Stricken language would be deleted from and underlined language would be added to the law as it existed prior to this session of the General Assembly.

Act 1494 of the Regular Session

State of Arkansas
87th General Assembly
Regular Session, 2009

By: Representative Webb
By: Senator Broadway

For An Act To Be Entitled

AN ACT TO PROMOTE THE CONSERVATION OF ENERGY AND NATURAL RESOURCES IN BUILDINGS OWNED BY PUBLIC AGENCIES AND INSTITUTIONS OF HIGHER EDUCATION; AND FOR OTHER PURPOSES.

Subtitle

TO PROMOTE THE CONSERVATION OF ENERGY AND NATURAL RESOURCES IN BUILDINGS OWNED BY PUBLIC AGENCIES AND INSTITUTIONS OF HIGHER EDUCATION.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF ARKANSAS:

SECTION 1. Arkansas Code Title 22, Chapter 2, is amended to add an additional subchapter to read as follows:

25-4-401. Legislative findings.

The General Assembly finds that:

(A) Public buildings can be built and renovated using sustainable, energy-efficient methods that save money, reduce negative environmental impacts, improve employee and student performance, and make employees and students more productive.

(B) The main objectives of sustainable, energy-efficient designs are to:

(i) Avoid resource depletion of energy, water, and raw materials;
(ii) Prevent environmental degradation caused by facilities and infrastructure throughout their life cycle; and

(iii) Create buildings that are livable, comfortable, safe, and productive; and

(2) State-owned buildings and buildings owned by an institution of higher education can be improved by establishing specific performance criteria and goals for sustainable, energy-efficient public buildings that are based on recognized, consensual standards with a scientifically proven basis and a history of successful performance.

25-4-402. Definitions
As used in this subchapter:
(1) "Institution of higher education" means a state-supported university or college;

(2) "Life-cycle cost analysis" means an analytical technique that considers the costs of owning, using, and operating a facility over its economic life including without limitation:

(A) Initial costs;

(B) System repair and replacement costs;

(C) Maintenance costs;

(D) Operating costs, including energy costs; and

(E) Salvage value;

(3)(A) "Major facility" means a construction project larger than twenty thousand (20,000) gross square feet of occupied or conditioned space.

(B) "Major facility" does not include a transmitter building or a pumping station;

(4) "Major renovation" means a building renovation project that:

(A) Costs more than fifty percent (50%) of its current replacement value;

(B) Is larger than twenty thousand (20,000) gross square feet of occupied or conditioned space; and

(C) Is funded in whole or in part by the state;

(5) "Public agency" means a state agency, office, officer, board, department, or commission; and

(6) "Sustainable, energy efficient public building" means a public building that, by complying with this subchapter, has the most economical
energy and water efficiency for that type of building.


(a) The Sustainable Energy-Efficient Buildings Program is established to promote energy conservation in buildings owned by public agencies and buildings owned by institutions of higher education.

(b) Under the Sustainable Energy-Efficient Buildings Program:

(1) For public agencies, the Arkansas Energy Office of the Arkansas Economic Development Commission shall develop and:

(A) Issue policies and technical guidelines to establish procedures and methods for compliance with the criteria and the performance standards for a major facility or a major renovation under § 25-4-404; and

(B) Administer an energy management program and an operation and maintenance program designed to achieve compliance with the requirements of § 25-4-406 through the implementation of energy conservation measures.

(2) For the institutions of higher education, each institution of higher education:

(A) Shall develop and issue policies and technical guidelines to establish procedures and methods for compliance with the criteria and the performance standards for a major facility or a major renovation under § 25-4-404; and

(B) May administer an energy management program and an operation and maintenance program designed to achieve compliance with the requirements of § 25-4-406 through the implementation of energy conservation measures.

25-4-404. Standards for a major facility or a major renovation.

(a) The following minimum standards apply to a major facility:

(1) A major facility of a public agency or an institution of higher education 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.

(2) Subdivision (a)(1) of this section applies to a major
facility project that has not entered the schematic design phase before the effective date of this act.

(3) An exception or a 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, is included in the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Standard 90.1-2007, under subdivision (a)(1) of this subsection.

(b)(1) A major renovation of a public agency or an institution of higher education 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.

(2) Subdivision (b)(1) of this section applies to a major renovation that has not entered the schematic design phase before the effective date of this act.

