#### 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:	Committee on Regulated Industries and Senator Saunders						
SUBJECT:	Engineering						
DATE:	February 19, 2	2004 REVISED: _					
ANA	ALYST	STAFF DIRECTOR	REFERENCE	ACTIO	N		
1. Sumner		Imhof	RI	Fav/CS			
2.	_		CM				
3.			AGG				
4.	<u>.</u>		AP				
5.							
6.							

# I. Summary:

The bill 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 (board) 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 a professional engineer applicant may fail the fundamentals examination or the principles and practice examination.
- Eliminates the requirement that the applicants take additional college level education courses in the areas of deficiency when an applicant fails the fundamentals or the principles and practice examination three times.
- Provides an exemption from the prohibition of use of the title "engineer." The title
  exemption extends to those who are exempt from licensure because they are employees
  providing design or fabrication of manufactured products and servicing of the products
  for a corporation not engaged in the practice of engineering or they are subordinates of a
  licensed engineer who is in responsible charge. Additionally they must be a graduate of

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

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

#### II. Present Situation:

Section 471.007, F.S., provides for nine members on the board with seven of its members being licensed 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.

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 exam 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.

Section 471.031, F.S. prohibits 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," "mining engineer," "marine engineer," "nuclear engineer," "petroleum engineer," "plumbing engineer," "structural engineer," "transportation engineer," "software engineer," "computer hardware engineer," or "systems engineer."

#### III. Effect of Proposed Changes:

Section 471.007, F.S., is amended to provide for an increase in the number of members on the board from nine to eleven. The two new members are required to be a licensed structural engineer and a licensed industrial engineer.

The bill amends s. 471.013(1)(d), 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.

<sup>&</sup>lt;sup>1</sup> This prohibition was part of a 2002 legislative change, ch. 2002-299, L.O.F.

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The amendment in s. 471.013(1)(e), F.S., decreases from five to three the number of times a professional engineer applicant may fail the fundamentals examination or the principles and practice examination. It also eliminates the requirement that the 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.

The bill amends s. 471.031, F.S., to provide an exemption from the prohibition of the use of the title "engineer" found in s. 471.031(1)(b), F.S. It 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 that has been approved by the department.

Section 471.003(2)(c), F.S., includes regular 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.

Section 471.003(2)(e), F.S., includes employees of a firm, corporation, or partnership who are subordinates of a person in responsible charge, licensed under ch. 471, F.S.

### 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:

According to the department, private companies that changed the titles of their unlicensed employees after the title prohibition was adopted in the 2002 legislative session will have the expense of changing the titles to what they were prior to the 2002 legislation. This is optional for the companies, but it is anticipated that many will do so to reclaim the use of

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the title "engineer" for many of their unlicensed employees who have an approved engineering degree. It is unknown how many companies changed their titles or will be affected.

Further, the department provides that the bill will save resources for private companies that did not change the employee titles for unlicensed engineers after the title prohibition was adopted in the 2002 Legislative Session.

### C. Government Sector Impact:

According to the department, the bill will reduce regulation on the use of the title "engineer."

VI.	Technical	<b>Deficiencies:</b>	

None.

## VII. Related Issues:

None.

#### VIII. Amendments:

None.

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