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**Details:** 

(FORM UPDATED: 08/11/2010)

# WISCONSIN STATE LEGISLATURE ... PUBLIC HEARING - COMMITTEE RECORDS

2007-08

(session year)

#### Senate

(Assembly, Senate or Joint)

Committee on ... Labor, Elections and Urban Affairs (SC-LEUA)

#### **COMMITTEE NOTICES ...**

- Committee Reports ... CR
- Executive Sessions ... ES
- Public Hearings ... PH

### INFORMATION COLLECTED BY COMMITTEE FOR AND AGAINST PROPOSAL

- Appointments ... Appt (w/Record of Comm. Proceedings)
- Clearinghouse Rules ... CRule (w/Record of Comm. Proceedings)
- Hearing Records ... bills and resolutions (w/Record of Comm. Proceedings)

(ab = Assembly Bill)

(ar = Assembly Resolution)

(ajr = Assembly Joint Resolution)

(**sb** = Senate Bill)

(**sr** = Senate Resolution)

(sir = Senate Joint Resolution)

Miscellaneous ... Misc



#### WISCONSIN LEGISLATIVE COUNCIL

Terry C. Anderson, Director Laura D. Rose, Deputy Director

TO:

SENATOR SPENCER COGGS

FROM:

Russ Whitesel, Senior Staff Attorney

RE:

2007 Assembly Bill 69

DATE:

February 25, 2008

• This memorandum, prepared at your request, briefly describes the provisions of Senate Amendment 1 to 2007 Assembly Bill 69, relating to registration requirements for professional engineers.

Under Assembly Bill 69, the requirements for registration as a professional engineer would be increased. Specifically, under Assembly Bill 69, an applicant for registration as a professional engineer would be required to submit satisfactory evidence of graduation from an approved engineering course of not less than *four* years and a record of four or more years of experience indicating the applicant is competent to be placed in charge of engineering work. Senate Amendment 1 provides that as an alternative to the engineering course of four years, an applicant may utilize a diploma of graduation or degree from a technical college in an engineering-related course of study of not less than *two* years.

The amendment also provides that an applicant possessing a diploma or certificate from a course of study of not less than four years as specified in the bill, must also have a specific record of *four* or more years of experience in engineering work of a character satisfactory to the Examining Board and indicating the applicant is competent to be placed in charge of engineering work.

The amendment also specifies that for an applicant possessing a diploma or degree from a course of study of not less than two years as specified in the amendment, must have a specific record of *six* or more years of experience in engineering work of a character satisfactory to the Examining Board and indicating the applicant is competent to be placed in responsible charge of engineering work must be provided.

The amendment makes no other changes in the requirements for licensure of professional engineers.

Assembly Bill 69 was passed by the Assembly on a voice vote on January 15, 2008. Senate Amendment 1 to 2007 Assembly Bill 69 was offered on February 19, 2008 by Senate Plale.

RW:jal:jb



# WISCONSIN STATE LEGISLATURE



#### Plotkin, Adam

From:

Dale M. Cherney [dalemcherney@bytehead.com]

Sent:

Tuesday, February 26, 2008 9:12 AM

To:

Sen.Coggs

Subject:

**AB-69** 

Attachments: WSPE Reply.doc

Senator:

The attachment indicates a desire for you to back AB-69 in the interests of the citizens of Wisconsin and the registered P.E.'s in the state.

Dale M. Cherney P.E. President Fox Valley Chapter WSPE 1133 Whittier Avenue Howards Grove, Wisconsin 53083 (920)-565-3271 Cell (920)-980-0289



# WISCONSIN STATE LEGISLATURE



#### Plotkin, Adam

From: Mike Coleman [MColeman@westbrookeng.com]

Sent: Wednesday, February 27, 2008 7:22 AM

To: Sen.Coggs; Sen.Wirch; Sen.Lehman; Sen.Grothman; Sen.Lasee

Subject: AB69 - Public Hear 2/27/08 - please enter this email and attached document as documentation and statement on

my behalf in reference to AB69 public hearing

I see that there is a public hearing scheduled for AB69. I cannot attend to this hearing today, however I would like it to be entered that I am opposed to AB69 as it is presented. I understand that Senator Plale has proposed an ammendment which states the following:

"a diploma of graduation or degree from a technical college in an engineering-related course of study of not less than 2 years and a specific record of 6 or more years of experience in engineering work of a character satisfactory to the examining board and indicating that the applicant is competent to be placed in responsible charge of engineering work".

