1-1 Van de Putte S.B. No. 982 By: (In the Senate - Filed March 4, 2005; March 14, 2005, read first time and referred to Committee on Government Organization; April 20, 2005, reported favorably by the following vote: Yeas 6, 1**-**2 1**-**3 1-4 Nays 0; April 20, 2005, sent to printer.) 1-5 1-6 1-7 A BILL TO BE ENTITLED AN ACT 1-8 relating to certain practices to improve energy conservation in 1-9 state buildings. 1-10 1-11 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS: SECTION 1. Subsection (e), Section 447.004, Government 1-12 Code, is amended to read as follows: 1-13 (e) A state agency or an institution of higher education may 1-14 not begin construction of a new state building or a major renovation 1**-**15 1**-**16 project before the design architect or engineer for construction or renovation has: 1-17 (1) certified to the appropriate authority having jurisdiction [agency or institution] that the construction or 1-18 1-19 renovation complies with: 1-20 1-21 <u>(A)</u> the standards established under this section; and 1-22 (B) the alternative energy and energy-efficient 1-23 architectural and engineering design evaluation requirements under Sections 2166.401, 2166.403, and 2166.408; and 1-24 1-25 (2) provided [a copy of that certification] to the 1-26 appropriate authority having jurisdiction and the state energy conservation office copies of: 1-27 1-28 (A) each certification under Subdivision 1-29 and (B) any written evaluation or detailed economic study prepared in accordance with Section 2166.401, 1-30 1-31 2166.403, or 2166.408. 1-32 1-33 SECTION 2. Subsection (a), Section 2166.153, Government 1-34 Code, is amended to read as follows: 1-35 A project analysis consists of: (a) 1-36 (1) a complete description of the project and a justification of the project prepared by the using agency;
(2) a detailed estimate of the amount of space needed 1-37 1-38 1-39 to meet the needs of the using agency and to allow for realistic 1-40 growth; 1-41 a description of the proposed project prepared by (3) 1-42 a design professional that: 1-43 (A) includes schematic plans and 1 - 44specifications describing the type of construction and probable 1-45 materials to be used; and 1-46 is sufficient to establish the general scope (B) and quality of construction; 1 - 471-48 (4)an estimate of the probable cost of construction; 1-49 (5) a description of the proposed site of the project 1-50 and an estimate of the cost of site preparation; 1-51 (6) an overall estimate of the cost of the project, including necessary funding for life-cycle costing, whole building 1-52 1-53 integrated design, commissioning, and postoccupancy building 1-54 performance verification; 1-55 information prepared under Section 2166.451 about 1-56 historic considered alternatives structures as to new 1-57 construction; 1-58 (8) an evaluation of energy alternatives energy-efficient architectural and engineering design alternatives 1-59 1-60 as required by <u>Sections</u> [Section] 2166.401, 2166.403, and 2166.408;

SECTION 3. The section heading to

Government Code, is amended to read as follows:

other information required by the commission.

Section 2166.403,

1-61

1-62

1-63

1-64

and

(9)

Sec. 2166.403. ALTERNATIVE ENERGY AND ENERGY-EFFICIENT ARCHITECTURAL AND ENGINEERING DESIGN IN NEW BUILDING CONSTRUCTION.

2 - 12-2

2-3 2-4

2-5

2-6

2-7 2-8

2-9

2-10 2-11

2-12

2-13

2-14 2**-**15 2**-**16

2-17

2-18

2-19 2**-**20 2**-**21 2-22

2-23

2-24 2**-**25 2**-**26

2-27

2-28 2-29 2-30 2-31

2-32 2-33

2-34

2-35

2-36

2-37

2-38 2-39 2-40

2-41

2-42

2-43

2-44 2-45

2-46 2-47

2-48

2-49

2-50 2-51

2-52 2-53

2-54

2-55

2-56 2-57

2-58

2-59

2-60 2-61 2-62

2-63

2-64

2-65 2-66

2-67

2-68 2-69

SECTION 4. Section 2166.403, Government Code, is amended by amending Subsections (b) and (c) and adding Subsections (b-1) and (b-2) to read as follows:

- (b) During the planning phase of the proposed construction, the commission, or the governing body of the appropriate agency or institution that is undertaking a project otherwise exempt from this chapter under Section 2166.003, must present a detailed written evaluation at [shall verify in] an open meeting to verify the economic feasibility of:
- (1) using energy-efficient architectural engineering design alternatives; or

(2) incorporating into the building's design and proposed energy system alternative energy devices for space heating and cooling, water heating, electrical loads, and interior lighting.

A detailed written evaluation under Subsection must be made available to the public at least 30 days before the open meeting at which it is presented.

(b-2) In each detailed written evaluation under Subsection

- 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 energy devenergy-efficient architectural design alternatives or for а particular function is determined to be economically feasible under Subsection (b-2) [(b)], the commission or governing body shall include the use of alternative energy devices or energy-efficient architectural design alternatives for that function construction plans.

SECTION 5. Subdivision (1), Subsection Section 2166.403, Government Code, is amended to read as follows:

(1) "Alternative energy" means a renewable energy
The term includes solar energy, biomass energy, resource. geothermal energy, and wind energy.

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

amended by adding Section 2166.408 to read as follows:

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.

(b) The evaluation must include information about economic and environmental impact of various energy-efficient architectural or engineering design alternatives, including an evaluation of economic and environmental costs both initially and 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, 2005.

S.B. No. 982

3-1 * * * * *