

## FRONT END ENGINEERING DESIGN (FEED)

OSL was commissioned to undertake a FEED Study for the Rationalisation of Offshore Operations for a reduced operating cost base. The location of compression equipment, metering and separation requirements were all challenged in a new operating environment, together with the associated impact on the onshore facility requirements.

Our work included:

- Study report
- Operational review
- Operating and maintenance philosophies
- PFD's
- P&ID's
- Decommissioning and destruction lists
- Equipment specifications
- Piping general arrangements
- Offshore survey
- Detailed tie-in analysis
- HAZOP
- Risk assessments
- Detailed cost estimate
- Schedule
- Execution scope of work



In addition to FEED Studies, OSL will, if required, also supervise FEED contractors. We have experience in providing a client team to manage a FEED contract and to prepare the project sanction documentation for a Gas Caverns and Surface Facilities Project in Europe. The client is a joint venture of three national Exploration and Production companies. We will also manage the ITT (Invitation to Tender) and the EPIC contract through the detailed design, construction and commissioning.

The £100m project consists of:

- Seven gas storage caverns made from leaching salt from the salt formation
- A gas processing facility, consisting of a two-stage compression system to increase gas pressure to 190 barg to inject gas into the storage system at 450,000 nm<sup>3</sup>/hr
- An export route via a dehydration (TEG absorption system) and pressure control systems at 900,000 nm<sup>3</sup>/hr
- Metering systems, vent and blow-down systems
- A 60 km pipeline (managed by others) which connects from the Dutch Gas transmission system to the processing facility
- Hydrocarbon accounting system

