

Fairfield General Hospital

Case Study

NHS
Northern Care Alliance
NHS Group

About

Fairfield General Hospital is located in Bury, Greater Manchester and is a part of the Northern Care Alliance NHS Foundation Trust.

The Northern Care Alliance cover hospitals in Salford, Bury, Rochdale, and Oldham and have a dedicated team of over 20,000 staff delivering healthcare to over one million people across Greater Manchester and beyond.

Resilience Maintained Throughout Live Works

To enable the formation of the new A & B switchrooms within the existing generator switchroom, Sudlows implemented a resilience-first construction approach.

A temporary generator was installed and commissioned to maintain N+1 redundancy throughout the programme. With temporary resilience in place, the existing 600kVA generator was safely decommissioned and removed from site.

Civil Works & Roadway Access in a Live Hospital Environment

To connect the new switchrooms to the generator compound, Sudlows installed new underground ductwork between the LV switchroom location and the generator compound across the main access road at the front of the hospital.

Due to the hospital's critical functions and continuous operation, it was essential that access routes and site logistics remained available throughout the excavation and reinstatement works.

Sudlows worked closely with the Estates Team to maintain safe and uninterrupted access while completing all associated civils activity.

Switchroom Fit-Out & Electrical Installation

Once enabling works were completed, the new switchrooms were constructed and fully fitted out, including:

- New dividing walls to create separate A & B switchrooms.
- Floor repair and reinstatement.
- Installation of new containment systems.
- Fire alarm integration and network connectivity.
- Delivery, installation and positioning of new LV panels.

New LV cabling was then installed from both the transformer supply and the new generators, and terminated into the new A & B LV switchboards.

TMDC Connection & Controlled Isolation Strategy

In order to connect the new TMDC to the transformer supply, the existing mains supply required isolation. To maintain resilience during this high-risk activity, Sudlows planned and installed an additional temporary generator solution to support the substation during the works.

Once new connections were completed and supply restored, generator commissioning was carried out, witnessed and reviewed by Senior Estates representatives. Following successful testing and approval, the project progressed into final supply transfer activities.

Load Migration & Stakeholder Co-ordination

The migration of live hospital loads was managed through detailed planning and stakeholder engagement.

Sudlows developed migration plans collaboratively with the Estates Team, supported by structured reviews with key hospital departments, ward stakeholders, and site teams. This planning phase took approximately six months, culminating in a detailed changeover schedule issued for approval.

All changeovers were completed successfully, on time, and with no unplanned outages.

Energy Monitoring & Operational Insight

As part of the new LV infrastructure, Sudlows installed and commissioned the Smart Estate Energy Monitoring System within the A & B switchboards.

This system enables the Estates Team to monitor real-time energy usage across the site and generate performance reports that support energy efficiency improvements and align with Net Zero goals.

Conclusion

The completed upgrade provides Fairfield General Hospital with an enhanced, future-ready LV power infrastructure, featuring A & B power streams each operating with N+1 redundancy.

The increased capacity and resilience ensures continuity for critical clinical services while supporting long-term expansion plans. Through early engagement, careful planning and close collaboration with hospital stakeholders, Sudlows delivered a complex live upgrade programme safely and successfully — maintaining operational continuity throughout.