

Energy Policy

Unit: [Energy Management](#)

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Title: UA Energy Manager

Purpose

The purpose of this policy is to provide reliable and cost-effective energy services to the campus in support of teaching, research, and service. In addition, this policy will serve as a guide to faculty, staff, and students in providing comfortable conditions while being aware of energy conservation which will result in a savings for the University.

The University of Alabama spends \$22 - \$23 million dollars annually on utilities (electricity, natural gas, and water/sewer). As a result, it is imperative that the campus adopts an energy policy to promote the conservation of energy. Energy use reduction 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. This policy is only a part of a comprehensive energy management program that also includes new building design and retrofits of existing buildings. The policy has been developed and will be updated periodically by the University standing committee on Energy Management. The committee welcomes comments and suggestions on this policy. Correspondence and petitions for the committee can be sent to dgrill@fa.ua.edu.

Policy

University Temperature Guidelines

In order to maintain reasonable comfort and lower energy expenditures, the University has established the following standards for comfort heating and cooling. Summer thermostat settings (cooling) are to be between 70 °F to 76 °F. Winter settings (heating) are to be between 66°F to 72°F.

The following areas are exempt from these energy set points:

- Laboratory facilities where temperature controls may affect on-going research and areas pre-designated for specific temperature and humidity control.
- Computer server rooms.
- Facilities that have art collections, museum pieces, musical instruments, and archives that require specific temperature and humidity control.

During unoccupied times the building heating and cooling equipment will have the set points modified. Exceptions to these guidelines must be approved.

Building Resource Management

Windows and doors should be kept closed during the heating season and during the summer in those areas that have mechanical cooling. Every member of the University community should assume the responsibility of closing windows, turning off computers and other office equipment when not in use, and turning off the lights when leaving a room. 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.

Lighting

Interior lighting will be L.E.D. or fluorescent (4,000 Kelvin), whenever possible. New energy-saving fixtures, lamps and ballasts will be used to replace existing less efficient lighting whenever economically feasible and appropriate. Exterior lighting will be L.E.D. whenever possible, and will meet minimum current safety requirements. Decorative lighting will be kept to a minimum. The University uses the lighting levels recommended by the most recent edition of the IES (Illuminating Engineering Society) Lighting Handbook as guidelines. Where it makes economic sense, occupancy/motion sensors (ultrasonic or infrared) wired to area lighting will be installed to reduce and/or turn off lights in unoccupied, vacated areas. Day-lighting controls will be installed to automatically adjust lighting levels as appropriate. Task lighting, such as desk lamps, is recommended to reduce overall ambient lighting levels. Desk lights should be of the fluorescent or L.E.D. type, which are now readily available at local stores including the University Supply Store.

Space Heaters

The University Energy Management Department should be contacted by the Building Representative if the central heating system is incapable of meeting comfort requirements or if a space heater is to be used to offset excessive cooling to a space. 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 that air-conditioning levels can be adjusted. Use of space heaters is a potential fire hazard and consume excessive amounts of electricity. 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.

Whether a space heater is purchased by the University or personal property, two issues affect the use of space heaters in campus buildings — fire safety and energy efficiency. All space heaters used on campus must be approved for fire safety, as classified by the National Fire Protection Association. No liquid fueled space heaters (e.g., kerosene heaters) are to be used in any residential, office, classroom or research buildings. Some electric space heaters also pose an unacceptable fire hazard. All space heaters must meet the following four specifications: Heaters must (1) be UL approved, (2) have elements that are protected from contact, (3) be tilt-proof (when tipped over, heater goes off), and (4) be thermostat-controlled.

Window Air Conditioning Units

The use of window air conditioning/heat pump units is discouraged except in cases of last resort. Window units cause damage to the buildings, they have high life cycle cost (energy and maintenance), and are noisy. Additionally, operating an air conditioning unit in cooling mode below about 50°F outside air temperature will quickly damage the unit. The Campus Energy Manager and Building Representative must approve a new application of a window unit. Specific petitions for installation will be reviewed only after University Facilities has determined that the primary heating/cooling source is not capable of meeting University Temperature Guidelines.

