




JBA
Engineering

ENGINEERING EXCELLENCE



ELECTRICAL INDEPENDENCE

Mission Critical Uninterruptable Power Supply (UPS)



JBA
Engineering

CASE STUDY 038

WWW.JBAENGINEERING.COM

ENGINEERING EXCELLENCE

CLIENT CHALLENGE

Maintaining Uptime in an Unreliable Grid Environment

A pharmaceutical client was suffering from frequent brownouts due to an unreliable grid supply, causing shutdowns that disrupted critical operations. For full availability and reliability, a solution was required to guarantee continuous uptime, regardless of issues from the grid.



OUR APPROACH

Electrical Expertise

JBA undertook a detailed review of the client's existing high-voltage (HV) electrical network, developing a bespoke HV network model to fully understand system performance under normal and abnormal operating conditions.

This model enabled JBA to assess how the site interacted with the Distribution Network Operator (DNO) supply and to quantify the reliability gap between the client's operational requirements and the resilience provided by the incoming grid connection.



OUR APPROACH

DNO Planning



Building on the HV network modelling and the quantified reliability gap, JBA liaised closely with the Distribution Network Operator (DNO) to develop and deliver a coordinated solution.

This process confirmed that a site-wide uninterruptible power supply (UPS) represented the most suitable solution to mitigate network resilience shortfalls.



OUR APPROACH

Full Integration

The fully integrated solution comprised a purpose-designed GRP enclosure providing segregation and fire protection, housing the UPS and associated low-voltage electrical distribution.

The enclosure was complete with air-cooling and all required protection, trips, and interlocks interfacing with the DNO high-voltage switchgear, ensuring safe, reliable operation and seamless integration with both the clients site and the grid network.



OUTCOME

Future-Ready Electrical Resilience

Full electrical availability and reliability was secured for mission-critical operations to strengthen the electrical backbone of our client's facilities.

A fire-safe modular built, air cooled, UPS system was delivered, allowing for the future upgrade of a diesel generator to gain further independence from the grid.



ONGOING PARTNERSHIP

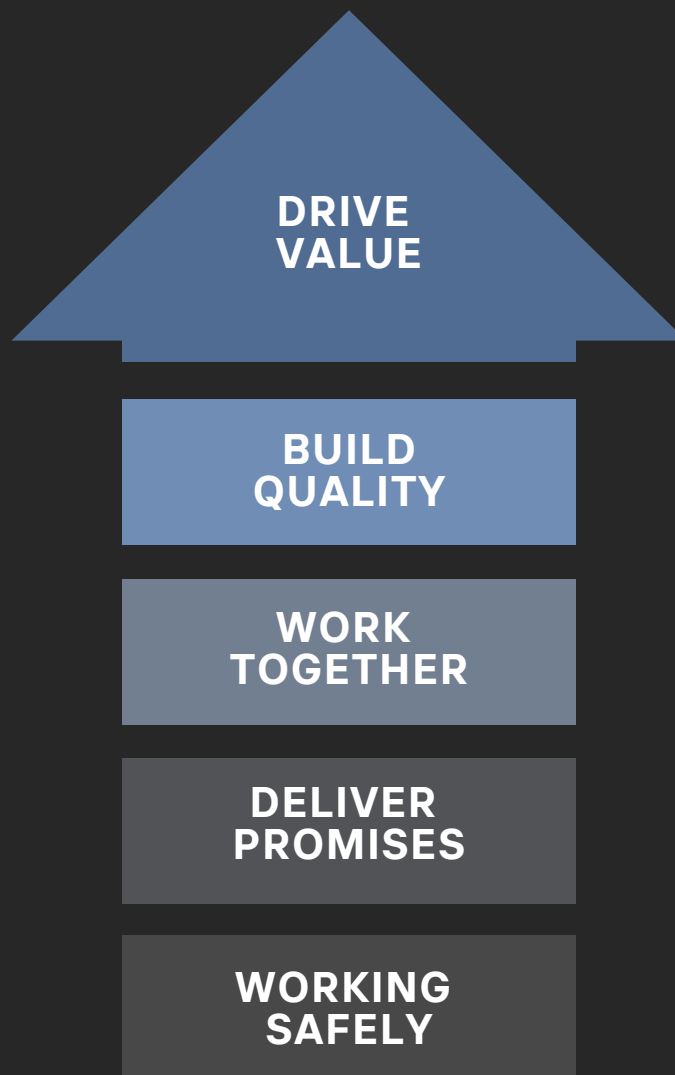
Future Strategy & Ongoing Services

JBA's relationship with the client has since developed into an ongoing service contract, enabling a collaborative approach to the client's crucial strategies across multiple sites for electrical resilience, efficient cooling, building services and critical retrofits and upgrades.



LET'S TALK...

Visit us online for more information about how JBA Engineering can support your projects!



INFO@JBAENGINEERING.COM



CASE STUDY 038

WWW.JBAENGINEERING.COM

ENGINEERING EXCELLENCE