the act or the application of the provision to other persons or circumstances is not affected.

Passed the Senate February 12, 1982. Passed the House March 9, 1982. Approved by the Governor April 1, 1982. Filed in Office of Secretary of State April 1, 1982.

CHAPTER 159

[Engrossed Senate Bill No. 3156] PUBLICLY OWNED FACILITIES——RENEWABLE ENERGY SYSTEMS

AN ACT Relating to energy conservation; amending section 1, chapter 177, Laws of 1975 1st ex. sess. and RCW 39.35.010; amending section 2, chapter 177, Laws of 1975 1st ex. sess. and RCW 39.35.020; amending section 3, chapter 177, Laws of 1975 1st ex. sess. and RCW 39.35.030; amending section 4, chapter 177, Laws of 1975 1st ex. sess. and RCW 39.35.040; and creating new sections.

Be it enacted by the Legislature of the State of Washington:

Section 1. Section 1, chapter 177, Laws of 1975 1st ex. sess. and RCW 39.35.010 are each amended to read as follows:

The legislature hereby finds:

- (1) That major publicly owned or leased facilities have a significant impact on our state's consumption of energy;
- (2) That energy conservation practices and renewable energy systems adopted for the design, construction, and utilization of such facilities will have a beneficial effect on our overall supply of energy;
- (3) That the cost of the energy consumed by such facilities over the life of the facilities shall be considered in addition to the initial cost of constructing such facilities; ((and))
- (4) That the cost of energy is significant and major facility designs shall be based on the total life-cycle cost, including the initial construction cost, and the cost, over the economic life of a major facility, of the energy consumed, and of the operation and maintenance of a major facility as they affect energy consumption; and
- (5) That the use of energy systems in these facilities which utilize renewable resources such as solar energy, wood or wood waste, or other non-conventional fuels should be considered in the design of all publicly owned or leased facilities.
- Sec. 2. Section 2, chapter 177, Laws of 1975 1st ex. sess. and RCW 39-.35.020 are each amended to read as follows:

The legislature declares that it is the public policy of this state to insure that energy conservation practices and renewable energy systems are employed in the design of major publicly owned or leased facilities and that the use of at least one renewable energy system is considered. To this end the legislature authorizes and directs that public agencies analyze the cost of

energy consumption of each major facility to be planned and constructed or renovated after September 8, 1975.

Sec. 3. Section 3, chapter 177, Laws of 1975 1st ex. sess. and RCW 39-.35.030 are each amended to read as follows:

For the purposes of this chapter the following words and phrases shall have the following meanings unless the context clearly requires otherwise:

- (1) "Public agency" means every state office, officer, board, commission, committee, bureau, department, and all political subdivisions of the state.
 - (2) "Office" means the Washington state energy office.
- (3) "Major facility" means any publicly owned or leased building having twenty-five thousand square feet or more of usable floor space.
- $((\frac{3}{3}))$ (4) "Initial cost" means the moneys required for the capital construction or renovation of a major facility.
- (((4))) (5) "Renovation" means additions, alterations, or repairs within any twelve-month period which exceed fifty percent of the value of a major facility and which will affect any energy system.
- (((5))) (6) "Economic life" means the projected or anticipated useful life of a major facility as expressed by a term of years.
- (((6))) (7) "Life-cycle cost" means the <u>initial cost and cost of operation of</u> a major facility ((including its initial cost, the cost of the energy consumed)) over its economic life((, and the energy consumption related cost of its operation and maintenance)). This shall be calculated as the initial cost plus the operation, maintenance, and energy costs over its economic life, reflecting anticipated increases in these costs discounted to present value at the current rate for borrowing public funds, as determined by the state finance committee. The energy costs used shall be those projected by the state energy office. The office shall update the projection of energy costs at least every two years.
- (((7))) (8) "Life-cycle cost analysis" includes, but is not limited to, the following elements:
- (a) The coordination and positioning of a major facility on its physical site;
 - (b) The amount and type of fenestration employed in a major facility;
- (c) The amount of insulation incorporated into the design of a major facility;
- (d) The variable occupancy and operating conditions of a major facility; and
 - (e) An energy-consumption analysis of a major facility.
- (((8))) (9) "Energy systems" means all utilities, including, but not limited to, heating, air-conditioning, ventilating, lighting, and the supplying of domestic hot water.
- $((\frac{9}{}))$ (10) "Energy-consumption analysis" means the evaluation of all energy systems and components by demand and type of energy including the internal energy load imposed on a major facility by its occupants,

equipment, and components, and the external energy load imposed on a major facility by the climatic conditions of its location. An energy_consumption analysis of the operation of energy systems of a major facility shall include, but not be limited to, the following elements:

- (a) The comparison of three or more system alternatives, at least one of which shall include renewable energy systems;
- (b) The simulation of each system over the entire range of operation of such facility for a year's operating period; and
- (c) The evaluation of the energy consumption of component equipment in each system considering the operation of such components at other than full or rated outputs.

The energy-consumption analysis shall be prepared by a professional engineer or licensed architect who may use computers or such other methods as are capable of producing predictable results.

- (11) "Renewable energy systems" means methods of facility design and construction and types of equipment for the utilization of renewable energy sources including, but not limited to, active or passive solar space heating or cooling, domestic solar water heating, windmills, waste heat, biomass and/or refuse-derived fuels, cogenerated energy, photovoltaic devices, and geothermal energy.
- Sec. 4. Section 4, chapter 177, Laws of 1975 1st ex. sess. and RCW 39-.35.040 are each amended to read as follows:

On and after September 8, 1975 whenever a public agency determines that any major facility is to be constructed or renovated such agency shall cause to be included in the design phase of such construction or renovation a provision that requires a life-cycle cost analysis to be prepared for such facility. Such analysis shall be approved by the agency prior to the commencement of actual construction or renovation. A public agency may accept the facility design if the agency is satisfied that the life-cycle cost analysis provides for an efficient energy system or systems based on the economic life of the major facility.

Nothing in this section prohibits the construction or renovation of major facilities which utilize renewable energy systems.

<u>NEW SECTION.</u> Sec. 5. This act does not apply to a major facility construction or renovation on which a life-cycle cost analysis is commenced under chapter 39.35 RCW before the effective date of this act.

<u>NEW SECTION</u>. Sec. 6. The department of general administration, in cooperation with the office and after consultation with affected agencies,

shall promulgate such rules, under chapter 34.04 RCW, as are necessary and convenient to properly administer this act, by September 1, 1982.

Passed the Senate March 8, 1982.

Passed the House March 6, 1982.

Approved by the Governor April 1, 1982.

Filed in Office of Secretary of State April 1, 1982.

CHAPTER 160

[Substitute Senate Bill No. 4917] STATE BOARD OF EDUCATION—OFI CERS

AN ACT Relating to the state board of education; amending section 28A.04.090, chapter 223, Laws of 1969 ex. sess. and RCW 28A.04.090; amending section 28A.03.030, chapter 223, Laws of 1969 ex. sess. as last amended by section 1, chapter 249, Laws of 1981 and RCW 28A.03.030; amending section 28A.04.100, chapter 223, Laws of 1969 ex. sess. and RCW 28A.04.100; and creating a new section.

Be it enacted by the Legislature of the State of Washington:

Section 1. Section 28A.04.090, chapter 223, Laws of 1969 ex. sess. and RCW 28A.04.090 are each amended to read as follows:

The state board of education shall annually elect a president and vice president. The superintendent of public instruction shall be an ex officio ((president)) member and the chief executive officer of the board. As such ex officio ((president)) member the superintendent shall have the right to vote only when there is a question before the board upon which no majority opinion has been reached among the board members present and voting thereon and the superintendent's vote is essential for action thereon. The superintendent, as chief executive officer of the board, shall furnish all necessary record books and forms for its use, and shall represent the board in directing the work of school inspection.

Sec. 2. Section 28A.03.030, chapter 223, Laws of 1969 ex. sess. as last amended by section 1, chapter 249, Laws of 1981 and RCW 28A.03.030 are each amended to read as follows:

In addition to any other powers and duties as provided by law, the powers and duties of the superintendent of public instruction shall be:

- (1) To have supervision over all matters pertaining to the public schools of the state.
- (2) To report to the governor and the legislature such information and data as may be required for the management and improvement of the schools.
- (3) To prepare and have printed such forms, registers, courses of study, rules and regulations for the government of the common schools, questions prepared for the examination of persons as provided for in RCW 28A.04.120(7), and such other material and books as may be necessary for