



Case Study

Production Data Management System for Offshore Gas Platform

Challenge

An International Oil Company (IOC) required a solution to manage production data for a new gas platform in the UK North Sea, one of the largest developments in the UK in recent years. The IOC's team had an ambitious vision of the scope of this system. It was to integrate data management across all the day-to-day production operations of the platform, including:

- Collecting and validating flow measurements from meters across the plant;
- Allocating flows of gas and liquids back to wells;
- Managing well test data;
- Capturing results of fluid sampling;
- Recording, categorising and analysing production losses;
- Calculating and reporting emissions of CO₂ and other gases;
- Creating and publishing production forecasts;
- Calculating dose rates and managing stocks of injected chemicals;
- Integrating with modelling software including process simulation and well models;
- Integrating with SAP;
- Managing nominations of gas to be transported through a subsea gas pipeline and redelivered at the gas terminal;
- Attributing sales gas deliveries to the field's partners;
- Optimising gas deliveries using an integrated economic model to forecast sales revenues;
- Tracking the ownership of stocks of crude oil and NGLs and forecasting future stock levels;
- Administering liftings of crude oil and NGLs by marine tankers.

“The system allows our team to map the molecules from the wells, through processing facilities, over third-party infrastructure to market and have a sound basis for accounting. The alternative is running disparate systems for each aspect of business with the potential for conflicting, or redundant data.”

Solution

After a competitive tender, Axis was selected as the preferred solution because of a proven ability to deliver all areas of the required system. The functionality provided by the Axis Production, Axis Gas, and Axis Tanker templates was a close match to these requirements.

In addition, the exceptional flexibility of Axis meant that functions could be tailored to provide a 100% fit to the client's business processes.

For a system with such a wide-ranging scope, relied upon by users in many different parts of the business, a key benefit of Axis was that it provided an integrated solution with all data in a centralised database, accessible by users across the business through a single web front-end.

The solution also made extensive use of the workflow functionality that Axis provides to ensure that users across the business can work on a single data set without losing data integrity or making changes that adversely affect other users.

Results

The implementation project culminated in a highly successful delivery, with the entire system completed, tested and accepted ahead of first gas. This allowed the client's team to carry out comprehensive and accurate hydrocarbon accounting from day one of production.

The company has taken advantage of the comprehensive support service offered by Adept, which ensures day-to-day issues are swiftly resolved and also that the system is adapted to changing business requirements.

By choosing Axis, the IOC's ambitious vision of their system has been fully realised.



Adept Solutions
Citypoint House, 11 Chapel Street
Aberdeen, AB10 1SQ
United Kingdom
T: +44 (0)1224 653414
E: enquiries@adeptsolutions.co.uk