Case Study







Jim Vause (E.ON) and Ian Southerton (Omniflex) at project handover.

"I'm very pleased with the completed job. The, work interface and communications [with Omniflex] was very good"

Omniflex replaces obsolete Robinson Annunciators.

Omniflex successfully install 1800 point alarm system without re-wiring or updating existing documentation.

When E-ON needed to replace their obsolete 1800 point critical alarm system at Isle-of-Grain Power Station, with minimal disruption, they chose an Omni16C SIL rated solution from Omniflex.

Omniflex successfully designed, supplied and commissioned custom packaged Omni16C remote alarm logic units to directly replace the obsolete Robinson units without the need to change any existing cabling or update existing documentation.

About E-ON

E-ON is one of the UK's leading power and gas companies – generating and distributing electricity, and retailing power and gas – and is part of the E-ON group, one of the world's largest investor-owned power and gas companies.

In the UK, E-ON generate and distribute electricity and retail electricity and gas to millions of homes and businesses across the country.

E-ON's Isle of Grain Power Station is an oil-fired power station situated on the River Medway near Rochester, in Kent, England with operational capacity of 1,320MW, and supplies approximately 3% of the UK's electricity needs.



The SIIL certified Omni16C Remote Logic Unit similar to those used on Grain Power Station

The Challenge

Across the Isle of Grain Power Station's generating units are a total of 1800 alarm points monitoring all the critical systems.

These alarms were provided by an obsolete, unreliable and unsupportable Robinson alarm system with old display technology.

In order to maintain safety standards at the power station it became necessary to upgrade this old alarm system with a state-of-art alarm system meeting today's latest safety specifications.

Due to shutdown constraints there was a need for the upgrade to be completed in the shortest time possible with the least risk to plant operations.

The Solution

Omniflex were awarded the contract for the full turnkey project to replace the existing alarm system.

Using Omniflex's industry proven Omni16C SIL1 Annunciator System, Omniflex repackaged the mechanical steelwork arrangement to match the existing space envelope of the Robinson System including mechanical fixings.

Omniflex also engineered the field terminal block arrangements to be exactly the same, "wire for wire" as the existing Robinson System eliminating the need to change a single plant cable.

The incandescent bulb displays were changed to high efficiency, high reliability LED technology, dramatically reducing the instance of failure of alarm lamps, and reducing the wasted heat.

Jim Vause Assistant C & I Engineer – Grain PS.





Isle of Grain Power Station

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The Result

Omniflex's custom engineered solution to suit E-ON's specific requirements, but based upon the proven Omni16C alarm modules to retain the safety certifications, allowed for the re-use of all of the existing internal panel wiring, power supplies and existing mechanical fixing.

This provided a very fast changeover and handover from old system to new and avoided significant project risk by the eliminating major re-wiring on the system.

Omniflex are proud of the fact that not a single wiring diagram on the station had to be changed other than a name change. The elimination of any system re-wiring was a direct benefit in down-time, risk and cost to E-ON.

"The contract awarded to Omniflex was based on an E.ON scoring system in which we looked at all proposals and scored against cost, project requirements, expected quality of service, previous results and health & safety record.

I'm very pleased with the completed job. The, work interface and communications was very good, with the final outcome of a delivered replacement alarm system successfully installed.

As a result I would have no problem using Omniflex again." said Jim Vause, Assistant C&I Engineer for the Grain Station.

All enquiries to Omniflex



Grain System before replacement.



Grain System after replacement.