

# State of Nevada

## Department of Health and Human Services (DHHS)

### Las Vegas, Nevada

#### Energy Management & Conservation Performance Contract

APS Energy Services completed an Investment Grade Audit for the State of Nevada, Department of Health and Human Services (DHHS) in Las Vegas, Nevada. APS Energy Services identified the following Energy Conservation Measures:

❖ **Comprehensive Lighting System Retrofit**

A total of 3,362 fixtures were replaced with energy efficient components that reduce electric consumption and improve lumen output at acceptable light levels for each area/room.

❖ **Life Safety – Exit Sign Upgrade**

A total of 98 exit signs were replaced with new 4-watt, long-life LED exit signs that reduce electric consumption and lower maintenance costs.

❖ **Programmable and Computerized Controls Retrofit**

Upgrade of the existing Direct Digital Controls (DDC) System.

❖ **Economizer and Controls Integration**

Replacement of the existing duct mounted dampers and relief dampers with new rooftop packaged units for Buildings 2 and 3a that include economizers and controls.

❖ **Programmable Thermostats Installation**

Thermostats installed at 7 different locations.

❖ **HVAC Upgrade**

Replacement of existing heating and air-conditioning systems with new high efficiency systems.

❖ **VFD Retrofit**

New Variable Frequency Drives (VFD) installed on the cooling tower fan motor of Building seventeen and the inlet guide vanes on the primary air handler on Building 3.

❖ **Chiller Replacement**

Replacement of existing chiller, chilled water expansion tank and chilled water pump with new high efficiency equipment.

❖ **Boiler Replacement**

Replacement of existing boiler, hot water expansion tank and hot water pump with new high efficiency equipment.

❖ **Water Conservation Program**

Installation of new low flow devices.

❖ **Xeriscaping**

Implementation of a turf removal program in an effort to conserve water and energy. The new landscape is watered with an efficient low volume drip irrigation system equipped with a filter and pressure regulator.

❖ **VendingMiser™ and PlugMiser™ Controls Installation**

A total of 490 PlugMisers™ and 13 VendingMisers™ were installed on various computer monitors, printers, copiers and cold drink and snack machines.

❖ **Trash Compaction Program**

Installation of one 17 yard waste compactor in Building 4.

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

- ❖ 1,371,223 kWh
- ❖ 19,794 therms
- ❖ 5,623,463 Gallons of Water

These savings translate to the following environmental benefits:



198

Passenger cars not driven for one year



123,012

Gallons of gasoline saved in one year



8

Acres of forest preserved from deforestation in one year