and moderated by the NIC.

INTERNATIONAL OFFERS OF ASSISTANCE AND APPLICATION OF THE JONES ACT

Offers of Assistance

The Deepwater Horizon incident required access to and use of spill response resources from Oil Spill Removal Organizations (OSROs) around the country. An immediate and on-going challenge throughout the response was the lack of a usable database listing OSROs either domestically or globally, let alone listing equipment that might be available to support the response. Domestically, while we could locate most OSROs, it took time to identify what equipment they had to offer, and more time to determine how moving the equipment they were offering to the Gulf of Mexico would impact the response posture of the contributing region. These information gaps became critical in determining the location of potential response resources to support the Deepwater

Horizon incident and in ensuring that areas outside the Gulf of Mexico maintained enough response capability to meet federal and certain state requirements. This experience underscores the critical need for the establishment and maintenance of a response resource inventory database that includes updated listing of all OSRO equipment nationwide, including real-time location and status of all OSRO equipment so that it can serve as a primary management tool for all major responses. Internationally, in addition to the absence of a useful equipment database, the challenge is that except for regional agreements for resource sharing with our neighbors in Canada, Mexico and Russia, we had never engaged other countries regarding sharing response equipment. The first task we faced was in sorting out who to talk with and what countries had potentially useful resources to offer. We found that there was no common lexicon regarding resource specifications (e.g., no common description of open ocean containment boom and skimming systems). There were no protocols for making requests or accepting offers, no mechanisms for reimbursing costs or even for determining costs in the first place. The NIC staff did manage to work through all of these issues with many of the offers, and to receive and employ some foreign resources, but the process was needlessly arduous and inefficient. Another major challenge was contending with political pressure to accept all international offers of assistance regardless of utility to the response. Going forward, we need to expand the response inventory database described above to include international oil response resources and establish processes and procedures for review and approval of international offers of assistance to help speed the delivery of critical resources in a future oil spill response. Finally, any offshore containment and recovery system developed in the future should be integrated into this system.

Application of the Jones Act

There was a misperception that the Jones Act (46 USC § 55102) impeded the use of foreign flag vessels for Deepwater Horizon response operations. In reality, the Jones Act had no impact on response operations. As the NIC, I provided specific guidance to ensure accelerated processing of requests for Jones Act waivers. This process was used to expedite the Jones Act waiver requests for seven vessels engaged in source control operations in the event they were forced to alter operations in a manner that might implicate the Jones Act. This expedited process resulted in DHS Secretary Napolitano approving the waiver request in less than 10 days from the initial request. During the entirety of the response, there were no Jones Act waiver denials. Any decision not to use a foreign flag vessel during the response was based upon an operational decision not any limitations imposed by the Jones Act.

AIR SPACE COORDINATION

Historically, the coordination of aviation assets and sorties has proved to be a recurring challenge for major responses. We also experienced difficulties during the initial stages of the *Deepwater Horizon* response. With over a 120 aircraft and hundreds of daily public, private, and military flights in support of the response, there was a high risk of aerial collision and we experienced several near mishaps during the early stages of this

response. We needed to quickly establish command and control over the airspace. This required engagement and coordination at a national level with the U.S. Air Force and U. S. Northern Command (NORTHCOM) to bring DOD capabilities and capacity to the response. In collaboration with NORTHCOM, we established the based out of Tyndall Air Force Base. The Aviation Coordination Center allowed us to control, de-conflict, and monitor the air space over the offshore waters and coastline of the Gulf and significantly improved our ability to verify oil trajectory modeling and direct resources such as skimmers, vessels of opportunity, and boom deployment to where it was most needed.

IMPLICATION OF DEEPWATER HORIZON LESSONS LEARNED FOR THE ARCTIC

The Commission has called for "an immediate, comprehensive federal research effort to provide a foundation of scientific information on the Arctic." The Commission further states "countries of the Arctic should establish strong international standards related to Arctic oil and gas activities. Such standards would require cooperation of policies and resources."

I support these recommendations and offer these additional comments and recommendations.

There is currently inadequate infrastructure to support extensive response and recovery operations on the North Slope with the exception of the oil industry facilities at Dead Horse in Prudhoe Bay. Point Barrow, the only location close to the new Beaufort and Chukchi Sea lease areas, has limited access and no ability to support large-scale operations. The closest port with any capacity is Nome and it is restricted to vessels with 21-foot drafts or less.

In the absence of forward operating bases and infrastructure, seaborne command and control capability will be vital in any response, including search and rescue and other activities. The only vessels in the U.S. fleet capable of operating in those environments in all ice conditions are Coast Guard icebreakers.

The current condition of the Coast Guard icebreaker fleet should be of great concern to the senior leaders of this Nation. Two of the three vessels are currently inoperable and key decisions regarding future icebreaking needs continue to be delayed. The current funding mechanism for operating this vessel is dysfunctional and should be changed. The National Science Foundation (NSF) current holds the operating funds and requires the Coast Guard to submit an annual operating plan for their approval. Congress has moved these funds back to the Coast Guard in several previous appropriations only to see the funds requested in the following year for the NSF in the President's budget. This funding structure should not be continued and operating funds for Coast Guard icebreaking operations should be requested in the Coast Guard's budget. Serious discussion must begin immediately regarding the imminent loss of capability as two of these vessels have reached the end of their service lives.

In my previous discussions with the Office of Management and Budget I was advised that there was no policy decision to change the status quo. I would submit that National Security Presidential Directive 66, signed by President Bush and continued by this Administration is adequate policy guidance to take appropriate and responsible action regarding next steps in the Arctic.

Finally, in considering governing frameworks for response in the Arctic the United States should move immediately to ratify the Law of the Sea Treaty. This treaty is the de facto governing structure for the Arctic and should underpin any domestic and international planning for spill response. We have waited long enough and the Treaty should be ratified without delay.

TESTIMONY
OF

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NATIONAL COMMISSION ON THE BP DEEPWATER HORIZON OIL SPILL AND OFFSHORE DRILLING

AND

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NATIONAL COMMISSION ON THE BP DEEPWATER HORIZON OIL SPILL AND OFFSHORE DRILLING

BEFORE
THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

SUBCOMMITTEE ON COAST GUARD AND MARITIME TRANSPORTATION
AND SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT

UNITED STATES HOUSE OF REPRESENTATIVES

FEBRUARY 11, 2011

I. Introduction

Chairman LoBiondo, Vice-Chairman Landry, Chairman Gibbs, Vice-Chair Beutler, Ranking Members Larsen and Bishop, and members of the Subcommittees, thank you for the opportunity to testify today on behalf of the National Commission on the BP *Deepwater Horizon* Oil Spill and Offshore Drilling.

The explosion that tore through the *Deepwater Horizon* drilling rig last April 20, as the rig's crew completed drilling the exploratory Macondo well deep under the waters of the Gulf of Mexico, began a human, economic, and environmental disaster.

Eleven crew members died, and others were seriously injured, as fire engulfed and ultimately destroyed the rig. And, although the nation would not know the full scope of the disaster for weeks, the first of more than four million barrels of oil began gushing uncontrolled into the Gulf—threatening livelihoods, the health of Gulf coast residents and of those responding to the spill, precious habitats, and even a unique way of life. A treasured American landscape, already battered and degraded from years of mismanagement, faced yet another blow as the oil spread and washed ashore. Five years after Hurricane Katrina, the nation was again transfixed, seemingly helpless, as this new tragedy unfolded in the Gulf. The costs from this one industrial accident are not yet fully counted, but it is already clear that the impacts on the region's natural systems and people were enormous, and that economic losses total tens of billions of dollars.

On May 22, 2010, President Barack Obama announced the creation of the National Commission on the BP *Deepwater Horizon* Oil Spill and Offshore Drilling (the "Commission"): an independent, nonpartisan entity, directed to provide thorough analysis and impartial judgment. The President charged the Commission to determine the causes of the disaster, and to improve the country's ability to respond to spills, and to recommend reforms to make offshore energy production safer. And the President said we were to follow the facts wherever they led.

This Commission report (the "Report"), which we ask be made part of the hearing record in its entirety, is the result of an intense six-month effort to fulfill the President's charge. As a result of our investigation, we conclude:

- The explosive loss of the Macondo well could have been prevented.
- The immediate causes of the Macondo well blowout can be traced to a series of identifiable mistakes made by BP, Halliburton, and Transocean that reveal such systematic failures in risk management that they place in doubt the safety culture of the entire industry.
- Deepwater energy exploration and production, particularly at the frontiers of experience, involve risks for which neither industry nor government has been adequately prepared, but for which they can and must be prepared in the future.
- To assure human safety and environmental protection, regulatory oversight of leasing, energy exploration, and production require reforms even beyond those significant reforms already initiated since the *Deepwater Horizon* disaster. Fundamental reform

will be needed in both the structure of those in charge of regulatory oversight and their internal decision-making process to ensure their political autonomy, technical expertise, and their full consideration of environmental protection concerns.

