

SENATE STAFF ANALYSIS AND ECONOMIC IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

BILL: CS/SB 1368

SPONSOR: Regulated Industries Committee and Senator Saunders

SUBJECT: Engineering

DATE: March 1, 2004 REVISED: 3/2/04 _____

| | ANALYST | STAFF DIRECTOR | REFERENCE | ACTION |
|----|---------------|----------------|------------|------------------------|
| 1. | <u>Sumner</u> | <u>Imhof</u> | <u>RI</u> | <u>Favorable/CS</u> |
| 2. | <u>Kruse</u> | <u>Maclure</u> | <u>CM</u> | <u>Fav/1 amendment</u> |
| 3. | _____ | _____ | <u>AGG</u> | _____ |
| 4. | _____ | _____ | <u>AP</u> | _____ |
| 5. | _____ | _____ | _____ | _____ |
| 6. | _____ | _____ | _____ | _____ |

I. Summary:

The committee substitute amends the law regulating engineers as follows:

- Increases the number of members on the Board of Professional Engineers in the Department of Business and Professional Regulation from nine to eleven. Requires the two new members of the board to be a licensed structural engineer and a licensed industrial engineer.
- Provides that an applicant for licensure as an engineer will be deemed to have passed the fundamentals examination if the applicant has received a doctorate degree in engineering from an institution that has an accredited undergraduate engineering program and has taught engineering full-time for at least 3 years.
- Decreases from five to three the number of times an engineer applicant may take the fundamentals examination or the principles and practice examination.
- Removes the requirement that the applicant take college-level courses *in the areas of deficiency, as determined by the board*, if an applicant fails either examination three times. The applicant must still take college-level education courses in order to reapply for examination.
- Provides an exemption from the prohibition on use of the title “engineer.” The exemption applies to a person who is exempt from licensure because the person provides design or fabrication of manufactured products and servicing of the products for a corporation not engaged in the practice of engineering, or the person is a subordinate of a licensed engineer who is in responsible charge. Additionally, the person must be a graduate of an

approved engineering curriculum of 4 years or more in a school, college, or university which has been approved by the board.

This committee substitute substantially amends the following sections of the Florida Statutes: 471.007, 471.013, and 471.031.

II. Present Situation:

The Department of Business and Professional Regulation (DBPR) has oversight over engineers, but the testing and licensure of engineers is operated exclusively by the Board of Professional Engineers. A consumer or business may verify the licensure of a person claiming to be an engineer on DBPR's website.¹ Section 471.007, F.S., provides for nine members on the Board of Professional Engineers, with seven of its members being licensed engineers and two being laypersons who are not, and not connected with, engineers. Of those seven licensed engineers, three must be civil engineers, one must be either an electrical or electronic engineer, one must be a mechanical engineer, one must be an engineering educator, and one must be from any discipline of engineering other than civil engineering. Members are appointed by the Governor for terms of four years each.

Section 471.013, F.S., provides for the examination prerequisites for persons seeking to be qualified to practice engineering in Florida. It allows every qualified applicant to take the fundamentals examination or the principles and practice examination five times, notwithstanding the number of times either examination has been previously failed. If the applicant fails either examination five times, the board requires the applicant to complete additional college-level education courses in the areas of deficiency, as determined by the board.² The section requires an applicant to take and pass the fundamentals exam prior to taking the principles and practice examination.³ The current statute does not provide a method for an applicant to bypass the fundamentals examination and take the principles and practice examination regardless of the applicant's level of education and teaching experience in engineering.

Section 471.031, F.S., regarding prohibitions and penalties, prohibits a person, unless the person is licensed, from using the name or title "professional engineer" or any other title, designation, words, letter, abbreviations, or device tending to indicate that such person holds an active license as an engineer when the person is not licensed under ch. 471, F.S. The prohibited titles include, but are not limited to, "agricultural engineer," "air-conditioning engineer," "architectural engineer," "building engineer," "chemical engineer," "civil engineer," "control systems engineer," "electrical engineer," "environmental engineer," "fire protection engineer," "industrial engineer," "manufacturing engineer," "mechanical engineer," "metallurgical engineer," "mining engineer," "minerals engineer," "marine engineer," "nuclear engineer," "petroleum engineer," "plumbing engineer," "structural engineer," "transportation engineer," "software engineer," "computer hardware engineer," or "systems engineer."

