HOUSE BILL 313

IN THE HOUSE

January 23, 1979	Introduced and referred to Committee on Natural Resources.
February 5, 1979	Committee Recommend bill, as amended.
February 6, 1979	Printed and placed on members' desks.
February 7, 1979	Second reading, do pass.
	On motion, taken from engrossing and referred to Committee on Natural Resources.
February 12, 1979	Intent statement attached.
	Committee recommend bill, do pass.
February 14, 1979	Printed and placed on members' desks.
February 15, 1979	Second reading, do pass.
February 16, 1979	Considered correctly engrossed.
February 17, 1979	Third reading, passed.

IN THE SENATE

February 19, 1979	Introduced and referred to Committee on Natural Resources.
March 20, 1979	Committee recommend bill, not concurred.

IN THE HOUSE

March 21, 1979	Returned from Senate, not concurred.

HOUSE BILL NO. 313

INTRODUCED BY Spaeth, Eggar, Vincent

A BILL FOR AN ACT ENTITLED: "AN ACT REQUIRING PERFORMANCE OF A LIFE-CYCLE COST ANALYSIS BEFORE ANY STATE AGENCY MAY LEASE OR CONSTRUCT A FACILITY."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MONTANA:

Section 1. Findings and purpose. (1) Operating and maintenance expenditures associated with energy equipment and with energy consumed in state-financed and leased buildings represent a significant cost over the life of a building. Energy conserved by appropriate building design not only reduces the demand for energy but also reduces costs for building operation. The size, design, orientation, and operability of windows; the ratio of ventilating air to air heated or cooled; the level of lighting consonant with space-use requirements; the handling of occupancy loads; and the ability to zone off areas not requiring equivalent levels of heating or cooling are but a few of the considerations necessary to conserving energy.

(2) It is very important that energy-efficient designs provide energy savings over the life of the building structure. Conversely, energy-inefficient designs cause excess and wasteful energy use and high costs over that

LC 0990/01

building's life. With buildings lasting many decades and with energy costs escalating rapidly, it is essential that the costs of operation and maintenance for energy-using equipment be included in all design proposals for state buildings.

(3) In order that such energy efficiency considerations become a function of building design and also a model for future application in the private sector, it is the policy of the state that buildings constructed and financed by the state be designed and constructed in a manner which will minimize the consumption of energy used in the operation and maintenance of such buildings.

Section 2. Definitions. In [sections 1 through 5] the following definitions apply:

(1) "Facility" means a building or other structure.

(2) "Energy performance index or indices (EPI)" means a number describing the energy requirements at the building boundary of a facility, per square foot of floor space or per cubic foot of occupied volume, as appropriate under defined internal and external ambient conditions over an entire seasonal cycle.

(3) "Life-cycle costs" means the cost of owning, operating, and maintaining the facility over the life of the structure and may be expressed as an annual cost for each year of the facility's use.

Section 3. Life-cycle cost analysis. Neither the department of administration nor any other state agency may lease or construct a facility, within limits prescribed in this section, without having secured a proper evaluation of life-cycle costs. Furthermore, construction may proceed only upon disclosing, for the facility chosen, the life-cycle costs as determined in [section 4] and the capitalization of the initial construction costs of the building. The life-cycle costs shall be a primary consideration in the selection of a building design. Such analysis is required only for construction of buildings with an area of 5,000 square feet or greater. For leased areas of 20,000 square feet or greater within a given building boundary, a life-cycle analysis shall be performed, and a lease may be entered only where there is a showing that the life-cycle costs are minimal compared to available like facilities.

Section 4. Rules for conduct of life-cycle cost analysis. (1) The department of administration shall adopt rules and procedures, including energy conservation performance guidelines, for conducting a life-cycle cost analysis of alternative architectural and engineering designs and for developing energy performance indices to evaluate the efficiency of energy utilization for competing designs in the construction of state financed and leased

facilities. Such rules and procedures shall take effect 270 days after July 1, 1979.

