Emerson’s Distributed RTU™ Network Reduces Site Commissioning Cost for Australian Oil Company

RESULTS

- An easy, cost-effective integration of additional measurement points for increased site visibility and ultimately, better control
- Increased personnel efficiency with easier configuration of drag-and-drop technology
- Embedded control close to process operations enabling rapid response to process changes
- Reduced site commissioning costs and efforts, while speeding up the project timeline

APPLICATION

Onshore Production – remote oil wells where operator needed an accurate net oil application which could be remotely monitored and accessed

CUSTOMER

Independent oil company in Queensland, Australia

CHALLENGE

This Australian oil company recently completed new oil wells, but they needed to have an application that would provide easier functionality for DNOC measurement and control for wellhead separators.

Due to the physical distance of the wells, the customer had a difficult time maintaining the wellheads. Remote monitoring was essential for maintaining and observing the systems.

The customer had a negative experience from previous commissioning activities, and was looking for a method to reduce site commissioning costs. One combined Factory Acceptance Test (FAT) for all the equipment would verify its functionality and would address this challenge.
SOLUTION

The Distributed RTU Network – using the ROC800-Series RTU – was introduced to the system in order to allow peer-to-peer communication between the RTUs and creating one outgoing link for data provision and remote monitoring. Its components utilized the same configuration software as the ROC800 and the DNOC metering software. The setup was simplified by delivering a true drag-and-drop experience that automatically configures and links into the network.

Utilizing the ROC800, the DNOC application, and the Micro Motion Coriolis meters for the project provided an accurate and reliable metering separation system. A HART protocol pass through the ROC800 and dedicated AMS software provided remote Coriolis meter verification, which was not previously available to this customer.

Another key consideration FAT — was utilized instrumentations to include all the pressure, temperature, and flow instrumentation. Under this test, the system was powered through the solar system and batteries, providing real-time data on solar power in a remote environment. This allowed for performing an integrated Factory Acceptance Test, while validating all the system component’s health and correct communication.

After the project was completed, it became apparent that Emerson could provide a complete system that included the most advanced technologies, best fitted instrumentation, and control components to solve this application challenge.