

Our references in Energy and Oil & Gas

Siemens Industrial Turbomachinery AB for Caspian Energy Group Ltd.

Filanovsky field LSP-1 platform



Lukoil awarded major contracts for the development of the Vladimir Filanovsky Field, Caspian Sea which was discovered in 2005. The total investment for the construction of the offshore field and its ancillary equipment is expected to be in the region \$3.5bn

The infrastructure at the Vladimir Filanovsky offshore field comprise of an ice-resistant fixed platform (LSP-1), a living quarters module platform (LQM-1), a central processing platform (CPP) and a risers block (RB) platform, which are all linked with connection bridges.

The Caspian Energy Group (CNRG) awarded Siemens the contract for the supply of 4 No. SGT-400 twin-shaft dual fuel Turbine Generator sets, each rated at 12.9MWe that will provide power for the entire facility. Each Gas Turbine Generator is supplied complete with a waste heat recovery system & Liquid Fuel preparation unit. The contract also includes the supply of a Power Management System for monitoring and control of the entire power island.

End Client:	LUKoil
Country:	Russian Federation – Offshore Caspian Sea.
Year of Completion:	2015

Solution implemented

Power Management System (PMS)

- Actemium ICS is designing a Power Management System to monitor and control:
 - 4 No. Siemens Gas Turbine Generator UCPs, GCPs and associated Waste Heat Recovery systems
 - Auxilliary Diesel Generator
 - Emergency Diesel Generator
 - 10kV Switchboard, protection & synchronising
 - Emergency switchboard synchronizing
 - Low Voltage Switchboards, Load shedding
 - Drilling Facilities interface
 - DCS interface
- Main Features of the PMS include:
 - Operators Mimic with metering indication and controls for manual synchronizing and manual load distribution
 - Siemens PCS7 based system with Dual Operator Workstations
 - Redundant S7 400 H PLC systems (hot swappable)
 - Redundant I/O infrastructure
 - 42" Operators Monitoring Screen
 - Panel mounted HMI for monitoring of WHRU systems
 - Colour laser printers and line printer
- Total Value of the project £800k

Solutions & Services for Industry

David Seal – Senior Applications Engineer (david.seal@actemium.co.uk)