I would support the ammendment to AB69.

I am a graduate of MATC with an Associates Degree in Civil Engineering Technology. I have 16 years of experience in Highway Design. I have been approved by the liscensing board to take the Professional Engineering Exam. If AB69 passes as originally submitted, I will never have the opportunity to not only become a Professional Engineer but to advance in my career.

#### Michael P. Coleman

Senior Engineering Technician Westbrook Associated Engineers, Inc. 619 East Hoxie Street PO Box 429 Spring Green, WI 53588

Phone: (608) 588-7866 Fax: (608) 588-7954

Email: mcoleman@westbrookeng.com



# WISCONSIN STATE LEGISLATURE





Speaker Pro Tempore Wisconsin State Assembly

Testimony of Rep. Mark Gottlieb
Assembly Bill 69
Senate Committee on Labor, Elections and Urban Affairs
February 27, 2008

Chairman Coggs and Members:

Thank you for holding this public hearing on Assembly Bill 69 (AB 69), relating to registration requirements for professional engineers.

At the request of the Professional Engineers Section of the Examining Board of Architects, Landscape Architects, Professional Engineers, Designers and Land Surveyors in the Wisconsin Department of Regulation and Licensing, I introduced AB 69 to make several changes to the licensure requirements for professional engineers.

Under current law, a person can obtain registration as a professional engineer either by completing an approved four-year college program and having a specific amount of additional experience, or by experience only, without a degree from an approved four-year college program. This bill removes the ability to obtain registration through experience only, thus requiring every applicant to have a degree from an approved four-year college program, as well as four additional years of experience.

Additionally, current law requires that all applicants for registration as a professional engineer complete a written examination on the skills required to practice engineering, except that an applicant with a degree from an approved four-year college program who has eight years experience is not required to take the examination. This bill eliminates that exemption, thus requiring every applicant to complete the written examination.

The Examining Board believes these changes are warranted because they are witnessing an ever-increasing number of applicants who are opting to secure their professional engineer registration using the work experience path. However, this "experience path" does not meet the higher standards, such as a mandatory examination, that are being established in the vast majority of states in the nation – making our engineers less competitive in the global market place. Additionally, applicants who fail the examination routinely use the "experience path" as their means to obtain their registration. The Board strongly suggests that this loophole needs to be closed to maintain the integrity of Wisconsin's professional engineering licensure application process.

In short, Assembly Bill 69 standardizes the requirements for obtaining registration as a professional engineer by requiring every applicant to have an appropriate college degree, show competency by completing an examination, and have four additional years of appropriate experience.

Senate Amendment 1, introduced by Senator Plale, would allow a person with a two-year technical college degree plus six years of experience to sit for the P.E. exam. I believe this amendment takes us in the wrong direction with regard to bringing Wisconsin into line with other states and with accepted national standards on the minimum educational requirements for licensure. Nonetheless, even an amended bill accomplishes much to improve licensure requirements. Therefore, I encourage you to support the bill, with or without Senate Amendment 1.

I want to thank this committee for its willingness to find a compromise and move this legislation forward.

Thank you for the opportunity to testify before you today.



# WISCONSIN STATE LEGISLATURE





#### The American Council of Engineering Companies of Wisconsin

3 S Pinckney Street, Suite 800 Madison, WI 53703 Tel: 608-257-9223 Fax: 608-257-0009 www.acecwi.org

the business voice of the Wisconsin consulting engineering industry

February 27, 2008

of Wisconsin

Senator Spencer Coggs Senate Committee on Labor, Elections, and Urban Affairs Wisconsin State Senate Madison, WI

RE: AB 69 - Professional Engineer Registration and Licensing

Dear Senator Coggs and Members of the Committee on Labor, Elections and Urban Affairs:

Thank you for holding a public hearing on AB69. The American Council of Engineering Companies of Wisconsin (ACEC WI) supports AB 69 and encourages passage of this bill. This proposed legislation strengthens the requirement for licensure of professional engineers (PE) and assures a higher level of protection for Wisconsin's citizens. It is good public policy.

