



# Case Study

**Escambia County  
Public Schools**  
Pensacola, FL



Inefficient lighting system



Lighting after retrofits and upgrades

## PROJECT HIGHLIGHTS

### Environmental Benefits

Under measurement

### Capital Costs

\$12,000,000

### Annual Savings

\$1,011,000

### Schedule Compliance

All 4 phases completed on time

### Budget Compliance

All 4 phases completed within budget

## PROJECT DESCRIPTION: Energy Savings Performance Contract

**Challenge:** Escambia County is the western most county in the State of Florida. The district administers 35 elementary schools, nine middle schools, and seven high schools, as well as a number of specialized centers. ConEdison Solutions through its subsidiary, BGA, Inc., was selected in 1999 to work with Escambia County on a comprehensive energy savings performance contract that included project management, site energy audits, energy modeling, financing arrangements, engineering design, construction management, commissioning, and training of owner staff. Quarterly measurement and verification of energy conservation measures were also part of the contract with Escambia County Schools.

## PROJECT SCOPE

**Solution:** Under the Energy Saving Performance Contract, \$12 million in facility and infrastructure improvement projects were developed and implemented in four phases over a three year period. This district-wide program involved various mechanical, electrical and plumbing retrofit renovations at 65 separate facilities throughout Escambia County.

**“The results... were almost immediate, and the actual savings were greater than... projected. They didn’t over-promise and under-deliver.”**

Ted Krichharr  
Former Assistant Superintendent Facilities  
School District of Escambia County

## ENERGY CONSERVATION MEASURES

### Phase I

- Installation of energy-efficient equipment and controls to replace inefficient water-cooled chillers, cooling towers, chilled water pumps, DDC control systems and air handling unit and fan motors
- Replaced and/or retrofitted fluorescent lighting system at 14 occupied facilities

### Phase II

- New Variable Air Volume (VAV) air handling system
- New boilers
- New circulating pumps
- New externally-lined metal duct work in school kitchens
- A 28 school, district-wide renovation program

### Phase III

- Performed comprehensive lighting retrofits at 15 facilities
- Water conservation projects at 8 facilities
- Installed new space heating boiler controls at 2 locations
- Installed HVAC time clock controls and programmable thermostats at 16 facilities
- Installed condensing water boilers at 2 facilities

### Phase IV

- Installed the 733 Smart Saver thermostats and split DX systems
- Renovation of HVAC and lighting
- Installation of condenser water pumps and variable frequency drives

© 2009 ConEdison Solutions, Inc.