INTEGRATED UTILITY SERVICES

CLIENT
Network Rail

PROJECT
Leeds City Station

LOCATION
Leeds

SERVICES PROVIDED

- Relocation of existing cleaners compound with a purpose built cladded structure
- Construction of sub-station buildings for Network Rail and Northern Powergrid
- Installation of domestic electrical supplies within buildings
- Installation of fire alarms
- Installation of 11kV switchgear
- All 11kV electrical protection
- Installation of containment
- Installation of 11kV cables
- Jointing and termination works
- All civil activity
- Removal of redundant switchgear

LEEDS CITY STATION
SANDFORD STREET SWITCHGEAR REPLACEMENT

>> OVERVIEW

Network Rail awarded IUS the contract for the replacement of the existing 11kV distribution substation at Leeds City Station. The existing oil filled switchgear was replaced with new apparatus. The works were coordinated to incorporate changes to the Northern Powergrid equipment.

>> DESCRIPTION

Owing to existing 11kV switchgear at Leeds City Station reaching the end of its life span, a solution was required for the seamless renewal of the switchgear, whilst maintaining supplies to an operational train station.

The former location of the existing 11kV substation was below ground in an area known as the 'Dark Arches'. The train station was built on a set of vaulted arches with an area occupying distribution substations.

Logistically the location of this existing substation was unsuitable, therefore a purpose built substation was constructed at platform level, containing both Northern Powergrid and Network Rail equipment in separate sides of the building.

Two parallel 11kV feeders were taken directly from Northern Powergrid's Whitehall Road primary substation. The approximate route length was 0.25 miles. Two parallel circuits then fed the Network Rail FKI Eclipse switchgear.

Each of the six Network Rail 11kV circuits supplied six 11,000/433V ground mounted transformers. These transformers were resupplied via new 11kV cabling. IUS managed all the critical power outages to deliver the works whilst trains continued to operate.

Delivery Excellence

IUS