

**Hearing on the Liability and Financial
Responsibility for Oil Spills under the
Oil Pollution Act of 1990 and Related
Statutes**

**House Committee on Transportation
and Infrastructure**

**Testimony of
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Thank you, Representative Oberstar, Ranking Member Mica and members of the Committee.

Good afternoon. My name is Robert Hartwig and I am President and Economist for the Insurance Information Institute, an international property/casualty insurance trade association based in New York City.¹ I am also a Chartered Property Casualty Underwriter (CPCU) and have worked on a wide variety of insurance issues during my 17 years in the property/casualty insurance and reinsurance industries, including research into the energy and marine insurance markets. The Institute's members account for nearly 70 percent of all property/casualty insurance premiums written in the United States. Its primary mission is to improve understanding of the insurance industry and the key role it plays in the global economy.

I have been asked by the Committee to provide testimony on the insurance implications of the Deepwater Horizon accident. Specifically, I will address the following three issues:

- (i) The insurance arrangements in place at the time of the Deepwater Horizon accident;
- (ii) The immediate and current insurance market reaction to the accident; and
- (iii) The potential market reaction to proposed changes by Congress to various Acts governing the limits of liability associated with offshore drilling activity and the spillage of oil.

Background on the Deepwater Horizon Accident²

On April 20, 2010, at approximately 10PM Central Time, a fire was reported on the Deepwater Horizon, a semi-submersible mobile offshore drilling rig located in the Gulf of Mexico off the coast of Louisiana and owned by Swiss-based Transocean Limited. The fire and explosion claimed the lives of 11 workers and injured 17 others. The rig

¹ Contact information: Tel: (212) 346-5520; Email: bobh@iii.org.

² The Insurance Information Institute maintains a comprehensive PowerPoint presentation on the insurance issues related to the Deepwater Horizon accident. It is available for download at: <http://www.iii.org/presentations/the-deepwater-horizon-disaster-insurance-market-impacts.html>

itself sank on April 22 in 5,000 feet of water. The rig was insured for approximately \$560 million, a sum that has largely already been paid to the rig's owner by its insurers due to the fact that Deepwater Horizon is viewed as a total loss.

As displayed in Figure 1, with an estimated 798,000 barrels of oil spilled through June 1, the Deepwater Horizon incident is the second largest oil well blowout in world history and the largest ever in U.S. waters. Although there has been some success at reducing the flow of oil into the Gulf during the first week of June, it is likely that the total spill volume will exceed one million or more barrels before complete control of the well is regained and the flow is completely stopped. By way of comparison, the Deepwater Horizon spill as of June 1 is approximately eight times the magnitude of the largest prior offshore platform spill in U.S. history, in which 100,000 barrels of oil were released into the Pacific Ocean off the California coast in January 1969. Prior to Deepwater, the largest and best known oil spill in American history involved a tanker, not a platform. The Exxon Valdez, after running aground in March 1989, spilled 257,000 barrels of crude into Prince William Sound, Alaska. The Deepwater Horizon spill as of June 1 was approximately triple that size.

The Exxon Valdez spill is also relevant because much of the key regulation governing the assignment and magnitude of liability associated with oil spills dates to legislation passed by Congress in the wake of that event, the Oil Pollution Act (OPA) of 1990 being the most significant among these. The OPA will be discussed in greater detail later in my testimony.

Offshore Energy Facilities: Insurance Market Considerations

Offshore oil platforms are among the most difficult and complex commercial risks to insure, subject to a unique set of environmental conditions because of their location at sea and their constant exposure to catastrophes and loss.

Despite the risks they face from hurricanes and other weather events, loss events for oil rigs and platforms are relatively infrequent, but have the potential to generate large losses when they do occur. For example, the 2005 hurricane season in the Gulf of Mexico

produced record losses for the offshore energy sector. These losses, however, were largely confined to physical damage sustained by the rigs and undersea pipelines, not pollution from oil spills.