(2) Such life-cycle costs shall be the sum of:

(a) the reasonably expected fuel costs over the life of the building, as determined by the department, that are required to maintain illumination, power, temperature, humidity, ventilation, and all other energy consuming equipment in a facility; and

(b) the reasonable costs of probable maintenance, including labor and materials, and operation of the building.

(3) The department shall adopt rules for determining life-cycle costs including rules relating to:

(a) the orientation and integration of the facility with respect to its physical site;

(b) the amount and type of glass employed in the facility and the directions of exposure;

(c) the effect of insulation incorporated into the facility design and the effect on solar utilization of the properties of external surfaces; and

(d) the variable occupancy and operating conditions of the facility and subportions of the facility.

(4) Such rules shall be based on the best currently available methods of analysis, including those of the national bureau of standards, the department of housing and

urban development, and other federal agencies and professional societies and materials developed by the department. Provision shall be made for an annual updating of rules and standards as required.

Section 5. Rules for energy performance indices. The department shall promulgate rules for energy performance indices as defined in [section 2] to audit and evaluate competing design proposals submitted to the state. As experience develops on the energy performance achieved with state building, the indices (EPI) shall serve as a measure of building performance with respect to energy consumption.

-End-

HB 313

Approved by Committee
on Natural Resources

HOUSE BILL NO. 313

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(2) It is very important that energy-efficient designs provide energy savings over the life of the building structure. Conversely, energy-inefficient designs cause excess and wasteful energy use and high costs over that building's life. With buildings lasting many decades and with energy costs escalating rapidly, it is essential that the costs of operation and maintenance for energy-using equipment be included in all design proposals for state buildings.

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facilities. COSTS OF THESE STUDIES SHALL BECOME A PORTION OF THE SERVICES PERFORMED BY THE CONTRACT ARCHITECT FOR THE DESIGNATED PROJECT UNDER THE STANDARD FEE SCHEDULE ESTABLISHED BY THE DEPARTMENT OF ADMINISTRATION. Such rules and procedures shall take effect 270 days after July 1, 1979.

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STATEMENT OF INTENT RE: HB 313

Because two sections of this bill delegate authority to the Department of Administration to adopt rules necessary to implement life-cycle costing, the House Committee on Natural Resources submits this statement of intent for the purpose of clarity delineating this authority.

The purpose of this bill is to encourage energy-efficient designs in state facilities to be constructed and financed in the future. To accomplish this goal, the bill requires that proposed facilities be evaluated not just from the perspective of front-end construction costs, but from the perspective of costs of operation and maintenance, particularly with respect to energy use, over the expected life of the facility. The bill provides, in section 3, that no state agency may construct a facility with an area of 5,000 square feet or greater without having secured a proper evaluation of life-cycle costs. These costs must be disclosed along with the capitalization of the initial construction costs, before construction may proceed. The life-cycle costs must be a primary consideration in selection of a building design.

Sections 4 and 5 grant extensive rulemaking authority to the department of administration to implement the application of life-cycle costs analyses and energy performance indices. In section 4(1), the committee has added language to clearly instruct the department of administration that the costs of conducting these studies are included in the standard architectural fee schedule established for state facilities. Thus the committee intends that the fiscal impact of the bill be minimized.

Costs should be incurred by the department only for developing the standards to be followed by architects submitting designs for state facilities. Section 4 is explicit as to what those standards must include.

Section 5 directs the department to adopt rules for energy performance indices to eventually serve as a measure of building performance with respect to energy consumption. It is intended that this would be an ongoing process of evaluation and refinement of those rules as experience with these practices develops.

First adopted by the HOUSE COMMITTEE ON NATURAL RESOURCES on February 12, 1979.

HB 313

Approved by Committee
on Natural Resources

HOUSE BILL NO. 313

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HB 0313/03

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