

SIGA Implementation at a Mediterranean FPSO

January 2021





The client

An international exploration and production company with a focus on gas field Development has launched a new development project in the Mediterranean Sea. The largest discovery in the region, the field is expected to provide the highest yield of liquid per volume of produced gas. The FPSO (Floating Production Storage Off loading) will be installed 90 km offshore, making it the first FPSO ever to operate in the Eastern Mediterranean.

The challenge

Challenges of securing the FPSO include the remoteness of the platform itself and the fact that the security program needs to be self-sustaining ; with very little intervention from the outside world. There are several vulnerabilities to the OT assets on the platform which—if manipulated—could lead to catastrophic results.



Cyber threats to the Oil & Gas sector



Remoteness – hard to access and act-upon risks in real-time



Potential catastrophic threats – leakages and explosions caused by a cyberattacks



Severe reputational consequences due to cyberattacks



The Process

The FPSO will have a gas treatment capacity of 800Mscf/day (8bcm/per annum) and a liquid storage capacity of 800,000 Bbls, which the Company believes provides a flexible infrastructure solution and, potentially the scope to expand out put for potential additional projects. The Field contains 1,409 bcf gas 2P Preserves plus 61M Bbls liquids 2P reserves. This represents a total of 317M BOE 2P reserves.

The Solution

SIGA has been selected to provide OT Cybersecurity for the FPSO platform to satisfy regulations and assuage concerns around OT cybersecurity threats to customer mission-critical infrastructure offshore. SIGA installed the SigaGuard solution for Level-0 protection by monitoring the electrical signals directly at the source, detecting anomalies in the process' behavior and gaining unmatched visibility into the OT process.





Main Vulnerabilities identified abroad the FSPO



How line & Pig launchers/receivers



Dew pointing scrubbers & LTS



Gas & Metering compressors



MEG injection and distribution



Train HP separator



Gas & Metering coolers

About us

Founded in 2014, SIGA OT Solutions is an innovative cybersecurity company driving a paradigm shift within the world of OT cybersecurity. The company strives to expand the boundaries of OT operations with deepened security and elevated process integrity, by delivering AI enhanced monitoring and deeper operational perception to operators of critical assets.