



## Tees Active Ltd – Thornaby Pavilion

### INTRODUCTION

Thornaby Pavilion is a leisure centre located in Thornaby town centre, UK, operated by Tees Active Ltd.

The Thornaby Pavilion has been serving the local community for over 40 years and was recently refurbished into a 21<sup>st</sup> century leisure facility offering a range of quality facilities and services including: an Activ8 gym, an indoor bowls rink, a large sports hall, squash courts, and a café.

The centre also runs a variety of events including children's parties and discos, as well as a range of fitness classes.

Tees Active Ltd is a charitable leisure management organisation which was established as a non-profit-distributing company on 1st May 2004.

Working closely with the Stockton-on-Tees Borough Council, the company specialises in the management of facilities and projects with the aim of raising levels of physical activity within the community. Per year, Tees Active welcomes almost 2 million visitors to its facilities and employs around 219 staff.

### THE CHALLENGE

Due to Tees Active Ltd being a non-profit-distributing company, it was looking for ways to reduce energy consumption, and therefore costs, in a number of its facilities to re-invest the saved capital into enhancing customer experience.

Powerstar identified Thornaby Pavilion as a potential candidate to benefit from voltage optimisation technology because of the facility's size, range of equipment, and long opening hours. After a series of thorough site surveys, the viability of voltage optimisation technology was confirmed as beneficial for Thornaby Pavilion.

The incoming voltage at the centre was higher than required for the electrical equipment on site but remained fairly stable.

With most electrical equipment rated to work most efficiently at 220V, voltage optimisation was a perfect solution to correct the surplus voltage supply and reduce the facility's overall electricity consumption, thereby reducing electricity bills to allow capital to be reinvested as needed.

### THE SOLUTION

Following the analysis of the voltage profile on site, the Powerstar team recommended the installation of a 200kVA Powerstar LITE system with a fixed 22.5V reduction in voltage.

Powerstar provided Thornaby Pavilion with a concept to completion service, providing a fully supported turnkey solution to the leisure centre.

The installation was carried out with minimal disruption to the facility's daily operations and without negative impact to the experience or enjoyment of its customers.

The installation of the Powerstar LITE system will reduce annual electricity consumption of the facility by as much as 43,682 kWh, equating to annual consumption savings of 11.5%.

### KEY FIGURES

- **Annual Consumption Saving:** 11.5%
- **Annual kWh Savings:** 43,682 kWh
- **Payback Period:** 3 years 8 months

### CUSTOMER QUOTATION

"We found working with Powerstar to be very easy as they did everything they could to accommodate our requirements not only in which unit was best suited to deliver the greatest efficiency, but also in ensuring minimum disruption. Work was carried out overnight which meant that there was no disruption to our operational hours and our customers.

This is one of the simplest ways to achieve instant cost effective energy savings and I would highly recommend Powerstar."

**Dennis Smith, Project Manager, Tees Active Ltd**



THORNABY PAVILION: serving the local community for over 40 years