

High Performance Buildings for Life

# **REGION 4 EDUCATION CENTER**Building HVAC, Controls, & Retrofit



"Because we're a government-funded building that's associated with area schools, we have a tight budget and must run as efficiently as possible. So we were happy to earn EPA energy rebates as a result of our system replacement."

- Gerald Jackson, Director of Ancillary Solutions, Region 4 Revitalizing a key educational facility with cost-efficient cooling and control systems.

### **◆ CHALLENGE**

The Region 4 Education Service Center is a key component in the Texas educational system, serving a seven-county area that comprises 50 public school districts and 50 public charter schools. Over time, its aging chillers proved incapable of coping with the area's nightly power surges, resulting in frequent outages that posed a risk to the center and the operation of its critical training and professional-development mission. What's more, the obsolete chillers were running at just 50% of capacity and required constant and costly maintenance, which decimated the Center's budget.

#### **♦ SOLUTION**

Hunton Services conducted an audit of the Center to pinpoint areas of concern and identify inefficient technologies that were causing system interruptions that resulted in operational downtime. The audit revealed a dated pneumatic control system that was faulty and undependable, an antiquated chilled-water system that was desperate for replacement and myriad opportunities for upgrading the Center's power-hungry lighting.

A comprehensive solution was formulated that connected the Center's two central plants. Replaced the antiquated unit with a highly efficient water-cooled chiller. Retrofitted the dated control system with an advanced system that controls both of the Center's buildings from a single platform. And upgraded 146,000 square feet of space with 2,442 energy-efficient lighting fixtures and highly effective window tinting.

## **PROJECT AT A GLANCE:**

- Project Gross Footage: 207,000 sq. ft.
- Project Cost: \$2,577,296
- Payback:

7 years (including energy & operational savings)



# REGION 4 EDUCATION CENTER Building HVAC, Controls, & Retrofit



### **ENERGY SAVINGS**

- Energy Saved:

Electricity: 1,077,859 kWh/year

- Building Energy Use Intensity
Before: (TO COME)

After: (TO COME)

- Energy Star Rating Before: (TO COME) After: (TO COME)

- Energy Star EUI Average:

Before: 71kbtu/Ft2/year or 21kWh/sq. ft. After: 56 kbtu/Ft2/year or 16 kWh/sq. ft.

# **ENVIRONMENTAL IMPACT:**

(TO COME)

# **PROJECT TIME LINE:**

- Results Verification: (TO COME)
- Project Completed: (TO COME)
- Project Started: (TO COME)
- Energy Evaluation/Audit: (TO COME)

## **♦ RESULTS**

Hunton Services was able to vastly improve the energy efficiency of the Region 4 Education Service Center, reducing its total energy consumption by over 1 million kWh per year. This comprehensive retrofit resulted in the Center's energy use intensity (EUI) decreasing by over 20% – from 21 to 16 kWh per square foot – earning the Center valuable rebates and carbon-credit offsets from its electricity provider.

Bottom line: the Center's \$2.5 million technology investment will be recouped in just seven short years, thanks to the energy consumption savings and operational cost efficiencies delivered by Hunton Services' technology solution.

## **♦ WHY CHOOSE HUNTON GROUP?**

In addition to world-class systems and innovative solutions, The Hunton Group is known for its expert and reliable people - the team that delivers energy efficient HVAC systems, top-notch facility service and parts support, sophisticated open control systems, financial solutions and now, as an independent energy producer.

# **♦ FOR MORE INFORMATION, CONTACT:**

marketing@huntongroup.com www.huntongroup.com

