

Services Performed

IRC facilitated Hazard and Operability (HAZOP) workshops for the topsides and hull facilities of the Shenzi TLP project.

Objectives

- Identify hazards and operability issues associated with the Shenzi TLP design
- Identify deviations from design intent, deviation causes, consequences, and safeguards
- Provide an action list with due dates and identify appropriate person/discipline to progress the action to close out

Project Description

BHP Billiton is developing the Shenzi field in the Green Canyon block, deepwater GoM. Discovered in 2002, the prospect is jointly owned by BHP Billiton, BP, and Hess. The facility design is a tension leg platform (TLP).

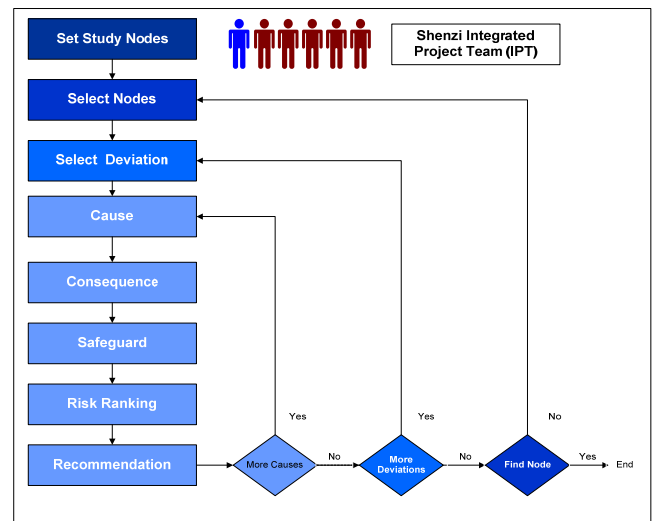
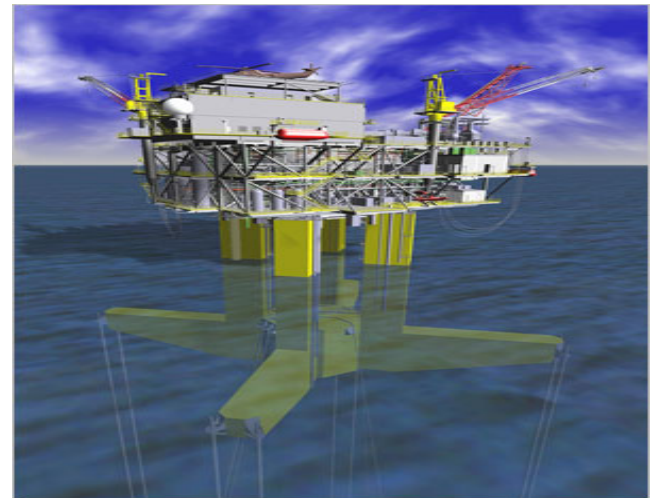
IRC was contracted by MODEC to conduct HAZOP studies as part of the Front End Engineering Design (FEED) for the hull and topsides. The purpose of the study was to identify hazards and operability issues during the early design stages of the project.

HAZOP studies were conducted in a workshop format, bringing together a multi-disciplined team of operations personnel, experienced design engineers and HSE professionals. The workshop utilized a clearly defined step-by-step methodology, and considered standardized deviations from normal process operations.

The studies included a review of the design for compliance with API RP-14C standards.

Findings from the workshop were recorded in a series of detailed HAZOP worksheets, including:

- A record of team discussions
- Description of identified potential accident events
- Consequences, relevant comments, safeguards, risk ranking, recommendations and responsibility assignment



Key Benefits to Client

- HAZOP workshops provided the client with the assurance that hazard and operability issues were being managed appropriately and that the facility's design is sufficiently robust
- The workshops provided the client with a clear list of actions for design improvements where required