

THE UNIVERSITY OF ALABAMA IN HUNTSVILLE
ENERGY MANAGEMENT POLICY

Number 06.06.14

Division Facilities and Operations

Date November 2008

Purpose The University's energy policy is designed to establish an understanding of the need for energy conservation and to implement methods of conserving energy and lowering energy costs.

Policy UAH spends approximately \$5.3 million dollars annually on utilities. Therefore, it is essential that the campus adopt an energy policy to promote the conservation of energy. This will result in savings that can be invested in University infrastructure upgrades in addition to conserving our natural resources. Although energy conservation is the focus of this policy, comfortable work and study conditions must also be achieved.

- A) The University community will embrace the importance of this energy policy and the need for energy conservation.
- B) Occupants of UAH facilities will be encouraged to support energy conservation measures.
- C) Facilities operating staff will ensure that energy conservation measures are implemented.
- D) Construction and renovation activities will be consistent with institutional energy guidelines.
- E) The University will plan activities according to time and location that provide an optimal learning environment that also maximizes energy conservation and reduces utility consumption.
- F) The University will adopt temperature guidelines for the heating and cooling of classrooms, offices, and general use/purpose spaces.
- G) The University will adopt lighting level standards for classrooms, offices, and general use/purpose spaces.

- H) The University will ensure that lighting for security purposes will not be reduced (both interior and exterior lighting).

The University's Energy Policy will be managed by Facilities &

- I) Operations who will identify and manage compliance issues with University departments.

Campus Wide Energy Guidelines:

- A) Lighting Levels – Interior lighting will be high efficiency LED fixtures, whenever possible. New LED fixtures will be used to replace existing, less efficient lighting whenever economically feasible and appropriate. Exterior lighting will be metal halide or LED, and will meet current code requirements. Decorative lighting will be kept to a minimum. Lighting levels recommended by the most recent edition of the IES (Illuminating Engineering Society) Lighting Handbook shall be used as guidelines. Vacancy/motion sensors will be installed to turn off lights in unoccupied areas. Day-lighting controls will be installed to automatically adjust lighting levels as appropriate. Task lighting, such as a desk lamp, is recommended to reduce overall ambient lighting levels. Desk lights should be of fluorescent or LED type.
- B) Space Temperatures - In order to maintain reasonable comfort and lower energy expenditures, the University has established the following standards for comfort heating and cooling:

	Summer (air conditioning)	Winter (heating)
Occupied Space	74-76 degrees F	69-71 degrees F
Unoccupied Space	85 degrees F	55 degrees F

Exceptions to these guidelines must be approved by UAH Director of Energy Management and Plant Systems, [Vanessa Ennis](#). Telephone: (256) 824-6242.

- C) Operation of Academic and Administrative Facilities – The following equipment and components will be switched off at the end of each work day when feasible:

- Office lights
- Office computers, printers, and monitors
- Office copy machines
- All other electronically operated equipment.

Generally speaking, all computing equipment should be turned off or placed in some sort of "power saver" mode when not in use.

However, during off-hours many computers perform backups or update and patch software (such as antivirus definitions) and the operating system, and it is therefore important to configure energy-saving features so as to not interfere with these critical update processes. The following equipment should be turned off (or, if possible, put in Sleep Mode) at the end of the day and over weekends:

- Monitors
- Printers
- Scanners
- Powered speakers

Please note that many modern devices, monitors in particular, continue to draw 9-16 watts of power even when turned off. To eliminate this draw, a power strip that has the ability to switch off certain outlets and not others should be used (or alternatively two separate power strips) so that the above equipment can be turned off without turning off devices that need to remain powered, such as a CPU.

- D) Building Resource Management - Windows and doors should be kept closed during heating season and during cooling season in those areas that have mechanical cooling. Every member of the University community should assume the responsibility of closing windows, turning off personal (desktop) computers and other office equipment when not in use, and shutting off the lights when leaving a room for more than seven minutes. One should not assume that someone else will do it. Energy management devices and strategies will continue to be added. Schedulers of classes, meetings, and other campus activities should endeavor to minimize energy use. Evening classes should be concentrated in the fewest buildings possible, and where appropriate, the buildings used should be those that already have late night temperature setback. Use of stairs rather than elevators, except for the physically challenged and persons

transporting heavy equipment or materials, is encouraged.

- E) New Construction – The University will seek to reduce future energy costs in new facility construction and renovation whenever feasible. Current standards outlined in ASHRAE Standard No. 90.1 Energy Efficient Design of New Buildings Except Low Rise Residential Buildings will be followed as closely as possible. Additionally, all city and state regulations will be followed. All planning for major construction and equipment purchase/installation must include energy life cycle costing. As resources become available, it is recommended that UAH develop and implement design standards for new construction to include energy efficiency.

- F) Process Cooling – No "once through" water systems are allowed on campus. Due to water and sewage costs, all process cooling must be closed loop with a proper heat exchanger. If you need assistance with specifying or installing a closed loop system, please contact Facilities and Operations at 824-6482.

- G) Space Heaters – The use of space heaters introduces two concerns, fire safety and energy consumption. **No personal space heaters are allowed in campus buildings.** If an area needs **temporary** supplemental heat, UAH Facilities and Operations will issue and install. All space heaters issued by Facilities must meet safety requirements as classified by the National Fire Protection Association. All space heaters must meet the following four specifications:
 - (1) be UL approved
 - (2) have elements that are protected from contact
 - (3) be tilt-proof (when tipped over, heater goes off)
 - (4) be thermostat-controlled

The issue of energy efficiency is also important – electric space heaters are a very costly means of heating. If a member of the campus community feels that a space heater is necessary for adequate warmth, this may indicate that the central heating system needs repair. Facilities' Work Order Desk should be contacted if an area cannot be heated to our temperature guidelines as outlined above. State regulations require that the University follow ASHRAE

Standard 90.1, which says that heating and cooling are not allowed simultaneously in the same space for the sole purpose of achieving comfort. Excessive cooling of a space on campus below the summertime University Temperature Guidelines should be reported to University Facilities so the air-conditioning levels can be adjusted.


- H) Holiday Periods – A period of closure for the University offers a great opportunity to save money on utilities that can be spent in other areas. Past history has shown that very few people occupy the buildings for any substantial time during the holidays. With this in mind, buildings will be only minimally heated/cooled during holiday periods except for buildings that contain special collections or sensitive equipment or buildings that are officially open during the holidays. A building will not be officially open just because a few people may want to work during the holidays. Requests for exceptions to this policy with justification should be addressed to the Campus Director of Energy Management and Plant Systems via the Building Representative after curtailment plans for the upcoming holiday period have been issued.

Suggestions


Energy conservation suggestions and/or ideas should be emailed to UAH's Director of Energy Management and Plant Systems, Vanessa Ennis: vanessa.ennis@uah.edu

Review: The Energy Management Office is responsible for the review of this policy every five years (or whenever circumstances require).

Approval



Chief University Counsel

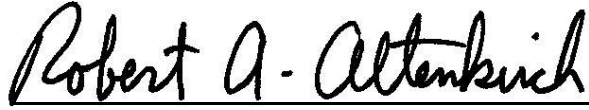


Senior Vice President for Finance and Administration



Associate Vice President for Facilities and Operations

APPROVED:



President