Ceramics Kiln House #0011

Building Gross Sq.Ft.: 15,696

Retrocommissioning Team Visit Period: Jan 2015—May 2015

Principal Building Use: Classroom and Laboratory

Building & Occupant Overview

Ceramics Kiln House was originally built in 1913 and is approximately 15,696 sq. ft. It holds several classrooms and instructional laboratory spaces with fume hoods. There are 2 DX variable air volume systems. The second floor VAV boxes have DDC controls. There are two exhaust fans serving the fume hoods with phoenix valves in them for flow control.

The facility's total metered energy during FY14 was 1,111 MMBTU.

Retrocommissioning Specifics & Results

Prior to the Retro-commissioning visit, there was a DDC controls up-grade to the air handling units. Exhaust fan switches were installed to control the fume hood exhaust by the user and reducing air flow in the AHUs. Occupancy sensors were installed in the second floor to control lights and shut off VAV boxes when the space is unoccupied. Occupancy sensors were added to rooms on the first floor for lighting control, too. An override switch was added to the research lab to allow keep the dedicated AHU for that lab off unless the lab is in use. Roof vents were closed to reduce infiltration and save energy. The condensing unit of AHU-2 had issues and was fixed. Airside economizer was added to AHU2 to reduce hours of mechanical cooling

Project Highlights

- DDC controls upgrade to the AHUs and second floor VAV boxes
- Exhaust fan control switches to control fume hood exhaust — 10 fume hoods that had been running 24/7 previously now have the capability to be shut off or exhaust reduced
- Occupancy sensor were installed on the second floor VAV boxes
- Roof vents were closed to reduce infiltration
- Air flow monitoring stations were reviewed and repaired