- Because regulatory oversight alone will not be sufficient to ensure adequate safety, the oil and gas industry will need to take its own, unilateral steps to increase dramatically safety throughout the industry, including self-policing mechanisms that supplement governmental enforcement.
- The technology, laws and regulations, and practices for containing, responding to, and cleaning up spills lag behind the real risks associated with deepwater drilling into large, high-pressure reservoirs of oil and gas located far offshore and thousands of feet below the ocean's surface. Government must close the existing gap and industry must support rather than resist that effort.
- Scientific understanding of environmental conditions in sensitive environments in deep Gulf waters, along the region's coastal habitats, and in areas proposed for more drilling, such as the Arctic, is inadequate. The same is true of the human and natural impacts of oil spills.

We reach these conclusions, and make necessary recommendations, in a constructive spirit: we aim to promote changes that will make American offshore energy exploration and production far safer, today and in the future.

II. The Root Causes of the Explosion

The Commission examined in great detail what went wrong on the rig itself. Our investigative staff uncovered a wealth of specific information that greatly enhances our understanding of the factors that led to the explosion. The results of that investigation are described in detail in Chapter 4 of the Report. The separate report of the chief counsel, to be published soon, will offer the fullest account yet of what happened on the rig and why. There are recurring themes of missed warning signals, failure to share information, and a general lack of appreciation for the risks involved. In the view of the Commission, these findings highlight the importance of organizational culture and a consistent commitment to safety by industry, from the highest management levels on down.

To summarize, the Macondo blowout happened because a number of separate risk factors, oversights, and outright mistakes combined to overwhelm the safeguards—promised by both government and by private industry—to prevent just such an event from happening. But most of the mistakes and oversights at Macondo can be traced back to a single overarching failure—a failure of management by BP, Halliburton and Transocean. Set out below are what Commission investigative staff determined were "key facts."

Key Facts: The investigation team identified several key human errors, engineering mistakes and management failures including:

- A flawed design for the cement slurry used to seal the bottom of the well, which was developed without adequate engineering review or operator supervision;
- A "negative pressure test," conducted to evaluate the cement seal at the bottom of the well, identified a cementing failure but was incorrectly judged a success because of insufficiently rigorous test procedures and inadequate training of key personnel;
- Flawed procedures for securing the well that called for unnecessarily removing drilling mud from the wellbore. If left in place, that drilling mud would have helped prevent hydrocarbons from entering the well and causing the blowout;
- Apparent inattention to key initial signals of the impending blowout; and
- An ineffective response to the blowout once it began, including but not limited to a failure of the rig's blowout preventer to close off the well.

Key Findings: The "key facts" led investigators to make the following "key findings":

- Errors and misjudgments by at least three companies—BP, Halliburton and Transocean—contributed to the disaster.
- Management failures included:
  - Inadequate training of key personnel.
  - Inadequate management of numerous late-stage well design decisions.
  - Poor communication within and between the companies involved.
  - Inadequate risk evaluation and risk mitigation measures.
- The disaster could have been prevented. Notably, workers on the rig incorrectly interpreted clear warning signs of a hydrocarbon influx during the negative pressure test. If recognized, those warning signs would have allowed them to shut in the well before the blowout began.
- Government regulations did not address several key causes of the blowout, and regulators lacked the resources or technical expertise to address others.
- Whether purposeful or not, many of the risk-enhancing decisions that BP, Halliburton, and Transocean made saved those companies significant time (and money).

The Commission's investigation concludes that these failures were preventable. Errors and misjudgments by at least three companies – BP, Halliburton and Transocean – contributed to the disaster. Federal regulations did not address many of the key issues. For example, no regulation specified basic procedures for the negative pressure test used to evaluate the cement seal or minimum criteria for test success. The chapter also notes that, "...whether purposeful or not, many of the decisions that BP, Halliburton, and Transocean made that increased the risk of the Macondo blowout clearly saved those companies significant time (and money)."

Attached to this testimony is a table that sets out decisions that increased risk at Macondo, while potentially saving time.

III. Regulatory Oversight and the Need for Reform

Regulatory Oversight

The responsibilities assigned to the Minerals Management Services (MMS) in an effort to regulate the offshore oil and gas industry have created conflicts of interest and have been subject to pressure from political and industry interests. MMS was not only responsible for offshore leasing and resource management; it also collected and disbursed revenues from offshore leasing, conducted environmental reviews, reviewed plans and issued permits, conducted audits and inspections, and enforced safety and environmental regulations.

Over the course of many years, political pressure generated by a demand for lease revenues and industry pressure to expand access and expedite permit approvals and other regulatory processes often combined to push MMS to elevate revenue and permitting goals over safety and environmental goals. As a result, the safety of U.S. offshore workers has suffered. The United States has the highest reported rate of fatalities per hours worked in offshore oil and gas drilling among its international peers (the U.K., Norway, Canada, and Australia) but has the lowest reporting of injuries. This striking contrast suggests a significant under-reporting of injuries in the United States.

These problems were compounded by an outdated organizational structure, a chronic shortage of resources, a lack of sufficient technological expertise, and the inherent difficulty of coordinating effectively with all of the other government agencies that have had statutory responsibility for some aspect of offshore oil and gas activities. Besides MMS, the Departments of Transportation, Commerce, Defense, and Homeland Security, and the Environmental Protection Agency (EPA) were involved in some aspect of the industry and its many-faceted facilities and operations, from workers on production platforms to pipelines, helicopters, drilling rigs, and supply vessels.

Reorganization Needed

To remedy this conflict of interest, Congress should create an independent agency with enforcement authority to oversee all aspects of offshore drilling safety (operational and occupational) as well as the structural and operational integrity of all offshore energy production facilities, including both oil and gas production and renewable energy production. The roles and responsibilities of BOEMRE should be separated into three entities with clearly defined statutory authorities.

(1) The Offshore Safety Authority would have primary statutory responsibility for overseeing the structural and operational integrity of all offshore energy-related facilities and activities, including both oil and gas offshore drilling and renewable energy facilities. Congress should enact an organic act to establish its authorities and responsibilities, consolidating the various responsibilities now under the OCSLA, the Pipeline Safety Act, and Coast Guard authorizations. This should include responsibility for all workers in energy related offshore activities.

(2) The Leasing and Environmental Science Office would be charged with fostering environmentally responsible and efficient development of the Outer Continental Shelf, and would act as the leasing and resource manager for conventional renewable energy and other mineral resources on the OCS. The Office would also be responsible for conducting reviews under the National Environmental Policy Act (NEPA).

(3) The Office of Natural Resources Revenue would be responsible for revenue collection and auditing.

Congress should review and consider amending where necessary the governing statutes for all agencies involved in offshore activities to be consistent with the responsibilities functionally assigned to those agencies. The safety-related responsibilities of the new offshore safety agency should be included in a separate statute.

Since the Commission issued its final report on January 11th, Secretary of the Interior Ken Salazar has already announced changes in the organization within Interior that reflect many of the Commission's recommendations. Other Commission recommendations will require congressional action, especially those recommendations that seek to promote the independence of the Offshore Safety Authority from politics. For instance, the Commission recommends that the head of the Safety Authority be appointed to a fixed term that cuts across any one Presidential Administration, a change that can be accomplished most effectively only by statute.

Regulation to Better Manage Risk

The Commission also recommends a more comprehensive overhaul of both the leasing program and the regulatory policies and institutions used to oversee the safety and environmental protection of offshore activities. The goals must be to reduce and manage risk more effectively, using strategies that can keep pace with a technologically complex and rapidly evolving industry, particularly in high-risk and frontier areas, and to secure the resources needed to execute the leasing function and provide adequate regulatory oversight. To accomplish these goals the Commission offers the following three recommendations:

- The DOI should promulgate prescriptive safety and pollution-prevention standards that are developed and selected in consultation with international regulatory peers and that are at least as rigorous as the leasing terms and regulatory requirements of peer oil-producing nations.
- The Department of the Interior (DOI) should develop a proactive, risk-based performance approach specific to individual facilities, operations, and environments, similar to the "safety case" approach in the North Sea which requires drilling rigs to be certified and have safety management obligations separate and apart from the operator.
- Working with the International Regulators' Forum and other organizations, Congress and the DOI should identify those drilling, production, and emergency-response standards that best protect offshore workers and the environment, and initiate new standards and revisions to fill gaps and correct deficiencies. These standards should be applied throughout the Gulf of Mexico, in the Arctic, and globally wherever the international industry operates. Standards should be updated at least every five years, as under the

formal review process of the International Organization for Standardization (ISO). (See below for expansion on the development of international regulations.)

