

CASE STUDY: SYSTEM INTEGRATION



CONTROL PANEL RETROFIT UPGRADE

Problem

We were approached by our client who had a number of ageing firewater pump control panels (in excess of 40 years old) which were no longer supported by the OEM. These systems were experiencing severe reliability issues; contributing to lost production on a number of their assets.

The system used a non-standard operating voltage, and other vendors would only quote for a complete system replacement, including all field instrumentation and hardware. The client felt this option would take too long, cost too much and introduce too much risk. Metron were approached to provide a pragmatic solution with a quick turnaround time – interfacing with existing field equipment and maintaining the same fit, form and function of the original control system, but using modern, reliable and supportable components.

Solution

An initial basic survey of the existing packages was performed by Metron. At the same time, we were also able to provide some initial short-term onshore and offshore support to improve their current reliability. This included on-site fault finding & repairs, sourcing of obsolete critical spares and providing re-engineered replacements of the most unreliable components as a temporary stopgap.

After agreeing a detailed statement of requirements with our client and their core staff; we completed all the design and drawings in-house, ready for manufacture. Fabrication, programming, and onshore testing was then completed by our engineers at our Aberdeenshire facility. A purpose-built test-system was additionally constructed to facilitate comprehensive testing prior to release.

After a successful witness FAT with our client, we mobilised offshore to execute installation and commissioning the panels. This was completed whilst maintaining minimum availability of the client's fire water pumps.

This provided a solution for our client where they were able to replace obsolete parts in their system, whilst maintaining operations and increasing overall reliability, reducing downtime and the risk of production losses.



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