



Tubular Bells: Concept Risk Assessment

Services Performed

IRC developed a novel Concept Risk Assessment (CRA) approach to compare risk contributors associated with four concept options for BP's Tubular Bells project. The approach enabled BP to gain clear insight into the design, operation, and inherent safety of each option.

Objectives

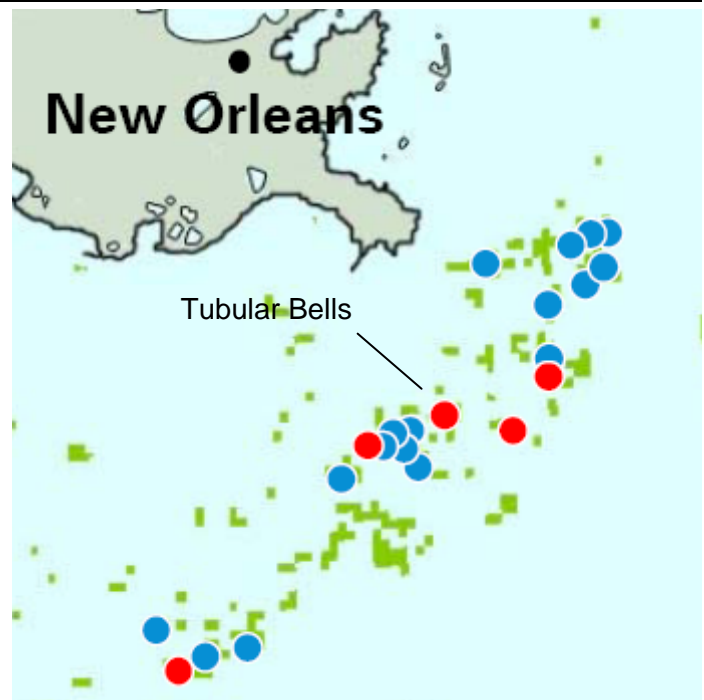
- Assess personnel risk levels and associated risk drivers for a series of platform development options
- Identify areas of highest personnel risk for each option, and make comparisons between options
- Identify "inherent safety" aspects and differences for the options
- Provide risk management focus for future project phases

Project Description

BP is developing the Tubular Bells field, located in the deepwater Gulf of Mexico, 150 miles southeast of New Orleans.

IRC conducted a CRA study to assess and compare risks to personnel associated with four development options involving Tension Leg Platform (TLP) and Spar hull configurations. A project-specific CRA approach was developed to compare major risk contributors associated with each of the options. The approach included:

- Detailed review of project design information
- Interviews with operations and project personnel
- Identification of Major Accident Hazard scenarios
- Evaluation of risk drivers and understanding of differences in the inherent safety of each design
- Consequence modeling and Quantitative Risk Analysis



Key Benefits to Client

- The analysis provided BP with a detailed, quantitative comparison of risks for both Spar and TLP options, including a clear evaluation of the key factors driving the risks
- Recommendations to reduce risk and address inherent safety enabled effective decision-making at the project's concept stage



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