PROJECTS OVERVIEW

A-Structure is located in the central-western part of area D, approximately 80 Km from the Libyan coast, where water depth is ranging between 95 and 105 m.

E-Structure is located in the central-eastern part of the Area D, about 130 Km far from the Libyan coast, in a water depth ranging from 205 to 235 m.

The scenario is based on:

- A new wellhead platform on Structure A (WHPA) with 8 dry tree wells, designed to handle a peak production of 160 MMSCFD, predrilled by jack-up and able to host a FMWR (two spare riser’s and J tubes for minor Structures future connections).
- A new multiphase clad sealine (18”) 43 km to deliver A Structure production to Sabratha Platform for treatment, compression and export (A structure need compression after 4-5 years from start-up allowing to use already planned BES compression without the need for any subsequent upgrading/revamping).
- Sabratha Platform modification to receive A Structure production.
- A new Production Platform on Structure E (PPE) (20 slots) with 15 dry tree gas wells, 3 dry tree oil wells (plus 2 additional oil wells contingent on testing of the first 3 oil wells) and 5 subsea wells to be connected to PPE. PPE peak gas production well be 600 MMSCFD and 28,000 std b/d condensate, with dedicated separation, treatment and compression facilities, able to host a FMWR and 120 POB Living Quarter. The PPE dry wells will be pre-drilled via semi-sub rig as well as the subsea wells.
- A new gas sealine (32” to be optimized during FEED) 130 km long to deliver E Structure production to Mellitah Complex.
- A new condensate/oil sealine (14” to be optimized during FEED) 130 km to deliver E Structure production to Mellitah Complex.
- A new 4th gas processing train at Mellitah complex (onshore) including 3rd condensate train, 4th SRU train and associated utilities together with future rejuvenation and design life extension's in line with established production profile of the existing gas trains and associated utility systems.
- CO2 management through dehydration and compression in Mellitah and injection in BES field through the installation of a new sealine (16”) 110 km from shore to BES field.

**BASIC & FEED SCOPE OF WORK**

Basic & FEED Contractor will be requested to produce engineering documents and scope of work for the "EPIC phase" to provide cost-effective bids.

Basic & FEED deliverables along with updated cost and time-schedule, to allow Company to take a final investment decision for the project.

**Offshore: “A” Structure well head platform, flowline, sealines**

The scope can be summarized as follows, but not limited to:

- Review all documents issued during conceptual selection phase (Feasibility).
- Perform Basic Engineering and FEED for Off-Shore Well head Platform (WHPA), accommodation for 12 persons with survival module, Helideck and limited facilities.
- Basic & FEED for gas and condensate sealines to Sabratha platform.
- Provide assistance for technical evaluations of the "EPIC tendering" and LLI’s Bids.
Offshore: “E” structure platform, subsea unit, flowline, sealines

Platform shall be designed for separation and dehydration of 600 mmscfd of throughput.

The scope can be summarized as follows, but not limited to:
- Review all documents issued during conceptual selection phase (Feasibility).
- Perform Basic Engineering and FEED for off-shore platform top side facilities, living quarter, helideck and relevant facilities.
- Basic & FEED for gas and condensate sealines to shore.
- Provide assistance for technical evaluations of the "EPIC tendering" and LLI's bids.

Mellitah Complex Expansion

The scope of the Expansion includes one additional treatment train similar to the existing trains and all required interfaces with the existing plant in terms of:

- Safety systems
- Process facilities
- Utilities
- Automation and control
- Storage and export facilities
- Logistics, etc.

The scope can be summarized as follows, but not limited to:
- Prepare/develop a tie-ins execution plan, based on the philosophy of minimization of production shut-down.
- Prepare Basic & FEED design for de-bottlenecking of existing units.
- Prepare Basic & FEED design for new units.
- Agreement with sulphur removal unit (SRU) licensor and development of SRU process design package.
- Agreement with licensors for: gas dehydration, gas sweetening, LPG dehydration and mercaptan removal and development of relevant process design package.
- Perform HAZID, HAZOP, SIL analysis, design safety case study, QRA and any required additional safety study for the entire Mellitah complex.
- Analyze the SIMOPS, identify the actions to avoid the unplanned shut down of Mellitah complex and prepare the ITT documents for the tie ins to be implemented during the planned plant shut downs.
- Provide EIA for entire Mellitah complex facilities including the new area.

Notes:

*Please be informed that the feed contractor shall not be invited to tender for the following execution phase “EPIC & EPC”.*

*Basic & FEED Bidder has the opportunity to participate on the project management services for the following execution phase subject to Company requisition.*