

# Best Practices

## Alcorn State University

- Asked individuals to turn off lights when exiting rooms that are no longer occupied and to turn off office equipment (including personal computers where possible) at the end of the day
- Facilities management employees turned off lights that had not been turned off by occupants at the end of the normal business day
- Installed a computerized energy management system (CEMS)
- During off hours and holidays in non-residential spaces the temperature were allowed to drop to 55 °F before heating occurs and are allowed to rise to 86 °F before cooling
- University chosen by the Mississippi Development Authority to install Smart Meters on 37 buildings on the Lorman Campus

## Delta State University

- Administration regularly send out campus-wide emails to encourage students, faculty, and staff to be mindful of turning off lights, computers, copiers, and other equipment when not in use
- Building managers have been appointed in each building on campus to take an active role in assuring that lights are used appropriately and turned off in areas not in use
- Facilities Management continues to fine-tune energy controls in academic and administration buildings
- Temperatures are maintained at occupied mode in residence halls during holiday periods, but academic and auxiliary buildings are placed in unoccupied modes during holidays
- Facilities Management reduced light levels in halls and transient areas while still assuring essential light levels for safety
- Central Mechanical Plant Ph II will complete our Central Mechanical Plant bringing it to it to full capacity

## Education and Research Center

- Replaced three outdated boilers in the Physical Plant with two high efficiency boilers
- Ongoing project to upgrade the HVAC system and lighting on every floor to a more energy efficient system
- Each office has a digital controller for the HVAC system monitored by the energy management system
- Lights are controlled by an acoustic/movement sensor assuring the lights will turn off after a period of time
- Project to replace the street lighting system with more efficient lighting

### **Jackson State University**

- Installed a Tracer Summit Building Automation System to the HVAC, lighting, and related electrical systems
- Buildings were scheduled to switch from occupied to unoccupied mode on a fixed schedule
- University invested in a multi-site commercial Maxicon Multi-Site Irrigation Control System

### **Mississippi State University**

- Added energy management controls to air handlers and upgraded to high-efficiency condensing boilers
- Replaced central steam boilers with high efficiency condensing boilers
- Over 50% of space is operated by a central Energy Management Control System with more added each year
- Building level re-commissioning of mechanical systems and optimization techniques applied to the campus wide control system
- Efforts by staff/employees to turn off energy consuming devices during breaks
- Spring and Fall dorm energy competitions
- Campus lighting and lighting controls retrofit project currently underway, upgrading from fluorescent to LED
- Expansion of Central Chiller Plant to include ice generation and storage facilities
- Design of campus smart metering system

### **Mississippi University for Women**

- In the process of reducing the use of T-12 fluorescent bulbs on campus.
- Installed energy efficient pulse boilers to take the place of using the steam manufacturing plant to furnish heat to 8 buildings
- In the process of having smart meters installed through the campus
- Replaced halogen lights with LED track lighting and Replaced 75 metal halide lamps with T5 high bay fluorescent bulbs

### **Mississippi Valley State University**

- University is a member of the American College & University Presidents Climate Commitment [ACUPCC]
- In the process of completing a Greenhouse Gas and Climate Action Plans that will support the Conservation Effort
- University in the Design Development Phase to construct a primary force main to sanitary sewer that will connect the University to the City of Greenwood eliminating the need to operate a waste water treatment center on the Main Campus
- Installed a campus wide CT metering system for each building

### **University of Mississippi**

- Modified the operating schedules of systems on campus to take advantage of reduced energy during times of low occupancy
- A new mechanical plant is currently under construction
- Nearly all of the larger horsepower motors on campus have been changed out to NEMA 1 high efficiency motors reducing waste
- Street and outdoor lighting have been replaced with induction type lights cutting the wattage use for exterior lighting in half
- High efficiency boilers have been installed to reduce gas usage at five campus facilities with five more planned or in the process of being implemented
- All campus facilities are being added to the smart grid providing with digital energy monitoring capabilities using Itron
- Educated wattage bulbs and fixtures are being installed campus wide as are occupancy sensors
- Retrofits are planned for several facilities on campus that will replace old heating and cooling coils in terminal reheat units and air handlers
- The 500 ton cooling tower for the Student Union building was replaced with a high efficiency low maintenance tower
- Variable frequent drives are being added to pumps and air handling equipment where applicable to reduce energy and peak demand
- The Waste Water Treatment Plant has been upgraded to handle increased loads

### **University of Mississippi Medical Center**

- Implemented a Comprehensive Energy Audit
- EMC Lighting Upgrades Project currently under construction
- EMC Implementation Project is currently in design phase
- Campus Retro Commissioning project is in the programming state
- Energy management staff is currently meeting with lighting professionals to determine the scope needed to replace all T-12 light fixtures on campus with T-8s

### **University of Southern Mississippi**

- Adjusted downward the temperature of domestic hot water units and heat units at 78 campus locations
- Upgraded and reprogrammed 10 building EMCS systems
- Installed time clocks on air handlers in 18 buildings for night and weekend setbacks
- Installed programmable thermostats in 12 buildings
- Repaired water leaks in 10 cooling towers and 17 water meters
- Reprogrammed boilers and lowered hot water temperature in Polymer Science Building
- Verve units installed in Cook Library Addition
- Replaced steam boilers with clear fire condensate boilers in Bobby Chain Building
- Installed VFD drives in Bobby Chain Building
- Upgrades of power plant and installation of Building Automated Controls (BAC)
- College Hall converted all lights to LEDs
- Security lighting upgrade: replaced 250-watt bulbs with 96-watt LED bulbs