Development supplying system design and key equipment

for onshore MEG reclamation.

The West Nile Delta project involves the development of gas and condensate fields located within the North Alexandria and West Mediterranean Deepwater concessions in the Mediterranean sea, off the coast of Alexandria, Egypt. The gas and condensate fields are being developed in phases, the first of which involves five major fields: Taurus, Libra, Giza, Fayoum, and Raven.

BP and its EPC contractor Bechtel awarded NOV a contract for the system design and key equipment supply of the monoethylene glycol (MEG) regeneration and reclamation onshore unit (MRU) for the West Nile Delta project.

MEG injection is a proven and widely used method to manage the risk of hydrate formation in multiphase gas pipelines. In an MRU water, salts, and other contaminants are removed from the MEG utilizing appropriate chemistry control and solid separation technologies, thus enabling transportation of gas from wells that produce formation water and other impurities.

The MRU is a slip-stream package, which is stick built at site. The design consists of pre-treatment, re-concentration followed by a slip-stream reclamation, and solid extraction. The equipment was delivered in 2017 and the package was started in December 2020.

Project details

Design rate:

• 40 Sm³/h

Concentrations:

- Rich MEG 33 wt%
- Lean MEG 90 wt%

Salt production:

• 550 kg/hr

Scope of work

- System design
- Procurement of key equipment

Key facts

- End user: BP
- Location: Egypt
- Client: Bechtel

