

SNEPCO Bonga Smart Choke Installation Project

Client

Shell Nigeria Exploration & Production Company

Services

Engineering

Facilities

Bonga Flowlines

Safety Record

■ Zero LTI

Man-hours

4,000

Status

Completed



Introduction

Shell Nigeria Exploration and Production Company (SNEPCo.) planned to install two Smart Choke Valves to mitigate against slugging by maintaining a constant volumetric flow through the choke valves

Temporary mitigation was handled by gaslift, which keeps total production at a gas handling system limiting rate. A permanent solution based on Shell Feasibility studies showed that fast acting choke (Shell proprietary algorithm) is capable of mitigating slugging in the Bonga flowlines with minimal or zero gaslift

Project Scope

Project Scope included Engineering, Procurement, Fabrication, QAQC, Transportation, Installation and Commissioning & Start-up as outlined below:

- Process Engineering Design
- Pipe Route Optimization
- Process Control Systems and software design
- Structural Engineering & Verification/modification of load capacity of existing members for additional load
- Workpack preparation, specifications and drawings
- Material Procurement and Fabrication
- Transportation of procured materials, fabricated piping spools, pipe supports and accessories offshore
- Offshore installation of choke valves with accompanying software integration, fabricated piping spools, pipe supports and accessories
- Commissioning: Preparation of commissioning dossier and procedures

Project Status: The project was successfully completed in Q4, 2013 within time schedule and in estimated budget frame