BOEMRE currently relies heavily on prescriptive regulations incorporating a number of industry technical standards. Prescriptive regulations must be the basis of an effective regulatory system, but given the many variables in deepwater drilling, prescriptive rules can never cover all cases. The federal agency responsible for offshore activity must have a regulatory approach that integrates more sophisticated risk assessment and risk management practices into its oversight of energy developers operating offshore. The focus should shift from prescriptive regulations covering only the operator to a *foundation* of augmented prescriptive regulations, including those relating to well design and integrity, *supplemented* by a proactive, risk-based performance approach that is specific to individual facilities (production platforms and drilling rigs), operations, and environments. Both the operator and the drilling rig owners would have a legal duty to assess and manage the risks of a specific activity by engaging all contractors and subcontractors in a coordinated safety management system.

To ensure that Interior has the ability to provide adequate leasing capabilities and regulatory oversight for the increasingly complex energy-related activities being undertaken on the OCS, budgets for these new offices as well as existing agencies should come directly from fees paid by the offshore industry, akin to how fees charged to the telecommunications industry pay for the expenses of the Federal Communications Commission, the Nuclear Regulatory Commission, the Office of Pipeline Safety which are essentially fully funded by such regulated industry payments. Through this mechanism, Congress, through legislation, and DOI, through lease provisions, could expressly oblige lessees to fund the regulation necessary to allow for private industry access to the energy resources on the OCS, including renewables.

IV. Environmental Review

As part of its inquiry into the existing regulatory structure for offshore drilling, the Commission reviewed existing mechanisms for protecting the environment. In its work on this question, the Commission focused on two issues: (1) the application of National Environmental Policy Act (NEPA) requirements to the offshore leasing process and (2) the need for better science and greater interagency consultation to improve decision-making related to management of offshore resources.

NEPA

Based on the Commission's review of leasing and permitting processes in the Gulf of Mexico before the *Deepwater Horizon* incident, the Commission concluded that the breakdown of the environmental review process for OCS activities was systemic and that Interior's historical approach to the application of NEPA requirements for offshore oil and gas activities needs significant revision. In particular, the application of tiering, use of categorical exclusions, the practice of area-wide leasing, and failure to develop formal NEPA guidance all contributed to this breakdown. The Commission recommends that the Council on Environmental Quality and the Department of the Interior revise and strengthen the NEPA policies, practices, and

procedures to improve the level of environmental analysis, transparency, and consistency at all stages of the OCS planning, leasing, exploration, and development process.

Improved Interagency Consultation and Environmental Science

Under OCSLA, it is up to the Secretary of the Interior to choose the proper balance between environmental protection and resource development. In making leasing decisions, the Secretary is required to solicit and consider suggestions from any interested agency, but he or she is not required to respond to the comments or accord them any particular weight. Similar issues arise at the individual lease sale stage and at the development and production plan stage. As a result, NOAA—the nation's ocean agency with the most expertise in marine science and the management of living marine resources—effectively has the same limited role as the general public in the decisions on selecting where and when to lease portions of the OCS. The Commission recommends a more robust and formal interagency consultation process in which NOAA, in particular, is provided a heightened role, but ultimate decision-making authority is retained at DOI. The Commission further recommends the creation of an Office of Environmental Science, led by a Chief Environmental Scientist, with specified responsibilities in conducting all NEPA reviews, coordinating other environmental reviews, and whose expert judgment on environmental protection concerns would be accorded significant weight in leasing decision-making.

V. Reforming Industry Safety Practices

Changing Business As Usual

Without effective government oversight, the offshore oil and gas industry will not adequately reduce the risk of accidents, nor prepare effectively to respond in emergencies. However, government oversight alone cannot reduce those risks to the fullest extent possible. Government oversight must be accompanied by the oil and gas industry's internal reinvention: sweeping reforms that accomplish no less than a fundamental transformation of its safety culture.

Even the most inherently risky industry can be made much safer, given the right incentives and disciplined systems, sustained by committed leadership and effective training. The critical common element is an unwavering commitment to safety at the top of an organization: the CEO and board of directors.

Industry Self-Policing as a Supplement to Government Regulation

One of the key responsibilities of government is to regulate—to direct the behavior of individuals and institutions according to rules. Many businesses and business groups are involved in internal standard setting, evaluation, and other activities that constitute self-policing or self-regulation. But even in industries with strong self-policing, government also needs to be strongly present, providing oversight and/or additional regulatory control—responsibilities that cannot be abdicated if public safety, health, and welfare are to be protected.

Industry-standard setting and self-policing organizations are widespread in the United States and in most industrialized nations—typically for operations marked by technical complexity, such as

the chemical, nuclear power, civil aviation, and oil and gas industries, where government oversight is also present. These processes coexist where there are relatively limited numbers of people with the requisite expertise and experience, making it hard for government to be able to rely solely on its own personnel (especially when government cannot compete with private-sector salaries for those experts). Support for standard setting and self-policing also arises in industries whose reputations depend on the performance of each company, and where significant revenues are at stake. However, industry self-policing is not a substitute for government but serves as an important supplement to government oversight.

After Three Mile Island, the nuclear power industry established the Institute of Nuclear Power Operations (INPO), a nonprofit organization with the ambitious mission "to promote the highest levels of safety and reliability—to promote excellence—in the operation of commercial nuclear power plants." The oil and gas industry, like the nuclear power industry, has both the substantial economic resources and the necessary economic incentive to make it happen. INPO was formed because doing so was in the industry's self-interest. As the *Deepwater Horizon* disaster made unambiguously clear, the entire industry's reputation, and perhaps its viability, ultimately turn on its lowest-performing members. If any one company is involved in an accident with widespread and potentially enormous costs, like those that followed the Macondo blowout, everyone in the industry—companies and employees—suffers, as do regional economies and the nation as a whole. No one, in industry or in government, can afford a repeat of the Macondo explosion and spill.

Like the nuclear power industry in 1979, the nation's oil and gas industry needs now to embrace the potential for an industry safety institute to supplement government oversight of industry operations. To be credible, any industry-created safety institute would need to have complete command of technical expertise available through industry sources—and complete freedom from any suggestion that its operations are compromised by multiple other interests and agendas. As a consensus-based organization, the American Petroleum Institute (API) is culturally ill-suited to drive a safety revolution in the industry. For this reason, it is essential that the safety enterprise operate apart from the API. API's longstanding role as an industry lobbyist and policy advocate—with an established record of opposing reform and modernization of safety regulations—renders it inappropriate to serve a self-policing function.

The INPO experience makes clear that any successful oil and gas industry safety institute would require in the first instance strong board-level support from CEOs and boards of directors of companies for a rigorous inspection and auditing function. Such audits would need to be aimed at assessing companies' safety cultures and encouraging learning about implementation of enhanced practices. The inspection and auditing function would need to be conducted by safety institute staff, complemented by experts seconded from industry companies. There would also need to be a commitment to share findings about safety records and best practices within the industry, aggregate data, and analyze performance trends, shortcomings, and needs for further research and development. Accountability could be enhanced by a requirement that companies report their audit scores to their boards of directors and insurance companies.

The industry's safety institute could facilitate a smooth transition to a regulatory regime based on systems safety engineering and improved coordination among operators and contractors—the principles of the U.K.'s "safety case" that shifts responsibility for maintaining safe operations at all times to the operators themselves. It should drive continuous improvement in standards and practices by incorporating the highest standards achieved globally.

The industry also needs to benchmark safety and environmental practice rules against recognized global best practices. The Safety and Environmental Management Program Recommended Practice 75 (API RP 75) developed in 1993 by the API and incorporated by reference in the Department of the Interior's new workplace safety rules, adopted in October 2010, is a reasonable starting point.

