

## Risk Management in the E&P industry

### Deepwater Horizon should have E&P companies thinking beyond insurance

Because the oil and gas industry is characterized by a high level of risk, you would assume that E&P companies are comfortable with the concept of risk management and experts at identifying, assessing and managing risks inherent in their businesses. However, in the wake of the Deepwater Horizon disaster in the Gulf of Mexico, you would be forgiven for wondering whether this is really true. How good are E&P companies at identifying and managing risk? What factors influence the effectiveness and efficiency of E&P companies' risk management programs? How should E&P companies think about risk management moving forward?

Many people assume that risk management and insurance are one and the same. Although insurance plays an important part, true risk management is much more. E&P companies should view risk through the lens of a comprehensive enterprise risk management program in which insurance can play a cost-effective role.

### Enterprise Risk Management

Contrary to popular belief, enterprise risk management is not just a bureaucratic compliance exercise. This perception has been furthered by legislation such as the Sarbanes-Oxley Act in the U.S. and similar regulatory responses in other countries which have been ineffective at helping companies better manage their risks. Why have the regulatory responses to the financial crisis that started with the failure of Enron a decade ago failed so miserably in helping to prevent future crises? Many lay the blame at the doorstep of SOX or the accounting industry, wondering why the auditors were unable to predict the meltdowns. Accountants and auditors are nothing more than scorekeepers, looking in the rearview mirror and reporting what has happened in the past. They cannot prevent management from making bad business decisions, the true culprit in business failures.

The concept of risk management should not be viewed negatively. Companies must take risk in order to earn profits and achieve their objectives—that is the essence of the capitalist system. In very simple terms, the success of a business enterprise depends on choosing the right risks to take, and then managing those risks as effectively as possible.

In 2004, The Committee of Sponsoring Organizations of the Treadway Commission (COSO), authors of the internal control framework now widely used as the basis for most internal control programs, issued Enterprise Risk Management – Integrated Framework (ERM). This framework provides a comprehensive basis for risk management across an enterprise, incorporating not only financial reporting risk, but also the risks within a company's strategy, operations and compliance with laws and regulations. COSO felt that something more was needed to help companies effectively manage the risks in their businesses. However, many companies have still not fully embraced this framework. E&P companies should take a good look at the ERM framework as a tool to help choose the right risks to take, better manage those risks and create more profitable businesses.

### **Risk Identification**

A key step in ERM is a comprehensive and ongoing identification of risks. Many companies equate risk management to the process of buying insurance. Although every E&P company has insurance for various risks, many of them do not have a true understanding of the comprehensive risks facing their business.

For E&P companies, a review of the operational and regulatory risks is critical. As E&P environments become more challenging and complex, broader and deeper technical expertise is required to fully understand the operational risks. The majors and large independents have access to this type of expertise in-house, while middle market E&P companies might need to look to outside experts to assist with risk identification.

E&P industry players often claim they are subject to a rigorous regulatory environment. However, compared to other highly regulated industries such as financial services and pharmaceuticals, E&P regulations could be considered light. Unfortunately, due to the recent events in the Gulf of Mexico and the current U.S. administration's desire to transform energy policy, that regulatory landscape is changing. E&P companies should closely monitor the regulatory environment to identify emerging risks to their businesses.

### **Risk Assessment**

Once a comprehensive list of risks has been identified, these risks need to be assessed. A risk assessment involves evaluating the potential magnitude and likelihood of each liability. As recent events have indicated, the magnitude of impact can range from minor equipment damage from a storm to a catastrophe like the BP disaster. Companies should consider not only the direct impact of the risk, such as the loss of the equipment and the value of the oil spilled, but also

other related impacts, such as environmental fines, liability claims, containment and cleanup costs and new regulatory requirements.

With regard to the likelihood of operational risks, the track record of the E&P industry has been good for the past two decades. However, as oil and gas get harder to find and produce, operating environments become more challenging and unpredictable. We could see an uptick in operational and safety incidents in the future.

## **Risk Response**

Once risks have been identified and assessed, companies should determine the appropriate risk response. Risk responses fall into four broad categories: avoidance, acceptance, reduction and sharing. The best response for a given risk is usually a combination of these techniques. Insurance is typically the first risk response that comes to mind; we believe we are simply paying to transfer our risks to someone else. Insurance is not risk management; it is one of several risk response techniques. It is most effective when treated as the risk response of last resort. Failure to employ other techniques, such as reducing risks by managing them internally, will result in paying higher premiums for insurance coverage, more uninsured losses and adverse impacts to the business.

