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Emerging Energy Security – Risk and Risk Mitigation

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Emerging Energy Security - Risks and Risk Mitigation

- Energy Security

This is of course a very broad subject. It is of great importance, and it's importance and relevance will become increasingly important both for the industrially developed nations – and for developing nations.

Today we see a strong growth in demand for hydrocarbon based energy, which is well publicised, coinciding with a concern over future reserves, security of transmission and energy prices at an all time high.

For certain (emerging) nations dependent on imported energy this becomes a major impediment for growth and development as the cost of energy becomes an ever larger part of the national budgets / balance of trade.

The continuing quest for new oil and gas fields to be developed takes us further into remote and "unchartered" territories. The cost of exploration and development; the challenges of technology and the infrastructure and logistics in getting the resources to market are massive – often running into tens of billions of dollars. This means only few of the world's largest corporate entities have the financial muscle and resources to take part in this game – even so often in partnership with each other, including state companies – but – still there is a need for private finance as debt in a significant share of the total investments.

- The Risk Business

For more than 30 years I have worked in the insurance industry – focusing during this time on the energy sector – oil, gas, power, mining and nuclear. I would suggest, I am not in the insurance business as most people think of it – but in the Risk business.

A well-known man said, "high risk – high reward" – that is one view, but only if you can manage and mitigate a significant part of the downside to risk.

Investors, lenders, shareholders and analysts – they all enjoy the upside of risk; but wish to minimise or eliminate risk downside.

This is where the insurance industry comes into the equation.

To succeed in exploring, developing and bringing energy to market in often new and remote regions of the world is a mammoth technological and economical undertaking – without the partnership with the insurance industry to reduce risk factors this would often not be possible. Look for example at the development of the North Sea in the 1970's.

We read in the daily press on a regular basis that ‘Experts’ predict a significant energy shortfall within the next ten years; unless new resources are brought on stream. To secure the development of new projects it is necessary to have a partnership between project managers/owners; lenders and insurers to make sure the risks associated with these developments are properly understood and analysed, and contained with the help of insurance products within an acceptable risk tolerance.

- Energy Security, Risk and Insurance

The role of the insurance industry in Energy Security is primarily to help avoid or mitigate risk and losses, and to compensate for the economic and financial consequences of loss, including damage to third parties or to the environment. To complement and to support the operations of the energy industry and its stakeholders including lenders.

Part of energy security is to ensure there are the financial tools to afford continued exploration and development, to reduce risk factors and safe delivery to ultimate consumers.

The risks the insurance industry focus on are typically random hazard loss:-

  - Fire, explosion, lightening etc
  - Earthquake, volcanic eruption, extreme weather conditions etc
  - Cost of control of well
  - Pollution / damage to the environment
  - Liability to third parties
  - Sabotage and terrorism
  - Nationalisation and expropriation
  - Operational safety / engineering
  - Delay in start up / advance loss of profits
  - Business interruption

For 2005 alone, the insurance industry will pay out in excess of $10 billion in respect of losses to the energy sector alone, although in an average year $4 billion to $6billion is more normal.

During 2006 we have seen a number of headlines in the press questioning the focus on safety and risk. Problems with the Alyaska pipeline, BP’s Texas City refinery and the Sakhalin Projects have been quoted. This is of course bad for the perception of the energy industry as a whole.

One often-overlooked aspect of the services of the insurance industry is their engineering capabilities. Major insurers like Swiss Re and AIG, who are leaders within the energy sector, have highly qualified and experienced engineers on staff who will conduct regular and rigorous inspections of facilities – focusing on risk and safety. With their broad global experience they can help to promulgate best industry practices – to raise a 'Red Flag' when they see safety being compromised, and work with the operators to reduce risk and improve safety – both for human life, for operational risks and for overall 'Energy Security' and energy supply.

In this way, by assessing and pricing risk, the insurance industry performs an independent audit-type function on the safety and security of energy operations.

- Risk Mitigation

In summary therefore I would like to suggest that the insurance industry might play a key role in the area of risk mitigation, as well as risk transfer, to support and complement the energy industry.

Particularly with respect to new or planned developments the insurance industry should be engaged as early as possible at the planning stage to focus on collateralisation and loan agreements, to assist with risk assessment and risk mapping and focus on integral safety of the whole energy delivery chain – including environmental impact, political risks, interdependency risks and how best to reduce overall risk factors.

The key areas where the insurance industry can play a role include:-

  - Protection of assets during course of construction and during operation
  - Protection of risk associated with cost of control of wells
  - Securitisation of revenue or cash flow for all stakeholders
  - Political risks including sabotage and terrorism
  - Operational safety (brand reputation) through regular engineering "audit" services.

Put most simply, without the availability of reasonably priced insurance, many major exploration, pipeline or refinery construction projects would not be able to be undertaken – thereby restricting the overall supply and distribution of energy.

Through the risk mitigation and risk reduction tools available the entire project or facilities become a more benign risk, thus more attractive to investors, lenders and other stakeholders, including rating agencies. Ultimately contributing to keeping the total cost of risk (and energy) to a minimum to the benefit of all.

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