FEDERAL LEGISLATIVE/REGULATORY MATTERS

Offshore Oil Drilling Rule Requires PE Involvement – NSPE achieved a victory in August when the Department of the Interior's Bureau of Safety and Environmental Enforcement issued a final rule that makes permanent the additional safety measures authorized after the fatal explosion of the BP Deepwater Horizon offshore rig and subsequent oil spill in 2010. The rule requires PEs to be more involved in the design and certification of offshore oil wells.

Immediately after the Deepwater Horizon disaster, the federal government pushed for increased safety and accountability measures for the offshore oil and gas industry and within the agency that oversees the industry. The rule is based on recommendations of a safety measures report issued by the Department of the Interior in May 2010. The Secretary of the Interior directed the agency to adopt and promptly implement the recommendations.

NSPE General Counsel Arthur Schwartz provided comments to the Chemical Safety Board in December 2010 that professional engineers should supervise all engineering design, operations, and maintenance of offshore oil wells. He emphasized that PEs are bound by a code of ethics to make decisions only in their area of expertise and to protect public health and safety above all other concerns.

The National Research Council also recently advised the BSEE to seek consultation to develop a "culture of safety" in addition to implementing inspections, operator audits, bureau audits, key performance indicators, and a whistleblower program to increase safety.

The final rule includes measures to ensure sufficient redundancy in blowout preventers; promote the integrity and control of wells; and facilitate a culture of safety through operational and personnel management. The rule requires that professional engineers do the following:

- Be involved in the well casing and cementing design process;
- Certify that well casings and cementing are appropriate for expected wellbore conditions;
- Certify well abandonment designs and procedures; and
- Certify that well designs include two independent barriers in the center wellbore and all annuli.

The rule also requires independent third parties to conduct blowout preventer inspections. These third parties must be licensed professional engineers, professional engineering firms, or technical classification societies.

FE Exam Changes Set for 2014 – Beginning in January 2014, aspiring PEs will face a new Fundamentals of Engineering Exam. The new exam will be taken on a computer instead of with paper and pencil. It also will no longer test the breadth of all examinees' basic knowledge with the same 120 questions on topics such as mathematics, chemistry, and thermodynamics.

Under the new format, exam takers will still be able to choose which exam they would like to take: chemical, civil, electrical and computer, environmental, industrial, mechanical, or other disciplines. The new exams, however, will test breadth of knowledge with questions that are tailored more toward the examinee's specific discipline. While the exam questions testing breadth of knowledge may share some content across disciplines, examinees will no longer receive the same 120 questions regardless of their discipline.

The National Council of Examiners for Engineering and Surveying, which administers the FE and PE

exams, says the change is being made because engineering programs across the nation are showing less uniformity in the core engineering curricula.

Every six to eight years, NCEES reviews FE exam content to ensure the exams are consistent with the curricula of U.S. engineering programs. In 2011, representatives from the NCEES FE Exam Development and Exam Oversight Committees, academic staff members, and members of the state licensing boards determined that it was necessary to conduct content review surveys for six new discipline-specific exams and one exam to allow candidates who aren't majoring in the six disciplines.

In October 2011, more than 7,000 people participated in a survey to determine the knowledge and skills that engineer interns need to help protect the public health, safety, and welfare. The participants included technical society members, deans and department heads of accredited engineering programs, and other professional engineers. In January 2012, a group of volunteers reviewed the survey analysis and developed exam specifications for the seven new exams.

To help universities and other organizations prepare new review courses for the FE exam, NCEES is providing information about the major domains at http://cbt.ncees.org. Detailed specifications will not be released until next year to reduce confusion about the exams.

NCEES Takes On Industry Exemptions, Approves Computer-Based PE Exams – The National Council of Examiners for Engineering and Surveying voted in August to support the expansion of PE licensure to engineered products and systems. The organization also approved the conversion of the Principles and Practice of Engineering Exam to a computer-based format no earlier than 2015.

At the NCEES annual meeting in St. Louis, board members addressed concerns about industry exemptions in some state licensing laws. These exemptions allow unlicensed engineers employed by manufacturing businesses or utilities to carry out engineering work. The board members approved an amendment to the Model Law to require responsible charge by a licensed engineer over the engineering design of buildings, structures, products, machines, processes, and systems that can affect the public health, safety, and welfare.

Although the change demonstrates NCEES's commitment to protecting the public, the change would need to be adopted in state licensing laws in order for it to take effect.

A new NCEES task force will be studying which U.S. jurisdictions have industrial exemptions and developing a communications plan about eliminating industry exemptions.

Board members also unanimously decided to convert the PE exam into a computer-based format beginning in 2015. This follows the decision in 2010 to convert the Fundamentals of Engineering Exam to a computer-based test by January 2014.

Carter said the exam transition would be gradual in order to allow NCEES to determine how the 25 different PE exams can adjust to a new format and continue to measure professional competence. More than 25,000 licensure candidates took the PE exam during the past year. The computer-based format will allow for more scheduling flexibility for candidates, increased uniformity of testing conditions, and improved exam security.

COURT DECISIONS

Delaware Court Upholds Board's Decision On Engineering Practice – The Superior Court of the State of Delaware recently affirmed a decision by the state licensing board ordering a company to stop practicing unlicensed engineering and remove the word "engineers" from its name.

Established in 2007, University Consulting Engineers was issued a cease-and-desist order by the Delaware licensing board in December 2010. According to Peggy Abshagen, executive director of the board, the company sought the services of engineers to operate on its behalf. But UCE was not authorized by the board to provide engineering services in Delaware, and, to make matters worse, the business also issued engineering reports by engineers who were not licensed in Delaware.

After attempting to help UCE comply with Delaware law, according to Abshagen, the licensing board issued the cease-and-desist order. The order demanded more than an end to unlicensed practice, however. It also required UCE to refrain from advertising on its Web site in a manner "which conveys the message it is entitled to practice engineering services in Delaware" and cease "using the inherently misleading term 'engineers' in its company name."

As an example, UCE's "About Us" page on its Web site stated, "UCE Biomechanical Engineers have an extensive background and experience in mechanical engineering combined with Biomechanics. They carry a PhD from a highly accredited university, teach at the university level mechanical engineering/biomechanics and are heavily involved with research and development projects which are recognized at the international level."

After a hearing requested by UCE to dispute the cease-and-desist order ended with the licensing board deciding against the company a second time, UCE filed an appeal with the Delaware Superior Court. According to the court order affirming the licensing board's decision, filed in June, UCE argued it did not engage in the practice of engineering as defined by Delaware law because its services were provided only to law firms and insurance companies, not the general public. UCE also argued its advertising and company name were not misleading.

Not one of the arguments made by UCE was supported by the court. "UCE does indeed hold itself out to the general public, albeit a limited audience" the court order reads. "Leaving aside those with whom they may share UCE's reports, lawyers and adjusters, though distinct groups, are nevertheless still members of the general public."

The court found substantial evidence to uphold the licensing board's decision. "As with so much else in today's world, things have become more complex," the order says. "Many professions have had to specialize to meet those complexities. Engineers are not immune from this trend and increased complexities make a need for greater public protection more compelling. The state has a substantial interest in prohibiting a group from calling itself 'engineers,' when in fact, that group does not employ statutorily qualified engineers."

"We thought that it was a very good decision," Abshagen says. "To come out with a win that went to Superior Court was very encouraging."

"This case illustrates the growing recognition of the critical need to prevent individuals and companies from engaging in misleading and deceptive activity relative to the practice of professional engineering in order to protect the public health and safety," adds NSPE Deputy Executive Director and General Counsel Arthur Schwartz.

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