We must take risks in order to reap the rewards; complete avoidance of risk is not an option. However, risk avoidance can be a useful tool in helping us choose the right risks to take, avoiding those that are too risky, unmanageable, or inconsistent with our mission and strategy. Risk avoidance might mean choosing not to drill in deep water, or not to do business in highly unpredictable countries such as Venezuela or Nigeria.

Risk acceptance or retention means accepting the loss from a risk when it occurs. Unhedged commodity prices and uninsured risks are examples of retained risk. Insurance deductibles and the potential loss over the insured amount also represent retained risk. Companies can never transfer 100 percent of a risk to a third party. Unless a risk is completely avoided, E&P companies need to understand that some amount of risk is always retained and may need to be reduced and managed.

Risk reduction means putting mechanisms in place to manage identified risks so that their magnitude and likelihood of impact are reduced. For example, offshore personnel receive safety training before being allowed on the rigs to reduce the risk of injury or death, commodity prices are hedged to reduce the impact of price changes in the future, and so on. Inherent risk is the level of risk that exists before we apply risk reduction techniques, whereas residual risk is the level of

risk that remains after those techniques are applied. Once identified risks have been reduced to the lowest levels practicable, the residual risk can be transferred or shared.

Risk sharing is the process of sharing the loss from a risk with a third party. Joint ventures are a common mechanism for sharing risk in the E&P industry, but the operating risks of the JV still have to be managed. JV partners with non-operated interests are not insulated from the risks and liabilities of the operator; in fact, JV partners with non-operated interests are generally responsible for their share of all operating costs, including clean-up costs in the event of a spill.

Anadarko, a 25 percent JV partner with BP in the well that exploded in the Gulf of Mexico, is still being named in lawsuits related to the disaster. They have borne 25 percent of the cost of the well and are experiencing the same lost revenues due to the disaster as the operator. JV partners with non-operated interests should consider what their responsibilities are for ensuring the operator is effectively managing the risks and operating safely, and what ability and tools they have to hold the operator accountable. Joint operating agreements should be reviewed to ensure non-operating partners are protected from gross negligence by the operator.

## **Insurance**

Although insurance is the risk response of last resort, it plays a critical role. Certain risks are simply too great in magnitude or too difficult to manage, and therefore need to be insured. As the E&P industry becomes more risky and complex, the insurance industry must adapt to meet its needs. New lines of insurance are being created to insure emerging risks, and new insurance companies are focusing on the unique insurance needs of the energy industry. Torus Insurance, a technical lines insurer specializing in large, complex risks with a focus on the energy sector, was formed in 2008 by First Reserve, a private equity firm in the energy industry. By offering a wide range of insurance programs with a deep understanding of the risks energy companies face, Torus is a direct response to the industry's growing risk landscape.

Insurance premiums for the offshore energy industry continue to rise. Moody's recently noted that insurance premiums for deepwater rigs have jumped by up to 50 percent since the Deepwater Horizon incident, while the cost of insuring rigs operating in shallow waters has climbed by 15-25 percent. To help manage the cost of insurance, E&P companies can employ certain techniques, such as technical analysis and benchmarking of their policy premiums, deductibles, liability limits and total cost of risk versus companies in their peer group. Insurance brokers can and should assist in these types of exercises. Companies

should ensure they are working with the right broker who understands the risks of their business and industry, and that brokers are compensated to look out for their best interests, not the interests of the insurance carriers.

Perhaps the most important thing companies can do to manage their insurance costs is to take a holistic view of ERM as a tool to optimize their deployment of risk capital across the enterprise. Companies who identify and manage risks proactively can retain larger amounts of risk, increasing their deductibles to help reduce premiums and, overall, free up capital to spend on insuring catastrophic risks that are the most difficult to manage and are beyond the company's control.

### **Conclusion**

E&P companies are accustomed to high levels of risk-taking required in the industry to realize profits. But the industry risk profile is rising: increasingly difficult operating environments, tighter regulations and geopolitical risk indicate that E&P companies should thoroughly review their risk management programs. Enterprise risk management techniques can help companies better understand and manage their risks, optimize the deployment of risk capital across the organization and be more profitable.

\* \* \* \*

Marcus Wagner is a partner with Calvetti, Ferguson & Wagner, a Houston-based public accounting and advisory firm with clients in the energy industry and multinational space. He leads the firm's Advisory practice, where he helps clients identify and manage risks and provides solutions to business issues.

Rick Baty contributed to this article. Rick is a broker with Insgroup, where he helps clients identify, manage and insure their business risks.