GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 2005

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SENATE BILL 402*

Short Title:	Water/Utilities Savings in Govt. Facilities.	(Public)
Sponsors:	Senators Kinnaird, Horton; Cowell, and Shaw.	
Referred to:	Commerce.	

March 7, 2005

A BILL TO BE ENTITLED

AN ACT TO CLARIFY THAT GUARANTEED ENERGY SAVINGS CONTRACTS INCLUDE CONSERVATION MEASURES FOR WATER AND OTHER UTILITIES, TO RAISE THE CAP FOR GUARANTEED ENERGY SAVINGS CONTRACTS, TO EXPAND THE STATE'S ENERGY POLICY AND LIFE-CYCLE COST ANALYSIS TO INCLUDE THE CONSERVATION OF WATER AND OTHER UTILITIES, AND TO MAKE CONFORMING CHANGES.

The General Assembly of North Carolina enacts:

SECTION 1. The title of Article 3B of Chapter 143 of the General Statutes reads as rewritten: "~~Energy~~ Conservation of Energy, Water, and Other Utilities in ~~Public~~ Government Facilities."

SECTION 2. G.S. 143-64.17 reads as rewritten:

"**§ 143-64.17. Definitions.**

As used in this Part:

(1) "Energy conservation measure" means a facility alteration, training, or services related to the operation of the facility, when the alteration, training, or services provide anticipated energy savings. Energy conservation measure includes any of the following:

a. Insulation of the building structure and systems within the building.

b. Storm windows or doors, caulking, weatherstripping, multiglazed windows or doors, heat-absorbing or heat-reflective glazed or coated window or door systems, additional glazing, reductions in glass area, or other window or door system modifications that reduce energy consumption.

c. Automatic energy control systems.

d. Heating, ventilating, or air-conditioning system modifications or replacements.

e. Replacement or modification of lighting fixtures to increase the energy efficiency of a lighting system without increasing the overall illumination of a facility, unless an increase in illumination is necessary to conform to the applicable State or local building code or is required by the light system after the proposed modifications are made.

f. Energy recovery systems.

g. Cogeneration systems that produce steam or forms of energy such as heat, as well as electricity, for use primarily within a building or complex of buildings.

~~h. Other energy conservation measures.~~

i. Faucets with automatic or metered shut-off valves, leak detection equipment, water recycling equipment, and wastewater recovery systems.

j. Other energy conservation measures that conserve energy, water, or other utilities.

(2) "Energy savings" means a measured reduction in fuel costs, energy costs, water costs, stormwater fees, other utility costs, or operating ~~costs~~ costs, including environmental discharge fees and water and sewer maintenance fees, created from the implementation of one or more energy conservation measures when compared with an established baseline of previous ~~fuel costs, energy costs, or operating costs~~such costs developed by the governmental unit.

(2a) "Governmental unit" means either a local governmental unit or a State governmental unit.

(3) "Guaranteed energy savings contract" means a contract for the evaluation, recommendation, or implementation of energy conservation measures, including the design and installation of equipment or the repair or replacement of existing equipment, in which all payments, except obligations on termination of the contract before its expiration, are to be made over time, and in which energy savings are guaranteed to exceed costs.

(4) "Local governmental unit" means any board or governing body of a political subdivision of the State, including any board of a community college, any school board, or an agency, commission, or authority of a political subdivision of the State.

(5) "Qualified provider" means a person or business experienced in the design, implementation, and installation of energy conservation measures.

(6) "Request for proposals" means a negotiated procurement initiated by a governmental unit by way of a published notice that includes the following:

a. The name and address of the governmental unit.

b. The name, address, title, and telephone number of a contact person in the governmental unit.
c. Notice indicating that the governmental unit is requesting qualified providers to propose energy conservation measures through a guaranteed energy savings contract.
d. The date, time, and place where proposals must be received.
e. The evaluation criteria for assessing the proposals.
f. A statement reserving the right of the governmental unit to reject any or all the proposals.
g. Any other stipulations and clarifications the governmental unit may require.

(7) "State governmental unit" means the State or a department, an agency, a board, or a commission of the State, including the Board of Governors of The University of North Carolina and its constituent institutions."

SECTION 3. G.S. 143-64.17G reads as rewritten:

"**§ 143-64.17G. Report on guaranteed energy savings ~~contracts.~~contracts entered into by local governmental units.**

A local governmental unit that enters into a guaranteed energy savings contract must report the contract and the terms of the contract to the Local Government Commission. The Commission shall compile the information and report it biennially to the Joint Commission on Governmental Operations. In compiling the information, the Local Government Commission shall include information on the energy savings expected to be realized from a contract and, with the assistance of the Office of State Construction, shall evaluate whether expected savings have in fact been realized."

