# ariosh

# **SNEPCO Bonga Smart Choke Installation Project**

## Client

Shell Nigeria Exploration & Production Company

### Services

Engineering

### Facilities

Bonga Flowlines

## Safety Record

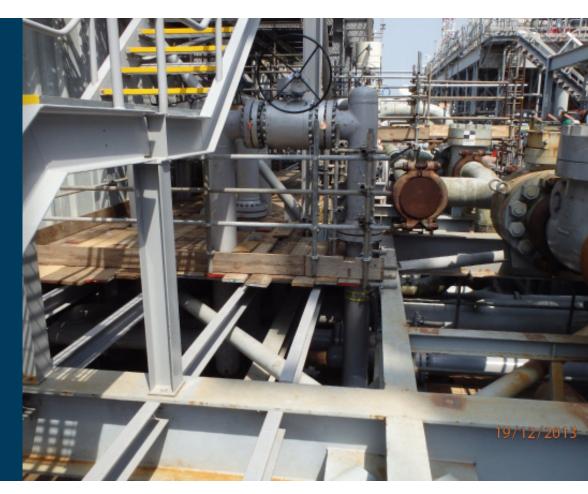
Zero LTI

#### 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