

# FOOTBALL CLUB SCORES PEACE OF MIND WITH UPS UPGRADE



**Upgrading vital uninterruptible power supplies delivers enhanced reliability, safety, and efficiency for a historic professional football club.** *(NB This project was undertaken by Constant Power Services prior to the merger with Riello UPS Ltd)*

## INTRODUCTION

Based in east London, Leyton Orient Football Club is a football institution with a rich history and a dedicated fanbase. Established in 1881, the club has experienced its fair share of ups and downs, but its resilience and passion have kept it firmly rooted in the hearts of its supporters.

With several Uninterruptible Power Supply systems already in place, managed and serviced by Constant Power Services for many years, our support and guidance to the management team at Leyton Orient meant that they recognised the need to upgrade the UPS systems that had served them well for many years.

## OBJECTIVE

The primary objective was to remove and certifiably dispose of the existing UPS systems located across the stadium due to their age, replacing them with new systems embracing the latest state of the art technology.

With one Central Supply System that would ensure the emergency lighting, life safety critical system would be protected with two further standard UPS systems to protect the requisite mission critical stadium loads.

The goals of the upgrade were to enhance the operational efficiency, ensure the ongoing safety of spectators and players, and to maintain continuous operations during mains electricity anomalies and power failures/outages.

## SPECIFIED SOLUTION

As well as assessing and reviewing service reports Constant Power Services carried out a site survey to propose a robust UPS system tailor made to meet the specific requirements of the football ground.

The UPS system featured the following components:

- **Centralized UPS System:** A centralized UPS system with sufficient capacity was installed to provide backup power to critical loads across the entire stadium.
- **Battery Bank:** The UPS system incorporated a large battery bank capable of storing enough energy to sustain operations during extended power outages.
- **Redundancy and Scalability:** The system allowed for future scalability to accommodate additional loads if necessary.
- **Monitoring and Control:** A comprehensive monitoring and control system was set up to remotely manage the UPS system, monitor battery health, and receive real-time alarms in the event of power disturbances.

## CHALLENGES

Once the removal and certified disposal of the old existing UPS systems was performed there was a possibility of limited space as well as possible obstruction located in the room for the installation of the new UPS systems.

This was established by taking into account the room dimensions as well as the existing structures already part of the football ground that were located in close proximity to where the new UPS systems were going to be installed.

It was of top priority to ensure that our new UPSs offered for the replacement were sized and positioned correctly for successful completion of the project.

The maintenance of the UPS system required specialist knowledge, tools and equipment.

With this and taking into account the new UPS environmental considerations, to prolong and achieve the maximum life expectancy and performance of each of the UPS systems.



## RESULTS & BENEFITS

The UPS installation at Leyton Orient Football Ground yielded significant benefits:

- **Enhanced reliability:** The UPS system eliminated power disturbances and any disruptions during matches, ensuring clean, uninterrupted, power to the supported loads allowing a consistent and uninterrupted experience for players and fans alike.
- **Safety assurance:** The UPS system provided a safe environment for players and spectators, preventing any potential hazards caused by sudden mains power failures.
- **Continuity of operations:** With the UPS system in place, the football ground could continue operating during power outages, preventing revenue loss and maintaining a positive reputation by avoiding any unwanted, unnecessary delays or disappointments.
- **Equipment protection:** Sensitive electronic equipment was safeguarded against power fluctuations, extending their life expectancy and reducing maintenance costs.
- **Reduced downtime:** The quick transition to UPS power during momentary power interruptions eradicating downtime and preventing match delays.
- **Remote monitoring and management:** The remote monitoring and control capabilities allowed the management team to proactively address any issues and optimise UPS system performance.

## CONCLUSION

The UPS installation at Leyton Orient Football Ground proved to be a gamechanger, enhancing reliability, safety, and operational efficiency.

With a reliable backup power system in place, the management ensured a seamless and enjoyable experience for football enthusiasts and stakeholders alike.

The success of this project serves as a valuable example for all other sports venues looking to improve their infrastructure and power management capabilities.