



RISK MANAGEMENT: SCIENCE OR ART?

In one way or another the technical services that BPP-Cables offers are in the business of risk management, whether it be the design of an offshore platform that will not collapse for twenty five years, or the risk assessment of a process plant for the probability of an accident occurring tomorrow.

Over the last twenty years, there has been a tremendous advance in the quality and reliability of analysis, design and risk assessment tools available to engineers. These offer rational means of looking at virtually every potential risk that an asset can be exposed to - of qualifying that risk and of ranking various risks in order of importance.

Just some of these techniques in the specific area of quantified risk assessment are shown in the inset box - ranging from preliminary hazard analysis as the least quantified technique through to fault tree analysis which offers a powerful quantitative risk evaluation methodology.

One of the consequences of using the above risk assessment tools is the capability it gives for managing future risk in two ways:

- The evaluation of risk for an existing asset -be it process plant, factory, structure or equipment - can identify historical risk from operational records and measurements. These can be used to quantify existing levels of degradation and from that to future levels of risk and the potential of incidents.



- One such a "window" into the future is available, it can be used with specific operating procedures and safety interlocks to substantially reduce the risk potential of the asset.

All of the above offer tremendous potential for supporting the process of defining insured risks and for managing and containing resultant potential liabilities.

Of course, appropriate insurance is the ultimate safeguard for risk management in limiting liability against major unpredictable events - against 'acts of God'. This is where the 'art' of risk management plays a part. However, it is increasingly apparent that the failures of risk management in recent years have been due to not forecasting predictable events and in not limiting the resultant liability sufficiently.

A rational approach to risk management through the scientific base now available to it can reduce these failures. BPP-Cables has experience of this area in the fields of offshore engineering and naval architecture as well as petrochemical and chemical process plant.

Risk Analysis Tools

