

CASE STUDY



Energy Projects NUAYYIM G.O.S.P.

Country
Kingdom of Saudi Arabia

EPC Contractor
J&P (Overseas) Ltd

Overall Project Value
320.000.000 USD

Owner
SAUDI ARAMCO

Dates
2006 - 2009

ENOIA's Consulting Value
10.122.000 USD

The "NUAYYIM ASL CRUDE INCREMENT FACILITIES 100 MBCD PROJECT" included the installation of a grass roots facility to process an additional 100 MBCD crude oil, expansion of existing capacity of Remote Injection Stations (RIS-A and RIS-C) (project 10-08256) and upgrading the facilities at Hawtah Stabilizer for additional crude degassing (project BI-10-03754).

Both projects aimed to support a total production of 200 MBCD of Arabian Super Light from the HAWTAH and NUAYYIM fields to meet the objectives of the 2006-2010 crude production program.



Project Description

A. The NUAYYIM GOSP works for Grass Roots Facilities:

- Inlet Manifold and Receivers
- Gas / Oil / Water Separators
- LP and HP Gas Compression
- TEG Gas Dehydration Unit
- Crude Export Pumps
- Gas Export Facilities
- Water Injection System
- Waste Water Treatment and Storm Water Handling
- Electric Substation/Switchgear and Emergency Power Generation
- Utilities (Water, Instrument and plant air systems, Nitrogen System)
- Flare
- Control and ESD system
- Fire Fighting systems

B. Upgrade NUAYYIM Downstream Facilities HAWTAH Stabilizer Upgrade Project works:

- Inlet Separation Sphere overheads piping modifications
- Addition of a third Feed Pre-heater in parallel with the two shells
- Stabilizer Tray Internals replacement
- Utilization of hand holes and substitution of a chimney tray for tray #21, immediately below the middle feed
- Stabilizer overheads piping modifications
- Replacement of the tube bundles for the Stabilizer reboilers to increase their heat transfer capacity
- New overheads compressor with associated suction KO drums and recycle/ aftercoolers
- New NGL Product Drum with a blowdown facility
- New Fuel Gas Heater (NGL vaporizer) for operation of Stabilizer Plant when Overhead Compressor is offline
- The addition of two more air compressors to increase the reliability of the existing compressors
- Control Valve Modifications and new control valves where required

Scope of Services

ENOIA was nominated and approved by SAUDI ARAMCO as the Engineering Consultant for the whole EPC project, with the services to be consisted of:

- Basic Design including FEED endorsement
- Detailed Engineering including Process, Mechanical, Piping, Instrumentation and Control, Electrical & Civil design
- 3D Model (PDS)
- Project Management and Project Control for Engineering
- Procurement services including technical Bid Tabulations & Evaluations
- Pre-Commissioning & Commissioning Procedures
- Construction follow-up
- Engineering Support services during construction

