2	relating to certain practices to improve energy conservation ir
3	state buildings.
4	BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:
5	SECTION 1. Section 447.004, Government Code, is amended by
6	amending Subsection (e) and adding Subsection (f) to read as
7	follows:
8	(e) A state agency [or an institution of higher education]
9	may not begin construction of a new state building or a major
10	renovation project before the design architect or engineer for the
11	construction or renovation has:
12	(1) certified to the appropriate authority having
13	jurisdiction [agency or institution] that the construction or
14	renovation complies with:
15	(A) the standards established under this
16	section; and
17	(B) the alternative energy and energy-efficient
18	architectural and engineering design evaluation requirements under
19	Sections 2166.401, 2166.403, and 2166.408; and
20	(2) provided [a copy of that certification] to <u>the</u>
21	appropriate authority having jurisdiction and the state energy
22	conservation office copies of:

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and

(A) each certification under Subdivision (1);

- 1 (B) any written evaluation or detailed economic
- 2 feasibility study prepared in accordance with Section 2166.401,
- 3 2166.403, or 2166.408.
- 4 (f) An institution of higher education may not begin
- 5 construction of a new state building or a major renovation project
- 6 before the design architect or engineer for the construction or
- 7 renovation has:
- 8 (1) certified to the institution of higher education
- 9 that the construction or renovation complies with the standards
- 10 established under this section; and
- 11 (2) provided to the state energy conservation office a
- 12 copy of that certification.
- SECTION 2. Subsection (a), Section 2166.153, Government
- 14 Code, is amended to read as follows:
- 15 (a) A project analysis consists of:
- 16 (1) a complete description of the project and a
- justification of the project prepared by the using agency;
- 18 (2) a detailed estimate of the amount of space needed
- 19 to meet the needs of the using agency and to allow for realistic
- 20 growth;
- 21 (3) a description of the proposed project prepared by
- 22 a design professional that:
- 23 (A) includes schematic plans and outline
- 24 specifications describing the type of construction and probable
- 25 materials to be used; and
- 26 (B) is sufficient to establish the general scope
- 27 and quality of construction;

- 1 (4) an estimate of the probable cost of construction;
- 2 (5) a description of the proposed site of the project
- 3 and an estimate of the cost of site preparation;
- 4 (6) an overall estimate of the cost of the project,
- 5 including necessary funding for life-cycle costing, whole building
- 6 integrated design, commissioning, and postoccupancy building
- 7 performance verification;
- 8 (7) information prepared under Section 2166.451 about
- 9 historic structures considered as alternatives to new
- 10 construction;
- 11 (8) an evaluation of energy alternatives <u>and</u>
- 12 energy-efficient architectural and engineering design alternatives
- as required by <u>Sections</u> [Section] 2166.401, 2166.403, and 2166.408;
- 14 and
- 15 (9) other information required by the commission.
- 16 SECTION 3. The section heading to Section 2166.403,
- 17 Government Code, is amended to read as follows:
- 18 Sec. 2166.403. ALTERNATIVE ENERGY AND ENERGY-EFFICIENT
- 19 ARCHITECTURAL AND ENGINEERING DESIGN IN NEW BUILDING CONSTRUCTION.
- 20 SECTION 4. Section 2166.403, Government Code, is amended by
- 21 amending Subsections (b) and (c) and adding Subsections (b-1),
- 22 (b-2), (c-1), and (c-2) to read as follows:
- 23 (b) Except as provided by Subsection (c-1), during [During]
- 24 the planning phase of the proposed construction, the commission, or
- 25 the governing body of the appropriate agency [or institution] that
- 26 is undertaking a project otherwise exempt from this chapter under
- 27 Section 2166.003, must present a detailed written evaluation at

