



ENGINEERING LICENSURE QUALIFICATIONS TASK FORCE

JON D. NELSON, P.E., CHAIR

ABSTRACT

The current system of engineering licensure is supported by three legs of qualification: education, experience, and examination. Though all major professions in the United States have similar systems of licensure and use similar qualifications, the systems are not identical. There are different means of assessment and varying levels of rigor and formality. Some licensure systems are more unified in their approach than others, but none seem as fractured as the engineering profession. The various engineering councils, societies, institutes, and boards that play a role in licensure are not well unified. Many are moving in similar directions but few are moving in concert. Some are actually moving in opposite directions on various issues.

It is also apparent that licensure is neither well understood nor valued by many of its stakeholders. It has been alleged by some that our licensure system has not adapted to the current engineering marketplace, is not relevant in certain areas, and is not adequate for emerging fields of engineering. These factors plus the natural pressures of business and technology serve to erode the value of licensure, if not the very status of engineering as a profession. Business and technology will run

their own course, but the other concerns about our licensure system need to be addressed.

The Engineering Licensure Qualifications Task Force (ELQTF) was commissioned to assess the current licensure system and develop recommendations for enhancement or change. Recognizing that there are many stakeholders in licensure, several key engineering organizations have agreed to participate as members of the task force. The goal will be to formulate viable recommendations concerning licensure qualifications and the licensure system. It is hoped that the process will serve to unify the profession as to licensure.

It is anticipated that it will take several years to complete the work of this task force. This report addresses the need for the task force and its organization. Future reports will address progress and summarize the current thoughts of the task force.

TEXT

Charge #1: *Assess the current licensure system process (three E's) in regard to licensure qualifications. Consider public protection, relevance, qualification assessment, efficiency, and mobility (both domestic and international). Make recommendations for enhancement and/or change.*

Subcommittees have been formed to address each charge. Charge #1 is the core charge of the task force and will result in recommendations to be presented for consideration. The charge also includes an assessment of the current licensure system. To develop recommendations for the licensure system, the assessments described in this charge and the next four charges must all be completed. Consequently, Charge #1 was split into two parts. Charge 1A addresses the first sentence of the charge and covers the assessment

ENGINEERING LICENSURE QUALIFICATIONS TASK FORCE

of the current licensure system. Charge 1B addresses the final sentence and covers the development of recommendations based on the results of the assessments performed under Charges #1 through #5.



Charge #2: *Review the licensure models of other professions, e.g., architecture and medicine, as well as the Canadian licensure model and the National Society for Professional Engineers (NSPE) proposed model to determine if aspects of these models may have applicability for the U.S. engineering model.*

The work of this subcommittee will focus on three areas: licensure systems of other professions, licensure systems of foreign countries, and alternative licensure systems that have been proposed for engineering. The professions of law, medicine, architecture, accounting, and nursing will be considered, and others may be included as the work progresses. The Canadian system will be considered in detail because it is comprehensive with similarities to the current U.S. system, and it has recently been reviewed in detail by the Canadian Council of Professional Engineers/Canadian Engineering Qualifications Board (CCPE/CEQB). Other foreign systems will be summarized and analyzed. Several individuals and organizations such as NSPE have proposed alternative licensure models. These will also be evaluated and considered by the task force.



Charge #3: *Establish a subcommittee to meet with the NSPE Licensure and Qualifications to Practice Task Force and the Canadian Engineering Qualifications Board (CEQB). The subcommittee results should be reported to the full task force for consideration in its deliberations.*

Charge #3 is considered a subset of Charge #2. CEQB and the NSPE will receive more focused attention based on the discussion under Charge #2 above.



Charge #4: *Interface with designated members of affiliated organizations and consider their input through representatives appointed to serve with the ELQTF. Also coordinate and consider input from other stakeholders (including the Participating Organizations Liaisons Council, or POLC) as required.*

This subcommittee will focus on the stakeholders in engineering licensure. Stakeholders will be identified and their stake in licensure defined through communication and evaluation. The position of each as to licensure will be considered for incorporation into the recommendations.