VI. Response and Containment

As part of its charge from President Obama, the Commission looked at the effectiveness of the response to the spill. There were remarkable instances of dedication and heroism by individuals involved in the rescue and cleanup. Much was done well—and thanks to a combination of good luck and hard work, the worst-case scenarios did not all come to pass. But it is impossible to argue that the industry or the government was prepared for a disaster of the magnitude of the *Deepwater Horizon* oil spill. Twenty years after the *Exxon Valdez* spill in Alaska, the same blunt response technologies—booms, dispersants, and skimmers—were used, to limited effect. On-the-ground shortcomings in the joint public-private response to an overwhelming spill like that resulting from the blowout of the Macondo well are now evident, and demand public and private investment. So do the weaknesses in local, state, and federal coordination revealed by the emergency.

Neither BP nor the federal government was prepared to conduct an effective response to a spill of the magnitude and complexity of the *Deepwater Horizon* disaster. Three critical issues or gaps existed in the government's response capacity: (1) the failure to plan effectively for a large-scale, difficult-to-contain spill in the deepwater environment; (2) the difficulty of coordinating with state and local government officials to deliver an effective response; and (3) a lack of information and understanding concerning the efficacy of specific response measures, such as dispersants or berms. Moreover, the technology available for cleaning up oil spills had improved only incrementally since 1990. The technologies and methods available to cap or control a failed well in the extreme conditions thousands of feet below the sea were also inadequate. Although BP was able to develop new source-control technologies in a compressed timeframe, and the government was able to develop an effective oversight structure, the containment effort would have benefitted from prior preparation and contingency planning.

Improved Oil Spill Response Planning

The Department of the Interior should create a rigorous, transparent, and meaningful oil spill risk analysis and planning process for the development and implementation of better oil spill response. Several steps are needed for implementation:

- Interior should review and revise its regulations and guidance for industry oil spill response plans. The revised process should ensure that all critical information and spill scenarios are addressed in the plans.

- In addition to Interior, other agencies with relevant scientific and operational expertise should play a role in evaluating spill response plans to verify that operators can conduct the operations detailed in their plans. Specifically, oil spill response plans, including source-control measures, should be subject to interagency review and approval by the Coast Guard, EPA, and NOAA. Other parts of the federal government, such as Department of Energy national laboratories that possess relevant scientific expertise, could be consulted. Plans should also be made available for a public comment period prior to final approval and response plans should be made available to the public following their approval.

- Interior should incorporate the "worst-case scenario" calculations from industry oil spill response plans into NEPA documents and other environmental analyses or reviews.

Spills of National Significance

The Gulf oil spill presented an unprecedented challenge to the response capability of both government and industry. Though the National Contingency Plan permitted the government to designate the spill as one of "national significance," this designation did not trigger any procedures other than allowing the government to name a National Incident Commander.

EPA and the Coast Guard should establish distinct plans and procedures for responding to a "Spill of National Significance." Specifically, EPA should amend or issue new guidance on the National Contingency Plan to:

- Increase government oversight of the responsible party, based on the National Contingency Plan's requirement that the government "direct" the response where a spill poses a substantial threat to public health or welfare.

- Augment the National Response Team and Regional Response Team structures to establish additional frameworks for providing interagency scientific and policymaking expertise during a spill. Further, EPA, NOAA, and the Coast Guard should develop procedures to facilitate review and input from the scientific community—for example, by encouraging disclosure of underlying methodologies and data.

- Create a communications protocol that accounts for participation by high-level officials who may be less familiar with the National Contingency Plan structure and create a communications center within the National Incident Command—separate from the joint information center established in partnership with the responsible party—to help transmit consistent and complete information to the public.

Strengthening State and Local Involvement

The response to the *Deepwater Horizon* disaster showed that state and local elected officials had not been adequately involved in oil spill contingency planning, though career responders in state government had participated extensively. Unfamiliarity with, and lack of trust in, the federal response manifested itself in competing state structures and attempts to control response operations that undercut the efficiency of the response overall.

EPA and the Coast Guard should bolster state and local involvement in oil spill contingency planning and training and create a mechanism for local involvement in spill planning and response similar to the Regional Citizens' Advisory Councils mandated by the Oil Pollution Act of 1990.

In addition, a mechanism should be created for ongoing local involvement in spill planning and response in the Gulf. In the Oil Pollution Act of 1990, Congress mandated citizens' councils for Prince William Sound and Cook Inlet. In the Gulf, such a council should broadly represent the citizens' interests in the area, such as fishing and tourism, and possibly include representation from oil and gas workers as ex-officio, non-voting members.

Research and Development for Improved Response

The technology available for cleaning up oil spills has improved only incrementally since 1990. Federal research and development programs in this area are underfunded: In fact, Congress has never appropriated even half the full amount authorized by the Oil Pollution Act of 1990 for oil spill research and development.

Specifically, Congress should provide mandatory funding (i.e. funding not subject to the annual appropriations process) at a level equal to or greater than the amount authorized by the Oil Pollution Act of 1990 to increase federal funding for oil spill response research by agencies such as Interior, the Coast Guard, EPA, and NOAA. In addition, Congress and the Administration should encourage private investment in response technology more broadly, including through public-private partnerships and a tax credit for research and development in this area.

Dispersants

Prior to the blowout, the federal government had not adequately planned for the use of dispersants to address such a large and sustained oil spill, and did not have sufficient research on the long-term effects of dispersants and dispersed oil to guide its decision-making.

EPA should update and periodically review its dispersant testing protocols for product listing or pre-approval, and modify the pre-approval process to include temporal duration, spatial reach, and volume of the spill. EPA should update its dispersant testing protocols and require more comprehensive testing prior to listing or pre-approving dispersant products. The Coast Guard and EPA should modify pre-approvals of dispersant use under the National Contingency Plan to establish procedures for further consultation based on the temporal duration, spatial reach, or volume of the spill and volume of dispersants that responders are seeking to apply. EPA and NOAA should conduct and encourage further research on dispersants.

Containment

The most obvious, immediately consequential, and plainly frustrating shortcoming of the oil spill response set in motion by the events of April 20, 2010 was the simple inability—of BP, of the federal government, or of any other potential intervener—to contain the flow of oil from the damaged Macondo well.

At the time of the blowout on April 20, the U.S. government was unprepared to oversee a deepwater source-control effort. Once the Secretary of Energy's science team, the U.S. Geological Survey, the national laboratories, and other sources of scientific expertise became involved, the government was able to substantively supervise BP's decision-making, forcing the company to fully consider contingencies and justify its chosen path.

The National Response Team should develop and maintain expertise within the Federal government to oversee source-control efforts. The National Response Team should create an interagency group—including representation from the Department of the Interior, Coast Guard, and the Department of Energy and its national laboratories—to develop and maintain expertise in source control, potentially through public-private partnerships.

Industry's Spill Preparedness

Beyond attempting to close the blowout preventer stack, no proven options for rapid source control in deepwater existed when the blowout occurred. The Department of the Interior should require offshore operators to provide detailed plans for source control as part of their oil spill response plans and applications for permits to drill.

These plans should demonstrate that an operator's containment technology is immediately deployable and effective. In applications for permits to drill, the Interior should require operators to provide a specific source-control analysis for each well. As with oil spill response plans, source-control plans should be reviewed and approved by agencies with relevant expertise, including the Interior and the Coast Guard.

Improved Capability for Accurate Flow Rate Estimates

Early flow rate estimates were highly variable and difficult to determine accurately. However, the understated estimates of the amount of oil spilling appear to have impeded planning for and analysis of source-control efforts like the cofferdam and especially the top kill.

The National Response Team should develop and maintain expertise within the federal government to obtain accurate estimates of flow rate or spill volume early in a source-control effort. The National Response Team should create an interagency group—including representation from Interior, the Coast Guard, the national laboratories, and NOAA—to develop and maintain expertise in estimating flow rates and spill volumes. In addition, EPA should amend the National Contingency Plan to create a protocol for the government to obtain accurate estimates of flow rate or spill volume from the outset of a spill. This protocol should require the responsible party to provide all data necessary to estimate flow rate or spill volume.

More Robust Well Design and Approval Process

Among the problems that complicated the Macondo well-containment effort was a lack of reliable diagnostic tools and concerns about the well's integrity. The Department of the Interior should require offshore operators seeking its approval of proposed well design to demonstrate that:

- Well components, including blowout preventer stacks, are equipped with sensors or other tools to obtain accurate diagnostic information—for example, regarding pressures and the position of blowout preventer rams.
- Wells are designed to mitigate risks to well integrity during post-blowout containment efforts.

Industry Responsibilities for Containment and Response

Industry's responsibilities extend to efforts to contain any big spills as quickly as possible and to mitigate the harm caused by spills through effective response efforts. Both government, which must be capable of taking charge of those efforts, and industry were woefully unprepared to contain or respond to a deepwater well blowout like that at Macondo. All parties lacked adequate contingency planning, and neither had invested sufficiently in research, development, and demonstration to improve containment or response technology.

