

## 8 MVA UPS solution at Barclays HQ



### Case study:

**Site:** Barclays, Canary Wharf

**Application:** Critical applications

#### Chloride capabilities displayed:

- Expert design
- Management of complex delivery & installation

#### Chloride products used:

- 90-NET
- CROSS static switches
- LIFE.net
- Batteries

Since 1998 Chloride has secured contracts for Barclays' call centre, data centre and head office facilities throughout the UK. At 1 Churchill Place in Canary Wharf an 8 MVA Chloride UPS infrastructure supports Barclays mission critical applications.

#### The design solution

This UPS project was designed by HH Angus Associates and engineered by Chloride, who carried out the building, installation, commissioning and post commissioning monitoring of two distributed UPS systems located on the 4th and 32nd floors. The first system comprises two units each containing three 90-NET 800 kVA UPS and the second system comprises four 90-NET 800 kVA UPS. The solution also includes the supply of 28 160 A single-phase Chloride CROSS static switches. In addition Chloride's LIFE.net remote monitoring and diagnostics facility ensures optimum functionality of the power distribution system 24/7.

A key design element in this project was the need to provide a solution that would allow synchronisation of the two UPS systems at the top and bottom of the building, should circumstances demand this facility.

#### Ensuring system resilience

Ensuring system resilience and maximum availability of power to load was a specific requirement for each installation. Special control and synchronising logic has also been designed into Chloride's UPS systems. Chloride's product flexibility and design capability has enabled Barclays to achieve the specific control functionality they needed, and helped their system configurations to operate effectively, safely and reliably to satisfy the goal of zero downtime and maximum availability.



800 kVA 90-NET UPS systems

# CHLORIDE

The Barclays projects are valued in excess of £2million. They satisfy the company's engineering objective to design products to a standard and not simply to a price. The Chloride products use microprocessor and digital control functionality which, for example, permits the ten 800 kVA UPS systems to be distributed across three plant rooms in a tower block installation. This system also incorporates multiple downstream Chloride load transfer switches. Drawing utility power from two independent substations the three systems have to be able to communicate and synchronise appropriately to provide the required switching functionality.

## Monitoring for 100 tonnes of batteries

Barclays' sophisticated 8 MVA UPS design involves the use of 3,200 battery blocs. Assembled in four strings, all 100 tonnes of batteries are monitored by Power Protect BATT (PPBATT) Chloride's unique battery cell monitoring system, in addition to standard battery care built into Chloride UPS. PPBATT monitors the condition of each battery cell providing the final link in the chain of protection.



PPBATT battery monitoring

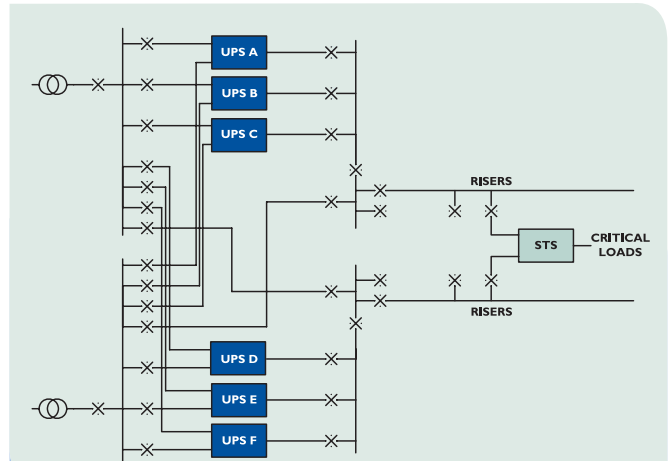


Diagram showing Barclays' modular parallel UPS system

For more information please visit our website

[www.chloridepower.com](http://www.chloridepower.com)

Chloride is an international provider of secure power solutions for business continuity for customers worldwide. Our innovative solutions and services protect business critical systems and processes from the damaging effects of poor quality electrical power and power interruptions.