

Special School District looks to Automatic Controls to help fund an energy-efficient building automation system using Ameren incentives with no occupant disruption

CASE STUDY



"To put it in perspective, I'm still running the same exact budget for my electricity that I had eight years ago. I haven't had to increase it...even though we've added over 100,000 additional square feet, and installed new air conditioning in building areas that did not have it before. That's all thanks to Automatic Controls and their ability to schedule and efficiently run the buildings' HVAC systems."

LARRY THOMPSON

Director of Facilities, Special School District of St. Louis County



O Hours

Of downtime while replacing the old system

60%

More energy efficient facilities, as measured by Energy Star

<u>\$190,000</u>

Utility incentive received

The Client SPECIAL SCHOOL DISTRICT OF ST. LOUIS COUNTY

INDUSTRY	LOC
School	St. I

Special School District of St. Louis County is a nationwide leader in providing education services and technical education for high school students and children with special needs.

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The Challenge

REPLACING A SCHOOL'S OLD HVAC SYSTEM WITHOUT DISRUPTING THE STUDENTS

As the Director of Facilities at Special School District (SSD) of St. Louis County, Larry Thompson is in charge of over 1,300,000 square feet of school buildings and offices. Part of his job entails making sure the environments inside of these buildings are safe, well-maintained, and comfortable for the students who use them.

Unfortunately, this could sometimes be a challenge.

Back in 2010, SSD facilities were using an HVAC control system that was outdated, inefficient, and prone to breaking. The controls for this system were limited, and Larry often found it difficult and frustrating to keep it running.

That's why when the government announced a new stimulus program to help jumpstart the economy back in 2010, Larry knew what needed to happen. It was finally time to overhaul their HVAC system, starting with the controls.

THE ONLY PROBLEM?

Larry would have to find a team who was willing to do the work without disrupting their students. Any downtime while they were transitioning to the new system would be unacceptable.

"The problem that we were having was our equipment was so old that a lot of times if you shut it off you were lucky if it came back on. We let the systems run pretty much all of the time because basically, we were afraid to turn them off."

The Solution a more reliable and easy-to-use system by automatic controls

Three companies bid to take on the project, and Automatic Controls ultimately won the contract.

Larry was pleased to hear that the team from Automatic Controls would be able to work around SSD's schedule and keep the existing system up and running while installing their solution.

The first stage of the project was to install the new controls. These would make it easier to adjust building temperatures, monitor the different heating and cooling equipment, and ramp the system up or down.

To make sure the installation didn't disrupt any students, the team from Automatic Controls did the work during a short school break, while classes were out for the summer.

The second stage of the project involved replacing all of the HVAC equipment in the facilities. Larry says Automatic Controls helped out every step of the way, working evenings and weekends to provide extra support and coordination until the job was done.

"We had to have everything done quickly. If Automatic Controls had to do work in the evenings, they did work in the evenings. If they had to do work on Saturdays, they'd do work on Saturdays. Basically, they were willing to do whatever they could to cause the least amount of disruption to our operations."



The Results 60% more energy efficient facilities

By the end of the project, SSD received over \$190,000 in utility incentives with the help of Automatic Controls. And the savings didn't end there, either.

After installing the new controls, SSD facilities saw their Energy Star scores immediately jump up across the board.

For example, Larry says one of their school buildings went from a score of 45 all the way up to 72, which means that it became approximately 60% more energy efficient.

In addition, the new HVAC system was much easier to maintain and regulate as well. The Automated Logic WebCTRL platform made it easy to see when there was a problem with the equipment, and the Automatic Controls team offered training and support to make fixing common issues a much simpler process.

Looking back on the project, Larry says the thing that impresses him the most about the new system is the way it makes life better for the students. Now, there is better air circulation throughout the schools and air conditioning in areas like the workshops where they weren't able to have it before.

When it comes to results, Larry says it doesn't get much better than that.

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"When we started out, one of our facilities had an Energy Star score of 45. Immediately after they finished putting in Automatic Controls, we jumped up to a score of 72. That was pretty dramatic.

Now, you walk into one of our buildings and you can actually smell the difference. It's not stuffy anymore...it's fresh air that smells good."





You can replace your old HVAC system without disrupting your business

Find out how Automatic Controls can help you install and support a more energy-efficient heating and cooling system.

GET IN TOUCH