



The Project

In 2018 Proeon were asked to develop a replacement crane control and drive system for an application on a Nuclear power facility in the UK. The crane system was over 20 years old, and whilst much of the mechanical side of the crane was regularly serviced and maintained to a high standard, the main issues were due to the obsolescence of the drives and the control systems.

The Challenge

Working in a Nuclear facility on a critical system present issues, not least the level of standards and procedures that are required. Proeon often work where control and automation are critical and complex and this project was a prime example of this.

The client wished to remove the obsolescence of the old system by updating the crane system and benefit from enhanced functionality whilst ensuring the same or better level of safety and control was maintained.

The replaced control package was based on Siemens SIMATIC Safety Integrated S7-1500F advanced controllers and connected to a newly installed PROFIsafe SINAMICS S120 VFD servo drive system, linked through an integrated PROFINET interface.

Within the control room, a new HMI was developed to provide the operator a clear view of the crane system including a mimic of the crane location and functionality of the crane, verifiable by the new CCTV systems.

The entire package of control hardware, software and drives were engineered, procured, integrated and subjected to Factory Acceptance Testing (FAT) at our premises prior to being installed at site by our dedicated site installation team comprising multidiscipline engineers and technicians. The installation was further strenuously tested as a complete system during a Site Integrated Test before being handed over to the Client.

Nuclear Facility Crane Control



In Conclusion

Working closely with the Client, we were able to understand all of the implications of this high-profile project and with no margin for error, we were successful in ensuring a safe and continued operation of this crane upgrade, providing a full turnkey project that will be supportable for the next 20 years.

Should you have any questions regarding this project, or on what Proeon Systems could do for you, please contact us directly on: +44(0)1953 859110 E: proeon@proeon.co.uk