The world's worst offshore oil disaster to date occurred in 1988, when an explosion and resulting fire destroyed the Piper Alpha platform in the North Sea, killing 167 men. The total insured loss amounted to \$3.6 billion in 2009 dollars. The Piper Alpha, operated by Occidental Petroleum (Caledonia) Ltd., accounted for around 10 percent of the oil and gas production from the North Sea at the time. The large loss of life and the cost of the rig itself, rather than pollution, were the primary drivers of loss in the Piper Alpha incident.

Due to the complex nature of the risks involved, developing an insurance program for an offshore energy operator is a sophisticated process that requires special knowledge and expertise on the part of the global insurance and reinsurance markets.

Risk management solutions may feature a number of risk financing components, such as self-insurance, high retentions and deductibles, traditional insurance, reinsurance, participation in mutual insurers, and the use of captives and the capital markets.

Many of the largest offshore energy operators, like BP, are self-insured for physical damage to their property and equipment. Self-insurance may be preferable when the high values and exposures involved would make the cost of insurance prohibitive.

Others may participate in industry-dedicated mutual insurers whereby member companies pay into a common fund that responds in the event of loss.

Summary of Key Offshore Energy Coverages

A number of insurers offer tailored insurance programs to help offshore energy operators protect their physical assets as well as their legal liability. Key insurance coverages relevant to the Deepwater Horizon accident include:³

Physical Damage: provides coverage for physical damage or loss to a company's offshore property and equipment, including offshore fixed platforms, pipelines and production and accommodation facilities. Other equipment such as offshore loading buoys may also be covered. Coverage is also available for mobile drilling rigs such as jack-ups, semi-submersibles and drill ships.

Business Interruption/Loss of Production Income: provides coverage for energy businesses against loss due to temporary interruption in oil/gas supply from an offshore facility as a result of physical loss or damage to an offshore facility.

Operators' Extra Expense (Control of Well): provides coverage for costs incurred by energy businesses when regaining control of a well after "blowout". Coverage may include: redrilling expenses incurred in the restoring or redrilling of a well after a blowout; and seepage and pollution liability coverage to pay third party bodily injury, damage to and loss of third party property, the cost of clean-up and defense expenses emanating from a blowout.

Comprehensive General Liability: provides coverage for claims an energy business is legally obligated to pay as a result of bodily injury or property damage to a third party.

Environmental/Pollution Liability: provides coverage for bodily injury, property damage, and clean up costs as a result of a pollution incident from a designated site.

Workers Compensation/Employers Liability: covers energy businesses for claims arising from injury or death of employees occurring in the course of their employment.

Insurance Arrangements Associated with the Deepwater Horizon Event

As discussed earlier in my testimony, offshore oil platforms are difficult and complex commercial risks to insure. This fact combined with the possibility of large scale losses means that the insurance arrangements themselves are complex, usually involving many insurers around the globe. To date, approximately 20 insurers have announced losses associated with the Deepwater Horizon accident, and more are likely to do so in the

³Insurance Information Institute, "Offshore Energy Facilities: Insurance Considerations," April 28, 2010: http://www.iii.org/articles/offshore_energy_facilities_insurance_considerations.html

month ahead. The key insurance arrangements related to the Deepwater Horizon event have been reported as follows:⁴

