

System optimisation - OCH retrofit

Client:

Shell

Location:

Princess, Gulf of Mexico

Equipment:

Open communications hub

distributed temperature sensing and P/T gauges (FBGs) to monitor the functionality of the P6 gas lift system.

A marinised DTS (in-well distributed temperature sensing) was developed and the installation of fibre optic technology provided a platform for Shell to evaluate fibre optic technology for future applications.

Project Background

With a step out distance of six kilometres and water depth of 1,200 metres, the challenge was to provide communications from an existing topside system to the subsea system via power line communication, co-existing with FMC KOS 150 SCMs. The key requirement was to optimise system performance, delivering a design life of 20 years.

Solution

Proserv delivered a retrofit open communications hub (OCH) solution to provide co-exist high speed communications on the power line with the existing SCM. This enabled the conversion of AC high-voltage to DC with the provision of power management subsea to all instruments.

Scope

The provision of high bandwidth communications and co-exist technology with the existing subsea system delivered all the key requirements on performance as set out by the client.

Benefits

The system was qualified to provide shared electrical power with the P6 production SCM and used fibre optic

