



Project Installation of New Cast Resin Transformer and Housing, Ring Main Unit and associated HV cabling at Plantation place.

Location Plantation Place, 30 Fenchurch Street

Completed November 2018



The Networks Team recently completed an extremely challenging project for CBRE as a preferred supplier within Plantation Place at 30 Fenchurch Street, installing a new Cast Resin Transformer and Housing, Ring Main Unit and associated HV cabling.

Project Deliverables

RJ Power Networks scope of works included the following:

- Prelims works
- Supply and installation of a Ringmaster RMU RN2c T2
- Bus bar Modifications (Subject to Transformer Construction Drawings)
- HV Cable Terminations of all equipment and the supply of adequate Materials to complete the job
- Transformer Internal HV Connections
- Supply of adequate Earthing
- Containment/bespoke Monoblock fabrication
- Labour to install, test and commission
- Supply and management of lift and shift Sub Contractor labour
- Project Management
- Mobile access equipment supplied to enable the construction of TX housing and Bespoke Busbar fabrication
- Supply and management of UK Power Networks attendance



Challenges and Solutions

The Networks team faced many challenges during the process of this project, with one of the most demanding aspects being the logistics of the sequenced changeover, the removal process and positioning of the replacement equipment within a third basement level, as it was only achievable via a lift shaft and a narrow corridor system.

Due to the difficult nature of the plant movement process, the job required a collaboration of specialist contractors to achieve a successful outcome, with all demonstrating their skills to achieve the highest level of engineering competence.

The plant movement was completed by Radius, with the process of removing the old transformer and installing the new transformer commencing at the top of a lift shaft. The old transformer needed to be lifted two floors where it was temporarily stored in the clients carpark. The new replacement transformer was manoeuvred down to the basement using the same lift path. These works had to be completed in a 24-hour window, which was extremely challenging to all involved, and required a lot of pre-planning between the Networks team, Radius and the client for the plant movement to be a complete success.

A bespoke LV Busbar Chamber and 4000A LV Busbar had to be manufactured off site, this was an extremely challenging process as the Networks team were unable to determine the exact measurements of the transformers LV connections. RJ Power Networks panel fabrication and Copper specialist, Darren Young, executed this task faultlessly and the equipment installed was inch perfect.

The team were faced with a miss delivery of parts by the manufacturer. The HV Bushings and HV Termination Box, which bolted onto the transformer housing, was not included on the original delivery from the manufacturing warehouse in France. It was only discovered that these essential parts were missing midway through the project, as a result the team were put under extreme pressure to locate the missing parts to ensure the job was kept to the extremely strict and tight schedule of works. After intense conversations with the supplying manufacturer the parts were located in the warehouse and delivered from France via a specialist courier service, which worked through the night to ensure the parts arrived to us on a next day delivery before the energisation phase of the job took place. The manufacturer really performed and understood our clients needs to ensure the project did not slip behind schedule.

The new equipment needed to be installed during the week without any interruptions to the client's day to day running of its multi tenanted building. The method of installation had to be revised numerous times until RJ Power Networks identified a solution to all of the issues that had been originally encountered.

The overall job went extremely well, the extraction of the old transformer and installation of the new was a success and a great achievement for all staff and contractors involved. Most importantly the client was extremely happy with the end result.

Thank you to the RJ Power Networks team as well as all of our specialist contractors used to complete this job. The project ran smoothly despite the demanding logistics.



Why RJ Power Networks

RJ Power Networks undertakes a range of installation, of HV to LV equipment in private distribution networks, as well as maintaining existing HV and LV equipment, making us the ideal company for this project.

We continually strive to offer a consistent, reliable and efficient service to all of our clients and future clients. The Networks divisions is a business led by passionate individuals that care about the quality of the work produced, and retaining collaborative and sustainable partnerships, with the ultimate goal of securing customer loyalty and forging strong long-term business relationships.