- **BP:** With a 65% interest in the Deepwater Horizon joint venture, BP says it is self-insured. BP's captive (Jupiter Insurance Ltd) has \$6 billion in capital, but does not purchase outside reinsurance protection. Jupiter's per occurrence limit on physical damage and business interruption is \$700 million and is not expected to cover environmental clean-up costs or third party liability.
- **Andarko Petroleum:** With a 25% interest in the Deepwater Horizon joint venture, Andarko Petroleum is believed to have a \$100 million owner's extra expense policy (covers re-drilling, re-gaining control of well, etc).
- **Mitsui Oil Exploration:** With a 10% interest in the Deepwater Horizon joint venture, Mitsui is believed to have a \$45 million owner's extra expense policy.
- **Transocean:** The drilling contractor is believed to have \$560 million of physical damage insurance, which is highly syndicated. Insurers have already paid the majority of losses under this coverage. In addition, Transocean carries some \$950 million in third party liability insurance, of which \$700 million excess of \$50 million is thought to cover offshore risks.
- **Cameron:** The manufacturer of the blowout preventer that failed on the rig has a \$500 million liability insurance policy.
- **Halliburton:** Service provider to Deepwater Horizon and supplier of cement used to plug the well has liability insurance in excess of \$1 billion.

Insured loss estimates currently range between \$1.4 billion and \$3.5 billion. The actual economic damages will greatly exceed the insured loss amount. This is in part due to the

⁴ Barclay's Capital research note, May 10, 2010; Credit Suisse research note, May 11, 2010.

fact that the BP, the lead firm on the project, is self insured. The company has repeatedly stated that it will pay all “legitimate” claims arising from the spill.

Immediate Insurance Market Reaction to the Deepwater Horizon Accident

The global energy insurance market is accustomed to infrequent but large scale losses. Historically, in the wake of such events, markets have behaved in an orderly manner consistent with the basic principles of supply and demand. In energy insurance markets, as in all insurance markets, the supply of insurance (also referred to as capacity) is a function of the amount of available capital which in turn is dependent on the rate of return that can be earned on that capital for any given level of demand. Of course, the riskier the venture, the greater the required rate of return. Needless to say, insuring deep sea drilling platforms is a risky business.

As the magnitude of the Deepwater Horizon incident became apparent in late April and as repeated early efforts to contain the spill failed, it became clear to insurance underwriters that Deepwater Horizon would likely become one of the most expensive events in history for the offshore energy insurance market. Current insured loss estimates range from \$1.4 billion to \$3.5 billion dollars. The wide range in loss estimates is primarily attributable to uncertainty surrounding the magnitude of business interruption losses if significant quantities of oil wash ashore.

Capacity and Pricing

The global energy market response to the Deepwater Horizon loss has been orderly. Capacity has not fled the market. Prices have risen, but commensurate with the rapidly changing outlook in demand for liability coverages and mounting uncertainty over government action related to limits of liability combined with the outlook for a very active 2010 hurricane season.

Moody’s estimates that property coverages are 15 percent higher for rigs operating in shallow water and up to 50 percent higher for deep water rigs.⁵ Insurance broker Willis

⁵ Moody’s Investors Service, Special Report, “*Deepwater Horizon Losses Sting Insurers and Reinsurers as Hurricane Season Looms*,” June 2010.

cites certain insurers' belief that the Deepwater Horizon event is "market changing" in terms of physical loss but that the "true market-changing loss dynamic will continue to take place in the liability arena." Indications are that the magnitude of increase is higher for rig operators in the Gulf of Mexico than in other parts of the world. According to the CEO of AonBenfield Reinsurance, offshore energy policies in the Gulf are expected to "virtually double."⁶ Elsewhere in the world, anecdotal reports suggest the price of energy coverage could be headed up by 10 to 15 percent over the next year as policies renew. It is also likely that reinsurance rates will rise for energy risks, the ultimate increase being dependent on the size of any damage incurred by hurricanes this year.

In terms of capacity, the typical third party liability limit purchased by large operators is approximately \$1 billion. By way of reference, worldwide energy market premiums total between \$2.5 billion and \$3 billion on an annual basis. There is no indication that liability capacity is shrinking to any appreciable extent. At the same time, higher prices do not appear to be attracting additional capacity. This is likely due to extreme uncertainty surrounding not only the ultimate liability losses arising from Deepwater Horizon, but the liability environment going forward given Congressional interest in raising the limits of liability associated with oil spills. Requirements that energy firms demonstrate higher limits of financial responsibility will increase the demand for liability coverage among drillers and increase the risk to insurers willing to offer higher coverage limits.