From now on, the oil and gas industry needs to combine its commitment to transform its safety culture with adequate resources for containment and response. Large-scale rescue, response, and containment capabilities need to be developed and demonstrated—including equipment, procedures, and logistics—and enabled by extensive training, including full-scale field exercises and international cooperation.

To that end, at least two industry spill containment initiatives have emerged that build on ideas and equipment that were deployed in response to the Macondo blowout and spill. The nonprofit Marine Well Containment Company was created in July 2010 by four of the major, integrated oil and gas companies. The second spill containment initiative is being coordinated by Helix Energy Solutions Group, which played a role in the Macondo well containment efforts.

Yet neither the Marine Well Containment Company's planned capabilities nor Helix's go past 10,000 feet despite the fact that current drilling technology extends beyond this depth. Also it seems that neither is structured to ensure the long-term ability to innovate and adapt over time to the next frontiers and technologies. What resources, if any, either initiative will dedicate to research and development going forward is unclear.

The primary long-term goal of a spill containment company or consortia should be to ensure that an appropriate containment system is readily available to contain quickly spills in the Gulf of Mexico with the best available technology. Any spill containment company or consortia should ensure that it remains focused on this goal, even when doing so potentially conflicts with the short-term interests of its founding companies, in the case of MWCC, or the parent company, in the case of Helix. An independent advisory board, with representatives from industry, the federal

government, state and local governments, and environmental groups could help keep any spill containment initiative focused on innovative, adaptive, effective spill response over the long term.

VII. Financial Responsibility

Oil spills cause a range of harms, including personal, economic and environmental injuries, to individuals and ecosystems. The Oil Pollution Act makes the party responsible for a spill liable for compensating those who suffered as a result of the spill—through human health and property damage, lost profits, and other personal and economic injuries—and for restoring injured natural resources. The Act also provides an opportunity to make claims for compensation from a dedicated Oil Spill Liability Trust Fund. The Oil Pollution Act, however, imposes limits on both the amount for which the responsible party is liable, and the amount of compensation available through the trust fund. In the case of the *Deepwater Horizon* spill, BP (a responsible party) has placed $20 billion in escrow to compensate private individuals and businesses through the independent Gulf Coast Claims Facility. But if a less well capitalized company had caused the spill, neither a multi-billion dollar compensation fund nor the funds necessary to restore injured resources, would likely have been available.

Liability for damages from spills from offshore facilities is capped under the Oil Pollution Act at $75 million, unless it can be shown that the responsible party was guilty of gross negligence or willful misconduct, violated a federal safety regulation, or failed to report the incident or cooperate with removal activities, in which case there is no limit on damages. Claims up to $1 billion for certain damages can be made to, and paid out of, the Oil Spill Liability Trust Fund, which is currently supported by an 8-cent per-barrel tax on domestic and imported oil.

The Oil Pollution Act also requires responsible parties to "establish and maintain evidence of financial responsibility," generally based on a "worst-case discharge" estimate. In the case of offshore facilities, necessary financial responsibility ranges from $35 million to $150 million.

Inadequacy of Current System

There are two main problems with the current liability cap and financial responsibility dollar amounts. First, the relatively modest liability cap and financial responsibility requirements provide little incentive for oil companies to improve safety practices. Second, as noted, if an oil company with more limited financial means than BP had caused the *Deepwater Horizon* spill, that company might well have declared bankruptcy long before paying fully for all damages. In the case of a large spill, the Oil Spill Liability Trust Fund would likely not provide sufficient backup. Thus, a significant portion of the injuries caused to individuals and natural resources, as well as government response costs, could go uncompensated.

Any discussion of increasing liability caps and financial responsibility requirements must balance two competing public policy concerns: first, the goal of ensuring that the risk of major spills is minimized, and in the event of a spill, victims are fully compensated; and second, that increased caps and financial responsibility requirements do not drive competent independent oil companies out of the market. A realistic policy solution also requires an understanding of the

host of complex economic impacts that could result from increases to liability caps and financial responsibility requirements.

Options for Reform

As this Committee and others in Congress consider options for addressing these problems, the Commission recommends that first, Congress significantly increase the liability cap and financial responsibility requirements for offshore facilities. To address both the incentive and compensation concerns noted above, Congress should significantly raise the liability cap. Financial responsibility limits should also be increased, because if an oil company does not have adequate resources to pay for a spill, the application of increased liability has little effect. Should a company go bankrupt before fully compensating for a spill, its liability is effectively capped. If, however, the level of liability imposed and the level of financial responsibility required are set to levels that bear some relationship to potential damages, firms will have greater incentives to maximize prevention and minimize potential risk of oil spills and also have the financial means to ensure that victims of spills do not go uncompensated.

Second, the Commission recommends that Congress increase the limit on per-incident payouts from the Oil Spill Liability Trust Fund. If liability and financial responsibility limits are not set at a level that will ensure payment of all damages for spills, then another source of funding will be required to ensure full compensation. The federal government could cover additional compensation costs, but this approach requires the taxpayer to foot the bill. Therefore, Congress should raise the Oil Spill Liability Trust Fund per-incident limit. Raising the Oil Spill Liability Trust Fund's per-incident limit will require the Fund to grow through an increase of the per-barrel tax on domestic and imported oil production. An alternative would be to increase the Trust Fund through a surcharge by mandatory provisions in drilling leases triggered in the event that there are inadequate sums available in the Fund.

Third, the Commission recommends that the Department of the Interior enhance auditing and evaluation of the risk of offshore drilling activities by individual participants (operator, driller, other service companies). The Department of the Interior, insurance underwriters, or other independent entities should evaluate and monitor the risk of offshore drilling activities to promote enhanced risk management in offshore operations and to discourage unqualified companies from remaining in the market.

The Interior Department currently determines financial responsibility levels based on potential worst-case discharges, as required by the Oil Pollution Act. Although the agency's analysis to some degree accounts for the risk associated with individual drilling activities, it does not fully account for the range of factors that could affect the cost of a spill, and thus the level of financial responsibility that should be required. Interior should analyze a host of specific, risk-related criteria when determining financial responsibility limits applicable to a particular company, including, but not limited to: geological and environmental considerations, the applicant's experience and expertise, and applicable risk management plans. This increased scrutiny would provide an additional guard against unqualified companies entering the offshore drilling market.

VIII. Spill Impacts and Gulf Restoration

Even before the highly visible damages caused by the spill became clear, many crucial Gulf economic and ecological resources—fisheries, transportation, tourism—faced long-term threats. First, more than 2,300 square miles of coastal wetlands—an area larger than the State of Delaware—have been lost to the Gulf since the United States raised the massive levees along the lower Mississippi River after the devastating Great Flood of 1927. Exceptionally powerful hurricanes, always a threat to the region, struck the coast in 2005 (Katrina and Rita) and 2008 (Gustav and Ike), causing even more wetland loss. Second, low-oxygen bottom waters were in the process of forming a massive "dead zone" extending up to 7,700 square miles during the summer of 2010. Referred to as hypoxia, this phenomenon has intensified and expanded since the early 1970s as a result of nutrient pollution, mainly from Midwestern agriculture. And finally, the *Deepwater Horizon* disaster made matters worse: 11 rig workers killed in the explosion and 17 injured; many thousands of people exposed to contaminated waters, coasts, beaches, and seafood; thousands out of work; birds and sea animals killed and significant habitats damaged or destroyed. The Commission's investigation made plain that existing authorities are not adequate to redress these significant harms and ensure restoration of the Gulf.

Human Health Impacts

The National Contingency Plan overlooks the need to respond to widespread concerns about human health impacts. For smaller oil spills, the response effort is generally carried out by trained oil spill response technicians, but given the scale of the response to the *Deepwater Horizon* spill and the need to enlist thousands of previously untrained individuals to clean the waters and coastline, many response workers were not screened for pre-existing conditions. This lack of basic medical information, which could have been collected if a short medical questionnaire had been distributed, limits the ability to draw accurate conclusions regarding long-term physical health impacts. EPA should amend the National Contingency Plan to add distinct procedures to address human health impacts during a Spill of National Significance. Spills of this magnitude necessarily require a significant clean-up effort, potentially exposing workers to toxic compounds in oil and dispersants.

