By: Van de Putte S.B. No. 1879

A BILL TO BE ENTITLED

AN ACT

2	relating	to	certain	practices	to	improve	energy	conservation	in

- relating to certain practices to improve energy conservation in state buildings.
- 4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:
- 5 SECTION 1. Section 447.004(e), Government Code, as amended
- 6 by Chapters 573, 1158, and 1398, Acts of the 77th Legislature,
- 7 Regular Session, 2001, is reenacted and amended to read as follows:
- 8 (e) A state agency or an institution of higher education may
- 9 not begin construction of a new state building or a major renovation
- 10 project before the design architect or engineer for the
- 11 construction or renovation has:
- 12 (1) certified to the appropriate authority having
- 13 <u>jurisdiction</u> [agency or institution] that the construction or
- 14 renovation complies with:
- 15 (A) the standards established under this
- 16 section; and

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- 17 (B) the alternative energy and energy-efficient
- 18 <u>architectural and engineering design evaluation requirements under</u>
- 19 <u>Sections 2166.401, 2166.403, and 2166.408; and</u>
- 20 (2) provided [a copy of that certification] to the
- 21 appropriate authority having jurisdiction and the state energy
- 22 conservation office copies of:
- 23 (A) each certification under Subdivision (1);
- 24 and

- 1 (B) any written evaluation or detailed economic
- 2 feasibility study prepared in accordance with Section 2166.401,
- 3 <u>2166.403</u>, or 2166.408.
- 4 SECTION 2. Section 2166.153(a), Government Code, is amended
- 5 to read as follows:
- 6 (a) A project analysis consists of:
- 7 (1) a complete description of the project and a
- 8 justification of the project prepared by the using agency;
- 9 (2) a detailed estimate of the amount of space needed
- 10 to meet the needs of the using agency and to allow for realistic
- 11 growth;
- 12 (3) a description of the proposed project prepared by
- 13 a design professional that:
- 14 (A) includes schematic plans and outline
- 15 specifications describing the type of construction and probable
- 16 materials to be used; and
- 17 (B) is sufficient to establish the general scope
- 18 and quality of construction;
- 19 (4) an estimate of the probable cost of construction;
- 20 (5) a description of the proposed site of the project
- 21 and an estimate of the cost of site preparation;
- 22 (6) an overall estimate of the cost of the project,
- 23 <u>including necessary funding for life-cycle costing</u>, whole building
- 24 integrated design, commissioning, and postoccupancy building
- 25 performance verification;
- 26 (7) information prepared under Section 2166.451 about
- 27 historic structures considered as alternatives to new

- 1 construction;
- 2 (8) an evaluation of energy alternatives and
- 3 energy-efficient architectural and engineering design alternatives
- 4 as required by Sections [Section] 2166.401, 2166.403, and 2166.408;
- 5 and
- 6 (9) other information required by the commission.
- 7 SECTION 3. The section heading to Section 2166.403,
- 8 Government Code, is amended to read as follows:
- 9 Sec. 2166.403. ALTERNATIVE ENERGY AND ENERGY-EFFICIENT
- 10 ARCHITECTURAL AND ENGINEERING DESIGN IN NEW BUILDING CONSTRUCTION.
- 11 SECTION 4. Section 2166.403, Government Code, is amended by
- 12 amending Subsections (b) and (c) and adding Subsections (b-1) and
- 13 (b-2) to read as follows:
- 14 (b) During the planning phase of the proposed construction,
- 15 the commission, or the governing body of the appropriate agency or
- 16 institution that is undertaking a project otherwise exempt from
- 17 this chapter under Section 2166.003, must present a detailed
- 18 <u>written evaluation at</u> [shall verify in] an open meeting to verify
- 19 the economic feasibility of:
- 20 <u>(1) using energy-efficient architectural or</u>
- 21 engineering design alternatives; or
- 22 <u>(2)</u> incorporating into the building's design and
- 23 proposed energy system alternative energy devices for space heating
- 24 and cooling, water heating, electrical loads, and interior
- 25 lighting.
- 26 (b-1) A detailed written evaluation under Subsection (b) must
- 27 be made available to the public at least 30 days before the open

1 meeting at which it is presented.

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- (b-2) In each detailed written evaluation under Subsection (b), the [The] commission or governing body shall determine economic feasibility for each function by comparing the estimated cost of providing energy for all or part of the function using conventional design practices and energy systems or operating under conventional architectural or engineering designs with the estimated cost of providing energy for all or part of the function using alternative energy devices or operating under alternative energy-efficient architectural or engineering designs during the economic life of the building. The comptroller's state energy conservation office, or its successor, must approve any methodology or electronic software used by the commission or governing body, or an entity contracting with the commission or governing body, to make a comparison or determine feasibility under this subsection.
- (c) If the use of alternative 16 energy devices or 17 energy-efficient architectural design alternatives for а particular function is determined to be economically feasible under 18 Subsection (b-2) [$\frac{(b)}{(b-1)}$], the commission or governing body shall 19 include the use of alternative energy devices or energy-efficient 20 21 <u>architectural design alternatives</u> for that function in the construction plans. 22
- 23 SECTION 5. Section 2166.403(d)(1), Government Code, is 24 amended to read as follows:
- 25 (1) "Alternative energy" means a renewable energy
 26 resource. The term includes solar energy, biomass energy,
 27 geothermal energy, and wind energy.

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1 SECTION 6. Subchapter I, Chapter 2166, Government Code, is

2 amended by adding Section 2166.408 to read as follows:

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- Sec. 2166.408. EVALUATION OF ARCHITECTURAL AND ENGINEERING DESIGN ALTERNATIVES. (a) For each project for which a project analysis is prepared under Subchapter D and for which architectural or engineering design choices will affect the energy-efficiency of the building, the commission or the private design professional retained by the commission shall prepare a written evaluation of energy-efficient architectural or engineering design alternatives for the project.
- 11 (b) The evaluation must include information about the

 12 economic and environmental impact of various energy-efficient

 13 architectural or engineering design alternatives, including an

 14 evaluation of economic and environmental costs both initially and

 15 over the life of the architectural or engineering design.
- (c) The evaluation must identify the best architectural and engineering designs for the project considering both economic and environmental costs and benefits.
- SECTION 7. This Act takes effect immediately if it receives a vote of two-thirds of all the members elected to each house, as provided by Section 39, Article III, Texas Constitution. If this Act does not receive the vote necessary for immediate effect, this Act takes effect September 1, 2003.