

EMERGENCY RESPONSE AND REPAIR FOLLOWING 11KV FAULT ON A CONTRACTED CUSTOMER NETWORK

LOCATION

Spalding, Lincolnshire

OVERVIEW

Integrated Utility Services (IUS) carried out works at a large food manufacturing facility that provides products for supermarkets throughout the UK. Their intake substation is operated via National Grid Electricity Distribution (NGED). The HV configuration included an aged, oil filled (Brush) combined 11kV Switchboard, with 3 NGED owned panels and 3 customer owned panels.

There was also a separate, customer owned two panel Schnieder Electric CE2/CE6 switchboard, connected via a HV cable loop. Their power supply is essential and the benefit of having an Operation & Maintenance Agreement with IUS, for their private 11kV network, was demonstrated following a fault.

We have had historic problems with the old Brush switchgear with various fault repairs completed on this network. However, it was a flashover on the NGED owned 11kV metering Circuit Breaker, which caused a loss of supply and an emergency response from both IUS and NGED.

SERVICES PROVIDED

- Out of hours response to a call following loss of supply
- Project and fault management
- Generator connection to restore temporary supplies
- Safe systems of work
- Switchgear removal
- New switchgear installation
- 11kV cable jointing and terminations
- Testing and commissioning
- Restoration of permanent supply
- Handback documentation



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THE PROJECT

The IUS Senior Authorised Person was called out to a loss of supply at the facility, attended the site and assisted NGED following a Distribution Network Operator Circuit Breaker trip.

To initially restore supplies, generation was arranged by the customer with IUS implementing the required safe system of work including HV switching and the issue of safety documents. This arrangement would provide a temporary supply solution and enable NGED to carry out any required repair works on their own equipment.

Following consultation with the client, it was decided the most appropriate way to proceed would be to replace the Brush oil filled switchgear with new Schneider Electric SF6 insulated apparatus. This would be achieved by extending the existing Schneider Electric switchboard with a further 3 panels.

With safety documentation in place, the old Brush switchgear was disconnected and removed. The new Schneider Electric apparatus was installed and 11kV cable jointing and terminations were undertaken. Working collaboratively with the customer and NGED the installation was completed, tested, commissioned and energised. This would allow normal supplies to be restored, and the generators to be disconnected.

IUS offer substation inspections, maintenance and 24/7 emergency cover via our High Voltage Customer Service (HVCS) team.

Our Operation & Maintenance agreements provide our customers with the trained, authorised and competent team to manage High Voltage networks safely. Our undoubted strength in Senior Authorised Personnel resource and response time differentiates IUS from our competitors.