Challenge

Gasunie commissioned a project to standardise the control systems at its compressor and blending plant in Wieringermeer due to a number of components becoming obsolete and changes in the gas transportation requirement. The existing control systems had also combined over a period of time resulting in multiple signals arriving on incorrect systems and these had to be rerouted to the systems where they belonged.

The plant had to remain fully operational during the conversion of large areas and the conversions had to be delivered within specific time windows. To realise this, the conversion was split into different phases for which temporary panels were designed and built to ensure the availability of the plant.

Solution

Stork provided Gasunie with a complete end-to-end solution for the control system upgrade, including:
- System architecture and preparation of the processing of verification and validation plans and processes.
- Implementation of the above in the Factory and Site acceptance tests (Fat and SAT) plans.
- Design, built and verification of the system in accordance with the system architecture.
- Technical implementation of the system in the operating environment.
- Design and delivery of hardware and software.
- System installation at the client location including supply and connection of cabling
- Reequipped the main control room including hardware and software.

Stork developed bespoke software tooling for the project to monitor the consistency in the electrical drawings. The tooling allowed Stork to develop and build panels very quickly after establishing the engineering principles, in accordance with the requirements set by Gasunie. In the pre-FAT and FAT of these panels no abnormalities were found, reflecting a very high quality of design and build of the panels.

At the time of integration in the operational environment at the client location, seven subcontractors were managed by Stork. Alignment of activities was of great importance and was continuously coordinated by Stork.

Technical Specs

- Region: Industrial Services, Continental Europe
- Business lines provided: Electrical & Instrumentation
- Execution time: 19 April 2011 - 1 December 2013
- Total manhours: 64,600 manhours
- Contact at Stork: Peter van Houten

Result & Benefits

Following the project completion, Gasunie is now able to properly control all assets at Wieringermeer including all its expansions in functionality according to the Gasunie standards. The new control systems are fit for purpose for many years to come, and the reliability of gas supply from the station Wieringermeer is secured.

“Gasunie is very pleased with the way Stork managed this project and with the quality delivered”

Tom Rutgers, Project Manager, Gasunie