Contributing to the skittishness of new capital is the fact that the Deepwater Horizon event could well unleash one of the largest tort actions in United States history. It will be years before the final cost of this accident is known. By way of reference, litigation from the 1989 Exxon Valdez lasted nearly 20 years, having finally been settled by the U.S. Supreme Court in 2008.

According to the *National Law Journal* and as displayed in Figure 2, a total of 126 Deepwater Horizon lawsuits had been filed as of May 24 against the four primary

⁶ Dow Jones News Service interview with AonBenfield Reinsurance Brokers CEO Jan-Oliver Thofern, "Energy Insurance Rates May Double in the Gulf of Mexico," June 7, 2010.

companies involved in the spill: BP, Transocean Ltd., Halliburton Energy Services and Cameron International Corporation.⁷ Suits alleging environmental damage were the most common, accounting for 30.2 percent of those filed, following suits alleging damage to person property (17.2 percent) and torts to land (12.9 percent).

Other types of litigation are, of course, possible in the months and years ahead, including health claims by workers assisting in the clean-up operation as well as coastal residents alleging bodily injury due to exposure to oil and chemical dispersants.

It is worth noting that on June 1 the U.S. Attorney General announced that federal authorities had opened civil and criminal investigations into the spill. In addition to the Oil Pollution Act of 1990 (discussed in the next section), the U.S. government has a wide range of laws under which it can bring charges, including:⁸

- **The Clean Water Act:** primary federal law in the U.S. governing water pollution;
- **The Migratory Bird Treaty Act:** federal statute makes it unlawful to harm over 800 species of migratory birds;
- **The Refuse Act:** - federal statute governing use of waterways that prohibits dumping of refuse into navigable waters;
- **The Endangered Species Act:** makes it unlawful to harm or kill any animal on endangered species list.

Conviction on criminal charges could result in a fine equal to twice the cost of economic and environmental damages and is not covered by insurance.

Possible Insurance Market Impacts of Proposed Changes to OPA Limits of Liability

The Oil Pollution Act of 1990, enacted amid rising public concerns in the wake of the 1989 Exxon Valdez spill, is the principal statute governing the assignment of liability and the requirements of financial responsibility for events involving oil pollution. Since the

⁷ National Law Journal, May 24, 2010.

⁸ U.S. Department of Justice, Office of the Attorney General; Environmental Protection Agency (EPA); U.S. Fish and Wildlife Service.

Deepwater Horizon incident, there has been a great deal of discussion in Congress and public policy circles about changing (i.e., increasing) the limits of liability from those that currently exist under the OPA.

Before discussing in detail how changes in the OPA might impact energy insurance markets, a brief review of the relevant provisions of the law affecting those markets is provided here.

The Oil Pollution Act of 1990's Financial Responsibility and Liability Framework

With respect to liability, the OPA establishes a financial responsibility requirement and compulsory liability insurance combined with strict liability rules that seek to achieve several objectives:⁹

- Prevent oil pollution damages from offshore energy facilities;
- Establish oil spill financial responsibility (OSFR) for lease holders of offshore facilities to demonstrate the capability to meet liability for possible removal costs and damages;
- Establish a standard for measuring natural resource damages (worst case oil spill for an offshore energy facility), and
- Establish penalties for not complying with the Act.

Specifically, the OPA features a compulsory liability insurance structure as part of the oil spill financial responsibility (OSFR) requirement combined with strict liability rules for oil pollution damages associated with offshore energy facilities. The financial responsibility and compulsory insurance requirements provide the funds to pay for damages, and the strict liability rules allow third-party claims to be made directly against the insurer, irrespective of negligence. This regulatory structure serves to avoid time-

⁹ This section, with minor edits, is drawn from testimony provided by Rawle O. King of the Congressional Research Service before the Senate Committee on Energy and Natural Resources, May 25, 2010.

consuming and costly litigation and the need for oil spill victims to prove negligence as the primary test of liability for oil pollution damage. The rational basis for the compulsory insurance/strict liability structure is threefold: (1) the loss, however caused, is more than the victim can be expected to bear without hardship; (2) the compensatory system is not a liability system, as such, but, instead, a means to speedily compensate oil pollution victims; and (3) the regulatory scheme needs resources from which to pay unlimited compensation.