Through this bill, licensure is reserved for the most qualified engineers. To receive PE licensure, the legislation requires:

O Passage of the fundamentals of engineering examination

O A minimum of 4 years of increasing experience

O Supporting statements from references

O Board recognition that qualifications have been met to sit for the principles and practices of engineering exam

o Passage of the principles and practices of engineering exam

This legislation is important to the industry, as continuation of current law is jeopardizing Wisconsin professional engineers' ability to practice in other states. The current PE licensure requirement is not considered sufficient in a growing number of states and licensure reciprocity is being denied. Wisconsin needs to have an industry that is competitive nationally and globally.

The current practice may allow the granting of credentials to those engineers who have not gone through the rigorous education and training that is required by AB 69. It does not protect the public to the degree that this new proposal would.

AB 69 is not career limiting. A PE credential is not necessary for individuals to do engineering. Elements of project development can and are being performed by non-PEs, engineers, and technicians with a variety of education and experience backgrounds. The PE licensure is reserved for the individual in responsible charge, the individual who stamps the plan.

ACEC WI acknowledges Senate Amendment 1. While our position would favor the requirement of a 4-year engineering degree, allowing technical college graduates with engineering related course of study to sit for the PE exam is acceptable to this industry. The amended bill still strengthens and standardizes licensure requirements and increases the public trust in the profession.

Sincerely,

Carol Godiksen
Executive Director

A

50th Anniversary
ACEC

Building Wisconsin One Project at a Time



# WISCONSIN STATE LEGISLATURE



22 North Carroll Street · Suite 103 · Madison, WI 53703 · 608.266.9430 · 608.266.7898 · Fax 608.266.0122

#### February 27, 2008

## Testimony Concerning AB 69 Requirements to Become a Professional Engineer

Before the Senate Committee on Labor, Elections and Urban Affairs Senator Spencer Coggs, Chair

Senator Coggs and distinguished members of the Committee,

The Wisconsin Technical College District Boards Association opposes AB 69 as originally introduced because it would greatly disadvantage engineers with Wisconsin Technical College training who seek to earn the professional engineer (PE) credential. We appreciate the sponsor's and the committee's consideration of Senate Amendment 1 to the bill. We believe that Senate Amendment 1 remedies our concerns and we do not oppose AB 69 as amended by Senate Amendment 1.

The PE credential is earned based on significant professional experience, rather than strictly academic credential. This is very different than a field such as nursing, in which both 2-year technical college and 4-year bachelors nursing graduates may sit for the same exam immediately after completing their studies. A graduate of either program earns the RN credential after the degree and upon entering the profession. For the PE, years of work as an engineer that is acceptable to the Examining Board is required after either 2-year or 4-year courses of study before the individual qualifies to become a PE. In all cases, we support that this academic work and this professional work be reviewed by and acceptable to the Examining Board, and be of the same total minimum number of years.

Senate Amendment 1 preserves the longstanding and critical pathway to earning a PE for Wisconsin Technical College graduates while realizing important improvements to the PE qualification process. Under the bill as amended, all Wisconsin PE's will have:

- The same total minimum years of academic and professional work, all of which is approved by the Examining Board, and
- Successful completion, without exception, of the same level of examination as administered by the Board.

While many Wisconsin Technical College-trained engineers go on to earn a bachelors degree, the path is sometimes limited. Both Marquette University and the Milwaukee School of Engineering offer direct "2+2" or "2+3" bachelors degree completion programs for technical college graduates. In contrast, transfer/degree completion programs are not readily available through UW institutions. Place-bound Wisconsin engineers working outside the Milwaukee area contribute greatly to the profession's vitality, the needs of Wisconsin engineering firms, and the engineering needs of Wisconsin communities. However, these engineers may not have options available to complete the bachelors degree without leaving their employment and out-state community.