Consumer Confidence

Images of spewing oil and oiled beaches in newspapers and on television set the stage for public concern regarding the safety of Gulf seafood. Additional factors contributed to the lingering impression that the public could not trust government assurances that the seafood was safe: the unprecedented volumes of dispersants used, confusion over the flow rate and fate of the oil, frustration about the government's relationship with BP in spill cleanup, and lawsuits filed by fishermen contesting the government's assurance of seafood safety. The economic blow to the Gulf region associated with this loss of consumer confidence is sizable. BP gave Louisiana and Florida $68 million for seafood testing and marketing, as well as money to assess impacts on tourism and fund promotional activities. As of early December 2010, BP was considering a similar request from Alabama.

In future spills, however, there is no guarantee that a responsible party will have the means or the inclination to compensate such losses. Such indirect financial harms are currently not

compensable under the Oil Pollution Act. Nevertheless, losses in consumer confidence are real and Congress, federal agencies, and responsible parties should consider ways to restore consumer confidence in the aftermath of a Spill of National Significance.

The Commission recommends that Congress, federal agencies, and responsible parties take steps to restore consumer confidence in the aftermath of a Spill of National Significance.

Lack of Sustained Funding for Gulf Restoration

A lack of sustained and predictable funding, together with failed project coordination and long-term planning, has resulted in incomplete and often ineffective efforts to restore the Gulf's natural environment. No funding source currently exists to support regional restoration efforts. While cost estimates of Gulf restoration vary widely, according to testimony before the Commission, fully restoring the Gulf will require $15 billion–$20 billion, or a minimum of $500 million per year, over 30 years. A number of different sources currently provide funding to individual states for restoration, however none of these sources provides funds for Gulf-wide coastal and marine restoration, and none is sufficient to support the sustained effort required. Most policymakers agree that without a reliable source of long-term funding, it will be impossible to achieve restoration in the Gulf.

Several Gulf States and the federal government have filed or are expected to file suit against BP and other companies involved in the spill, which will likely create opportunities to direct new restoration funds to the region. In some cases, congressional action will be required to ensure that funds are directed to this purpose. The Commission recommends that 80 percent of any Clean Water Act penalties and fines be directed to Gulf restoration. Should such penalties and fines not be directed to the Gulf, Congress should consider other mechanisms for a dedicated funding stream not subject to annual appropriations. Although such mechanisms face hurdles, the fact remains that resources are needed if progress on coastal restoration is to continue. Inaction is a prescription for further degradation. Should CWA penalties not be redirected to Gulf restoration, Congress should consider other mechanisms for a dedicated funding stream not subject to annual appropriations.

Decision-making Body for Expediting Work

In order for funding to be most efficiently directed at long-term restoration, a decision-making body is needed that has authority to set binding priorities and criteria for project funding. The Gulf Coast Ecosystem Restoration Task Force is now in place, as recommended by the September 2010 report on restoration from Secretary of the Navy Ray Mabus to the President, and subsequently established by Presidential Executive Order. According to the Executive Order, the job of the Task Force is to begin coordinating the different restoration projects being undertaken by various jurisdictions in the Gulf, coordinating related science activities and engaging stakeholders. However, as many in Congress and the Administration have suggested, the Task Force lacks some features necessary to effectively direct long-term restoration efforts in the Gulf—most importantly the ability to set binding goals and priorities.

The Commission recommends that Congress establish a joint state-federal Gulf Coast Ecosystem Restoration Council. The Council should implement a restoration strategy for the region that is

compatible with existing state restoration goals. Experience in major restoration endeavors, including those in the Gulf, has shown that, absent binding goals to drive the process, restoration projects are insufficiently funded, focused, or coordinated. Therefore, the restoration strategy should set short- and long-term goals with binding criteria for selecting projects for funding. Key criteria should include national significance; contribution to achieving ecosystem resilience; and the extent to which national policies—such as those related to flood control, oil and gas development, agriculture, and navigation—directly contributed to the environmental problem. Congress should also ensure that the priorities and decisions of the Council are informed by input from a Citizens Advisory Council that represents diverse stakeholders.

Restoration Rooted in Science

Finally, but essentially, restoration decisions must be rooted in science. An approach that draws heavily on information and advice from scientists will result in project selection and funding allocations that are more likely to lead to an effective region-wide restoration strategy. Such an approach will also advance transparency in decision-making and enhance credibility with the public.

The Commission accordingly recommends the establishment of a Gulf Coast Ecosystem Restoration Science and Technology Program that would address these issues in three ways: (1) by creating a scientific research and analysis program, supported by the restoration fund, that is designed to support the design of scientifically sound restoration projects; (2) by creating a science panel to evaluate individual projects for technical effectiveness and consistency with the comprehensive strategy; and (3) by supporting adaptive management plans based on monitoring of outcomes scaled both to the strategy itself and to the individual projects or categories of projects included in it.

Managing Ocean Resources

The Commission recommends that as a part of management and restoration efforts in the marine environment, greater attention should be given to new tools for managing ocean resources, including monitoring systems and spatial planning. Marine scientists have emerged from the *Deepwater Horizon* incident with more precise questions to investigate, as well as a better sense of monitoring needs in the Gulf of Mexico, which because of its multiple uses and economic value should be a national priority. To that end, the National Ocean Council, which the President initiated in July 2010, should work with the responsible federal agencies, industry and the scientific community to expand the Gulf of Mexico Integrated Ocean Observing System, including the installation and maintenance of an in situ network of instruments deployed on selected production platforms. Participation in this system by industry should be regarded as a reasonable part of doing business in nation's waters.

Coastal and marine spatial planning has the potential to improve overall efficiency and reduce conflicts among ocean users. Congress should fund grants for the development of regional planning bodies at the amount requested by the President in the fiscal year 2011 budget submitted to Congress. Ocean management should also include more strategically sited Marine Protected Areas, including but not limited to National Marine Sanctuaries, which can be used as "mitigation banks" to help offset harm to the marine environment. Given the economic and

cultural importance of fishing in the Gulf region—and the importance of Gulf seafood to the rest of the country—scientifically valid measures, such as catch share programs, should be adopted to prevent overfishing and ensure the continuity of robust fisheries.

IX. The Future of Offshore Drilling

The central lesson to be drawn from the catastrophe is that no less than an overhauling of both current industry practices and government oversight is now required. The changes necessary will be transformative in their depth and breadth, requiring an unbending commitment to safety by government and industry to displace a culture of complacency. Drilling in deepwater, however, does not have to be abandoned. It can be done safely. That is one of the central messages of the Commission's final report. The Commission's recommendations are intended to do for the offshore oil and gas industry what new policies and practices have done for other high risk industries after their disasters. The Commission believes that the potential for such a transformation to ensure productive, safe, and responsible offshore drilling is significant, and provides reason for optimism even in the wake of a disaster.

The significance of the *Deepwater Horizon* disaster, however, is broader than just its relevance to the future of offshore drilling. The disaster signals the need to consider the broader context of the nation's patterns of energy production and use, now and in the future—the elements of America's energy policy. The explosion at the Macondo well and the ensuing enormous spill—particularly jarring events because of the belief they could never happen—force a reexamination of many widely held assumptions about how to reconcile the risks and benefits of offshore drilling, and a candid reassessment of the nation's policies for the development of a valuable resource. They also support a broader reexamination of the nation's overall energy policy.

Important decisions about whether, when, where, and how to engage in offshore drilling should be made in the context of a national energy policy that is shaped by economic, security, pace of technology, safety, and environmental concerns. Offshore drilling will certainly be an important part of any such policy, but its relative importance today will not, and should not, be the same a half-century from now. The nation must begin a transition to a cleaner, more energy-efficient future. Otherwise, its security and well-being will be increasingly dependent on diminishing supplies of nonrenewable resources and on supplies from foreign sources.

Drilling for oil in the Gulf of Mexico, however, is not solely a matter for U.S. consideration. Both Mexico and Cuba have expressed interest in deepwater drilling in the Gulf in the near future. Potential sites are close enough to the United States—Cuba's mainland lies only 90 miles from Florida's coast and the contemplated wells only 50 miles—that if an accident like the *Deepwater Horizon* spill occurs, fisheries, coastal tourism, and other valuable U.S. natural resources could be put at great risk. It is in our country's national interest to negotiate now with these neighbors to agree on a common, rigorous set of standards, a system for regulatory oversight, and operator adherence to an effective safety culture, along with protocols to cooperate on containment and response strategies in case of a spill.

Frontier Areas

Our Commission also examined prospects in so called "frontier areas." On December 1, in the wake of the *Deepwater Horizon* experience, Interior Secretary Ken Salazar announced that the Administration would not proceed with drilling in areas where there are "no active leases" during the next five-year leasing plan. As a result, exploration and production in certain frontier areas—the eastern Gulf and off of the Atlantic and Pacific coasts—are deferred. The Secretary also indicated that plans for 2011 drilling in Alaska's Beaufort Sea would be subjected to additional environmental assessments.

