

Field extension: subsea control module

Client:

Talos Energy LLC

Location:

Phoenix, Gulf of Mexico

Equipment:

Dual A2G SEM control modules mounted on UTA with topside upgrade

Water depth

2,500 ft

Project Background

After announcing first production from the Tornado exploration project ahead of schedule and under budget, Talos Energy LLC announced plans for the addition of a second Tornado well (Tornado 2) to the Phoenix project in the Gulf of Mexico. Production from Tornado ties back to the Helix Producer I, a dynamically positioned floating production unit and the first ship shaped production vessel to operate in the Gulf of Mexico.

In preparation for Tornado 2, Talos required a control system that would be able to manage the additional instrumentation requirements for subsea control and monitoring. Talos chose Proserv's latest generation A2G subsea electronics module (SEM), as it delivered improved flexibility and performance compared to the OEM.

Scope

The A2G SEM allows for greater capacity for expansion of instrumentation on the Phoenix field and eliminates the need for an open communications hub and electronic distribution unit by interfacing and communicating directly to the multiphase flowmeter (MPFM). Proserv designed a new UTA to enable the control and monitoring of extra third party devices such as subsea flowmeters and chemical metering valves.

Proserv also provided a spare SCM for the project, as well as the necessary topside equipment on Helix Producer,

consisting of a master control station with remote operating terminal, hydraulic power unit and topside umbilical termination.

System build was executed at Artemis House, Proserv's subsea controls Centre of Excellence in Great Yarmouth. The Proserv's Houston team managed project management and client interface.

Conclusion

This represented the third Proserv subsea control module in the Phoenix Field and the first A2G subsea electronics module for Talos.

Benefits

- The Proserv A2G SEM is the fastest multi-drop powerline communications system in the market, offering up to ten times better performance than our closest competitor
- API 17F compliant and fully ISO 13628 6 qualified design
- Flexible and transparent IP based architecture
- In-built web interface provides remote diagnostic and performance monitoring
- In built obsolescence resilient design delivering a fully backward compatible solution
- Automatic transmission of subsea data by exception