Insurance Requirements¹⁰

Under Section 1016 of the OPA, parties responsible for offshore facilities must establish and maintain oil spill financial responsibility (OSFR) capability to meet their liabilities for removal costs and damages caused by oil discharges from an offshore facility and associated pipelines. The OSFR is demonstrated in various ways including surety bonds, guarantees, letters of credit and self insurance, but the most common method is by means of an insurance certificate. The insurance certificate spells out the limit required under Section 1016 of OPA. Lease holders of a covered offshore facility (COF) must demonstrate a minimum amount of OSFR of \$35 million per 35,000 barrels of “worst case oil-spill discharge” up to a maximum of \$150 for COF located in the OCS and \$10 million in state waters. As an illustration, a worst case oil-spill discharge volume of 35,000 barrels (bbls) requires \$35 million in OSFR while a volume of 35,001 bbls requires \$70 million. The MMS calculates the worst case oil-spill discharge volume for a facility. An exemption to the OSFR is provided for persons responsible for facilities having a potential worst case oil-spill discharge of 1,000 bbls or less.

Insurance Market Impacts Associated with Raising Existing OPA Limits of Liability

Under OPA the owner or operator of a facility from which oil is discharged (“responsible party”) is liable for damages resulting from the spill and costs associated with the containment or cleanup of the spill. However, the OPA contains limits of liability as well as exceptions to those limits as follows:

¹⁰ *Ibid.*

- **Limits of Liability:** OPA establishes limits for oil spills. Responsible parties (holders of leases or permits) for offshore facilities are liable for up to \$75 million per spill, plus removal costs;
- **Liability Exception:** The limit of liability *does not* apply if the incident was caused by gross negligence or willful misconduct or violation of a Federal safety, construction or operating regulation

In the wake of the Deepwater Horizon spill, legislation has been introduced in Congress to raise the limit of liability (retroactively) under OPA to \$10 billion from the current limit of \$75 million. As discussed earlier in this testimony, the typical maximum available limit of third-party liability coverage in the offshore energy market today is approximately \$1 billion and with perhaps as much as \$1.2 billion to \$1.5 billion available under some circumstances.

As a practical matter, energy insurers and reinsurers simply cannot provide \$10 billion in capacity. There are numerous obstacles for insurers and buyers alike:

- The entire global energy insurance market currently consists of no more than \$3 billion in annual premiums;
- Higher limits of liability will increase the demand for coverage, perhaps greatly, exhausting available capacity;
- Underwriting for very low probability, extreme severity events is very challenging for insurers and reinsurers;
- The increase in demand coupled with increase in risk assumed by insurers implies that the cost of providing the coverage will be much higher than today;
- The higher cost of coverage could disadvantage smaller offshore operators that cannot self insure;
- The current tort liability environment increases uncertainty as to the frequency and severity of future events, and

- If Congress retroactively raises the limits of liability on OPA, it may well do so in the future, raising potential future payouts unexpectedly, thereby increasing the uncertainty (and cost) associated with offering such coverage.

Insurer Risk Management Response

While the exact cause of the Deepwater Horizon catastrophe is still under investigation, the findings, if history is any guide, will provide valuable insights into the chain of events—both mechanical and human—that led to the failure.

While the federal government has taken a variety of steps to improve the safety of offshore drilling facilities in the weeks since the Deepwater Horizon, including imposing a moratorium on new drilling activity and stepped up inspections, insurers are also digging deeper into the operations of offshore drillers. Steps taken by insurers include even more stringent reviews of an operator's safety record and compliance with new and existing regulatory protocols governing the operation of offshore facilities.

