

**Provo City School District**  
**Policy Series 6000: Finances and Operations**

**6850 P1**

## **Energy Conservation**

### **Responsibilities:**

Every person is expected to become an “energy saver” as well as an “energy consumer.”

The staff member is responsible for implementing the guidelines during the time that he/she is present in the instruction room or office.

The Head Custodian is responsible for scheduling airflow control of common areas, i.e. halls, cafeteria, etc. The head custodian shall also have access to adjust temperatures within a reasonable range during the school day, including access to schedule after school events. HVAC staff, in coordination with the designated sole-source programming/controls contractor, shall be responsible to set standard/global settings for efficient control management.

Since the head custodian schedules the airflow for the building, he/she is responsible for verification of the nighttime shutdown and any after hours needs for school and public events.

The designated Energy Specialist provides regular (at least semi-annual) program update reports to the Board.

The designated Energy Specialist performs routine audits of all facilities and communicates the audit results to the appropriate personnel.

HVAC technicians are responsible for either directly or indirectly making adjustments to the Organization’s Energy Management System (EMS), including temperature settings and run times for Heating, Ventilation and Air Conditioning (HVAC) and other controlled equipment.

Administration will regularly communicate the importance and impact of the energy conservation program to its internal and external constituents.

The designated Energy Specialist provides monthly energy savings reports to facility administrators detailing performance results.

The organization is committed to and responsible for a safe and healthy learning environment.

To complement the organization's behavioral-based energy conservation program, the organization shall develop and implement a preventive maintenance and monitoring plan for its facilities and systems, including HVAC, building envelope, and moisture management.

### **General:**

Instruction room doors shall generally remain closed when HVAC is operating. Ensure doors between conditioned space and non-conditioned space remain closed when possible (i.e. between hallways and gym or pool area).

Proper and thorough utilization of data loggers will be initiated and maintained to monitor relative humidity, temperature, and light levels throughout the organization's facilities to ensure compliance with organization guidelines.

All exhaust fans should be turned off daily.

All office machines (copy machines, laminating equipment, etc.) should be switched off each night and during unoccupied times. Fax machines should remain on.

All computers should be turned off each night. This includes the monitor, local printer, and speakers. Network equipment is excluded.

All capable PC's should be programmed for the "energy saver" mode using the power management feature. If network constraints restrict this for the PC, ensure the monitor "sleeps" after 10-minutes of inactivity.

**Cooling Season Occupied Set Points<sup>1</sup>: 72°F - 76°F**

**Unoccupied Set Point: 85°F**

**Heating Season Occupied Set Points<sup>1</sup>: 68°F - 72°F**

**Unoccupied Set Point: 55°F for specified facilities**

<sup>1</sup> Set points are in accordance with ASHRAE 55 "Thermal Conditions for Human Occupancy."

### **Air Conditioning Equipment**

Occupied temperature settings shall not be set below 72°F.

During unoccupied times, the air conditioning equipment shall be off. The unoccupied period begins when the students leave the area at the end of day, and/or when faculty and staff have concluded their respective workdays. The temperature of the instruction room will be maintained to afford comfort for the period the staff remains in the instruction room after the students have left, specifically for after school, Title 1 or community events. Provo City School District has established a 7:30 AM to 4:30 PM operations timeline for elementary school operations. This will cover the majority of needs for staff, after school programs, PTA meetings, etc. Secondary schools shall be monitored and managed to meet the scheduled events of the schools and community. This does not mean that airflow will remain in operation for the entire timeline. Programming, zone control, etc., will be monitored and scheduled to provide airflow to accommodate school/community needs.

Air conditioning start times may be adjusted (depending on weather) to ensure instruction room comfort when instruction begins.

Ensure outside air dampers are closed during unoccupied times.

Ceiling fans should be operated in all areas that have them.

Relative humidity levels shall not exceed 60% for any 24-hour period.

Air conditioning should not be utilized in facilities during the summer months unless the facilities are being used for summer school, year-round school, or a special schedule as arranged

by the principal. Air conditioning will be used when team cleaning is underway in a given building.

In all areas with evaporative coolers such as shops, kitchens and gymnasiums, the doors leading to halls which have air conditioned instruction rooms or dining areas should be kept closed as much as possible.

Where cross-ventilation is available during periods of mild weather, custodians will shut down HVAC equipment and adjust temperature with windows and doors. Cross-ventilation is defined as having windows and/or doors to the outside on each side of a room.

Ensure dry food storage areas are maintained within code requirements. Typically, this is 55°F-75°F temperature and 35%-60% Relative Humidity. Utilize loggers to verify.

### **Heating Equipment**

Occupied temperature settings shall not be above 72°F.

The unoccupied temperature setting shall be 55°F (i.e. setback). This may be adjusted to a 65°F setting during extreme weather.

The unoccupied time shall begin when the students leave an area for the day and/or when faculty and staff have concluded their respective workdays.

During the spring and fall when there is no threat of freezing, all steam and forced air heating systems should be switched off during unoccupied times. Hot water heating systems should be switched off using the appropriate loop pumps.

Ensure all domestic hot water systems are set no higher than 120°F or 140°F for cafeteria service (with dishwasher booster).

Ensure all domestic hot water re-circulating pumps are switched off during unoccupied times.

For heat pumps, ensure a 6°F dead-band between heating and cooling modes.

### **Lighting**

All unnecessary/non-automatic lighting in unoccupied areas will be turned off. Staff should make certain that lights are turned off when leaving the instruction room or office when empty. Utilize natural lighting where appropriate.

All outside lighting shall be off during daylight hours.

Gym lights should not be left on unless the gym is being utilized.

All lights will be turned off when students and staff leave for the day. Custodians will turn on lights only in the areas in which they are working. Please ensure lights are turned off when not needed.

### **Water**

Ensure all plumbing and/or intrusion (i.e. roof) leaks are reported and repaired immediately.

Grounds watering should only be done between 4am-10am.

When spray irrigating, ensure the water does not directly hit the facility.

Water sub-meters on irrigation and cooling tower supply lines may be installed under direction of the building maintenance and grounds department.

This procedure is not intended to be all-inclusive, and may be modified by direction of the Facilities Director, District Superintendent and/or Business Administrator for local conditions.

Adopted: August 31, 2015