In a time when highly skilled professionals are needed as quickly as possible across Wisconsin's economy, Senate Amendment 1 to AB 69 assures that we do not lose great engineers to other states because they have a viable path to become a PE by leaving. Without the amendment, we may lose more engineers to other states both because there are better transfer opportunities to complete a bachelors degree, and, importantly, because many other states provide for engineers without a bachelors degree to earn the PE credential.

On behalf of Wisconsin Technical College District Boards, we thank Senator Plale and members of the committee for protecting technical college graduates while assuring the PE credential is appropriately strengthened. We do not oppose the bill as amended by Senate Amendment 1.

For Wisconsin Technical College District Board Members,

Paul Gabriel Executive Director



# WISCONSIN STATE LEGISLATURE





#### Testimony on Senate Amendment 1 to Assembly Bill 69 Senate Committee on Labor, Elections and Urban Affairs February 27, 2008

## Morna Foy, Executive Assistant Wisconsin Technical College System

Good afternoon. I would like to thank Chairman Coggs and the members of the Committee for providing this opportunity to comment on Assembly Bill 69 and to register the Wisconsin Technical College System's (WTCS) support for this proposal as amended by Senate Amendment 1. The WTCS believes that AB 69, if amended as proposed, will simplify and clarify the prerequisites necessary to take the Professional Engineer (PE) licensure exam and will improve the consistency of state licensure processes while recognizing Wisconsin's unique educational assets.

Wisconsin's technical colleges offer associate degree programs in a variety of engineering fields: civil, electronic, highway, industrial, applied, and electrical. Last year, over 1,200 students were enrolled in these programs. While it is not necessary to be a PE to work as an engineer, the PE license is required to approve engineering projects and, therefore, represents the highest level of engineer and has the highest earning potential. Under current law, WTCS graduates of engineering associate degree programs with appropriate work experience are eligible to sit for the PE exam and be certified as Professional Engineers.

Under the current version of AB 69, eligibility to sit for the PE licensure exam would be limited to individuals with a baccalaureate degree and four years of appropriate work experience. It is important to keep in mind that as a post-academic professional credential, the PE license is an indication of an individual's overall professional competency, not their academic credentials. As such, it would make sense to limit eligibility to those who are best able to achieve the industry's professional standards. I am unaware of any evidence suggesting that technical college graduates with appropriate work experience make for less qualified PE applicants or less effective PEs than individuals with baccalaureate degrees.

The PE license is also a nationally recognized, portable credential and, as such, it makes sense that the profession would advocate for a consistent licensing process, which in the case of engineering, combines academic and work experience requirements. As a result, the provision in AB 69 and Senate Amendment 1 that eliminates the ability of those without specific engineering academic degrees from sitting for the PE exam will improve the consistency of Wisconsin's licensure process with other states.

In contrast, limiting eligibility to only those with a baccalaureate degree does not provide a consistency benefit or acknowledge the importance of Wisconsin technical college

Senate Labor, Elections and Urban Affairs February 27, 2008 Page 2 of 2

engineering programs and graduates in addressing the state's workforce needs. Many other states allow individuals with associate degrees and excellent professional experience to sit for the PE exam and be registered as a PE without earning a baccalaureate degree. Recent estimates suggest that jobs in the engineering sector will grow over 10% this decade and that Wisconsin's universities and colleges are graduating only two-thirds of the science and engineering students that the state's industries need each year.

Access to baccalaureate degree programs varies for technical college engineering program students and graduates. Transfer is quite fluid and seamless from the WTCS to engineering programs at Marquette and the Milwaukee School of Engineering, which has been very beneficial to the state's economy in the southeast. However, while the WTCS will continue to pursue new transfer opportunities, such as the recently announced collaborating engineering program between UW-Stout, UW-Green Bay and Northeast Wisconsin Technical College, transfer from WTCS engineering programs to University of Wisconsin baccalaureate degree programs remains very challenging.

Preserving the current eligibility option for PE licensure for technical college graduates encourages interest in engineering careers at a time when the engineering sector is experiencing workforce shortages, while still encouraging students to pursue further academic credentials and encouraging institutions to work together to build seamless educational pathways.

On behalf of current technical college engineering students, WTCS engineering graduates and our employer partners in the engineering industry, the WTCS asks your support for Senate Amendment 1 to AB 69.

