

# Sellafield Substation – Commissioning Programme



## Case Study: SCADA

Commissioning and Protection Scheme Testing at Sellafield, Cumbria

**Client:** Sellafield Utilities (via ABB)

**Project Partner:** WJ Project Services

**Location:** Sellafield, Cumbria

**Scope:** SCADA commissioning, unit protection schemes, secondary injection testing, and personnel training



## Project Overview

WJ Project Services was commissioned by ABB to support the commissioning of SCADA, unit protection schemes, and low-voltage switchgear at Sellafield. The project included testing, relay commissioning, SCADA integration, and staff training.

## Approach

The team developed testing methodologies for unit protection schemes, conducting short-circuit and secondary injection tests to verify differential and restricted earth fault protection. All procedures and results were fully documented for client reference.

## Commissioning & Training

Relays were commissioned in line with client settings, and signalling to SCADA was verified. On-site training was provided for switchgear operation, protection relay use, and Omicron CMC testing, enabling staff to manage long-term system testing independently.

## Equipment

ABB Unigear ZS1.2, 11kV air-insulated, metal-clad switchgear was selected, offering EC 61439-1/-2 certification, safety, reliability, and scalable design.

## Outcome

The project delivered fully commissioned protection and SCADA systems, comprehensive documentation, and trained personnel, ensuring reliable long-term operation.

