Impacts of the Gulf Oil Spill Series

The International Regulatory Structures for Offshore Exploration

Monday, November 8, 2010

Event Summary

With significant technological advances in drilling, production, equipment and robotics, international deepwater offshore production reached 7 million barrels per day in 2010. Much of this development happened rapidly in the last decade, resulting in a growing number of countries opening deepwater offshore areas to petroleum development. Governments have considered a variety of approaches to manage and regulate offshore resources. Following the Macondo blowout, a number of these countries are reconsidering their existing regulatory structure; in hopes of prevent future accidents of this scale. Norway provides an important case study managing the risk of offshore petroleum activities.

Robin West, the Chairman of the Board and Founder of PFC Energy, spoke about international regulatory approaches in the oil industry. Mr. West began by pointing out that offshore oil drilling produces 23 percent of U.S. oil supply and production is climbing while onshore drilling is declining. Ultra deep water oil production will grow as the other deposits wane. The increase in ultra deep water drilling is especially important when thinking about how governments reacted to the oil spill. He noted that the U.S. moratorium covered both deep water and shallow drilling, even though very different safety issues and years of experience are associated with each.

Mr. West pointed out that the economic scope of the industry is an important factor when creating a regulatory response to the Gulf spill. Oil is a $100 billion a year industry that affects many sectors in the U.S. economy. For example, the oil industry is the second largest buyer of helicopters after the U.S. military and is a very high tech industry, relying heavily on Silicon Valley for innovation.

The perception of the oil industry and the current safety agenda have been shaped by past accidents. Mr. West discussed the climate, citing the hostility and trauma created by serious accidents here have created a negative perception of the industry. He further suggested that to understand the modern international safety agenda, the United States should look at the 1988 Piper Alfa production platform explosion and the subsequent public investigation, which changed the industry in the UK.

Currently, the U.S. regulatory procedures are structured such that a company has to check off a few boxes in order to be approved. This puts the burden of determining risk on the regulators. The UK and Norway, for example, use a “safety case” method which puts the burden on the company and operator to think through possible issues and anticipate problems. In this method, the companies must prove they are addressing safety issues and earn the trust of the regulator. This method also helps mitigates the gap between the knowledge of the regulator and the technically advanced nature of the industry.

What separates "safety case" countries from the United States is the way the debate about the regulation of the oil industry is framed. Norway, for example, is more skeptical of the private sector than the United States and sees the regulation of operators as the primary concern. The focus in the United States, on the other hand, is on efficiency. The desire to move the approval process along quickly may be one reason why United States does not require extensive regulatory review.

Mr. West pointed out that the shift from the current regulatory process to the Safety Case method would take a number of years and would be complicated. Many companies currently operating in the Gulf, such as BP, are familiar with this other regulatory process and could work with the United States to develop a safety case structure which would fit the conditions specific to the United States.

Magne Ognedal, Director-General of the Petroleum Safety Authority (PSA) in Norway, spoke about how Norway came to use the "safety case method" and how it is employed. Since 1972, Norway has had an oil regulatory body specifically in charge of addressing offshore issues (Norway has no onshore production). The government concluded in 1978 that the regulators were doing the job that the oil industry should be doing. The regulatory framework had promoted a dynamic in which the oil industry waited for the regulators to tell them what to fix and then they would fix it. In response, the regulatory body decided to change the system and began discussing risk, focusing mainly on risk-approach development.

Norway experienced several bad accidents, but learned from them and created a new role for the Norwegian Petroleum Directorate. When discussing the changes, industry representatives and labor unions were invited to participate and give feedback, something unique to Norway. It was determined that Norway needed completely different types of regulations, ones that do not require the regulators to do the job of the industry, particularly in the area of safety regulation. The focus was shifted to auditing company management systems and verifications, instead of inspections.

As a result of the collaboration between the Norwegian Petroleum Directorate, private sector and labor unions, the Safety Case was introduced. This method created a different definition of safety. In Norway's method, "safety" meant the prevention of harm to people, the environment, and the economy. Mr. Ognedal stressed that the regulatory language also changed so that the industry assessments had to be "accepted," not "approved," thereby continuing to shift the burden of prevention further to the industry. Notably, this method does not require all of the paperwork to be provided to the regulators, but it must be available upon request, freeing regulators from spending all their time reading through reports. They wanted the regulators to look at what was happening in the industry instead of getting lost in what was written or getting buried in paperwork. Companies are asked to put into writing how they formulate regulations for safety and are required to have that information available when requested. Norway now produces three levels of analysis: industry wide, national, and company-based.