

Case Study

Greater *energy and cost savings* made for the UK's largest electricity transmission and distribution business.

October 2024



Project Overview

Location | National locations of 40+ sites.

Challenge | Requirement to upgrade a site's power protection equipment to meet the client's national design standards and to move UPS equipment accordingly in addition to all other nationwide site UPS upgrades.

Critical Load | Safe transmission and distribution of electricity across the UK.

Solution | KUP is proud to have a 'client first' approach. With over 40 installations of the KOHLER PW 8000PDA required across all sites within this project; the first step to resolving an unexpected extra site move of the UPS at another location, was to assess what works would be required and how feasible this would be.

Background

Kohler Uninterruptible Power (KUP) have been working with UK's largest electricity transmission and distribution business for many years. The business is pivotal in connecting millions of people to the energy they use safely, reliably, and efficiently.

Crucial to this connectivity are the KUP UPS solutions already in place across 40+ sites nationally, that are used to back up communications equipment and control centres. All the sites have strict UPS design standards to adhere to, allowing for ease of maintenance and increased productivity.

KUP have a rolling programme to upgrade the current UPS solutions to more energy efficient products over a four-year period.

Challenge

Each site had previously used KOHLER PW 9000DPA systems, these were now being upgraded to the KOHLER PW 8000DPA systems as per the project specifications and agreed upgrade works.

One site on the South Coast, required a new UPS system to meet the client's national design standards. At this site, the current systems were located in two different places: a ground floor communications room and a basement floor battery room. The decision was made to install the new UPS system and batteries in the existing basement room to meet design standards across all sites. This required special works, that included significant re-cabing.

Solution

As the site did not conform to other site designs for UPS systems, KUP was asked to conduct a review and provide advice on how to proceed with the programme of upgrades. This included an assessment of any additional works that may be required and how feasible this would be.

Given the age and design of the UPS it was recommended to replace the system in full as this would benefit the client in energy efficiency savings.

[Indent or box w/image] The KOHLER PW 8000DPA is a leading edge modular designed UPS using proven Decentralised Parallel Architecture (DPA) technology. The PW 8000DPA excels by offering broad load-range energy efficiency, "Six nines" 99.9999% availability and flexible scalability in either a tower or rack-mountable solution. The system offers high efficiency, low cost of ownership and a compact footprint that is proven in a wide range of critical applications.

The UPS upgrade at this coastal site needed to comply with design standards and safety measures across all other sites. For this site to be included in the upgrade project, KUP would need to justify the efficiency savings against the extra outlay.

John Inman, KUP Business Development Manager, produced a Total Cost of Ownership (TCO) document demonstrating that the project would pay for itself with energy efficiency savings within just three years. The thoroughness of the TCO coupled with KUP's expertise in delivering UPS upgrades enabled the project to go ahead alongside the rest of the upgrade programme.



Our electrical Partner, Lewis Electrical, were on hand to support this project with all installation and cabling work. They completed the relocation of electrical supplies from communications room to the basement battery room which included core drilling between the concrete floors to open up a cable route.

Result and Impact

The site was successfully upgraded to the KOHLER PW 8000DPA UPS systems and the project was completed within predicted timeframes. Critical to the successful upgrade works was the project management from KUP and their trusted suppliers.

"I would also like to say thank you very much to your installers Lewis Electrical, Steve and his team were very focused on the job and progressed everything in a safe, calm and timely manner. Their professionalism during the installation was reassuring and made the whole process a lot less stressful for all involved." Anonymous

This rolling annual project to replace the existing UPS systems across the UK will enable the client to continue their mission to deliver electricity safely, reliably and efficiently to the customers and communities they serve, while working towards a cleaner, greener energy future.

PM: John Inman, KUP Business and Development Manager

CE: Leigh Boyle, KUP Projects Team

If you are looking for a sales and service solution for your power protection equipment, please get in touch with our team at uksales.ups@kohler.com