

Albuquerque Academy is one of the most respected Educational Institutions in New Mexico and a renowned College Preparatory School. It was founded in 1955 and the campus consists of 19 facilities situated on 312 acres campus near the Sandia Mountains. Energy Controls Inc. was selected to manage a \$2 Million project that included situations addressing campus automation, mechanical and electrical systems.

This project included installation of a new boiler and chiller plant, a campus wide automation system and energy efficient lighting in all campus facilities. The project emphasized Integration of multiple systems via FieldServer to Modbus, I/Net and Ethernet. Blending both new and existing devices/networks at the Academy involved products from a wide variety of manufacturers. These included lighting controls, access control, boiler controls, chillers, variable frequency drives, and video surveillance. The project also included Integration of Access Control, Video Security, as well as a high speed wireless Internet system.

All of this information had to interface to an I/Net system from TAC. Energy Controls came to Sierra Monitor to help them solve this integration challenge. Using multiple FieldServers, Energy Controls was able to link the necessary information to I/Net and the Ethernet. Due to a certain unique situation regarding the chillers, additional enhanced configuration of FieldServer was necessary to deliver the proper information to I/Net. Working with Sierra Monitor technical support, Energy Controls was able to make the necessary changes to bring all the data desired into the network. Energy Controls knowledge gained at the FieldServer Technical Training class combined with the special expertise provided by the Sierra Monitor Technical Support Center gave Albuquerque Academy the integrated solution they desired.

Facilities

East Campus

- Administration
- North and South Buildings
- Sims Performing Arts
- EC Gym/Dining Hall
- Music Building
- Physical Plant

West Campus

- Administration
- Visual Arts
- Multi-purpose Computer
- 6th & 7th Grade Buildings
- WC Gym
- Natatorium

Central Campus

- Science Building
- Library

Efficiencies

- New Chiller Plant and Piping
- New Boiler Plant and Piping
- Full Campus Lighting Retrofit
- Campus-wide FMS System
- FMS Connect to Internet
- FMS Service and Mechanical Repairs
- Variable Frequency Drives

Integration FieldServer

- Modbus to I/Net – Square D
- Modbus to I/Net – McQuay

Security Measures Campus-wide

- Access Control
- Internet-based Video Surveillance

Integration Ethernet

- Ethernet LAN to I/Net

Wireless

- 11 MBS Wireless to I/Net & MATE Security