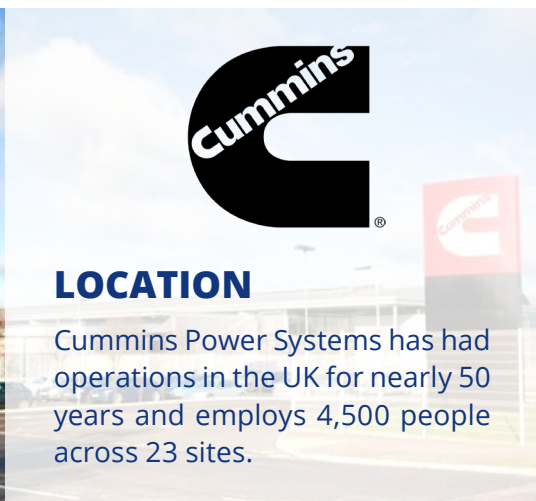




LOCATION

Cummins Power Systems has had operations in the UK for nearly 50 years and employs 4,500 people across 23 sites.

CASE STUDY

Cummins Power Systems, Manston, Kent

Cummins Power Systems, a subsidiary of Cummins Inc., is a global leader dedicated to increasing the availability and reliability of electric power around the world. With more than 90 years of experience, its global network of distributors in more than 190 countries delivers innovative solutions for any power need – commercial, industrial, recreational, emergency and residential.

Products include alternators, generator-drive engines and pre-integrated power systems, combining generator sets with power control and transfer technologies. Services range from system design, project management, operations and maintenance contracts, to the development of turnkey power plants.

Much like **iESCO**, Cummins Power Systems pride themselves on matching the right control technologies with their client's power requirements.

Power generator business Cummins are “committed to meeting or exceeding clean air standards worldwide”.

Cummins are industry leaders in the development of cleaner, quieter and more efficient generator technology. Their commitment to meeting and exceeding air regulatory standards made the decision to install a **powerPerfector iQ** in their Manston Kent facility an easy choice.

Over the years Cummins have developed technologies that reduce the primary pollutants in the exhaust of a diesel generator set by approximately 80 per cent. **powerPerfector** technology can also assist in reducing the carbon within a business.

Cummins pride themselves on the build quality of their diesel generator sets, which they describe as being capable of “*rugged, reliable mechanical and electrical performance*” all areas which **iESCO's powerPerfector** technology pride itself due to their 100% safety record and no failure guarantee.

*“Start to Finish, it has been an absolute pleasure working with **iESCO** throughout the project. The engineers are very thorough at all stages, planning, preparation and installation. The project team are fantastic demonstrating every positive aspect of customer care and delivering all information efficiently.”*

Sam Garrett, Facilities & Maintenance Leader
Cummins Power Systems

INFORMATION

Unit	pP iQ 1500 kVA
ROI:	22%
Annual CO ₂ saving (kg)	113,000
Annual kWh saving (kWh)	240,677
Annual cost saving (£)	29,050





Cummins Power Systems

Installed in December 2019 the iQ has been helping Cummins to reduce electricity, cost and carbon. To provide accurate savings analysis to Cummins a Power Quality Analyser (PQA) was installed upstream of the **powerPerfector**. The location of the PQA was important as to replicate the site meter, which does not see a change in voltage itself. Once the PQA was set up the iQ was programmed to cycle on and off every half an hour. This programme allowed Cummins to measure the impact by comparing the data throughout the day.

The second test used a larger data set, including a full five days of non stop testing. The average power savings improved with the longer time frame, averaging **8.51%**.

Finally, when both of these comparisons are taken into consideration, we observed an average change in power between the cycles of **9.22kW** or **7.34%**. Savings were

measured using a FLUKE power Quality Analyser to ensure 100% accuracy.

iESCO installed the **powerPerfector iQ** technology over the Christmas period to minimise disruption to the running of the site and the iQ was fully functioning in less than 8 hours due to preparation work prior to the shut-down.

The **powerPerfector iQ** is the fastest, most accurate and precise control technology on the market. The iQ has been designed in response to the increasing risk of greater supply volatility, phase imbalance and increased transients and harmonics due to the multiple renewable feeds onto the network.

To find out how iESCO's **powerPerfector** technology can help your business, please get in touch.

