

Seymour R-II School District



CUSTOMER BENEFITS

- Improved aesthetics
- Upgraded energy-efficient equipment
- System interoperability
- Single point of contact with accountability

PROJECT AT A GLANCE

Project Type:
Energy Performance Contract

Location:
Seymour, Missouri, USA

Guaranteed Annual Savings:
\$8,161



With limited resources in its capital budget to address much-needed upgrades for the energy and lighting systems in the high school, this school district found relief in a performance contract solution from Schneider Electric.

The Challenge

Seymour is a growing community in southern Missouri. The Seymour R-II School District serves a student population of approximately 1,000 students in grades PreK-12, providing an enviable student/teacher ratio of 14 to 1.

The high school, which was built in 1966, got an addition in 2000 to house middle school students. A hallway joins the two buildings.

By 2005, the high school was in serious need of system upgrades. The school's aging HVAC systems were no longer energy-efficient – a situation that was compounded by rising energy costs. Variations in classroom temperatures and outdated lighting technology created comfort issues for students and staff alike.

In addition, single-pane windows and open areas in the ceilings contributed to increased energy usage in the high school. Moreover, the existing electrical wiring lacked the capacity to support installation of an air-conditioning system for the gym.

“Performance contracting is a great solution for schools with similar problems. We are extremely happy with our energy systems upgrade and would definitely choose to work with Schneider Electric again.”

Frank Rowles

Superintendent, Seymour R-II Schools

Unfortunately, the building and maintenance fund did not include sufficient funds to improve systems in the high school, so the district turned to performance contracting. The Seymour R-II School District began searching for a solution that would permit upgrades to the high school without straining an already limited budget for capital improvements.

Schneider Electric, a leading provider of building automation systems, security and energy solutions, proposed a performance contract that would enable the district to fund the upgrades at the high school with a lease purchase.

The district also asked Schneider Electric to act as a general contractor to oversee additional improvements, such as window replacements. And although a portion of the project was scheduled to be executed during the summer months, other improvements would have to occur during the school year when classes were in session.

The Solution

Schneider Electric installed a TAC Vista™ energy management system to control the indoor environment at Seymour High School. The TAC Vista system leverages an enable/disable capability to automatically accommodate diverse needs by scheduling operation of the HVAC system.

The school district uses system-generated reports for trending purposes and optimizing the system. Full-color graphics, along with local and remote access to the system, make it easy to monitor and manage comfort levels throughout the high school.

Prior to installing air conditioning in the gym, Schneider Electric had to upgrade the high school's electrical capabilities from single-phase to three-phase wiring to support the new A/C system. The new system, however, has substantially improved the comfort level in the gym.

In addition to new HVAC units for the gymnasium, the district chose to retrofit its existing HVAC units, which consisted of a furnace and condensing unit shared by two rooms. Each room now has its own heating and cooling unit on the roof, greatly improving the learning environment for staff and students.

Replacing incandescent lighting fixtures with high-bay fluorescent lighting in the gym improved visibility. In addition to installing energy-efficient lights in the parking lot, Schneider Electric replaced T12 lamps and magnetic ballasts in the classrooms with more energy-efficient T8 lamps and electronic ballasts.

Acting as a general contractor, Schneider Electric oversaw installation of new energy-efficient, double-pane windows in 17 classrooms. Schneider Electric also supervised the installation of drop ceilings to reduce heating/cooling requirements in some areas and coordinated drywall preparation for the replacement of student lockers in another area.

The Bottom Line

The Seymour R-II School District was able to take advantage of a municipal lease purchase opportunity to fund the necessary improvements. Schneider Electric completed the project in October 2005.

Today, students and staff at the high school enjoy a brighter, more comfortable indoor environment. The school can now host community events in the gym throughout the year, assured that attendees will be comfortable.