The major interest in offshore Alaska reflects the likelihood of finding significant new sources of oil there. The Chukchi and Beaufort Sea off Alaska's north coast rank behind only the Gulf of Mexico in estimated domestic resources. But finding and producing those potentially important supplies of oil offshore Arctic Alaska requires the utmost care, given the special challenges for oil spill response and containment, and heightened risks associated with this frontier, especially its extreme cold, extended seasons of darkness, hurricane-strength storms, and pervasive fog—all affecting access and working conditions—and the extraordinary richness of its ecosystems and the subsistence native communities dependent upon their protection. To deal with these serious concerns about Arctic oil spill response, containment and the heightened environmental stakes the Commission recommends three approaches before the Department of the Interior makes a determination that drilling in a particular area is appropriate. First, the Department should ensure that the containment and response plans proposed by industry are adequate for each stage of development and that the underlying financial and technical capabilities have been satisfactorily demonstrated in the Arctic. Second, the Coast Guard and the oil companies operating in the Arctic should carefully delineate their respective responsibilities in the event of an accident—including search and rescue—and then must build and deploy the necessary capabilities. Third, Congress should provide the resources to establish Coast Guard capabilities in the Arctic, based on the Guard's review of gaps in its capacity.

The Arctic is shared by multiple countries, many of which are considering or conducting oil and gas exploration and development. The extreme weather conditions and infrastructure difficulties are not unique to the U.S. Arctic. Damages caused by an oil spill in one part of the Arctic may not be limited to the waters of the country where it occurred. As a result, the Commission recommends that strong international standards related to Arctic oil and gas activities be established among all the countries of the Arctic. Such standards would require cooperation and coordination of policies and resources.

Bringing the potentially large oil resources of the Arctic outer continental shelf into production safely will require an especially delicate balancing of economic, human, environmental, and technological factors. Both industry and government will have to demonstrate standards and a level of performance higher than they have ever achieved before.

Creating and implementing a national energy policy will require enormous political effort and leadership—but it would do much to direct the nation toward a sounder economy and a safer and more sustainable environment in the decades to come. Given Americans' consumption of oil, finding and producing additional domestic supplies will be required in coming years, no matter

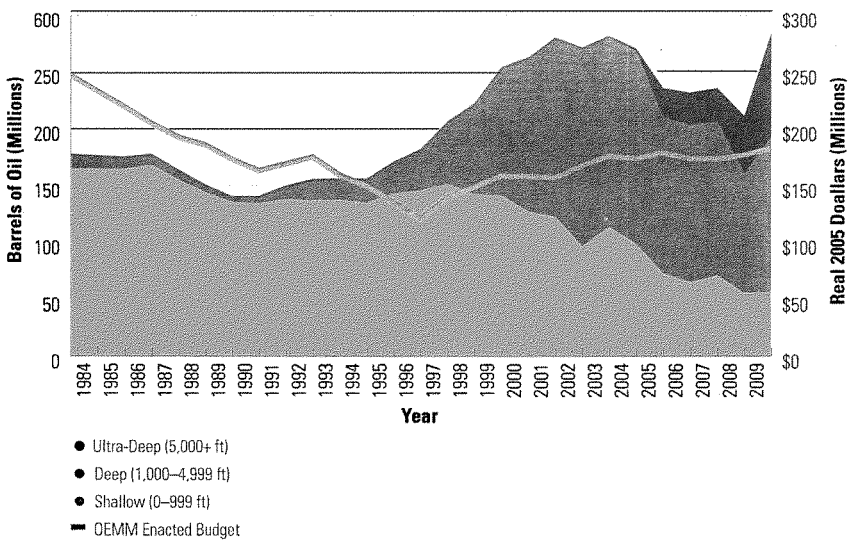
what sensible and effective efforts are made to reduce demand—in response to economic, trade, and security considerations, and the rising challenge of climate change.

The extent to which offshore drilling contributes to augmenting that domestic supply depends on rebuilding public faith in existing offshore energy exploration and production. We have proposed a series of recommendations that will enable the country and the oil and gas industry to move forward on this one critical element of U.S. energy policy: continuing, safe, responsible offshore oil drilling to meet our nation's energy demands over the next decade and beyond. Our message is clear: both government and industry must make dramatic changes to establish the high level of safety in drilling operations on the outer continental shelf that the American public has the right to expect and to demand. It is now incumbent upon the Congress, the executive branch, and the oil and gas industry to take the necessary steps.

Examples of Decisions That Increased Risk At Macondo While Potentially Saving Time

Decision	Was There A Less Risky Alternative Available?	Less Time Than Alternative?	Decision-maker
Not waiting for more centralizers of preferred design	Yes	Saved Time	BP on shore
Not waiting for foam stability test results and/or redesigning slurry	Yes	Saved Time	Halliburton (and perhaps BP) on shore
Not running cement evaluation log	Yes	Saved Time	BP on shore
Using spacer made from combined lost circulation materials to avoid disposal issues	Yes	Saved Time	BP on shore
Displacing mud from riser before setting surface cement plug	Yes	Unclear	BP on shore
Setting surface cement plug 3000 feet below mud line in seawater	Yes	Unclear	BP on shore (approved by MMS)
Not installing additional physical barriers during temporary abandonment procedure	Yes	Saved Time	BP on shore
Not performing further well integrity diagnostics in light of troubling and unexplained negative pressure test results	Yes	Saved Time	BP (and perhaps Transocean) on rig
Bypassing pits and conducting other simultaneous operations during displacement	Yes	Saved Time	Transocean (and perhaps BP) on rig

MMS Budget and Gulf of Mexico Crude Oil Production, 1984-2009

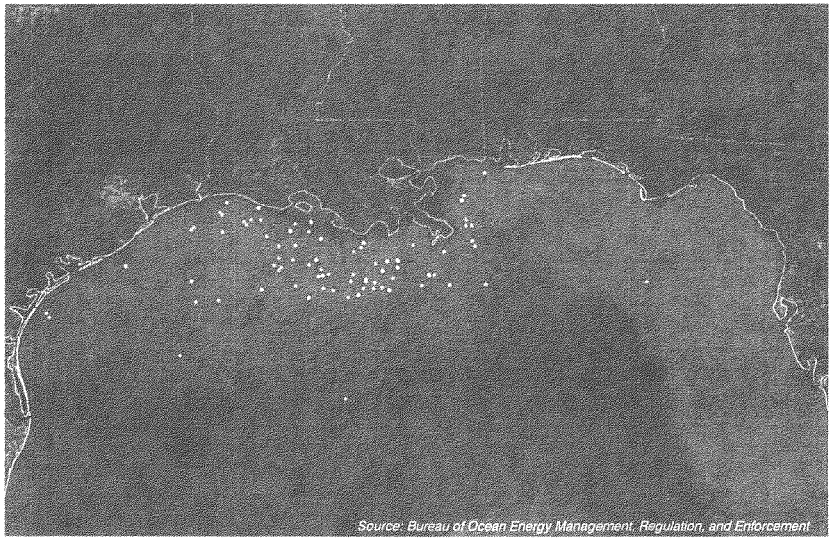


In the last twenty years, MMS's leasing, environmental, and regulatory budget decreased or remained static while deepwater oil production in the Gulf of Mexico boomed.

Note: OEMM (Office of Energy and Minerals Management) has responsibility for renewable energy, leasing and environmental, resource evaluation, regulatory, and information management programs. It does not include revenue management or general administration.

Sources: "Budget Division: Congressional Budget Justifications," Bureau of Ocean Energy Management, Regulation, and Enforcement, http://www.boemre.gov/adm/budget.html; Minerals Management Service, Deepwater Gulf of Mexico 2009: Interim Report of 2008 Highlights, (May 2009), 71-72, http://www.gomr.boemre.gov/PDFs/2009/2009-016.pdf; U.S. Energy Information Administration, This Week in Petroleum: Production, Proved Reserves and Drilling in the Ultra-Deepwater Gulf of Mexico, (May 26, 2010), http://www.eia.gov/oog/info/twip/twiparch/100526/twipprint.html.

