

TOTAL E&P QATAR

Process & safety of offshore oil platform



Total Exploration & Production Qatar (TEPQ) operates the Al Khalij oil field, located 130km off the coast of Qatar. The process of oil extraction involves several stages: first, the oil is extracted by a cluster of 7 unmanned platforms and piped to the island of Halul 40 km away. There, it is processed by two separation trains and stored before being transferred to oil tankers towards the refinery.



Aim

TEPQ wanted to replace their former Integrated Control and Safety System (ICSS) with a modern and efficient supervisory control system. The replacement had to meet Total's general specifications as well as the constraint of the Al Khalij site. This includes the implementation of stringent safety measures to minimize the risks of environmental pollution and damage to marine ecosystems during offshore oil extraction. To that end, TEPQ chose the Panorama software platform to supervise its offshore installations. The SCADA meet not only the technical criteria such as object-oriented technology, tree structure navigation, user profile management, remote visualisation etc. but also to avoid shut down production during switchover.



Solution

From the control room located 40km away from the oilfield, operators can control and monitor, round the clock: offshore production units, separations trains on the island, fire & gas detection and safety systems (FGS/ESD). The Panorama platform enables reporting, traceability and also interfaces with other applications such as the PI system. The interoperability of the solution facilitates the transmission of production data to TEPQ head office based in Doha. On this project, the local Codra's partner is responsible for maintaining the application and provides technical support.



Customer benefits

Panorama's solutions exceed the customer's expectations and bring to them new services. In addition to meet their initial specifications, Total's teams realized the scope of possibilities offered by Panorama, such as inhibit counting, alarm masking, data search in SQL, extracting the SQL database to CSV/Excel, creating a "Post-it note" tool in the calendar, well test management and reporting, etc. Also, the application continuously evolves as TEPQ will installed the new Panorama Web HMI, key services for the user's application. The aim is to:

- Facilitate access from anywhere to operational data with a simple HTML5 web browser,
- Save time and reduce operational costs by up to 15% when migrating or upgrading applications thanks to a flexible implementation and a simplified infrastructure.