Thank you for the opportunity to comment today. I would be happy to answer any questions.



# WISCONSIN STATE LEGISLATURE



#### **Testimony**

Wisconsin Senate

**PUBLIC HEARING** 

Committee on Labor, Elections, and Urban Affairs

Wednesday, February 27, 2008

1:05 PM

300 Southeast

**State Capitol** 

Assembly Bill 69

Martin J. Hanson, PE

Joint Board of Architects, Landscape Architects,

Professional Engineers, Designers & Land Surveyors--Chairman

Professional Engineers Section--Chairman

Chairman Coggs and honorable members of the Wisconsin Senate

Committee on Labor, Elections and Urban Affairs:

#### Committee on Labor, Elections and Urban

#### **Affairs**

Senator Spencer Coggs, chair

Senator Robert Wirch, vice-chair

Senators John Lehman, Glenn Grothman, Alan

Lasee, members

My name is Martin Hanson and I am a professional engineer.

I am presenting testimony on behalf of the Wisconsin Joint Board of Architects, Landscape Architects, Professional Engineers, Designers & Land Surveyors, where I am chairman, and the Engineers Section of the Joint Board, where I am also chairman; both boards have authorized me to

speak on behalf of the respective body. I am also a member of several professional organizations who also support this legislation.

I would like to thank the chairman for scheduling the hearing on this important legislation, and I would like to thank Representative Gottlieb for his hard work on this bill. Today, I intend to provide testimony on this legislation to inform, and answer your questions to convey the purpose behind the changes included in Assembly Bill 69.

I have been working on some of these changes since I was first appointed to the board six years ago. This legislation is strongly supported by the Engineers Section and is likewise strongly supported by the Joint Board of Architects, Landscape Architects, Professional Engineers, Designers & Land Surveyors.

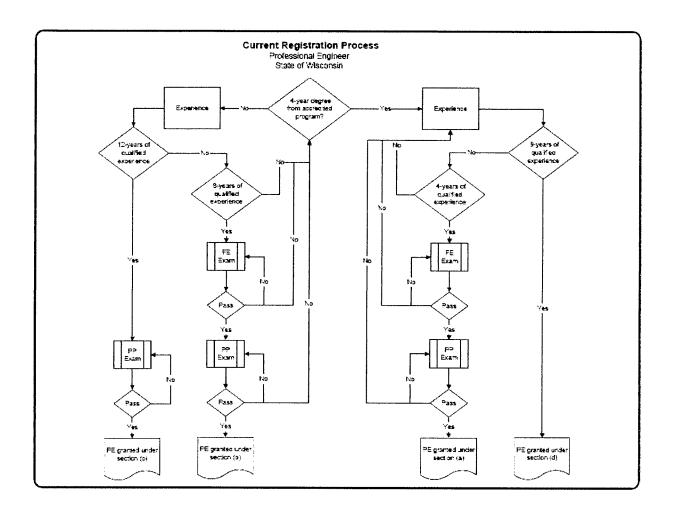
I am also happy to report that this bill has received the support of members of the American Society of Civil Engineers, Wisconsin Section, the Wisconsin Society of Professional Engineers (WSPE), and the American Council of Engineering Companies of Wisconsin (ACEC WI). The bill has been discussed by the Alliance for Technical Professions, a consortium of

engineering professionals and affiliated groups interested in legislation and rule making, and how both affect the public health, safety, and welfare. I have also received letters and phone calls in support of this bill from my many collqueges in the industry.

This bill does three simple things. First, it streamlines the licensure process for engineers; second, it eliminates the review of examinations; and thirdly, it eliminates the statutory need for testing in a specific area. All of these changes in the statutes for professional engineers and are long overdue. I will address each change separately.

#### STREAMLINING LICENSURE

The current path to licensure in Wisconsin is very complex. There are numerous paths and branches as shown in Exhibit 1 from the Wisconsin Department of Regulation and Licensing web site.



**EXHIBIT 1** 

This bill eliminates all the alternate paths to licensure and prescribes a single path, one set of requirements, and one standard for all applicants.

