

Administrative Procedure

Feb 2, 2011 _____ Adopted

701 ENERGY USE GUIDELINES

Developed by: District Energy Steering Committee as part of the Schools for Energy Efficiency[®] (SEE) Program.

Delano Public Schools Energy Mission Statement

Delano Public Schools is committed to an energy-conscious environment through energy efficient building operation and behavioral strategies. A comfortable learning environment will be maintained and health, safety and security will not be compromised. We believe that public education should provide leadership in developing an energy-efficient culture and support awareness about positive environmental impact and utility cost avoidance opportunities.

We believe all staff and students should learn and practice ways to reduce energy consumption on a daily basis by instilling lifelong habits for energy conservation; therefore, everyone is required to abide by the following energy standards.

Delano Public Schools Operational Standards

1. Lighting

Lighting will be turned off in any area that is unoccupied, except for gymnasiums, corridors, stairwells and exits as required by code, or where necessary to maintain an appropriate level of safety.

Lighting in secondary buildings will remain off until 60 minutes (7:02 a.m.) before school starts and lights will be shut off 90 minutes (4:20 p.m.) after school ends, except in areas occupied with early morning events, evening events or other scheduled activities.

Lighting in elementary buildings will remain off until 90 minutes before school starts (6:40 a.m.) and lights will be shut off 60 minutes after school ends (3:35 p.m.), except in areas occupied with early-morning events, after-school programs, evening events or other scheduled activities.

Natural sunlight should be used in place of electrical light when available, depending on area use and specifications.

Partial lighting will be used where available when only a portion of a room is occupied.

Lighting levels will be maintained in accordance with the Illuminating Engineering Society (IES) of North America standards:

<u>Task area</u>	<u>Foot-candles*</u>
Corridors, stairways, restrooms	10-20
Storage rooms	10-50
Conference rooms	20-50
General offices	30-50
Classrooms	30-50
Cafeterias	30-50
Gymnasiums	30-50
Parking areas (uncovered)	1-2

*A measure of light intensity on a surface being illuminated. Defined as one lumen of light per one square foot of surface area.

IES lighting standards will be assessed and maintained through de-lamping and will be a consideration for remodeling and new construction projects.

Gym lights will be turned off if the area will be unoccupied for a period in excess of 30 minutes for gymnasiums with high intensity discharge (HID) lights and five minutes for incandescent or fluorescent lights. When physical education classes are held outside, gym lighting will be limited to minimal walk-through lighting.

Night custodians should turn lights on only in the area in which they are currently working.

2. Temperature control

On regular school days, temperatures will be maintained for the entire building 30 minutes before the start of school until 30 minutes after dismissal. Special consideration will be given to certain preschool and special education classrooms when appropriate.

<u>Areas</u>	<u>Heating Season</u>	<u>Cooling Season</u>
Classrooms (grades K-12)	68-70 F	73-75 F
Gymnasiums and locker rooms	65-70 F	
Offices	68-70 F	75-77 F
Shop rooms	65-70 F	76-78 F
Halls	65-70 F	
Kitchens and cafeterias	65-70 F	76-78 F

(Temperatures are measured four feet above floor level in the center of the room.)

Network and server equipment rooms should be kept at a maximum temperature of 72 F 24 hours a day, 365 days a year.

Night setback temperatures should be 10F lower than occupied times for all areas without scheduled events.

Staff and students are encouraged to dress appropriately for the season.

Main boilers will remain off after the heating season, with the exception of buildings with pools.

Windows should be kept closed during the heating season and when air-conditioning units are in operation.

After school hours, all classroom and office windows will be closed, and blinds and shades will be drawn.

Doors should be closed in unoccupied areas and classrooms to maintain room temperatures.

Exterior doors and inner vestibule doors shall not be blocked open unless there is a delivery in process.

3. Ventilation

All vents will be unobstructed to maintain proper airflow and function of the equipment.

Ventilation systems will be controlled to maintain the correct amount of air based on occupancy. Special attention will be paid to gymnasiums because they are designed for full capacity, but rarely are fully occupied.

4. Scheduling

Early morning events, evening events or other scheduled activities will be concentrated to the minimal number of rooms or wings within a building.

Large areas such as auditoriums and gymnasiums should not be used for small groups unless necessary. Use of these areas will be coordinated with the maintenance staff to reduce energy use during unoccupied times.

5. Computers and other electrical equipment

Computers will be set with a 10-minute sleep-mode. Tech will direct staff on how to set sleep mode.

Computers and monitors will be shutdown at the end of the day.

Computer monitors should be shut off when not in use.

Electronics should be shut off at night including, speakers, boom boxes, etc.

Power management features will be activated on all office equipment (printers, copiers, for example) for those with the capability.

Office equipment will be shut down nightly.

Electronics and office equipment, with the exception of computers, should be unplugged during the summer.

Personal beverage makers, warmers and space heaters are restricted from school district facilities, unless authorized by facility operations.

Refrigerators in the staff lounge and science areas will be emptied and unplugged during the summer, unless in use for summer programs.

Vending machines (soda, juice, water) not in use will be unplugged during the summer.

Vending machines will be de-lamped.

6. Kitchens

Appliance and equipment “on” times will be as close as possible to the actual use.

Ventilation fans should be used in conjunction with equipment use.

Refrigerator and freezer doors should remain closed as often as possible.

Unused kitchen equipment will be unplugged during the summer.

Freezers will be consolidated during the summer.

Upright freezers and walk-in coolers will be emptied, propped open and unplugged during the summer.

7. Swimming pools

Swimming pool temperatures will be set at no higher than 82 F – 83 F for standard use and 84 F – 85 F for therapeutic use. Air temperature in swimming pool areas will be set 2 F above pool temperature.

8. Peak control energy days (if applicable)

All staff and students will comply with energy reduction procedures during peak control energy days. Energy reduction levels will be met in order to fulfill contractual agreements with utility companies.

9. Water heating

Thermostats for hot water heaters will be set so water delivery temperature at all sinks will not exceed 110 to 120 F.

Thermostats for hot water heaters that service dishwashing equipment will be set at 180 F.

10. Water conservation

Water leaks will be fixed as soon as possible.

Efficient water practices will be considered during ground irrigation.

11. Future construction

Energy and water efficiency will be a consideration for all future remodeling and new construction projects.

ENERGY STAR products will be considered when purchasing any new equipment or appliances.

12. Exemption procedures

Any exceptions to this policy must be presented and approved by the energy steering committee. The appropriate exemption form and procedure steps can be obtained from the energy efficiency coordinator or downloaded from the district Web site.