

ASU System Policy

Effective Date: December 11, 2009

Subject: Conservation of Energy and Natural Resources

Category: Financial Management 1.02

1. Purpose

Arkansas State University System (ASU System) is committed to energy conservation through sustainable design, construction, and operation of campus buildings. The Arkansas legislature established goals for sustainable, energy-efficient public buildings in Act 1494 of 2009. ASU System is exempt from the provisions of Act 1494 if it develops policies and procedures to meet the specific performance criteria and goals for a major facility or major renovation as defined in the Act. This policy is adopted to meet the exemption requirements of Act 1494.

2. Arkansas State University System Conservation of Energy and Natural Resources Policy

Arkansas State University System will meet the specific performance criteria and goals for a major facility or a major renovation set out in Act 1494 of 2009.

3. Definitions

Arkansas State University System (ASU System). Arkansas State University System (ASU System) means all the institutions within the Arkansas State University System, now and in the future.

Major Facility. Major facility means a construction project larger than twenty thousand (20,000) gross square feet of occupied or conditioned space. Major facility does not include a transmitter building or a pumping station.

Major Renovation. Major renovation means a building renovation project that costs more than fifty percent (50%) of its current replacement value, is larger than twenty thousand (20,000) gross square feet of occupied or conditioned space, and is funded in whole or in part by the state.

4. Process

A. The following minimum standards apply to a major facility:

- I. A major facility shall be designed, constructed, and certified to at least ten percent (10%) reduction below the baseline energy consumption determined in accordance with the Performance Rating Method of Appendix G of the American Society of Heating, Refrigerating and Air-conditioning Engineers, Standard 90.1-2007, as it existed on January 1, 2009.
- II. Any exception or special standard for a specific type of building or building facility that is found in the American Society of Heating, Refrigerating and Air-conditioning Engineers, Standard 90.1-2007 shall be allowed.

B. The following minimum standards apply to a major renovation:

- I. A major renovation shall be certified to at least ten percent (10%) reduction below the baseline energy consumption determined in accordance with the performance rating method of Appendix G of the American Society of Heating, Refrigerating and Air-conditioning Engineers, Standard 90.1-2007, as it existed on January 1, 2009.

C. For new construction of either a major facility or major renovation, the following standards apply:

- I. The indoor water system shall be designed and constructed to use at least twenty percent (20%) less potable water than the indoor water use baseline calculated for the building after satisfying the fixture performance requirement, if any, under the Arkansas Plumbing Code.
- II. The outdoor potable water or harvested ground water consumption shall use water use efficient landscape materials and irrigation strategies, including water reuse and recycling, to reduce conventional consumption by at least fifty percent (50%) of the water that would have been consumed otherwise.

D. In the event ASU System determines that the American Society of Heating, Refrigerating and Air-conditioning Engineers, Standard 90.1-2007 is not practicable for a major facility or major renovation, a practicable alternative standard for the design and construction for that major facility or major renovation shall be utilized.

- E. To verify the performance of a building component or system and ensure that design requirements are met upon completion of construction, building or system commissioning practices that are tailored to the size and complexity of the building and its system components shall be employed.
- F. To measure and verify a major facility's performance under this section's standards, the following will be performed:
 - I. A meter for electricity, natural gas, fuel oil, and water shall be installed in accordance with the guidelines issued by the United States Department of Energy under Section 103 of the Energy Policy Act of 2005.
 - II. The metered data from the first twelve (12) months of the building's operation shall be compared with the energy design target.
 - III. A report of the performance results on that comparison shall be made to the Arkansas State University System Board of Trustees.
 - IV. If the report shows that the building's average energy or water consumption over the one year period after the date of beneficial occupancy is more than the baseline consumption determined in accordance with the performance rating method of Appendix G of the American Society of Heating, Refrigerating and Air-conditioning Engineers, Standard 90.1-2007, as it existed on January 1, 2009, the designer, the contractor, the contractor manager at risk, the commissioning agent, and the appropriate representative of Arkansas State University shall investigate, determine the cause for the failure to achieve the performance standards, and recommend corrections or modifications to meet the performance standards.

(Adopted by the Arkansas State University Board of Trustees on December 11, 2009, Resolution 09-93)