That path will be, in sequential order:

Obtain an engineering degree from an ABET or Board approved institution

- 2. Pass the 8-hour Fundamentals of Engineering exam (national exam)
- 3. Obtain 4 years of qualifying engendering experience
- 4. Pass the 8-hour Principles and Practice exam (national exam)

The most abused path to licensure in the current law is the approved degree plus 8 years of qualified experience. This path forces the board, two of whom are public members with limited technical qualifications and knowledge, to make subjective judgments on applicants' qualifications for ENCINETE SECTION 155 MEMBERS, POSSIBLE QUOTUM Z PORCE | licensure. We do not believe this is good public policy and obstructs the PROFESSIGNAL board's mission of protecting public health, safety, and welfare. This path is sometimes referred to as the "grandfather" clause or path, as it was likely enacted in very early licensure legislation to allow current practitioners the ability to become licensed.

This path, and all other paths in the current law, are repealed by Assembly Bill 69. Applicants will all have a consistent and standardized path to licensure. The Board will evaluate each candidate against the same criteria.

Examinations by themselves do not ensure the competency of any

engineer: But we believe the exam is a far better and more consistent

measure than a subject review of a resume of experience.

Professional Engineers who obtain their license in Wisconsin by this "grandfather" clause are severely disadvantaged in other states when applying for licensure by comity. Most states do not recognize or accept the Wisconsin license granted by experience because it was not obtained by the more common examination path. Wisconsin professional engineers typically must take the Principles and Practice exam in the state they wish to practice in. Requiring all Wisconsin engineers to obtain licensure by examination will make it easier for them to obtain licenses in other states where they may be working on projects. This will provide more opportunities for Wisconsin professional engineers.

This new legislation should be enacted immediately, and there should be no phase-in of the new process.

The Engineer Section predominately sees applications for licensure in this path in two scenarios.

Applicants who Fail to Pass Principles and Practice Exam

We have seen a number of applicants who have failed the Principals and Practice examination, once or several times, simply wait an additional four years and re-apply under the "grandfather" clause. Some of these applicants will even state in their application that they are applying because they have failed the exam. Furthermore, some of those who have been denied licensure under the "grandfather" clause, on appeal during their hearing freely state that they don't want to take the exam or believe they cannot pass the exam. The "grandfather" path is unquestionably the easier path to licensure. It is also the most subjective and therefore we believe an inappropriate process to grant a professional engineer license. The board should have evidence sufficient to support a strong recommendation for licensure for all applicants who are granted a license to practice. We can only have this sufficient evidence by having consistent criteria to measure against. We believe the criteria should be the ability to pass the Principal and Practice examination. The inability of an applicant to pass the exam raises some doubt as to their competence, regardless of the applicant's experience. The board's charge is to eliminate doubt in the consideration of candidates for licensure.

#### Applicants from out-of-state

We are seeing an increase in the number of applicants under the "grandfather" clause who are residents of states other than Wisconsin. This is because Wisconsin may be the only state that still has this experience path to licensure. Our lower application and renewal fees also make Wisconsin an attractive state to obtain licensure. Many of these applicants have significantly more experience than the required eight years. These are typically persons who are looking to simply add a credential to their resume for compensation, status, or other reasons outside the interests of the objective of licensure. Granting licenses in this manner is not within our mission to protect public health safety and welfare and extends our intended jurisdictional reach far beyond the borders of Wisconsin. We believe this to be an inappropriate use of our resources and not a good path to a professional credential.

It is not surprising that engineers in the industry across the country generally regard those who have obtained licensure by examination to have met a higher standard than those who have obtained the credential by experience only.

#### **EXAM REVIEW**

This bill eliminates the opportunity for an applicant to review their incorrect answers to exam questions.

The tests we use for Fundaments of Engineering and Principles and Practice are developed by The National Council of Examiners for Engineering and Surveying (NCEES) and are used across the country. An enormous amount of effort goes into developing the test question bank. The questions are tested for ambiguity, accuracy, and other measure to ensure they are a fair and objective measure of breath and depth of knowledge. To facilitate testing and scoring, these tests are now multiple choice and machine scored.