SECTION 4. G.S. 143-64.17H reads as rewritten:

"**§ 143-64.17H. ~~Guaranteed~~ Report on guaranteed energy savings ~~contract reporting requirements.~~contracts entered into by State governmental units.**

A State governmental unit that enters into a guaranteed energy savings contract must report the contract and the terms of the contract to the State Energy Office of the Department of Administration within 30 days of the date the contract is entered into. In addition, within 60 days after each annual anniversary date of a guaranteed energy savings contract, the State governmental unit must report the status of the contract to the State Energy Office, including any details required by the State Energy Office. The State Energy Office shall compile the information for each fiscal year and report it to the Joint Legislative Commission on Governmental Operations and to the Local Government Commission annually by December 1. In compiling the information, the State Energy Office shall include information on the energy savings expected to be realized from a contract and shall evaluate whether expected savings have in fact been realized."

SECTION 5. G.S. 142-63 reads as rewritten:

"**§ 142-63. Authorization of financing contract.**

Subject to the terms and conditions set forth in this Article, a State governmental unit that has solicited a guaranteed energy conservation measure pursuant to G.S. 143-64.17A or G.S. 143-64.17B or the State Treasurer, as designated by the Council of State, is authorized to execute and deliver, for and on behalf of the State of North Carolina, a financing contract to finance the costs of the energy conservation measure. The aggregate principal amount payable by the State under financing contracts entered pursuant to this Article shall not exceed ~~fifty million dollars ($50,000,000)~~ seventy-five million dollars ($75,000,000) at any one time."

SECTION 6. G.S. 143-64.10 reads as rewritten:

"**§ 143-64.10. Findings; policy.**

(a) The General Assembly ~~hereby finds:~~finds all of the following:

(1) That the State shall take a leadership role in aggressively undertaking ~~energy~~ the conservation of energy, water, and other utilities in North ~~Carolina;~~Carolina.

(2) That State facilities have a significant impact on the State's consumption of ~~energy;~~energy, water, and other utilities.

(3) That ~~energy conservation~~ practices to conserve energy, water, and other utilities that are adopted for the design, construction, operation, maintenance, and renovation of these facilities and for the purchase, operation, and maintenance of equipment for these facilities will have a beneficial effect on the State's overall supply of ~~energy;~~energy, water, and other utilities.

(4) That the cost of the ~~energy~~ energy, water, and other utilities consumed by these facilities and the equipment for these facilities over the life of the facilities shall be considered, in addition to the initial ~~cost;~~cost.

(5) That the cost of ~~energy~~ energy, water, and other utilities is significant and facility designs shall take into consideration the total life-cycle cost, including the initial construction cost, and the cost, over the economic life of the facility, of the ~~energy~~ energy, water, and other utilities consumed, and of operation and maintenance of the facility as it affects ~~energy consumption; and~~ the consumption of energy, water, or other utilities.

(6) That State government shall undertake a program to reduce ~~energy~~ the use of energy, water, and other utilities in State facilities and equipment in those facilities in order to provide its citizens with an example of ~~energy use~~energy-use, water-use, and utility-use efficiency.

(b) It is the policy of the State of North Carolina to ensure that ~~energy conservation~~ practices to conserve energy, water, and other utilities are employed in the design, construction, operation, maintenance, and renovation of State facilities and in the purchase, operation, and maintenance of equipment for State facilities."

SECTION 7. G.S. 143-64.11(2) reads as rewritten:

"(2) "Energy-consumption analysis" means the evaluation of all energy-consuming ~~systems~~systems, including systems that consume water or

other utilities, and components of these systems by demand and type of ~~energy,~~energy or other utility use, including the internal energy load imposed on a facility by its occupants, equipment and components, and the external energy load imposed on the facility by climatic conditions."

SECTION 8. G.S. 143-64.11(2b) reads as rewritten:

"(2b) "Energy-consuming system" includes but is not limited to any of the following equipment or measures:

a. Equipment used to heat, cool, or ventilate the facility;
b. Equipment used to heat water in the facility;
c. Lighting systems;
d. On-site equipment used to generate electricity for the facility;
e. On-site equipment that uses the sun, wind, oil, natural gas, liquid propane gas, coal, or electricity as a power source; and
f. Energy conservation ~~measures~~ measures, as defined in G.S. 143-64.17, in the facility design and construction that decrease the ~~energy~~ energy, water, or other utility requirements of the facility."

SECTION 9. G.S. 143-64.11(3) reads as rewritten:

"(3) "Facility" means a building or a group of buildings served by a central ~~energy~~ distribution system for energy, water, or other utility or components of a central ~~energy~~ distribution system."

SECTION 10. G.S. 143-64.12 reads as rewritten:

"**§ 143-64.12. Authority and duties of State agencies.**

(a) The General Assembly authorizes and directs that State agencies shall carry out the construction and renovation of State facilities, under their jurisdiction in such a manner as to further the policy declared herein, ensuring the use of life-cycle cost analyses and ~~energy conservation practices.~~practices to conserve energy, water, and other utilities.