Microwaves, Hot Plates, Toasters, Toaster Ovens, and Grills

Cooking appliances should not be used in private offices or cubicles. These devices should only be used in a properly equipped and approved break area or kitchen space. All devices must be plugged into standard wall outlets only (extension cords are not allowed).

Coffee Makers

Any coffee makers which are equipped with a hot plate to keep the coffee warm, should not be used in private offices or cubicles. These devices should only be used in a properly equipped and approved break area or kitchen space. All devices must be plugged into standard wall outlets only (extension cords are not allowed).

Refrigerators

Refrigerators should be used in a properly equipped and approved break area or kitchen space when available. All devices must be plugged into standard wall outlets only (extension cords are not allowed).

Radios/CD Players/Personal fans

Radios, cd players, and personal sized fans are permitted in private offices or cubicles. These devices must be plugged into regular wall outlets.

Extension Cords

Use of extension cords on a regular or permanent basis is a violation of the State Fire Code. Extension cords may only be used temporarily and the user must be present at all times. Temporary extension cords must be at least four feet long and have a minimum of 12-gauge wire. A power strip or surge suppressor strip is permitted if they are equipped with their own internal circuit breakers.

Computer Power Management

Computer power management setting should be configured so the computer monitor turns off and the CPU enters into hibernate or sleep mode when inactive for more than 15 minutes. Computers should be shut down over the weekend unless otherwise notified.

Changeover from Heating to Cooling

Facilities maintenance personnel perform the required changeover from heating to air-conditioning in the spring. Because of the varying types of equipment installed throughout campus, buildings must be changed over individually. Facilities performs the changeover on the basis of priorities established to (1) provide comfort to students living in University Housing, (2) maintain required temperatures to protect equipment and research in progress, and (3) serve the greatest number of individuals and activities. Air conditioning may not begin until outside temperature exceeds 75 °F for three consecutive days. Temperature projections are also considered. The wide swings in temperature during the Spring and the high cost associated with switching between heating and cooling make this policy necessary. Special problems or hardships with this policy should be addressed to the University Energy Manager through the Building Representative.

Operation of Campus Steam Plant

Much of campus is heated by a campus steam system using large natural gas fired steam boilers. Steam production will be maintained to provide the most comfort to the greatest number of people. The plant may not start until the outside air temperature has dropped below at least 55 °F for three consecutive days, although temperature projections are also considered.

Changeover from Cooling to Heating

Facilities maintenance personnel perform required changeover from air-conditioning to heating in the fall. Because of the varying types of equipment installed throughout campus, buildings must be changed over individually. Facilities performs the changeover on the basis of priorities established to (1) provide comfort to students living in University Housing, (2) maintain required temperatures to protect equipment and research in progress, and (3) serve the greatest number of individuals and activities. Heating may not begin until the high outside air temperature has dropped below at least 55°F for three consecutive days. Temperature projections are also considered. The wide swings in temperature during the Fall and the high cost associated with switching between cooling and heating make this policy necessary. Special problems or hardships with this policy should be addressed to the University Energy Manager through the Building Representative.

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. Every effort will be made to shut down the campus steam system during every holiday period. The exception to the policy will be 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 Energy Manager via the Building Representative after curtailment plans for the upcoming holiday period have been issued.

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, state, and federal regulations will be followed. All planning for major construction and equipment purchase/installation must include energy life cycle costing. Design standards for new building construction must include energy efficiency requirements.

Suggestions

The Energy Management Committee encourages suggestions for additions or modifications to this Energy Policy as well as other energy conservation suggestions. Please send to dgrill@fa.ua.edu.

Scope

This policy applies to all faculty, staff, students, student employees, graduate assistants, contractors, and/or volunteers working in activities or programs.

Office of the Vice President of Finance and Operations

Signed:  3/1/2019
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Cheryl Mowdy
Assistant Vice President for Finance and Operations