

Contract: Schiehallion FPSO Mooring Repair
Client: BP
Location: West of Shetland, UK



Challenge

The Atlantic frontier is one of the world's harshest environments. BP's FPSO *Schiehallion*, located here, suffered a mooring line failure which potentially left the FPSO unable to withstand the forthcoming winter conditions.

BP called upon the expertise of leading marine and offshore engineering consultants Noble Denton to perform the complex marine procedures to execute the replacement of a damaged mooring line with minimal risks to people, production and environment.

Consultancy

Familiar with the Noble Denton's record of technical excellence and sense of urgency, BP Aberdeen appointed Noble Denton to engineer, coordinate and supervise the fast-track replacement of the failed mooring line and re-tensioning of the other mooring lines on the *Schiehallion* FPSO.

The scope of work included the preparation and engineering of the offshore procedures for both the anchor handling vessel and the FPSO in addition to the supply of supervisory personnel.

Other value-add activities included:

- Operations preparations
- Anchor handling vessel mobilisation
- Pull-in wire change-out
- Retrieval of the failed mooring line.

Actions taken

To fulfil the scope of work Noble Denton undertook these key activities:

- Comprehensive engineering drawings
- Preparation of procedures for all phases including anchor handling for the vessel and FPSO
- Specification and procurement of relevant equipment and services
- Review of third-party FPSO preparations
- Review of third-party equipment and services
- Conduct risk assessments and HAZID
- Offshore supervision
- Perform post-implementation review
- As-built drawings compilation.

Outcome and benefit

The project was successfully completed to client specifications on a fast-track basis in which replacement and re-tensioning were performed with no harm to people or environment.