

## GNN Early Production Facilities (Phase I)

<b>Owner</b>	Petrogulf Misr (formerly Geisum Oil Company) / PPIS
<b>Client</b>	Petroleum Marine Services (PMS)
<b>Location</b>	Offshore Gulf of Suez, ~50 km north of Hurghada, Egypt
<b>Year / Status</b>	2022 / Successfully Delivered
<b>Project Type</b>	Basic and Detailed Engineering
<b>Keywords</b>	Offshore Engineering, Early Production Facility, Freestanding, MOPU, CSS

### Scope of Work

UNEPP supported Phase I of the GNN offshore field in PETROGULF's concession (41 m water depth). The scope covered an Early Production Facility (EPF) to monetize four wells—three pre-drilled—via a Conductor Support Structure (CSS), Electrical Submersible Pumps (ESP) delivering 10,000 BPD, and a Mobile Offshore Production Unit (MOPU) hosting topside facilities. Production is routed through a 10-inch, 5 km pipeline to the WP-C platform, with tie-ins and upgrades on WP-C and Geisum Star (GS) to ensure integration, reliability, and early revenue generation.

### Technical Challenges

- Freestanding operation of the CSS for up to six months during the transition phase, with no structural support from external units
- Safe temporary shut-in and integrity of predrilled wells during MOPU demobilization
- Planning seamless transition between temporary EPF and permanent platform installation
- Integration with legacy infrastructure (WP-C, GS) with minimal disruption

### Execution Strategy

UNEPP adopted a structured design basis approach focused on EPF topside facilities and integration with existing PETROGULF infrastructure. Early client engagement through meetings and data reviews led to a comprehensive Design Basis Document across all disciplines. The design followed international standards and PETROGULF specs, emphasizing safety, reliability, and operability, and covered MOPU facilities, X-tree tie-ins, and required platform modifications.

### Strategic Outcome

This project marks a strategic step for PETROGULF in maximizing early revenue from the GNN field while planning for long-term infrastructure. The structured approach adopted by UNEPP reinforces its capability in offshore early production systems, platform integration, and phased development. It also reflects a continued commitment to supporting Egypt's offshore energy sector with fit-for-purpose and standards-compliant engineering solutions.

### Photos / Diagrams

