

Energy Efficiency Case Study

Yuba College Teams with Cooper Oates, Earns an A for Energy Efficiency



Background

Yuba College, located in Marysville, California, serves as a launching point for students throughout Northern California seeking high-quality educational services and programs. As a comprehensive community college, Yuba offers a full array of certificates and two-year associate degrees, pre-collegiate coursework, opportunities to pursue future educational goals, as well as continuing education courses for professionals. The same level of dedication the school employs in preparing students for the contemporary workplace, it also uses in emphasizing energy-efficient operational practices. In teaming with Cooper Oates, the HVAC contractor who administered the AirCare Plus Program, Yuba College has been able to realize its goal of saving energy while lowering utility expenses.

Delivering the Savings

As part of a committed effort to upgrade its facilities, Yuba College was quick to welcome the energy and cost-saving opportunities presented by Cooper Oates and the AirCare Plus Program. The program works to improve the efficiency of HVAC units for PG&E's small to medium-sized commercial electric customers. It all starts with a no-cost tune-up. In the case of Yuba College, all major HVAC unit components throughout the campus were inspected and adjusted for optimal performance and energy efficiency.

For Yuba College, the benefits of working with Cooper Oates included:

- Improved HVAC system performance
- Lower energy bills
- Increased comfort for building occupants
- A positive environmental impact

Bill Granger, who handles maintenance control for Yuba College, explains what made the program so attractive to the school:

Quick Facts

School: Yuba College

Location: Marysville, California

Scope of energy-saving measures:
80 HVAC units diagnosed and serviced for increased efficiency through measures relating to refrigerant, thermostat controls, and economizer optimization

Estimated Annual Savings*

- 285,125 kWh
- 21 kW
- 925 Therms
- Approximately **\$42,768.75** saved per year

Program Benefits

- No-cost HVAC tune-up and services
- Increase equipment performance and longevity
- Save money through decrease in overall energy costs
- Reduce impact on environment

*Estimated annual cost savings based on a utility rate of \$0.15 per kWh.



“Our PG&E rep approached us about the program, and we liked the fact that a lot of free work could be done to help us upgrade our HVAC systems.”

In total, 80 units were serviced across the campus site. The adjustments are estimated to reduce energy use by approximately 285,125 kWh annually, saving the school approximately **\$42,768.75 per year.****

Work Performed

Each HVAC unit was inspected by Cooper Oates, and based on the diagnosis, serviced to improve performance. Roughly a third of the serviced units required either installation of programmable thermostats, or modification of thermostat settings (in cases where a programmable thermostat was already in place). The programmable thermostats, which were installed at no cost to the school, maintain



occupant comfort by ensuring proper settings based on the occupancy schedule. They also guarantee the HVAC unit is running only when necessary.

Approximately three-fourths of the serviced units received refrigerant charge adjustments. Having a proper refrigerant charge reduces energy consumption while extending the life of the compressor. A number of units also receive adjustments to the economizer, which offers

further savings by providing as much “free cooling” with outside air as possible.

Client Feedback

“Working with Cooper Oates and the AirCare Plus Program was easy,” says Granger. “We gained better knowledge of our equipment. It’s nice knowing that all of our equipment is working properly in the end, and that the equipment is now more efficient.”

*** Actual savings vary by customer, unit quality, location and utility rates.*



Our History

For over half a century, Cooper Oates has proudly served businesses and commercial properties throughout the Sacramento Valley and Northern California. From our beginnings as an air conditioning installer, to our current capability as a full-service mechanical provider, we have placed your facility’s comfort and your business’s profitability front and center.

Our team of experts has extensive experience designing, installing, monitoring, and servicing a broad range of mechanical projects including:

- Office Buildings
- Industrial / Conditioned Warehouses
- Hospitals / Clinics / Labs / Medical Offices
- Educational Facilities
- Server / Datacenter / Clean Rooms
- Restaurants / Commercial Kitchens
- Manufacturing / Distribution Centers