Charge #5: *Review the NCEES member survey results and the charges and reports from the Advisory Committee on Council Activities (ACCA), Special Committee on Experience Evaluation, Committee on Examinations for Professional Engineers (EPE), Committee on Examination Policy and Procedures (EPP), and the Licensure Promotion, Mobility, and NCEES/ACEC Joint Task Forces and consider this information during your committee deliberations.*

Several NCEES committees and task forces address issues directly associated with licensure qualifications. The work of these groups will be summarized and incorporated into the deliberations of the task force by this subcommittee.



ENGINEERING LICENSURE QUALIFICATIONS TASK FORCE

Charge #6: *Present a preliminary report at the 2001 zone meetings and other reports throughout the life of the task force.*

Communication throughout the life of the task force will be critical to ensure the NCEES membership is well informed when ideas are considered and decisions are made. The first reports at the 2001 zone meetings addressed the need for the task force and its organization. Future reports will address progress and summarize the current thoughts of the task force. Reports will be made at the various NCEES meetings and will be posted on CouncilNet. NCEES members will be able to post messages to the task force, and written comments will also be welcome from both inside and outside the NCEES. Straw votes and questionnaires will more than likely be used for feedback as well. The task force will use all such feedback for guidance in its deliberation. It is hoped that the other organizations will maintain similar communications with their membership so that the final recommendations of the task force will reflect a unified profession.



Charge #7: *Develop a rationale, statement of purpose, and proposed role for consideration by Council of continuing the responsibilities of this task force on a long-term basis.*

It may take two or more years to establish firm recommendations for Council consideration. As the work continues, it is expected that the charges and perhaps the task force itself will be expanded. Possibilities for the future of the task force could include such items as the mitigation of differences between organizations and the implementation of recommendations. It is too early to tell what the long-term future of the task

force will be at this time. Charge #7 will be addressed much later.

CONCLUDING COMMENTS

The Engineering Licensure Qualifications Task Force appreciates the importance of this effort. The future of licensure is unclear, and it is time to assess the condition of our current system. Task force members also understand the sensitive nature of the issue and want to acknowledge that the ultimate direction of the NCEES will be decided by the Council body, not by the task force. It is entirely possible that the result of this effort will simply be to stay the course and make no enhancements or changes at all. It is difficult to tell at this time where the work will take us, but we hope that the membership of NCEES and the engineering organizations will be partners in this endeavor and will work to stay informed. The issue is broad and complex, and we all must be prepared when the time comes for decisions that may shape the future of engineering licensure in the United States.



Respectfully submitted, **Engineering Licensure Qualifications Task Force:**

Jon D. Nelson, P.E., OK, Chair

Members

Jerry Carter, NC
Stanley C. Harris, P.E., VA
Larry J. Hodge, P.E., L.S., ID
Melvin Hotz, P.E., MD
L.G. "Skip" Lewis, Jr., P.E., SC
William H. Palm, P.E., FL
Dale W. Sall, P.E., L.S., NE
Steve T. Schenk, P.E., OR
John W. Steadman, Ph.D., P.E., WY
William Sutherland, P.E., MN
Thomas F. Talbot, Ph.D., P.E., AL

ENGINEERING LICENSURE QUALIFICATIONS TASK FORCE

Consultants

Thomas W. Elliott, P.E., NSPE
Ronald L. Ewing, P.E., P.L.S., ACEC
Wallace Fowler, P.E., P.L.S., ASEE
Digvir S. Jayas, Ph.D., P.E., CEQB
E. Walter LaFevre, Ph.D., P.E., P.L.S., ASCE
Larry D. Nixon, P.E., ABET
Charles L. Proctor, Ph.D., P.E., ASME
Ned R. Sauthaoff, Ph.D., IEEE

Board Liaisons

J. Richard Cottingham, P.E., P.L.S.
Ted C. Fairfield, P.E.

Staff Liaisons

Betsy Browne
Mike Shannon, P.E.