

Brownfield upgrade: subsea control modules



Client:

Talos Energy LLC

Location:

Typhoon and Boris, Gulf of Mexico

Equipment:

Six Proserv SEM replacements and MCS extension

Water depth

2,500 ft

Project Background

Proserv's relationship with Talos was already well established with the kick-off of the Tornado 2 project, in which Proserv was awarded a production control system. As a result of this proven history delivering controls expertise, Proserv gained the contract award to upgrade six obsolete competitor control modules for the Typhoon and Boris Field tie-backs into the Helix Producer 1. The incumbent controls supplier was recommending a complete system change out. Proserv was able to offer an alternative solution by upgrading the OEM's subsea controls modules (SCM) using Proserv's proprietary electronics to remove obsolescence issues and restore the system to full functionality.

Scope

Proserv removed the existing subsea electronics modules (SEMs) from the Baker Hughes SCMs and replaced them with Proserv's A2G SEMs. In order to communicate with the new fields, Proserv installed a master control station (MCS) extension to the existing Phoenix MCS to provide power and communications to both the Typhoon and Boris Fields.

This project utilised the capabilities of a number of Proserv's facilities around the world. The SCM upgrades were executed at Proserv's subsea controls centre of excellence, Artemis House, in Great Yarmouth, with project management and client interface handled by Proserv in Houston. The MCS software and hardware upgrades were executed and implemented out of our Trondheim facility in Norway.

Conclusion

After successful execution and contract close-out, Proserv now controls eight wells while co-existing with other wells in the Phoenix field, offering an effective route to future SCM upgrade opportunities. This project highlights how Proserv continues to build a solid track record as the controls provider of choice for Talos Energy.

Benefits

By executing specialist 'brain surgery' on the OEM SCM to remove the obsolescence issues, Proserv was able to avoid a complete control system replacement. This saved the client millions of dollars in CAPEX, while significantly reducing the carbon costs associated with new system build and deployment.

- All obsolescence risks eliminated, with our fully supported SCM electronics
- SEMs co-exist with existing infrastructure, allowing for future field upgrades without affecting production
- Proserv's market-leading and field-proven technology will continue to improve the reliability and production life of the Typhoon and Boris Fields.