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- 1 [shall verify in] an open meeting to verify the economic
- 2 feasibility of:
- 3 (1) using energy-efficient architectural or
- 4 engineering design alternatives; or
- 5 (2) incorporating into the building's design and
- 6 proposed energy system alternative energy devices for space heating
- 7 and cooling, water heating, electrical loads, and interior
- 8 lighting.
- 9 (b-1) A detailed written evaluation under Subsection (b)
- 10 must be made available to the public at least 30 days before the
- open meeting at which it is presented.
- 12 (b-2) In each detailed written evaluation under Subsection
- 13 (b), the [The] commission or governing body shall determine
- 14 economic feasibility for each function by comparing the estimated
- 15 cost of providing energy for <u>all or part of</u> the function using
- 16 conventional design practices and energy systems or operating under
- 17 <u>conventional architectural or engineering designs</u> with the
- 18 estimated cost of providing energy for all or part of the function
- 19 using alternative energy devices or operating under alternative
- 20 energy-efficient architectural or engineering designs during the
- 21 economic life of the building. The comptroller's state energy
- 22 <u>conservation office</u>, or its successor, must approve any methodology
- or electronic software used by the commission or governing body, or
- 24 an entity contracting with the commission or governing body, to
- 25 make a comparison or determine feasibility under this subsection.
- 26 (c) If the use of alternative energy devices <u>or</u>
- 27 energy-efficient architectural design alternatives for

- 1 particular function is determined to be economically feasible under
- 2 Subsection (b-2) [(b)], the commission or governing body shall
- 3 include the use of alternative energy devices or energy-efficient
- 4 <u>architectural design alternatives</u> for that function in the
- 5 construction plans.
- (c-1) For a project constructed by and for a state 6 7 institution of higher education, the governing body of the institution shall, during the planning phase of the proposed 8 construction for the project, verify in an open meeting the 9 10 economic feasibility of incorporating into the building's design and proposed energy system alternative energy devices for space 11 heating and cooling functions, water heating functions, electrical 12 13 load functions, and interior lighting functions. The governing body of the institution shall determine the economic feasibility of 14 each function listed in this subsection by comparing the estimated 15 16 cost of providing energy for the function, based on the use of conventional design practices and energy systems, with the 17 estimated cost of providing energy for the function, based on the 18 use of alternative energy devices, during the economic life of the 19 20 building.
- 21 (c-2) If the use of alternative energy devices for a
 22 specific function is determined to be economically feasible under
 23 Subsection (c-1), the governing body shall include the use of
 24 alternative energy devices for that function in the construction
- 25 plans for the project.
- SECTION 5. Subdivision (1), Subsection (d), Section
- 27 2166.403, Government Code, is amended to read as follows:

- 1 (1) "Alternative energy" means a renewable energy
- 2 resource. The term includes solar energy, biomass energy,
- 3 geothermal energy, and wind energy.
- 4 SECTION 6. Subchapter I, Chapter 2166, Government Code, is
- 5 amended by adding Section 2166.408 to read as follows:
- 6 Sec. 2166.408. EVALUATION OF ARCHITECTURAL AND ENGINEERING
- 7 DESIGN ALTERNATIVES. (a) For each project for which a project
- 8 analysis is prepared under Subchapter D and for which architectural
- 9 or engineering design choices will affect the energy-efficiency of
- 10 the building, the commission or the private design professional
- 11 retained by the commission shall prepare a written evaluation of
- 12 energy-efficient architectural or engineering design alternatives
- 13 for the project.
- 14 (b) The evaluation must include information about the
- 15 economic and environmental impact of various energy-efficient
- 16 architectural or engineering design alternatives, including an
- 17 evaluation of economic and environmental costs both initially and
- 18 over the life of the architectural or engineering design.
- 19 (c) The evaluation must identify the best architectural and
- 20 engineering designs for the project considering both economic and
- 21 environmental costs and benefits.
- 22 SECTION 7. This Act takes effect immediately if it receives
- 23 a vote of two-thirds of all the members elected to each house, as
- 24 provided by Section 39, Article III, Texas Constitution. If this
- 25 Act does not receive the vote necessary for immediate effect, this
- 26 Act takes effect September 1, 2005.

S.B. No. 982

Speaker of the House

I hereby certify that S.B. No. 982 passed the Senate on April 28, 2005, by the following vote: Yeas 31, May 26, 2005, Senate refused to concur in House amendments and requested appointment of Conference Committee; May 27, 2005, House granted request of the Senate; May 29, 2005, Senate adopted Conference Committee Report by the following vote: Yeas 31, Nays 0. Secretary of the Senate I hereby certify that S.B. No. 982 passed the House, with amendments, on May 25, 2005, by the following vote: Yeas 143, Nays 0, two present not voting; May 27, 2005, House granted request of the Senate for appointment of Conference Committee; May 29, 2005, House adopted Conference Committee Report by the following vote: Yeas 137, Nays 0, three present not voting. Chief Clerk of the House Approved:

President of the Senate

Date

Governor