

# Payson Unified School District

## Payson, Arizona

### Energy Management & Conservation Performance Contract

APS Energy Services completed an Investment Grade Audit for Payson Unified School District in Payson, Arizona. The Audit resulted in the development of a comprehensive package of sustainable projects for the District that resulted in approximately 24% in annual utility cost avoidances. APS Energy Services implemented the following Energy Conservation Measures:

#### ❖ Comprehensive Lighting System Retrofit

A total of 4,288 fixtures were replaced with energy efficient components that reduce electric consumption and improve lumen output at acceptable light levels for each area/room.

#### ❖ Occupancy Lighting Sensors

A total of 223 occupancy sensors were installed at seven locations.

#### ❖ Exit Signs Retrofit

Installation of 63 new LED exit signs ensuring long life and virtually no maintenance cost.

#### ❖ PC Power Management

Installation of Verdiem PC power management system commonly called SURVEYOR that provides the system administrator with enterprise-wide control over advanced computer power configurations.

#### ❖ Controls

Installation of a Building Management System (BMS) to improve HVAC reliability and enhance building efficiency while providing an easy to use interface for monitoring and scheduling of the District's building systems.

#### ❖ HVAC Retrofit

Retro-commissioned the outside air dampers on 30 package units to optimize the efficiency of the outdoor ventilation feature and the heat recovery wheel. Installed 6 new economizers on existing package units. The new economizers utilize gear-drive technology with a direct-mount spring return actuator that close upon loss of power.

#### ❖ HVAC Replacement

Replaced 28 existing rooftop units with new 13 SEER rooftop units that included vertical economizers with solid state controllers, condenser coil hail guard systems and modulating burner control.

#### ❖ Air Flow Corrections

Installation of one 1,200 cfm in-line booster fan to increase air flow to the three dome rooms at Frontier Elementary that are presently unable to maintain proper comfort.

#### ❖ VendingMiser™ Controls Installation

A total of 11 VendingMiser™ Controls were installed at six different locations.

#### ❖ Water Conservation

Installation of 3 waterless urinals at Payson High School.

To date, the total annual energy savings for the Payson USD project is:

- ❖ 1,017,780 kWh
- ❖ 19,008 therms

These savings translate to the following environmental benefits:



151

Passenger cars not driven for one year



93,754

Gallons of gasoline saved in one year



6

Acres of forest preserved from deforestation in one year