The existing legislation was enacted when the examinations were written long-hand. Applicants would develop the solution on paper and submit

their answers with supporting logic and calculations. These questions were then graded, and partial credit was granted appropriate to the correctness of the solution strategy contained in the applicant's presentation. In this method of examination, it was logical to allow an opportunity for the applicant to review his or her answer and potentially appeal for additional partial credit.

Multiple choice questions with single unique correct answers eliminate the opportunity to score any partial credit and therefore eliminate any need for post-exam review. Currently if an applicant requests to review a question, we have to seek approval from NCEES and have a board member present during the review. The applicant is shown the question text, the answer choices, and his or her answer. The applicant is NOT shown the correct answer. An unscrupulous applicant could review multiple questions in multiple exam administrations, all for the purpose of harvesting questions for either his or her own benefit (some questions are repeated in each administration of the exam to measure exam difficulty and consistency) or for unauthorized and illegal distribution and/or sale of test questions.

NCEES is concerned, and rightly so, about the security of the exam questions. There is considerable time and money expended in the development and maintenance of the test bank. To allow post-exam review of questions opens the state of Wisconsin to the risk of exam security breach. NCEES has indicated it may hold states liable for the cost of development and testing of replacement questions where the state's process did not ensure the security of the exam.

We believe that there is no real purpose for reviewing exam questions in the current format, and we want to reduce the risk to the state of Wisconsin for defense of any claims against the state by NCEES or breach of exam questions. In addition, the Department of Revenue and Licensing and the board can use their time more wisely in tasks other than proctoring an applicant's review of test questions.

#### SPECIFIC AREA TESTING

The current statute contains language requiring the examination to "include questions which require applicants to demonstrate knowledge of the design

needs of people with physical disabilities and of the relevant statutes and codes."

This legislation was likely enacted in the sprit of Americans' with Disabilities

Act implemented in 1973 and 1990. The intent was logically to raise

awareness among newly licensed engineers of the changes to codes and

design standards dealing with people with physical disabilities.

The need to specifically test for this attribute no longer exists. The International Building Code has been adopted by many states and local governments. This document, over 700 pages, is revised every three years. It contains a section on Accessibility, defining the term as the accommodation of disabled persons in structure. This includes parking spaces, elevators, and restrooms. Local governments may pass ordinances to supplement these requirements. There are extensive resources available to design professionals dealing with the Americans with Disabilities Act including the ADA.gov website.

We believe that the design professions and educators have been working within the requirements of ADA for more than 30 years, and it has become

the standard of practice. The examination prepared by NCEES contains information on all subjects that will include ADA impacts where appropriate. Having the statute refer to a specific test area requires the state to prepare and administer these questions separately form the national exam—an additional burden of state resources with no corresponding benefit to the public.

I want to assure the committee that the removal of this language and requirement in no way whatsoever is intended to diminish the need for design professionals to work within design statutes, codes, and ordinances to accommodate the needs of those with physical disabilities. My uncle, an Architect for years in Arizona, was a polio victim and was confined to a wheelchair for most of his practicing years; I am indeed deeply sensitized to this issue. I again assure the committee that the removal of this requirement does not change the methods and practices of design professionals with regard to accommodations and accessibility issues for persons with disabilities.

We believe that it is no longer necessary to have the statutes specially call out areas for questions in the examination. To do so raises questions

about other technical areas that should be considered to be included in the examination. The board has confidence in the national exams prepared by NCEES to achieve an appropriate breadth and depth of questions. This is a difficult exam and requires substantial serious preparation as demonstrated by the overall 54% pass rate in Wisconsin (first-time takers have a higher pass rate of 74%).

Mr. Chairman, I am aware of discussions on a potential amendment to this bill addressing the educational requirements in this bill. I would like to take just a brief moment to address this issue because the amendment was offered in the Assembly and the floor debate did not address the real issues and created confusion.

The amendment offered in the Assembly would allow graduates of technical school 2-year programs and experience satisfactory to the board, to apply to sit for the professional engineer examination.