Summary

The global energy market response to the Deepwater Horizon loss has been orderly. Markets remain stable and capacity has not fled the market, despite insured losses that are expected to total as much as \$3.5 billion. At the same time, prices have risen, reflecting not only the Deepwater Horizon event itself but increased demand for liability coverage and mounting uncertainty over government action related to limits of liability.

While available capacity for liability coverage in offshore energy insurance markets remains at pre-Deepwater Horizon levels of approximately \$1 billion to \$1.5 billion, it is highly unlikely that insurers could provide coverage limits sufficient to meet the proposed \$10 billion limit of liability being discussed in the context of the Oil Pollution Act (OPA).

Thank you for the opportunity to testify before the Committee today. I would be happy to respond to any questions you may have.

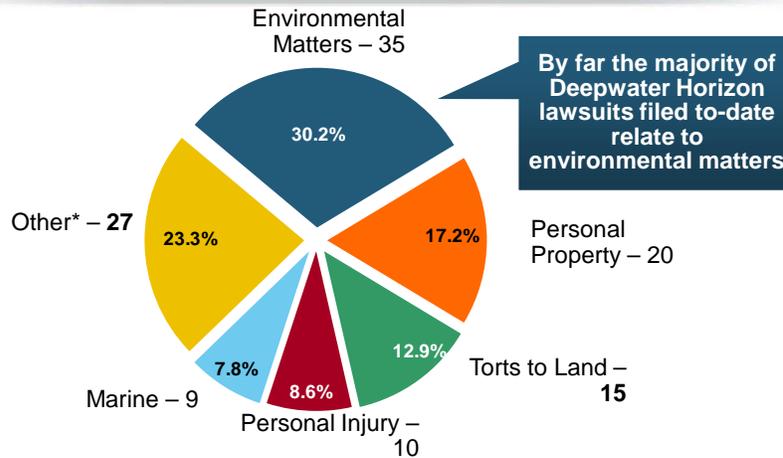
Figure 1. Largest International Oil Well Blowouts by Volume, as of June 1, 2010



Date	Well	Location	Bbl Spilled
June 1979-April 1980	Ixtoc I	Bahia del Campeche, Mexico	3,300,000
April 20, 2010-present	Deepwater Horizon	Gulf of Mexico, USA	798,000 (est.) thru June 1*
October 1986	Abkatun 91	Bahia del Campeche, Mexico	247,000
April 1977	Ekofisk Bravo	North Sea, Norway	202,381
January 1980	Funiwa 5	Forcados, Nigeria	200,000
October 1980	Hasbah 6	Gulf, Saudi Arabia	105,000
December 1971	Iran Marine International	Gulf, Iran	100,000
January 1969	Alpha Well 21 Platform A	Pacific, CA, USA	100,000
March 1970	Main Pass Block 41 Platform C	Gulf of Mexico	65,000
October 1987	Yum Il/Zapoteca	Bahia del Campeche, Mexico	58,643
December 1970	South Timbalier B-26	Gulf of Mexico, USA	53,095

*Top end of U.S. Geological Survey (USGS) range of 12,000 to 19,000 barrels per day announced June 7. An earlier estimate from the U.S. Dept. of Interior suggested as much as 25,000 bbls of oil per day may have spilled.
 Source: American Petroleum Institute (API), 09/18/2009; <http://www.api.org/ehs/water/spills/upload/356-Final.pdf>

Figure 2. Deepwater Horizon Lawsuits: Nature of Suits Filed To-Date



*Nature of suits in "Other" category includes: contract; marine products liability; other statutory actions; Outer Continental Shelf Lands Act; personal injury product liability; products liability; property damage; property damage/products liability; real property; securities/commodities and stockholder suits.

Source: National Law Journal, 05/24/10