Loss of Well Control Accidents



Loss of Well Control Accidents and Resulting Consequences

- Loss of Well Control Panel Investigation
- Fire or Explosion
- Fatalities
- Fire or Explosion with Fatalities or Injuries

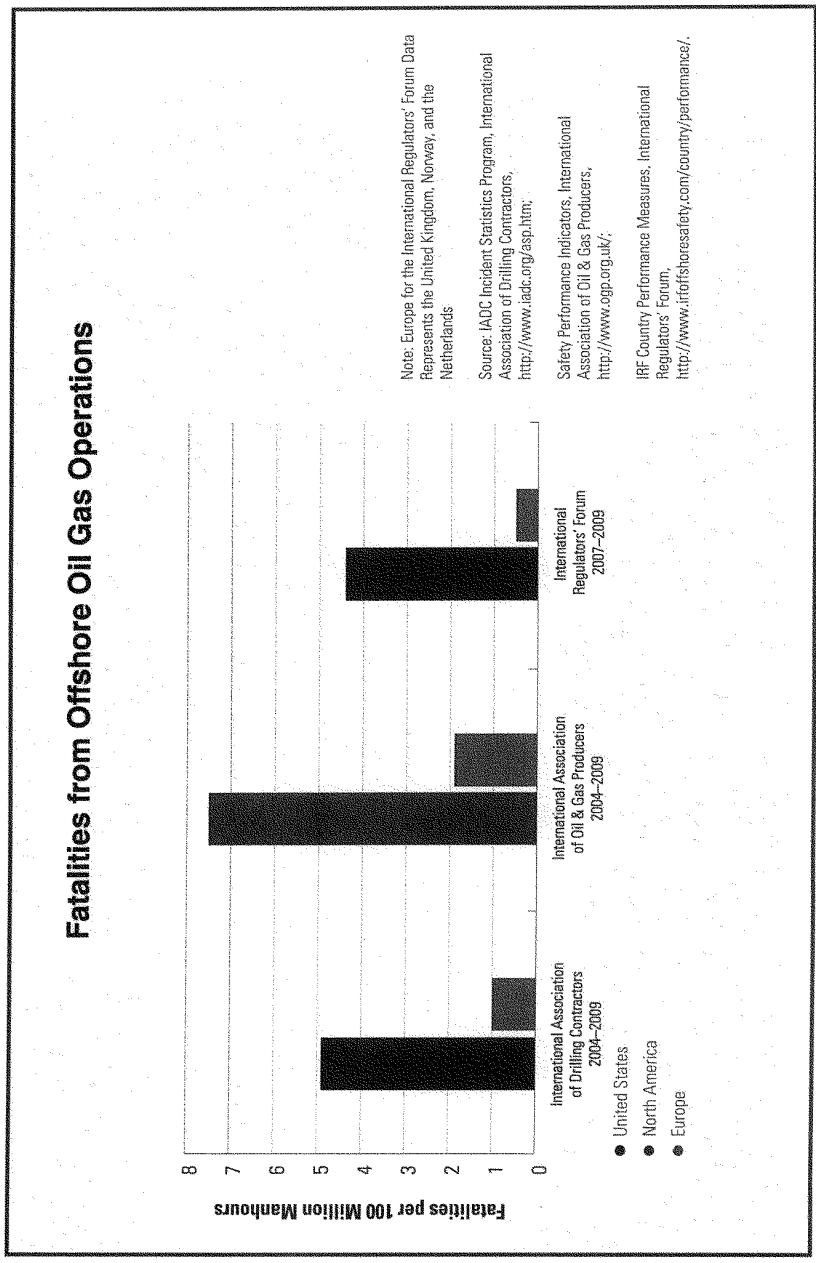
Between 1996 and 2009, in the U.S. Gulf of Mexico, there were 79 reported loss of well control accidents—when hydrocarbons flowed uncontrolled either underground or at the surface.

The regulator considers the following three factors when determining whether or not an accident will undergo a panel investigation: the actual and potential severity of the incident; the complexity of the incident; and, the probability of similar incidents occurring.

Loss of Well Control Accidents

Loss of Well Control Accidents & Consequences		
Date	Company	Consequence Code
01/24/96	Oryx Energy Company	
11/10/96	Noreen Explorer, Inc.	
11/27/96	Tana Oil and Gas Corporation	
12/03/96	Amoco Production Company	
01/10/97	BHP Petroleum, Inc.	
03/04/97	Shell Offshore, Inc.	
04/01/97	American Exploration Company	
05/31/97	Houston Exploration Company	
10/20/97	Freeport-McMoRan Resource Partners	
01/06/98	Hall-Houston Oil Company	
01/16/98	Chevron U.S.A., Inc.	
04/30/98	Vastar Resources Inc.	
07/08/98	Newfield Exploration Company	
11/22/98	Ocean Energy Inc.	
12/09/98	Petrobras America Inc.	
02/10/99	Union Pacific Resources Company	
08/11/99	Freeport McMoran Sulphur Inc.	
09/10/99	Newfield Exploration Company	
12/02/99	Apache Corporation	
12/05/99	Freeport McMoran Sulphur LLC	
01/02/00	Calkon Petroleum Operating Company	
01/05/00	Apache Corporation	
01/12/00	Murphy Exploration & Production Company	
02/28/00	Murphy Exploration and Production Company	
03/22/00	Forcenergy Inc.	
04/07/00	Union Oil Company of California	
08/15/00	Houston Exploration Company	
11/18/00	Houston Exploration Company	
03/01/01	Forest Oil Corporation	
04/02/01	Newfield Exploration Company	
04/04/01	Matrix Oil & Gas, Inc.	
05/10/01	Devon Energy Production Company	
05/24/01	BHP Petroleum (Americas) Inc.	
07/06/01	Tri-Union Development Corporation	
07/13/01	William G. Helis Company	
10/24/01	Argo, L.L.C.	
11/21/01	BP Amoco Corporation	
01/12/02	BP Amoco Corporation	
08/08/02	BP Exploration & Oil Inc	
09/07/02	El Paso Production Oil & Gas Company	
10/03/02	Murphy Exploration & Production Co.	
11/14/02	BP Exploration & Production Inc.	
12/06/02	Kerr McGee Corporation	
03/08/03	Anadarko E&P Company	
04/12/03	Helis Oil & Gas Corporation	
04/22/03	ChevronTexaco Corporation	
09/02/03	Mariti Operating Company	
12/04/03	Walter Oil & Gas Corporation	
02/09/04	Energy Partners, Ltd.	
02/17/04	Oxy Energy (Dunhill), L.P.	
02/22/04	ATP Oil & Gas Corporation	
10/21/04	Amerada Hess Corporation	
03/08/05	Hunt Oil Company	
05/28/05	W & T Offshore, Inc.	
11/30/05	W & T Offshore, Inc.	
12/01/05	Chevron USA	
02/20/06	Forest Oil Corporation	
11/18/06	Dominion Exploration & Production, Inc.	
01/23/07	Fairways Offshore Exploration, Inc.	
03/16/07	East Cameron Partners, LP	
06/24/07	Stone Energy Corporation	
08/22/07	Apache Corporation	
09/07/07	Eni US Operating Co. Inc.	
11/20/07	BP Corporation North America Inc.	
12/03/07	Rooster Petroleum, LLC	
02/14/08	Apache Corporation	
04/23/08	Apache Corporation	
04/26/08	LLOG Exploration Offshore, Inc.	
05/06/08	Mariner Energy, Inc.	
08/19/08	Energy Resource Technology GOM, Inc.	
10/31/08	Chevron U.S.A. Inc.	
11/01/08	Union Oil Company of California	
12/20/08	El Paso E&P Company, L.P.	
04/19/09	LLOG Exploration Offshore, Inc.	
04/23/09	Stone Energy Corporation	
05/27/09	Stone Energy Corporation	
08/26/09	Stone Energy Corporation	
12/22/09	Not Listed	
12/29/09	Murphy Exploration & Production Company	

KEY: Loss of Well Control | Panel Investigation | Fire or Explosion | Fatalities | Fire or Explosion with Fatalities or Injuries


Fatalities from Offshore Oil Gas Operations
Fatalities per 100 Million Manhours
0
1
2
3
4
5
6
7
8
International Association of Drilling Contractors 2004–2009
International Association of Oil & Gas Producers 2004–2009
International Regulators' Forum 2007–2009
United States
North America
Europe
Note: Europe for the International Regulators' Forum Data Represents the United Kingdom, Norway, and the Netherlands
Source: IADC Incident Statistics Program, International Association of Drilling Contractors, http://www.iadc.org/asp.htm;
Safety Performance Indicators, International Association of Oil & Gas Producers, http://www.ogp.org.uk/;
IRF Country Performance Measures, International Regulators' Forum, http://www.irfoffshoresafety.com/country/performance/.

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