The professional engineer credential should be reserved for those most qualified to supervise and be in responsible charge. The board's function is

to determine who among the many professionals in the engineering industry are most qualified. To assist us make that decision, we rely on basically three things. First a degree from an ABET accredited engineering program, second at least four years of qualifying experience, and third, statements from references familiar with the applicants work. No system is 100% accurate—some who can pass the test may not be truly qualified. However your, and my responsibility is to institute a system that has a reasonable assurance of a high degree of accuracy. In more cases than not, an education of four years in an ABET accredit program prepares and engineer more than a two year degree in a technical college—both programs serve a critical and useful purpose, but they have different outcomes. The public safety is better served with the higher standard.

This is not a debate about which is better, college/university programs versus technical school programs. They are just different. During the development of the bill, the technical school lobby caught notice. One of their long standing issues is that technical school credits are not accepted by the University of Wisconsin system for credit when students transfer to seek an engineering degree. In some respects, I believe they are using this bill to rejuvenate debate on this topic. I'm not familiar enough with the

courses and equivalency to have an opinion on who is right, but the fact that there is a difference under debate only strengthens my argument that the two degrees and the information learned is substantially different.

There is current active debate on educational requirements for licensure. There are several credible studies and recommendations that increase educational requirements beyond the recommended four-year ABET degree. NCEES is in the process of adopting a new model law that includes this increased educational requirements beyond a bachelor's desgree. ASCE just released a new study, Civil Engineering Body of Knowledge for the 21st Century, last week further documenting the need for additional educational requirements because the technical component of an engineering degree has eroded over time. This amendment is not consistent with where the industry is moving.

It was also framed as a "fencing out" proposition—IT IS NOT. There are many unlicensed persons productively working for engineering companies and government agencies. The license is only required, and appropriately so, for those who are in responsible charge of projects. Project teams are always composed of a variety of technical specialists, engineers and

technicians, licensed and unlicensed; all vital members of the team; all with potential for rewarding careers. This field is not like cosmetology or barbering whereby you must have a license to practice. The professional engineer credential is reserved for those who have demonstrated a level of competence such that they will accept professional liability for the protection of public health, safety, and welfare. This credential is not required to be a member of an engineering or project team. This is not an issue about who can do what work, it is an issue about who is the responsible person for public projects and how the states assures the public of those persons competence.

The bill also enhances Wisconsin engineers ability to complete for projects nationwide—an economic gain for Wisconsin

AB 69 brings Wisconsin in alignment with other states. We don't want to have the "easy path" that is less valued (which is it by other states) and will tend to attract those who may not be qualified.

This is a critical time to move this bill. In the design and construction industry, there is a new procurement method called design-build that you

may have heard of. In this procurement, the owner signs a contract that contains the design and construction of the facility—as opposed to a contract for the design and a separate contract for the construction. In design-build, contractors are looking to have licensed professional engineers on their staff so they do not have to hire a design firm. The public health, safety and welfare concern needs to be addressed by having that licensed professional engineer in responsible charge of the work. It would be inappropriate, but we have seen cases, where construction foremen, superintendents, and others are seeking professional engineer credential under the experience clause so they can sign the drawings on design build projects where there may have been minimal engineering work done. In no way am I inferring that all contractors are so motivated in this way, in fact I think most are not. However, we need to protect the public against the possibility of misuse of the credential in his way.

Mr. Chairman, although I am not in favor of the proposed Amendment, I will still support the bill if the Amendment is adopted. The two-year degree option is currently law and the amendment does not create new law, it merely preserves the status quo for that path to licensure. With this

Amendment, the bill does in fact increase the ability of the board to protect the public health, safety and welfare; that is why I will still support it.

Mr. Chairman, in summary, the Engineer Section of the Joint board and the Joint Board strongly support Assembly Bill 69 and urge its passage at the earliest opportunity.

This bill is needed to update the statues regarding professional engineers.

We need to have all engineers measured against the same standard to ensure the protection of public health, safety, and welfare, and we need to make Wisconsin engineers competitive in the national economy.

We need to eliminate the opportunity for applicants to review test questions—this practice is outdated and no longer serves any real purpose. It does subject the state to a risk of liability for breaches of exam security.

Finally, we can eliminate the statute requirement for single, specialized topics because it also has outlived its purpose.

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Thank you again for the opportunity to testify today. I appreciate your consideration of this matter.

I would be happy to answer any questions that may remain from the committee.

Martin J. Hanson, PE