English Building #0044

Building Gross Area: 51,445 sq.ft.


Principal Building Use: Offices, Classrooms, Computer labs

Building & Occupant Overview

Built in 1905, it was originally known as the “Women’s Building” only included the westernmost portion of the building and parts of the southern and northern legs with a swimming pool. Further additions to the Quad side of the building with classrooms and meeting rooms formed the square shaped plan and was later named “English Building” in 1956. There are about 42 water source heat pumps presently serving about a third of the building. The spaces around the atrium are served by a new VAV air handling unit that replaced some heat pumps in 2012. The building was connected to the campus chilled water at the same time. There are several spaces with window air-conditioners and steam radiators with hand valves in this building.

Retro-commissioning Specifics & Results

New controls were added to the make-up air unit, exhaust fans and the condenser water system steam heating exchanger valves. DDC thermostats were installed on heat pumps serving classrooms with occupancy sensors to enable set back during unoccupied periods. The old chilled water change-over relay is now used to shut all heat pumps in the building and can be turned off through DDC. So, the entire heat pump system is now scheduled to turn off during unoccupied periods. The time clock for AHU2 serving the student admissions/advisory office was fixed and scheduled to turn off during unoccupied periods. The heat exchanger and pump associated with AHU2 was also tied to the time-clock.

Project Highlights

- Installed DDC thermostats and occupancy sensors in classroom served by heat pumps to enable setback when space is unoccupied and enable scheduling
- New controls added to the individual heat pumps, make-up air unit, exhaust fans and the condenser water system to shut entire system down during unoccupied periods
- Installed occupancy sensors missing in some of the rooms served by VAV boxes (AHU3) and the unit is scheduled to turn off during unoccupied periods
- Fixed time clock and issues with pneumatic controls for AHU2 and scheduled the unit to turn off during unoccupied periods
- Fixed failed steam radiators valves and traps