¹ Department of Business and Professional Regulation, License Search, at <https://www.myfloridalicense.com/default.asp> (last visited March 1, 2004).

² Section 471.013(1)(d), F.S.

³ *Id.* at (c).

Section 471.003, F.S., provides several exemptions from licensure including “[r]egular full-time employees of a corporation not engaged in the practice of engineering as such, whose practice of engineering for such corporation is limited to the design or fabrication of manufactured products and servicing of such products” and “[e]mployees of a firm, corporation, or partnership who are the subordinates of a person in responsible charge, licensed under this chapter.”⁴

In the 2003E Special Session, the Legislature amended s. 471.003, F.S., s. 471.005, F.S., and s. 471.031, F.S., to create an exemption from licensure requirements for defense, space, and aerospace companies and employees conducting specified engineering services in Florida.⁵ (See ch. 2003-425, L.O.F.) The exemption allows a person to use the title or personnel classification of “engineer” within the scope of the work conducted under the exemption as long as the title does not include or connote the term “professional engineer,” “registered engineer,” “licensed engineer,” “registered professional engineer,” or “licensed professional engineer.”⁶ The amendments included specific definitions for “space or aerospace company” and “defense company.”⁷

III. Effect of Proposed Changes:

The committee substitute amends s. 471.007, F.S., to provide for an increase, from nine to eleven, in the number of members on the Board of Professional Engineers. The two new members must be a licensed structural engineer and a licensed industrial engineer.

The committee substitute amends s. 471.013(1), F.S., to provide that an applicant for licensure as an engineer will be deemed to have passed the fundamentals examination if the applicant has received a doctorate degree in engineering from an institution that has an undergraduate engineering program that is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineers and Technology, Inc., and has taught engineering full-time for at least 3 years, at the baccalaureate level or higher, after receiving the doctorate degree.

The committee substitute also amends s. 471.013(1), F.S., to decrease, from five to three, the number of times an engineer applicant may take the fundamentals examination or the principles and practice examination. It also eliminates the requirement that an applicant take additional college-level education courses *in the areas of deficiency, as determined by the board*, when an applicant fails the examination three times. An applicant must still take college-level education courses as a condition of future eligibility to take the examination.

The committee substitute also amends s. 471.031(1)(b), F.S., to provide an exemption from the prohibition on the use of the title “engineer.” The change will allow unlicensed individuals who are exempt from licensure under s. 471.003(2)(c) and (e), F.S., to use the title or personnel classification of “engineer” in the scope of their work if the title does not include or connote the term “professional engineer,” “registered engineer,” “licensed engineer,” “registered professional engineer,” or “licensed professional engineer,” and if that person is a graduate of an approved engineering curriculum of 4 years or more in a school, college, or university which has been

⁴ Section 471.003(2)(c) & (e), F.S.

⁵ Section 471.003(2)(j), F.S.

⁶ Section 471.031(1)(b)2., F.S.

⁷ Section 471.005(12) & (13), F.S.

approved by the board. The persons affected by this exemption are “[r]egular full-time employees of a corporation not engaged in the practice of engineering as such, whose practice of engineering for such corporation is limited to the design or fabrication of manufactured products and servicing of such products” and “[e]mployees of a firm, corporation, or partnership who are the subordinates of a person in responsible charge, licensed under this chapter.”

The committee substitute will take effect upon becoming a law.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

V. Economic Impact and Fiscal Note:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

None.

C. Government Sector Impact:

According to the Department of Business and Professional Regulation, the committee substitute will reduce regulation on the use of the title “engineer.”

VI. Technical Deficiencies:

The title of the committee substitute does not address the reduction, from five to three, in the number of times an applicant may take the fundamentals or principles and practice examinations or the proposed changes to the college-level education courses that must be taken to be eligible in the future to take either examination. The Legislature may wish to amend the committee substitute’s title to add in these provisions.

VII. Related Issues:

None.

VIII. Amendments:

#1 by Commerce, Economic Opportunities, & Consumer Services:

Amends the title to incorporate the changes made by the committee substitute to the number of times an engineer applicant may take certain licensure examinations and the college-level education courses that an applicant must complete as a condition of future eligibility to take the examinations if the applicant fails the examinations the specified number of times.

This Senate staff analysis does not reflect the intent or official position of the bill's sponsor or the Florida Senate.
