



Success Story: Measurement and Verification

CLIENT BACKGROUND

Ridley School District, Folsom, Pennsylvania.

After authorizing the construction of a new high school, the district was looking for creative ways to renovate the remaining eight schools within the district. Taking a performance contracting procurement method, the district entered into an agreement that provided lighting/mechanical/building envelope modifications for the eight existing buildings, a districtwide building automation system, power quality vulnerability assessments, energy consulting services, and energy information retrieval and analysis. All of these renovations and improvements were financed out of the energy savings provided by the energy conservation measures (ECMs) included in the project. The performance contract required a measurement and verification (M&V) program to ensure that guaranteed energy savings were actually achieved.

APPROACH

Enerwise worked closely with the district to define and develop the ECMs, complete the vulnerability assessments, and supply and install electric and natural gas metering equipment. Energy information retrieved from the meters is reproduced in both graphic and tabular formats on a secure web site that is used by both the district and Enerwise to

- Monitor energy usage to conduct the M&V analysis and validate energy savings, as required by the performance contract.
- Identify unusual usage patterns to further reduce energy consumption.
- Submeter selected buildings to assist with cost allocation to various user groups.
- Recalculate utility bills using interval meter data and applying appropriate utility tariffs.

CLIENT BENEFITS

- Cost-effective way to renovate the eight existing school buildings without a capital outlay, using guaranteed energy savings to finance the project
- Validated project savings and a platform for additional energy reduction strategies and future energy procurement advantages
- Web-based access to the energy information, enabling easy, timely integration of energy data
 - New curriculum opportunities associated with energy conservation, use of technology in the workplace, and computer science