(b) The Department of Administration shall develop and implement policies, procedures, and standards to ensure that State purchasing practices improve ~~energy~~ efficiency regarding energy, water, and other utility use and take the cost of the product over the economic life of the product into consideration. The Department of Administration shall adopt and implement Building Energy Design Guidelines. These guidelines shall include energy-use goals and standards, economic assumptions for life-cycle cost analysis, and other criteria on building systems and technologies. The Department of Administration shall modify the design criteria for construction and renovation of facilities to require that a life-cycle cost analysis be conducted pursuant to G.S. 143-64.15. The Department of Administration, as part of the Facilities Condition and Assessment Program, shall identify and recommend energy conservation maintenance and operating procedures that are designed to reduce energy consumption within the facility and that require no significant expenditure of funds. State departments, institutions, or agencies shall implement these recommendations. Where

energy management equipment is proposed for State facilities, the maximum interchangeability and compatibility of equipment components shall be required.

The Department of Administration shall develop a comprehensive ~~energy management~~ program to manage energy, water, and other utility use for State government. Each State agency shall develop and implement ~~an energy~~ a management plan that is consistent with the State's comprehensive ~~energy management program.~~program to manage energy, water, and other utility use.

(c) through (g) Repealed by Session Laws 1993, c. 334, s. 4."

SECTION 11. G.S. 143-64.15 reads as rewritten:

"**§ 143-64.15. Life-cycle cost analysis.**

(a) A life-cycle cost analysis shall include, but not be limited to, all of the following elements:

(1) The coordination, orientation, and positioning of the facility on its physical ~~site;~~site.

(2) The amount and type of fenestration employed in the ~~facility;~~facility.

(3) Thermal characteristics of materials and the amount of insulation incorporated into the facility ~~design;~~design.

(4) The variable occupancy and operating conditions of the facility, including illumination ~~levels; and~~levels.

(5) Architectural features ~~which~~ that affect ~~energy consumption.~~the consumption of energy, water, and other utilities.

(b) The life-cycle cost analysis performed for any State facility shall, in addition to the requirements set forth in subsection (a) of this section, include, but not be limited to, all of the following:

(1) An energy-consumption analysis of the facility's energy-consuming systems in accordance with the provisions of subsection (g) of this ~~section;~~section.

(2) The initial estimated cost of each energy-consuming system being compared and ~~evaluated;~~evaluated.

(3) The estimated annual operating cost of all utility ~~requirements;~~requirements.

(4) The estimated annual cost of maintaining each energy-consuming ~~system; and~~system.

(5) The average estimated replacement cost for each system expressed in annual terms for the economic life of the facility.

(c) ~~The General Assembly requires each~~Each entity ~~to~~ shall conduct a life-cycle cost analysis pursuant to this section for the construction or the renovation of any State facility or State-assisted facility of 20,000 or more gross square feet. For the replacement of heating, ventilation, and air conditioning equipment in any State facility or State-assisted facility of 20,000 or more gross square feet, the entity shall conduct a life-cycle cost analysis of the replacement equipment pursuant to this section when the replacement is financed under a guaranteed energy savings contract or financed using repair and renovation funds.

(d) The life-cycle cost analysis shall be certified by a registered professional engineer or bear the seal of a North Carolina registered architect, or both. The engineer or architect shall be particularly qualified by training and experience for the type of work involved, but shall not be employed directly or indirectly by a fuel provider, utility company, or group supported by fuel providers or utility funds. Plans and specifications for facilities involving public funds shall be designed in conformance with the provisions of G.S. 133-1.1.

(e) In order to protect the integrity of historic buildings, no provision of this Article shall be interpreted to require the implementation of ~~energy cost~~ measures to conserve energy, water, or other utility use that conflict with respect to any property eligible for, nominated to, or entered on the National Register of Historic Places, pursuant to the National Historic Preservation Act of 1966, P.L. 89-665; any historic building located within an historic district as provided in Chapters 160A or 153A of the General Statutes; any historic building listed, owned, or under the jurisdiction of an historic properties commission as provided in Chapter 160A or 153A; nor any historic property owned by the State or assisted by the State.

(f) Each State agency shall use the life-cycle cost analysis over the economic life of the facility in selecting the optimum system or combination of systems to be incorporated into the design of the facility.

(g) The energy-consumption analysis of the operation of energy-consuming systems utilities in a facility shall include, but not be limited ~~to:~~to, all of the following:

(1) The comparison of two or more system ~~alternatives;~~alternatives.

(2) The simulation or engineering evaluation of each system over the entire range of operation of the facility for a year's operating ~~period; and~~period.

(3) The engineering evaluation of the ~~energy~~ consumption of energy, water, and other utilities of component equipment in each system considering the operation of such components at other than full or rated outputs."

SECTION 12. This act is effective when it becomes law.