(c) For new construction under either subsection (a) or (b) of this section:

(1) 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; and

(2) Outdoor potable water or harvested groundwater consumption shall use water use efficient landscape materials and irrigation strategies, including without limitation water reuse and recycling, to reduce conventional consumption by at least fifty percent (50%) of the water that would have been consumed otherwise;

(d) If the Arkansas Energy Office of the Arkansas Economic Development Commission or the institution of higher education determines the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Standard 90.1-2007 is not practicable for a major facility or major renovation, the Arkansas Energy Office or the institution of higher education shall determine a practicable alternative standard for the design and construction for that major facility or major renovation.

(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:
   (1) A building level owner's 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; and
   (2)(A) The public or institution of higher education and the building designers shall:
      (i) Compare metered data from the first twelve (12) months of the building's operation with the energy design target; and
      (ii) Report the performance results of that comparison to the Arkansas Energy Office or to the governing board of the institution of higher education.
   (B) If the report under subdivision (f)(2)(A)(i) of this section 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 owner public agency or the owner institution of higher education, the contractor, the contract manager at risk, and the commissioning agent shall:
      (i) Investigate;
      (ii) Determine the cause for the failure to achieve this section's performance standards; and
      (iii) Recommend corrections or modifications to meet this section's performance standards.

25-4-405. Purchase of a constructed or renovated building.
   (a) A public agency shall not purchase a building that:
      (1) Did not meet the design and construction standards that were applicable for a comparable building at the time of its construction; or
      (2) Had a major renovation that did not meet the standard for
energy and water efficiency that was applicable for a comparable building at
the time of the major renovation.

(b) This section does not apply to:

(1) The purchase of a building that has historic, architectural, or cultural significance;

(2) A building that is acquired by devise or gift; or

(3) A building that is purchased for demolition.

25-4-406. Program to manage energy usage of public agencies.

(a) The Arkansas Energy Office of the Arkansas Economic Development Commission shall:

(1) Develop an energy program to manage energy, water, and other utility uses for public agencies that will reduce total energy consumption per gross square foot for all existing state buildings by twenty percent (20%) by 2014 and thirty percent (30%) by 2017 based on energy consumption for the 2007 - 2008 fiscal year if the savings can be justified by a life-cycle cost analysis; and

(2) Update this program annually.

(b) To implement its plan, the Arkansas Energy Office shall:

(1) Develop and implement policies, procedures, and standards to ensure that a public agency's purchasing practices:

(A) Improve the efficiency of energy, water, and other utility uses; and

(B) Consider the cost of the product over its economic life;

(2)(A) Adopt and implement building energy design guidelines for public agencies that include without limitation:

(i) Energy-use goals and standards;

(ii) Economic assumptions for life-cycle cost analysis; and

(iii) Other criteria for building systems and technologies.

(B) The Arkansas Energy Office shall modify the design criteria for the construction or the renovation of the facilities of a public facility to require the conduct of a life-cycle cost analysis;

(3) Identify and recommend energy conservation maintenance and
operating procedures that:

(A) Are designed to reduce energy consumption within the public facility; and

(B) Require no significant expenditure of funds.

(4) Require the maximum interchangeability and compatibility of equipment components when energy management equipment is proposed for any facility of a public agency; and

(5)(A) Develop an energy audit and a procedure for conducting an energy audit, to the extent funds are available.

(B) Within five (5) years after the effective date of this act, the Arkansas Energy Office shall have completed an energy audit of every public agency.

(C) When conducting an energy audit under subsection (b)(5) of this section, the Arkansas Energy Office shall identify and recommend any public facility that is suitable for:

(i) Building commissioning to reduce energy consumption within the facility; or

(ii) Installing an energy savings measure under a guaranteed energy savings contract.

(c) The Arkansas Energy Office may adopt architectural and engineering standards to implement this section.

(d) A public agency shall:

(1) Develop and implement, to the extent funds are available, an energy management plan to manage its energy, water, and other utility uses that is consistent with the Arkansas Energy Office's energy management program developed under this section;

(2) Update its management plan annually, including without limitation strategies for supporting the energy consumption reduction requirements under subsection (a) of this section;

(3) Submit annually by April 1 to the Arkansas Energy Office a written report of the public agency’s utility consumption and costs by fuel;

(4) Carry out the construction and renovation of a facility in a manner that:

(A) Furthers the goals under this section; and

(B) Ensures the use of life-cycle cost analyses and practices to conserve energy, water, and other utilities; and
(5) Implement the Arkansas Energy Office's recommendations made under subdivision (b)(1) of this section, to the extent funds are available.

