

Board Policy

Code No. 802.7R1

ENERGY GUIDELINES

Developed by: District Energy Steering Committee
February 25, 2010

Bettendorf Community School District Energy Mission Statement

Bettendorf Community School District 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.

BETTENDORF COMMUNITY SCHOOL DISTRICT OPERATIONAL STANDARDS

1. Lighting

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

Lighting in buildings will remain off until 60 minutes before school starts and lights will be shut off 60 minutes after school ends, 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 delamping and will be a consideration for remodeling and new construction projects.

Gym lights will be turned off if the area is unoccupied. 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.

Parking lot lighting will be reduced whenever possible.

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 | 76-78 F |
| Gymnasiums and locker rooms | 65-70 F | 76-78 F |
| Offices | 68-70 F | 76-78 F |
| Shop rooms | 65-70 F | 76-78 F |
| Halls | 65-70 F | 76-78 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 15 F higher for cooling and 20F lower for heating 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 where possible.

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.

Computer monitors will be shut off when not in use.

Electronics (including radios and tape players) should be shut off and unplugged when not in use.

LCD projectors and document cameras will be turned off when not being used within a 10 minute period. Avoid using mute or blank settings on LCD projectors.

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

Office equipment (including copiers) will be shut down nightly.

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

Personal electrical equipment (including beverage makers, microwaves, refrigerators, lamps, warmers and space heaters) are restricted from school district facilities, unless authorized by facility operations. Provisions will be made for departmental/community appliances.

Authorized personal appliances will be shut off and unplugged at night.

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

Vending machines will be de-lamped where possible or Vending Misers will be installed.

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. 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.

Approved: February 19, 2013

Reapproved:

Revised: