

AN OFFICIAL NCEES PUBLICATION FOR THE EXCHANGE OF INFORMATION, OPINIONS, AND IDEAS REGARDING THE LICENSURE OF ENGINEERS AND SURVEYORS

FEATURE STORY

CLEVELAND STATE UNIVERSITY WINS 2013 NCEES ENGINEERING AWARD

The winners of the NCEES Engineering Award for Connecting Professional Practice and Education have been named, with the grand prize going to the Cleveland State University Civil and Environmental Engineering Department. The award jury met June 4, 2013, in Clemson, South Carolina, to select the \$25,000 grand prize winner.

The department received the prize for its submission, *Design, Funding, and Construction of the August Pine Ridge School/Hurricane Shelter in Belize*.

The jury praised the project for demonstrating the value of collaboration and the challenge of finding improvised, local solutions.

For the project, civil engineering students from the university's chapter of Engineers Without Borders collaborated with faculty, professional engineers, and allied professionals to design and construct a building that would not only provide additional classroom space for a Belize school but also serve as a hurricane shelter

for the local community. The jury praised the project for demonstrating the value of collaboration and the challenge of finding improvised, local solutions.

The jury selected five additional winners to receive awards of \$7,500 each:

- Northern Arizona University Department of Civil Engineering, Construction Management, and Environmental Engineering
Paper Pulp Sludge Characteristics and Applications



- Seattle University Department of Civil and Environmental Engineering
Design Options for a Creek Crossing for a Utility Company
- Seattle University Department of Civil and Environmental Engineering
Structural Evaluation and Retrofit of a Warehouse
- University of Nevada, Reno Department of Civil and Environmental Engineering
Capstone Design Project—SouthEast Connector
- University of Texas at El Paso Department of Civil Engineering
Multidisciplinary Design of a Sustainable, Environmentally Friendly, and Affordable House

The NCEES Engineering Award recognizes engineering programs that encourage collaboration between students and professional engineers. EAC/ABET-accredited programs from all engineering disciplines were invited to submit projects that integrate professional practice and education.

In selecting this year's winners, the 10-member jury of NCEES members and representatives from academic

continued on page 11

Officer nominees and incoming zone vice presidents discuss vision for NCEES

NCEES will elect a new president-elect and treasurer on August 23 at its 2013 annual meeting. The new board of directors will be installed at the banquet that evening.

NCEES will elect a new president-elect and treasurer on August 23 at its 2013 annual meeting. The Committee on Nominations has submitted Howard (Skip) Harclerode II, P.E., and David Widmer, P.L.S., as nominees for president-elect and John Dillaplain, P.E., and Gary Thompson, P.L.S., as nominees for treasurer.

Two new vice presidents will join the 2013–14 board of directors, which will be installed at the banquet on August 23: James Purcell, P.E., representing the Northeast Zone, and Daniel Turner, Ph.D., P.E., P.L.S., representing the Southern Zone.

Nominees for President-Elect



**Howard (Skip)
Harclerode II, P.E.
Maryland State Board
for Professional
Engineers**

NCEES Experience: Northeast Zone Vice President (2011–13); Committee on Member Board Administrators Board of Directors Liaison (2012–13); Computer-Based Testing Implementation Task Force Board of Directors Liaison (2011–13); Committee on Law Enforcement Board of Directors Liaison (2011–12); Northeast Zone Assistant Vice President (2007–09); Committee on Finances Chair (2010–11); Committee on Uniform Procedures and Legislative Guidelines Consultant (2008–10), Chair (2006–08), Subcommittee Chair (2005–06), and Member (2004–05); Engineering Education Task Force

Member (2008–10); Bachelor's Plus 30 Task Force Ex Officio Member (2007–08); Fire Protection/Design Build Task Force Member (2003–04); PE Chemical Exam Development Committee Volunteer (2005–present)

Why do you want to serve as NCEES president?

Since my first NCEES annual meeting in 2003, I've been impressed by the organization and the professionalism of its members. I believe my broad experience with NCEES and with the Maryland PE board as board chair has prepared me to lead the Council. I would consider it an honor and a privilege.

If elected, what are the key issues or goals you would want to focus on as president? One goal I'd focus on is being responsive to the needs of the member boards. NCEES is a member-driven organization. The board of directors' policies and actions should be guided by the will of the Council and be relevant to the needs and concerns of its members.

One issue of concern is the industrial exemption. The public is not well served by allowing unlicensed engineers to practice in these exempt areas. Even though we cannot take the lead on this issue, NCEES can influence efforts to remove this exemption.

Another important issue is the PE and PS exams' transition to computer-based testing. Over the next two years, we will learn a lot from the FE and FS exams' move to CBT. This process is just beginning for the PE and PS, and the board of directors must support the exam committees involved in this process.

Additionally, I would like the board to explore the possibility of creating a mentorship program, whereby licensure candidates would have the opportunity to be paired with mentors while gaining the required experience. These mentors would provide counsel and document candidates' experience. The mentorship program would strengthen the work experience component of the licensure process and may help keep more people on the path to licensure.

How has your past experience prepared you for this office? My engineering career spans more than 42 years in industry and private practice, and I've been a P.E. for 36 years. I have had the opportunity to talk with engineering deans and students and participate in student forums, licensure presentations, and career days as well as interact with many practicing P.E.s and P.S.s. All of these experiences, along with my service on the Maryland PE board, have taught me about the issues facing the engineering and surveying professions at all levels.

In Maryland, we have a unique regulatory structure for our professional design boards. The Boards of Architects, Engineers, Land Surveyors, Landscape Architects and Interior Designers are funded through a Special Fund, which is managed by the Joint Design Boards via the Joint Chairs. Since 2009, I have served as chair of the Joint Chairs. Under my leadership, the Joint Chairs work together to not only manage the Special Fund but also address issues common to the design boards. This experience has given me a broad prospective on solutions to shared issues.

Additionally, the experience I have gained from operating a multidisciplinary engineering consulting firm for more than 20 years has

prepared me to assume this role. NCEES represents multiple engineering and surveying disciplines, and my broad-based experience will help me give better guidance and insight to the board of directors.

Lastly, serving on numerous and diverse NCEES committees and task forces over the past 10 years and representing the Northeast Zone on the board of directors for the past two years has prepared me to serve as president.



**David Widmer,
P.L.S.
Pennsylvania
State Registration
Board for
Professional
Engineers, Land
Surveyors, and
Geologists**

NCEES Experience: Treasurer (2011–13); Committee on Finances Board of Directors Liaison (2011–13), Member (1997–98); Committee on Uniform Procedures and Legislative Guidelines Board of Directors Liaison (2012–13), Member (2008–09, 1994–95); Northeast Zone Vice President (2009–11); Committee on Examinations for Professional Surveyors Board Liaison (2009–11), Member (1992–93); Committee on Law Enforcement Board Liaison (2010–11), Member (1993–94); Member Board Administrators Networking Group Board of Directors Liaison (2009–10); Committee on Nominations Member (2007–08); Governance Task Force Member (2007–08)

Why do you want to serve as NCEES president? Serving as Northeast Zone vice president and NCEES treasurer has convinced me that I want to continue the work I've truly

enjoyed the past 21 years, and that is being involved with the licensing of engineers and surveyors. I come from a joint board in Pennsylvania, where every member has a vote, and my experience as a civil engineering business owner has given me insight into all types of engineering and surveying issues. I've taken every case seriously, taken every application to heart, and been a proven leader.

If elected, what are the key issues or goals you would want to focus on as president?

First of all, we have to remember that NCEES is a member-driven organization. Our focus may change from meeting to meeting, but the important thing is that we continue on the path of our strategic plan.

As president-elect, the first goal is to assist President Mamola with anything she needs and travel with her throughout the country and abroad to represent NCEES. The second key responsibility is to assign committee chairs and members. This alone is a monumental task. I will state that I have not promised one person a position, nor will I until I am elected and the requests are all before me. I will choose the best person for each and every position.

The year as president will be one of many speaking engagements as well as running the board meetings. Being the president of several firms and organizations, including the Pennsylvania board in 1994 and 1995, has provided me with the experience needed. I have the commitment of my family and staff so that I can spend the required time away from my family and work to do the task at hand.

continued on page 4

Q&A: BOARD NOMINEES & INCOMING VPs

My specific goals as president include continuing the work of the leadership development committees, addressing mobility issues by working to standardize continuing professional competency requirements, promoting the conversion of the PS and PE exams to computer-based testing, and closely watching Council finances as we begin CBT.

How has your past experience prepared you for this office? I think the key is that I have been zone vice president for two years and treasurer for an additional two years. I have always said that your first year as a zone vice president is all a learning curve on how the board operates and what your role is. These four years on the board of directors have provided me with much insight not only on the Council as a whole, but with the various committees. I have had the distinct pleasure of working with presidents from all four zones and been involved with many different committees as both a member and board liaison. This knowledge goes a long way when determining committee chairs and members.

My experience as treasurer has given me the vision of how we account for every penny of revenue and how we spend it and invest it. The investment committee formed this year as the result of a Finance Committee recommendation has provided much needed answers to questions being asked by our members.

Lastly, my 21 years of involvement with NCEES have provided me with not only great memories but also personal knowledge of many of our members that many people do not see. This is a truly fantastic organization, and I would like to continue my relationship with it by being the next president-elect.

Candidates for Treasurer



**John Dillaplain,
P.E.**

**Illinois State
Board of
Professional
Engineers**

*NCEES Experience:
Committee on
Finances Member*

*(2011–13); Committee on Law Enforcement
Member (2007–08, 2005–06); Committee on
Uniform Procedures and Legislative Guidelines
Member (2004–05)*

Why have you chosen to run for treasurer? I have served on the Finance Committee for the past two years. In that time, the committee has been able to implement several improvements to the way we do business. We also were able to add funding for a second delegate from each member board to attend the annual meeting and expand support for travelers on NCEES business. I am proud of what we were able to accomplish. I am running for treasurer to become more active in the management of NCEES finances.

If elected, what issues or goals would you want to focus on? Last August, President Gene Dinkins challenged our committee to come up with a “big idea” for the best use of what can be described as excess funds that have been accumulating for the past several years. I took that challenge to heart. Last February, I proposed to the Finance Committee that NCEES form an Engineering and Education Foundation. The foundation could provide funding for activities such as the NCEES Engineering Award for college partnership programs, engineering education programs

such as National Engineer’s Week, and other outreach activities determined to meet the standards of NCEES. While NCEES already funds many of these activities, the creation of a foundation would ensure that such activities are supported well into the future. The Finance Committee accepted the premise but chose to defer action until computer-based testing has been successfully implemented. I plan to continue to be the champion for development of the foundation.

How has your past experience prepared you to be NCEES treasurer? My service on the Finance Committee has afforded me the opportunity to work with NCEES staff, understand the financial condition of NCEES, and participate in the budget process. In addition, I have been a business owner. That experience is crucial in understanding the pitfalls of poor planning and budgeting and the rewards of proper planning and execution. Finally, I served as treasurer of my church for several years and for my local chapter of the Illinois Society of Professional Engineers and local post of the Society of American Military Engineers. I am fully prepared for and committed to serving as treasurer for the next two years.



**Gary Thompson,
P.L.S.**
**North Carolina
Board of
Examiners for
Engineers and
Surveyors**

*NCEES Experience:
Committee on*

*Examination Audit Consultant (2009–13);
Committee on Examination Policy and Procedures
Chair (2011–13), Consultant (2009–11);*

Committee on Nominations Alternate (2010–12), Member (2006–09); Committee on Examinations for Professional Surveyors Chair (2009–11), Consultant (2008–09), Member (2005–08); Computer-Based Testing Task Force Consultant (2009–11); Surveying Exam Development Committee (2006–present)

Why have you chosen to run for treasurer?

Serving on the North Carolina board has allowed me to participate in numerous NCEES activities, which have been rewarding and educational. I'm a candidate for treasurer so that I can support NCEES services and activities.

If elected, what issue or goals would you want to focus on?

The treasurer has become a key member of the team working to implement computer-based testing for the FE and FS exams. As treasurer, I would build on my predecessor's work of supporting this team to ensure that the transition is a success, which would pave the way for other exams to migrate to CBT.

NCEES also needs to continue to support activities that will attract students to the engineering and surveying professions. I find it rewarding to take part in outreach activities, and I encourage others to do so.

In addition, I support the development of a plan to use a portion of the reserve funds to promote licensure and provide assistance to member boards to ensure that all boards can participate in NCEES activities. Of course, I'd advocate using these reserve funds only after careful analysis to ensure that it would not negatively impact NCEES operations.

How has your past experience prepared you to be NCEES treasurer?

I have developed financial management skills by managing the North Carolina Geodetic Survey budget for the past 19 years. Additionally, I have managed the financial and professional components of numerous grants.

I have served on a variety of NCEES committees, including chairing two committees, which has taught me about all aspects of exam development. More specifically, serving on the CBT Task Force provided me with knowledge that would be beneficial to the treasurer as more exams move to CBT. In 2013, I increased my exam-related knowledge by completing the ABET program evaluator training.

I've enhanced my public speaking skills by taking part as a speaker/instructor at numerous professional workshops and conferences. I've been involved in a variety of licensure promotion activities, including the Future City Competition, and served on college advisory committees. I've also served as president of a national and a state professional organization.

My experiences of managing an agency budget and numerous grants, serving on NCEES committees and the CBT Task Force, completing the ABET program evaluator training, participating in licensure activities and educational outreach, and managing a national organization and a state organization have, together, prepared me to serve as NCEES treasurer.

Incoming Northeast Zone vice president



James Purcell, P.E.

**New Jersey
State Board of
Professional
Engineers and
Land Surveyors**

NCEES Experience:

*Computer-
Based Testing*

Implementation Task Force Member (2012–13); Northeast Zone Assistant Vice President (2011–13); Special Committee on Bylaws Chair (2012–13); Committee on Law Enforcement Chair (2011–12), Member (2009–10); Leadership Task Force Member (2011–12)

Why do you want to serve as Northeast Zone vice president?

During my tenure, I've had the opportunity to represent the New Jersey board at nearly all of the NCEES annual meetings and serve NCEES on a number of committees and task forces. I was encouraged to serve the Northeast Zone by several of my NCEES colleagues whom I greatly respect. Understanding that most jurisdictions are unique and having dealt with the legislative and rule-making processes and the various interests involved in these activities, I believe I can be a valuable asset to the board of directors as we tackle issues of license portability, the industrial exemption, and practice issues.

What insights from your professional experience do you bring to this office?

I've had the opportunity to interact with all sectors of the community, from the public that benefits from our actions, to the government officials who regulate our professions, to the teachers who educate us, to fellow professionals.

continued on page 6

Q&A: BOARD NOMINEES & INCOMING VPs

I've learned that everyone speaks a different language but that we're all interested in preserving our health, safety, and welfare and enhancing our quality of life. Understanding this allows me to see issues from different viewpoints, understand the concerns of each, and help drive consensus and compromise.

Most of my work over the last four decades has been with consulting firms that perform both surveying and engineering, and I believe I've developed a significant understanding of the issues facing both professions. As an engineer with a better-than-average understanding of surveying, I hope to bridge the divide between our professions.

What issues or goals do you want to focus on during your term? It's becoming increasingly important for professionals to be able to practice across jurisdictional borders, and NCEES must take the lead in advancing licensure portability. Coming from a state with some unique regulations, I've dealt with the frustrations of comity licensure on both sides—as licensee and board member. The *Model Law* and *Model Rules* are excellent guidelines to aspire to, but we need to educate the boards and, by extension, licensees on the differences between us.

Another issue facing the professions is the delineation of responsibilities between design professions, particularly between professional engineers and surveyors, but also between these and planners, architects, landscape architects, geologists, and other allied professions. I'd like to help specifically in resolving the issue of engineering measurements ("surveys") and foster consensus on definitions of engineering and surveying that allow for appropriate overlap.

Responsible charge and the use of remote technology to practice our professions is also of great concern. We need to recognize that this is going to become increasingly normal and work on ways to ensure proper oversight.

Incoming Southern Zone vice president



**Daniel Turner,
Ph.D., P.E., P.L.S.
Alabama
State Board of
Licensure for
Professional
Engineers
and Surveyors**

NCEES Experience:

Committee on Examinations for Professional Engineers Member and CBT Charge Subcommittee Chair (2010–13); Southern Zone Secretary-Treasurer (2012–present); Southern Zone Site-Selection Committee Chair (2012–13)

Why do you want to serve as Southern Zone vice president? My career has been spent in service to our profession, principally in two ways: educating and motivating students to become highly ethical professionals who seek licensure and, secondly, encouraging practicing engineers and surveyors to take ownership of their profession and to conduct their practices at the highest possible level.

I love to help and encourage people, which made these two areas of service personally rewarding. So at its simplest, serving as Southern Zone vice president allows me to continue serving our profession, students, and practitioners and to continue to help and encourage those around me.

What insights from your professional experience do you bring to this office?

For over 30 years, I managed academic departments and initiated and managed a highly successful transportation research center. These positions kept me in close contact with students, faculty, alumni, businesses, industries, and agencies.

In addition, I have been a member of multiple professional and technical organizations. It has been my honor to serve at the highest levels of leadership of six national engineering societies. These leadership experiences have shown that a good plan, trust in good people, and identifying and organizing for future opportunities and challenges are some of the traits of successful organizations. NCEES possesses these traits.

What issues or goals do you want to focus on during your term? A principal goal involves students because they have always been special to me. The types of students and their interests change constantly, and they are now changing more rapidly than ever. We'll need to develop new approaches to stay close to them in the future. This may be as simple as continuing to modify our communication modes with them and developing additional student-based programs. Another approach might be to identify professors who are champions at pointing students toward licensure and developing a program to reward each of them.



Case highlights Alabama board voting issue in statutes and rules

In 2007, the Alabama Board of Licensure for Professional Engineers and Land Surveyors investigated a complaint alleging that a licensed engineer was reviewing and placing his professional seal and signature on documents prepared by an unlicensed individual for work solicited and performed by the unlicensed individual through his uncertified firm. This firm had previously held a certificate of authorization; but since the death of the P.E. who served as its principal, it did not meet the certificate of authorization requirements.

The investigation led to charges being filed alleging that the P.E. reviewed the work solicited and performed by the uncertified firm and placed his professional seal and signature on engineering documents that contained the name of a firm without a valid Alabama certificate of authorization on six different occasions.

The matter went to hearing, which revealed that the P.E. was part owner of a certified engineering firm and had agreed to temporarily serve as the responsible engineer for the unlicensed individual's firm in 2007. The engineer also informed the unlicensed individual in late spring 2007 that he would not submit an application to the board to serve as the principal engineer for a certificate of authorization for the uncertified firm.

The administrative law judge who heard the case provided his findings and

disciplinary recommendations to the board for consideration.

The judge's findings of fact stated that the inclusion of the P.E.'s signature, license number, and title as the professional engineer on the project documents bearing the uncertified firm's name was misleading since the unlicensed individual's firm did not have a valid certificate of authorization and the P.E. held only a certificate of authorization for his firm, not the firm owned by the unlicensed individual. The conclusions of law stated that by placing his professional seal and signature on engineering documents prepared by the uncertified firm, the P.E. engaged in misconduct and discredited the engineering profession.

The judge's recommendations, which included a public reprimand and fine, were provided to the board office and the professional engineer. The matter was then placed on the agenda for the next board meeting, where the voting board members would review the hearing materials and the judge's report and determine if it would accept, modify, or reject the judge's recommendations.

Where things start to go wrong

The board consisted of five members in 2007, and the board member directing an investigation is automatically recused from hearing deliberation. Prior to the board meeting, the P.E. contacted two of the board

members who would be deliberating the matter and mentioned to them that the case would be discussed at the meeting. At this time, the two board members were unaware of the judge's recommendations, and both advised him that they couldn't discuss the matter. At the meeting, these board members recused themselves, leaving only two eligible voting members.

Concerned about the number of voting members, staff researched the issue. The board's legal statute stated, "If after the hearing three or more members of the board vote in favor of finding the accused guilty," and the board rules stated, "All members of the Board, including the Chair, are entitled to vote and to make or second motions. A majority of those members of the Board present and voting on any matter shall decide that matter before the Board." Another concern was that the board had to render its decision within 30 days of the hearing, and only a few days remained in that window.

The board's legal counsel advised that deliberation could proceed since the board rules require only a majority vote, regardless of the number of board members.

The board deliberated and found the P.E. guilty of misconduct. The matter was appealed to circuit court, where the P.E.'s attorney argued that the board's statute required a vote of at least three

continued on page 15



Wyoming recognizes value of Ph.D.

The NCEES *Model Rules* has, for a long time, allowed the waiver of the FE exam for those with an earned engineering doctoral degree. The Wyoming law now also waives the Principles and Practice of Engineering exam.

The state of Wyoming has, for many years, defined the teaching of advanced engineering topics and research investigations as the practice of engineering. Thus, faculty at the University of Wyoming who teach upper-division or graduate-level classes and do engineering-related research, by law, should be licensed. Obviously, this has been a difficult proposition. In lieu of having all faculty members being licensed, the Wyoming Board of Registration for Professional Engineers and Professional Land Surveyors took the unofficial approach that the dean of the university's college of engineering and applied science should hold the P.E. license as the responsible person in charge. This, in turn, has caused issues with regard to the hiring process.

A re-examination of this history has led to two new formal relationships between the board and the university—a memorandum of understanding and a new licensure path.

Memorandum of understanding

In January 2011, the board signed an MOU with the University of Wyoming that called for the following:

- The college shall continue to promote the importance of professional licensure to eligible faculty, staff and students as follows:
 - Eligible engineering faculty and staff members shall be encouraged to become licensed professional engineers. The board will provide alternate paths to licensure for faculty members holding an earned doctorate in an engineering discipline.
 - The college's Orientation to Engineering course, and other courses within each engineering program, shall instruct

students on ethical behavior and the importance of professional licensure.

- All graduating seniors within an engineering discipline shall be required to take the Fundamentals of Engineering examination with a good-faith effort.
- Each engineering capstone design course (e.g., senior design) shall be taught under the supervision of a faculty member who is a licensed professional engineer. If a licensed professional engineer is not available to teach the course, a licensed professional engineer from the faculty and staff committee mentioned in the item below shall be appointed to provide design and course oversight. The appointed engineer shall actively participate in course design reviews and other related course activities.
- The dean shall appoint a faculty and staff committee of professional engineers, licensed to practice in Wyoming, to oversee all engineering capstone design courses. A senior, licensed faculty member shall chair the committee. If the dean is licensed, he or she shall serve as committee chair.
- The committee shall provide the board an annual report (due June 1 of each year) documenting the college's activities pertaining to licensure, including a list of instructors for the capstone design courses and a list of program-specific courses that address ethical behavior and professional licensure.

After two full years in effect, the MOU is working very well.

$$1000 \frac{\pi 1.5^2}{4} 7.9^2 - 1000 \frac{\pi 3^2}{4} 1.98^2$$

$$110,288 - 27,712$$

$$\frac{kg}{m} m^2 \left(\frac{m}{s} \right)^2$$

The new path to licensure

Effective July 1, 2013, Wyoming law recognizes the value of the earned doctoral degree in engineering with regard to licensure. The NCEES *Model Rules* has, for a long time, allowed the waiver of the FE exam for those with an earned engineering doctoral degree. The Wyoming law now also waives the Principles and Practice of Engineering exam. The new path to licensure is stated as follows:

- An applicant for a license as a professional engineer who has graduated from a doctoral curriculum in engineering approved by the board shall submit evidence satisfactory to the board showing that the applicant
 - Is of good moral character and repute;
 - Has passed any examinations required by rule of the board to establish competence at a professional level in Wyoming licensing laws and professional ethics; and
 - Has four years of engineering experience in increasing responsibility and scope of a grade and character that evidence the applicant is competent to practice as a professional engineer.

While the rules that will correspond to the new legislation are not yet approved, the current draft is as follows:

- A “doctoral curriculum approved by the board” is defined as an earned doctoral degree (Ph.D., etc.) from an institution that grants EAC/ABET-accredited undergraduate or graduate degrees.
- “Examinations required by rule of the board” are defined as
 - A written examination on professional ethics and Wyoming licensing laws; and
 - An oral interview with the board.
- The four years of engineering experience must be obtained after the applicant completes his/her first degree (undergraduate or graduate) in engineering. No credit toward this experience requirement will be given for the applicant’s graduate education.

Ramifications

The Wyoming board recognizes that this is the first engineering licensure law in the United States that effectively waives both the FE and PE exams for those with qualified earned doctoral degrees. Because of that, the board realizes that those who are licensed via this pathway will, at least in the near future, have difficulty getting comity licensure from other jurisdictions. However, the board encourages other jurisdictions to include this new pathway in future modifications of their licensure laws.

Finally, this is NOT a limited license for teaching or faculty only. This license will have all of the rights and responsibilities that accompany any license in the state of Wyoming.



NCEES continues engagement in international activities

The more we learn about how the practice of engineering is regulated outside the United States, the more comfortable we will be with evaluating licensure applications from individuals who have taken NCEES exams through our existing partnerships.

As an organization, NCEES continues to stay involved with international activities through our partnerships with several foreign entities that have been authorized to offer NCEES exams as well as our continued participation as a signatory to two mobility accords. This summer, we have been busy maintaining those relationships and developing new ones.

In June, President Gene Dinkins, P.E., P.L.S., and I attended the annual meeting of Engineers Canada, held in Yellowknife, Northwest Territories. I have always appreciated the courtesy shown to us by our northern colleagues and am reminded each time I attend this meeting of the significant similarities between our systems of licensure. Like NCEES, Engineers Canada is committed to serving the needs of its constituents, the 12 provincial and territorial associations that regulate the practice of engineering in Canada. Many of the issues discussed at the meeting are issues that are on the NCEES radar. As we routinely attend the annual meeting of Engineers Canada, the leadership of Engineers Canada regularly attends our annual meeting. It is beneficial for both organizations to maintain a close working relationship, share information on best practices, and work toward improving mobility for our licensees.

In July, I traveled to Tokyo to meet with the leadership of the Japanese PE/FE Examiners Council (JPEC) to discuss revisions that will be required to our existing agreement governing the administration of NCEES exams in Japan.

We continue to have a significant population of candidates taking the NCEES exams in Japan, as many work for international firms that require the services of professional engineers licensed in the United States. The changes to our existing agreement relate to the transition of the FE exam to computer-based testing and how that exam will be administered at the Pearson VUE test site in Tokyo effective January 2014. We will also continue to offer the PE exam twice each year, which will be administered by the JPEC leadership under the oversight of NCEES.

From Tokyo, I traveled to Seoul, South Korea, to participate in the biennial meeting of the International Engineering Alliance (IEM) with President-Elect Patty Mamola, P.E. IEM provides oversight for six international agreements governing mutual recognition of engineering qualifications and professional competence. Three of the agreements focus on the mutual recognition of accreditation processes: the Washington Accord, which addresses four-year engineering degrees; the Sydney Accord, which addresses engineering technology degrees; and the Dublin Accord, which addresses engineering technician qualifications. The three remaining agreements cover recognition of the equivalence in the practice of engineering. NCEES is a signatory to two of these: the Asia-Pacific Economic Cooperation and the International Professional Engineers Agreement. The third, the International Engineering Technologists Agreement, addresses competence for technologists.

$$F = Q_B \rho V_B - Q_C \rho V_C = \rho \frac{\pi D_B^2}{4} V_B^2 - \rho \frac{\pi D_C^2}{4} V_C^2$$

The concept of these agreements is that a person recognized in one country as reaching the agreed standard of competence should only be minimally assessed (primarily for local knowledge) for registration in another country that is party to the agreement.

There are 25 countries that are signatories to the various IEM accords. This provides for an interesting meeting and a great opportunity to network with professionals from other parts of the world who are involved in the process of establishing engineering criteria and governing the practice of engineering in their respective countries. Although there are differences in language and culture, all involved in IEM are professionals of the highest order who are dedicated to improving the quality of engineering for the betterment of their citizens.

Representatives from JPEC, the Korean Professional Engineers Society, and the Saudi Council of Engineers will attend the upcoming NCEES annual meeting. I encourage

those of you attending this meeting to introduce yourself to these individuals and talk with them about their systems of licensure and their reasons for wanting to offer NCEES exams. The more we learn about how the practice of engineering is regulated outside the United States, the more comfortable we will be with evaluating licensure applications from individuals who have taken NCEES exams through our existing partnerships.

To that end, President-Elect Mamola is creating a task force for the coming year that will be charged with studying how experience gained outside the United States and not under the responsible charge of a U.S.-licensed professional engineer can be evaluated. The task force, which is being created at the request of several member licensing boards, will be led by Past President Joseph Timms, P.E., and will focus on developing processes and guidelines that can be recommended for use by all member boards to properly evaluate foreign experience.

ENGINEERING AWARD

continued from cover

institutions and professional engineering organizations considered criteria such as

- Successful collaboration of faculty, students, and licensed professional engineers
- Benefit to public health, safety, and welfare
- Multidiscipline and/or allied profession participation
- Knowledge or skills gained

“Projects like these are innovative ways to teach students about the vital importance of technical competency and ethical practice in the engineering profession,” said NCEES President Gene Dinkins, P.E., P.L.S. “We hope they will inspire other engineering programs to introduce similar collaborations.”

Cleveland State University will be honored at the upcoming NCEES annual meeting. Representatives from the winning project will receive the award on behalf of the university’s civil and environmental engineering department at a luncheon on August 23.

NCEES is currently preparing for the 2014 award cycle, and entry information will be available in October.

The 2013 NCEES Engineering Award Book will also be released this fall. More information on all of this year’s winning projects is available online at ncees.org/award.



Are we truly protecting the public to the best of our ability?

If we are not using all of the tools available to us, we are not serving the public well. We are also setting ourselves up for public scrutiny with potentially negative consequences.

For several years, NCEES has been encouraging member boards to use its Enforcement Exchange database to post disciplinary actions against licensed engineers and surveyors and to use the database while reviewing applications for licensure. In January 2013, I learned that only about 29 of the 69 member boards were posting information to Enforcement Exchange. My curiosity piqued, I did a little research. I found that several of our neighboring member boards and a few other boards from which we receive the most comity applications are not posting information on Enforcement Exchange.

To determine if any applicants to Ohio or registered professionals in Ohio were disciplined in other states and failed to report the disciplinary actions on their application or renewal, I had my staff make a public records request to four states, comprising eight member boards, for all disciplinary actions taken by the respective boards since 2008. The states were selected based on the following criteria: proximity to Ohio, number of comity applications received from that state, response on the NCEES member board profile that the board does not report disciplinary actions to Enforcement Exchange, and number of entries into NCEES Enforcement Exchange by the member board.

In response to our request, the eight boards reported a total of 194 disciplinary actions taken between 2008 and 2012. Of those 194 reported actions, 27 involved individuals who are licensed

as professional engineers and/or professional surveyors in Ohio. Two of the 27 individuals reported the disciplinary action on their Ohio application or renewal form. None of the 194 disciplinary actions were reported to the NCEES Enforcement Exchange by the board that took action.

In this limited review, we discovered 25 Ohio licensees who have been disciplined in another jurisdiction for violations related to the practice of their profession and potentially violated Ohio law by not reporting the action to the Ohio board.

Potential implications for boards

If we are not using all of the tools available to us, we are not serving the public well. We are also setting ourselves up for public scrutiny with potentially negative consequences. Below are a few examples from recent news stories involving state regulatory agencies that were singled out because they failed to report disciplinary actions. These stories resulted in damaging negative publicity for the regulatory boards.

In July 2010, ProPublica, a nonprofit investigative journalism organization, discovered that hundreds of state agencies across the United States failed to report disciplinary actions taken against health professionals to the federal government's central database that was set up to identify dangerous caregivers. Local newspapers picked up the story, including the *Columbus (OH) Dispatch*, which then

$$\pi_3 : M^0 L^0 T^0 = (L T^{-2})^i (M L^{-3})^j (L^2)^k M^1$$

$$M^0 L^0 T^0 = M^{j+1} L^{i-3j+2k} T^{-2i}$$

ran stories that included the discovery that Ohio State Board of Pharmacy and Board of Speech-Language Pathology and Audiology had failed to meet the reporting requirements. By not reporting disciplinary actions, they were undermining the effectiveness of the database.

In March 2012, the *Boston Globe* ran a story involving the impact on the public when regulatory boards fail to report disciplinary action. The article reported a case involving a Massachusetts doctor that caused irreversible brain damage to an infant during delivery. The incident resulted in a \$23.8 million malpractice judgment against the doctor. The judgment was never reported to the public database and was unavailable to other state medical boards. The doctor resumed practicing under her maiden name in Oregon. Her current patients are left with the impression that the doctor has a clean record. The *Globe* also reported other cases involving sexual assaults and falsified medical studies that went unreported.

What is our liability—and responsibility—as regulatory boards if an individual who has been disciplined in another jurisdiction comes to our state to practice and we grant a license without checking? Or even worse, what if we fail to report violations that the individual then repeats in another jurisdiction? Do we want to be the next regulatory agency featured in stories such as these?

Qualifications to practice as a professional are not limited to education, examination, and experience but also include the character and integrity of the individual. As regulators, it is incumbent on each of us to assure the public that we are licensing individuals who are not only technically competent but also ethically sound. Prior disciplinary action is one way for a board to assess character.

For the past five years, NCEES and its Committee on Law Enforcement have tried diligently to promote Enforcement Exchange and increase member board participation. Those efforts include a redesign of the database, screen casts on how to use the database, articles in *Licensure Exchange*, letters to member board administrators and chairs highlighting its benefits, and presentations at NCEES meetings. Based on the latest review of member board use, they seem to have had little impact. This failure to report not only impacts comity applications but also undermines the integrity of the NCEES Model Law Engineer and Model Law Surveyor designations, which require a record free of disciplinary actions.

With our primary responsibility being protection of the health, safety, and welfare of the public, failure to use the NCEES Enforcement Exchange database seriously compromises the integrity of our licensing process. How can the public trust that we are licensing qualified individuals and protecting them from unethical and illegal practice if we are not using all the tools available to us to evaluate licensure applicants?



FROM THE PRESIDENT

GENE DINKINS, P.E., P.L.S.
NCEES PRESIDENT

NCEES making progress to meet strategic goals

The NCEES strategic plan and progress report is available online at ncees.org under About NCEES.

This year, we've made considerable strides toward meeting the goals outlined in the NCEES strategic plan. Executive Director Jerry Carter recently sent all member boards a report on our progress as of April 2013.

The strategic plan, adopted by the NCEES board of directors in 2012, outlines several issues that represent challenges to maintaining an effective licensure process. The plan specifies goals for each of the issues and strategies for achieving these goals.

NCEES staff, the board of directors, and our standing committees and task forces have been working on various objectives to help us meet our ultimate goals:

- NCEES will be the recognized leader in developing and establishing licensure standards that serve to protect the public, are used by all member boards, and lead to increased mobility.
- The NCEES examinations will increasingly be used outside the United States as an outcomes assessment tool and to assist in determining minimum competency.
- The general public will have a greater understanding that engineering and surveying licensure are essential to public health, safety, and welfare.
- The demonstrated value of licensure will result in continued growth in the number of licensed engineers and surveyors.
- NCEES' governance processes and structures will facilitate active engagement of all member boards.

- Education standards for entry into professional practice and for continued licensure will continually evolve to reflect minimum requirements for the protection of the public.

Of course, we still have work to do to address the plan's various objectives. President-Elect Patty Mamola, P.E., will continue directing these efforts during her term as president, which will begin at the conclusion of this month's annual meeting.

She is moving forward with several task forces that will address some of the issues outlined in the strategic plan. The Mobility Task Force will continue with efforts to increase uniformity among member boards. The Public Outreach/Communications Task Force will help with initiatives to increase awareness of licensure and its value to the public. Continuing the 2012–13 Committee on Member Board Administrators' work to explore alternate methods of evaluating experience, a newly created task force will study the issue of evaluating foreign experience and recommend how NCEES and its member licensing boards can best address this issue.

Other committees and task forces will be assigned charges to address additional objectives for the strategic plan.

The NCEES strategic plan and progress report is available online at ncees.org under About NCEES.

MEMBER BOARD NEWS

ALABAMA Frazier Christy is a new appointee. Michael Arnold is no longer a member.

ARIZONA Melissa Cornelius is the new executive director. She replaces Ronald Dalrymple, who has retired. Administrative Assistant Shari Courtney and Investigations Manager Kathryn Fuller have also retired.

DISTRICT OF COLUMBIA Daniel Burton is the new board administrator.

HAWAII Kevin Katayama is a new appointee.

MAINE PE Joyce Noel Taylor is a new member. Ken Sweeney is no longer a member.

MICHIGAN PE Daniel Acciavatti, Kelly Fedele, Jay Larson, and Randy Sherman are new appointees. Mahmoud El-Gamal, John Kraus, Kevin Prihod, Robert Stempien, and Anthony Vizzini are no longer members.

MICHIGAN PS Jeff Bartlett is a new appointee. Catherine DeDecker is no longer a member.

NEW HAMPSHIRE PS Board vice chair John Myhaver passed away June 5.

OKLAHOMA Roy Entz and Glen Smith have been reappointed to the board, and George Gibson has been elected 2013–14 chair.

SOUTH CAROLINA Lenora Addison-Miles is the new board administrator, replacing Jan Simpson, who has retired. The board presented Simpson its Meritorious Service Award in July in recognition of her service.

TEXAS PE Sina Nejad and Kyle Womack are new appointees. Kemble Bennett and Gary Raba are no longer members.

VERMONT The PE and PS boards have moved to 89 Main Street, 3rd Floor, Montpelier, VT 05620-3402.

Upcoming Events

August 1-3

SE Exam Meeting
Clemson, South Carolina

August 9-10

FE Exam Meeting
Clemson, South Carolina

August 21-24

NCEES Annual Meeting
San Antonio, Texas

September 13-14

PE Mechanical Exam Meeting
Clemson, South Carolina

September 20-21

PE Civil Exam Meeting
Clemson, South Carolina

September 29-30

PE Petroleum Exam Meeting
New Orleans, Louisiana

ALABAMA BOARD

continued from page 7

members to find an accused guilty. The court agreed and issued an order reversing the board's decision.

The Alabama board's law and rules are similar to NCEES *Model Law* and *Model Rules* regarding voting, but the *Model Law* states, "If after such hearing a majority of the board votes in favor of sustaining the charges..." whereas Alabama law specifies the number of votes required for a majority.

This year, the board has proposed changes to its licensing law that include the language, "If after the hearing a majority of the deliberating members of the board vote in favor of finding the accused guilty..." Hopefully, this legislation will pass—and resolve the voting issue for future matters.

Gene L. Dinkins, P.E., P.L.S.
President
Columbia, South Carolina

Dale A. Jans, P.E.
Immediate Past President
Sioux Falls, South Dakota

Patty L. Mamola, P.E.
President-Elect
Reno, Nevada

David H. Widmer, P.L.S.
Treasurer
Beaver Falls, Pennsylvania

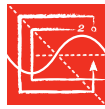
Michael J. Conzett, P.E.
Central Zone Vice President
Ralston, Nebraska

Howard C. Hardlerode II, P.E.
Northeast Zone Vice President
Phoenix, Maryland

Theodore A. Sack, P.L.S.
Southern Zone Vice President
Sand Springs, Oklahoma

Von R. Hill, P.S.
Western Zone Vice President
Bountiful, Utah

Jerry T. Carter
Executive Director
Clemson, South Carolina



NCEES

P.O. Box 1686
(280 Seneca Creek Rd)
Clemson, SC 29633 USA

PERIODICALS
POSTAGE PAID
CLEMSON, SC
29633

Licensure

EXCHANGE

**Jerry T. Carter, Executive Director
and Publisher**

**Keri B. Anderson, Manager of
Corporate Communications**

Jennifer L. Williams, Senior Editor

**Ragenia P. Thompson, Graphics and
Print Coordinator**

ISSN NO. 1093-541X
VOLUME 17, ISSUE 4

All articles within *Licensure Exchange*
may be reprinted with credit given to this
newsletter and to NCEES, excluding those
articles reproduced in *Licensure Exchange*
with permission from an original source.

POSTAL NOTICE

Licensure Exchange is published bimonthly by
NCEES, 280 Seneca Creek Road, Seneca, SC
29678-9214.

Periodicals postage paid at Clemson, SC 29633

Postmaster: Send address changes to
Licensure Exchange, P.O. Box 1686,
Clemson, SC 29633-1686

Member board profiles available online

A profile of each NCEES member licensing board is now available on the NCEES website. Included in each profile is general board information, such as the number of licensed engineers and surveyors in that state or territory, details of requirements for licensure and firm certificates of authorization, and information on the jurisdiction's practice act and how it's enforced.

"There's a lot of information in these profiles—all provided by the member licensing boards," said NCEES Executive Director Jerry Carter. "We appreciate their participation in this project and hope that they and members of the public will find it useful."

To view the profiles, click on the Licensing Boards tab on ncees.org and follow the Board Profile Survey link for each licensing board.

To view the
profiles, click on
the Licensing
Boards tab
on ncees.org
and follow the
Board Profile
Survey link for
each licensing
board.