

## **ENERGY AND WATER MANAGEMENT**

### A. Purpose and Scope

In response to Board Policy 3511 under the direction of the Superintendent or Assistant Superintendent of Business Services, the Governing Board hereby establishes specific programs, procedures and practices.

### B. District Level Responsibilities

The Energy Managers will provide each facility with accurate records of energy consumption and costs. They will provide verifiable performance information to the Board, Superintendent/designee, and Administrators at each site on the goals and progress of the energy conservation program.

1. The Energy Managers will perform routine audits of all facilities and communicate the results of the audit to appropriate personnel.
2. The Energy Managers will inspect all electrical systems to see that they are operating efficiently and effectively.
3. The Energy Managers will be responsible for the oversight of the District Energy Management System (EMS), including temperature settings and run times for heating, ventilating, air conditioning (HVAC), and other controlled equipment.
4. The Energy Managers will switch off all domestic hot water recirculating pumps during unoccupied times.
5. Administration will regularly communicate the importance and impact of the energy conservation program to stakeholders.

### C. District Guidelines

1. All capable personal computers (PCs) will be programmed for the "energy saver" mode using the power management feature. If network constraints restrict this for the PC, the monitor will be set for "sleep mode" after 10 minutes of inactivity.
2. Occupied rooms will have a cooling temperature setting NOT to fall below 72°F.
3. Occupied rooms will have a heating temperature setting NOT to be above 69°F.
4. During unoccupied times, the air conditioning equipment will be off.
5. The unoccupied period is determined when students are not in the classroom, 30 minutes prior to the arrival time of students, and 30 minutes after the end of the school day.

6. Staff has the ability to override the program during the unoccupied period. The override period will be set for one hour unless specific circumstances dictate otherwise.
7. The unoccupied temperature setting will be 90°F-50°F (e.g. setback) unless specific circumstances dictate otherwise.

<p style="text-align: center;"><b>Occupied Cooling Set Points<sup>1</sup>: 72°F</b></p> <p style="text-align: center;"><b>Occupied Heating Set Points<sup>1</sup>: 69°F</b></p> <p style="text-align: center;"><b>Unoccupied Cooling Set Point: 90°F</b></p> <p style="text-align: center;"><b>Unoccupied Heating Set Point: 50°F</b></p>
---

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

#### D. Department and Site Administrators

1. The facility administrator is responsible for the total energy usage of his/her facility.
2. On site food services staff will ensure that dry food storage areas are maintained within code requirements. Typically, this is 55°F-75°F temperature and 35%-60% relative humidity.
3. Swimming Pools – pool covers must be placed over the pool at the end of the last period or after a scheduled school related event.
4. Where feasible, exterior and parking lot lighting will be turned off on holidays and weekends and by 10:00 p.m. on weekdays or when night custodian finishes the workday.
5. Marquees will be turned off at 10:00 p.m. during the weekdays and off during weekends where feasible.
6. Stadium lighting must be used judiciously. Stadium lighting will be controlled by a locked switch with access given only to authorized PYLUSD employees. Lights will be turned on no sooner than 30 minutes before a field activity and shut off 30 minutes after the end of an activity.
7. Custodians will use minimal lighting necessary for cleaning district stadiums.
8. Small group activities should not be scheduled for large meeting areas that require heating and air conditioning. Whenever possible, small groups should be scheduled in rooms that can be individually heated or cooled.

#### E. Facilities and Maintenance

1. To complement the organization's behavioral-based energy conservation program, Facilities and Maintenance will develop and implement a preventive maintenance and monitoring plan for its facilities and systems, including HVAC, building envelope, and irrigation management.
2. Outside air dampers will be closed during unoccupied times.

3. All domestic hot water systems are set no higher than 120°F or 140°F for cafeteria service (with dishwasher booster).
4. For HVAC equipment, ensure a 6° separation between heating and cooling modes and a 2° hysteresis.
5. Irrigation controls will be operated by the Director of Maintenance and Facilities, district irrigation specialists, or authorized personnel.
6. Irrigation schedules will be coordinated with the district irrigation specialists.
7. Installing water sub-meters on irrigation and cooling tower supply lines to eliminate sewer charges will be considered.

#### F. Custodians

1. The custodian is responsible for implementing the guidelines in common areas, such as halls, restrooms, multi-purpose rooms, etc.
2. All exhaust fans should be turned off daily.
3. Air conditioning will not be utilized in facilities during the summer months unless the facilities are being used for summer school programs. Custodians may use air conditioning only as necessary to clean facilities.
4. All interior lighting will be turned off when students and staff leave for the day. Custodians will turn on lights only in the areas where necessary (such as for safety, etc.).
5. All plumbing and/or intrusion (e.g. roof) leaks should be reported immediately.

#### G. Teachers and Staff

1. Each staff member is responsible for implementing the Administrative Regulations.
2. Each staff member will keep all doors and windows closed when using air-conditioning or heating units.
3. Each staff member will turn off all classroom lights when leaving for more than 15 minutes, even if a room has motion sensors.
4. Each staff member will turn off all lights in staff restroom, storage, and lunchroom when leaving.
5. Each staff member will refrain from turning lights on unless definitely needed.
6. Each staff member will limit the use of personal appliances in the workplace.
7. All office machines (copy machines, laminating equipment, etc.) will be switched off, or if applicable, switched into energy-savings mode each night and during unoccupied times. Fax machines should remain on.
8. All computers will be turned off each night including the monitor, printer, and speakers. Network equipment is excluded.

9. In all areas which have evaporative coolers such as shops, kitchens and gymnasiums, the doors leading to halls which have air conditioned classrooms or dining areas should be kept closed as much as possible.
10. All outside lighting will be off during daylight hours where applicable.
11. Gym lights should not be left on unless the gym is being utilized.
12. Kilns should be operated whenever possible when utility rates are the least expensive. Electric kilns should be operated after 9:00 p.m. during October through May and after 6:00 p.m. from June through September.
13. Doors or windows that do not close or operate properly, exterior lighting (including parking lot lights) that remains on during daylight hours, and occupancy sensors that do not function properly will be reported.

H. Approved by:

Jayne Christakos  
Responsible Division Head

6/3/13  
Date

Doug Domene  
Superintendent

6/3/13  
Date