

Energy Commissioning and Optimization (ECO 24/7SM) Case Study

Facility: Gallup University – 1001 & 1003 Gallup Drive, Omaha, NE



- Built in 2003
- 3-story (north) and 5-story (south) office and data center with 306,000ft²
- Nine CAV and VAV AHUs
- Two water-cooled chillers
- Four gas-fired boilers
- Modern DDC controls

Energy Commissioning and Optimization Services (completed in October 2008)

- Optimized the chiller enable schedule
- Optimized hot water pump speed and temperature control
- Implemented ECO 24/7SM Fan Airflow Station technology on all nine AHUs
- Integrated outside air control with return fan speed control
- Implemented ECO 24/7SM Pump Flow Station technology for the chilled and condenser water pumps
- Fine-tune 304 single duct terminal boxes

Benefits

- Reduced comfort complaints
- Improved system reliability
- Eliminated building pressure control issue
- Reduced electricity demand by **33.9%**, electricity consumption by **33.6%** and gas consumption by **18.3%**, based on 12 months of utility data since project completion (5 months of construction utility data for natural gas)

