

CHAPTER 177

[Senate Bill No. 2106]

PUBLIC FACILITIES CONSTRUCTION AND RENOVATION—
ENERGY CONSUMPTION—LIFE-CYCLE COST ANALYSES

AN ACT Relating to energy consuming utilities; and adding a new chapter to Title 39 RCW.

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

NEW SECTION. Section 1. 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 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.

NEW SECTION. Sec. 2. The legislature declares that it is the public policy of this state to insure that energy conservation practices are employed in the design of major publicly owned or leased facilities. 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 the effective date of this act.NEW SECTION. Sec. 3. 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) "Major facility" means any publicly owned or leased building having twenty-five thousand square feet or more of usable floor space.

(3) "Initial cost" means the monéys required for the capital construction or renovation of a major facility.

(4) "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) "Economic life" means the projected or anticipated useful life of a major facility as expressed by a term of years.

(6) "Life-cycle cost" means the cost of 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.

(7) "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) "Energy systems" means all utilities, including, but not limited to, heating, air-conditioning, ventilating, lighting, and the supplying of domestic hot water.

(9) "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;
- (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.

NEW SECTION. Sec. 4. On and after the effective date of this act 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.

NEW SECTION. Sec. 5. If any provision of this act, or its application to any person or circumstance is held invalid, the remainder of the act, or the application of the provision to other persons or circumstances is not affected.

NEW SECTION. Sec. 6. Sections 1 through 5 of this act shall constitute a new chapter in Title 39 RCW.

Passed the Senate May 28, 1975.

Passed the House May 8, 1975.

Approved by the Governor June 4, 1975.

Filed in Office of Secretary of State June 4, 1975.