



Spalding High School

Voltage Power Optimisation

Background

Spalding High School is an academically selective, high achieving 11-18 secondary state school for girls, with a mixed sixth form. Due to extracurricular activities the schools opening hours have become extended from normal school hours, inflating annual energy costs.

The school plays host to approximately 985 students with a floor area of 8944m². The current electrical consumption of approx 393,327kWh at an annual cost of £39,333.

The electrical consumption at Spalding High School along with most other schools of its size has been increasing over time and the possibility of installing Voltage Power Optimisation (VPO) was investigated.



Process and Benefits

After a site survey and investigation from three VOP providers powerPerfector services were awarded the contract to

install, with an estimated saving of approximately 12% on existing electrical consumption and costs.

The work required power to be shut down to the whole site while the VPO unit was installed. This process took approximately two hours and once installed required no maintenance. The work was carried out at a time that was convenient for the school as servers and other equipment required special power down procedures to be followed.



VPO creates a more efficient, robust and reliable electrical supply protecting the entire electrical infrastructure of the school allowing electrical appliances and lighting to operate more efficiently, thus reducing electrical consumption.

Finance and Savings

Spalding High School successfully applied to Lincolnshire County Council's Salix Energy Efficiency Loan Scheme for the full project costs.

Project cost	£18,808
Expected energy savings	47,199kwh
Expected cost savings	£4,719 pa
CO ₂ savings	24.5 tonnes
Return on Investment	3.98 yrs