25-4-407. Application to historic and unique buildings.
This subchapter does not apply if the implementation of a measure to conserve energy, water, or other utility use conflicts with the requirements for:

(1) A property to be eligible for, nominated to, or entered on the National Register of Historic Places under the National Historic Preservation Act of 1966, P.L. 89-665;
(2) An historic building located within an historic district;
(3) An historic building listed, owned, or under the jurisdiction of an historic properties commission; or
(4) A building that the Arkansas Energy Office has exempted from this subchapter because of its unique architectural characteristics or usage.

25-4-408. Advisory committee for the Arkansas Energy Office of the Arkansas Economic Development Commission.
(a)(1) The Director of the Arkansas Energy Office of the Arkansas Economic Development Commission shall create a sustainable, energy-efficient building advisory committee composed of:

(A) Representatives from the design and construction industry who are involved in public works contracting;
(B) Persons from public agencies who are responsible for overseeing public works projects or for developing energy efficiency programs and policies; and
(C) Other persons that the director considers to have useful information.

(2) Advisory committee members shall serve at the pleasure of the director.

(b) The committee shall provide advice on the implementation of this subchapter, including without limitation recommendations regarding:

(1) An education and training process for persons who are involved in the implementation of this subchapter;
(2) An ongoing evaluation or feedback process to help the authority to implement this section; and
(3) Water-deficiency requirements and energy-efficiency
requirements.

25-4-409. Rules.
(a) The Arkansas Energy Office of the Arkansas Economic Development
Commission shall:
(1) Adopt rules for the implementation of operation and
maintenance energy conservation measures in a public building; and
(2) Develop or revise the Arkansas Energy Office's architectural
and engineering standards to provide assistance in determining:
(A) Which energy conservation measures are best suited to
the unique characteristics of each building; and
(B) The specifications for the energy conservation
measures under this subchapter; and
(3) Adopt rules for the development of education and training
requirements for the various personnel that may be involved in a major
facility or a major renovation under this subchapter.
(b) The Arkansas Energy Office may adopt:
(1) Rules to implement this subchapter; and
(2) Architectural or engineering standards as needed to
implement this section.

(a) The Arkansas Energy Office of the Arkansas Economic Development
Commission, to the extent funds are available, shall conduct a performance
review of the Sustainable Energy-Efficient Buildings Program that includes at
least the following:
(1) An identification of the costs of implementing energy-
efficient and water-efficient building standards in the design and
construction of a major facility or major renovation;
(2) An identification of the operating savings attributable to
the implementation of energy-efficient and water-efficient building
standards, including without limitation savings in energy, water, utility,
and maintenance costs;
(3) An identification of any impact on employee productivity
from the application of the standards under this subchapter; and
(4) An evaluation of the effectiveness of the application of the standards under this subchapter.

(b) No later than December 1, 2010, and each year thereafter, the Arkansas Energy Office and each institution of higher education shall report to the cochairs of the Legislative Council its:

(1) Findings under subsection (a) of this section; and

(2) Recommended changes, if any.

25-4-411. Applicability.

(a) The boards of trustees for the University of Arkansas, Arkansas State University, the University of Central Arkansas, Henderson State University, Arkansas Tech University, and Southern Arkansas University are exempt from the provisions of this subchapter if those institutions develop policies and procedures to meet the specific performance criteria and goals for a major facility or major renovation.

(b)(1) The board of trustees of any institution of higher education that is not included under subsection (a) of this section may be exempted from the provisions of this subchapter by the Department of Higher Education.

(2) Before granting an exemption to a board of trustees of an institution of higher education under subdivision (b)(1) of this section, the department shall review and approve the policies and procedures to meet the specific performance criteria and goals for a major facility or major renovation.

(c) This subchapter does not:

(1) Preclude an institution of higher education from adopting the policies and technical guidelines for a major facility or a major renovation that are established by the Arkansas Energy Office of the Arkansas Economic Development Commission under § 25-4-403(b)(1); or

(2) Affect the processes or exemptions under § 22-6-601.

/s/ Webb

APPROVED: 4/14/2009