



# Oregon

**State Board of Examiners for  
Engineering & Land Surveying**

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## EXAMINATIONS & QUALIFICATIONS COMMITTEE

Minutes of Meeting

October 11, 2013

### Members present:

Steven Burger, Chair  
Anne Hillyer  
Carl Tappert  
Tom Van Liew (Excused absence)

### Staff present:

Mari Lopez, Executive Secretary  
Jenn Gilbert, Executive Assistant  
Matt Bryan  
Jennifer O'Neill  
Joy Pariante  
Brianna Weekly

### Others present:

Katharine Lozano, Assistant Attorney General  
Ken Hoffine (Observer)  
Afshin Majd

The meeting of the Examinations and Qualifications Committee meeting was called to order at 9:31 a.m. in the OSBEELS Conference Room at 670 Hawthorne Avenue SE, Suite 220, Salem, OR 97301. Mr. Tappert was a substitute member on the Committee, due to Mr. Van Liew's excused absence.

### **Public Comment**

There was no public comment.

### **Review of Applications**

#### **Comity Application**

*Majd, Afshin* – The Committee reviewed an application for registration as an electrical engineer by comity for Mr. Majd out of sequence with the agenda because Mr. Majd was present at the meeting. Mr. Majd first applied in October 2012, based on registration in California, and was considered during the February 2013 Committee meeting. At that time, the Committee informed him that a National Council of Examiners for Engineering and Surveying (NCEES) Credential Evaluation was required, as per Oregon Administrative Rule (OAR) 820-010-0227(2), or

reference(s) from a supervisory PE to verify his remaining experience to comply with OAR 820-010-0227(6) and 820-010-0230(1)(a).

Mr. Majd provided a credential evaluation that showed he had completed the required number of math/basic science credits. However, he was missing a general chemistry course, which prevented his program of study from fulfilling the required curricular content of the NCEES Engineering Education Standard. Mr. Majd also submitted two additional PE references. References who supervised Mr. Majd's engineering experience, in accordance with OAR 820-010-0230(2), verify a total of two years and four months of experience. References who did not supervise Mr. Majd's engineering experience verify having knowledge of eight years and nine months of experience. After reviewing Mr. Majd's credential evaluation and his references, the Committee determined to recommend the Board approve Mr. Majd's reapplication for registration as an electrical engineer by comity.

### **New Business**

#### **NCEES FE Civil Examination Course Content**

NCEES is revising the content of the civil module of the Fundamentals of Engineering (FE) examination. NCEES is removing chemistry, electricity and magnetism and thermodynamics from the FE. Currently, OAR 820-010-0225(3)(d) uses thermodynamics in the outline of technical courses needed to qualify for the FE based upon a graduate degree. The Committee discussed the possibility of adding or removing courses from the list provided in OAR 820-010-0225(3)(d). Mr. Tappert said he didn't agree with removing any courses because all of the courses in the OAR are important to understanding engineering. With the rise in renewable energy options, Mr. Tappert said he thought thermodynamics and electricity and magnetism would be critical areas of knowledge. Mr. Burger agreed and said, in the future, he'd like the Board to consider adding some courses, such as project management and construction management because engineering is about more than just the science, it's also about product delivery. He explained that most engineers aren't hired to act as scientists, but rather to design and oversee projects, and that should be reflected in the Board's rules. Mr. Burger also said he'd like to see the list of required courses for non-ABET degrees expanded to give applicants more options to fulfill their requirements.

Mr. Bryan pointed out that he had observed an ABET recertification at Portland State University and it was a very long, involved process. Mr. Hoffine mentioned that non-ABET degrees may become more common, as the accreditation process is expensive and it's becoming difficult for universities to get programs ABET-accredited.

The Committee requested that Staff make an inquiry to NCEES to determine why those three subjects were removed. Additionally, Staff was directed to request updated curriculum from the state engineering programs to determine if these changes are part of an educational trend. There will be further discussion on the topic during the December 2013 Committee meeting.

#### **LS Courses Accepted from Oregon State University**

Staff presented the Committee with the list used to determine qualification based on specifications set forth in OAR 820-010-0226(3)(d),(e) and (f). This list contains qualifying upper-division courses for individuals with engineering degrees who are applying for the Fundamentals of Land Surveying (FLS) examination. Ms. Gilbert explained that this list of courses is the base from which Staff determines compliance for graduates of an ABET-accredited engineering program at OSU. If an applicant has the courses required, as they appear

on this list, they're in compliance. Mr. Burger asked if courses on transcripts are always titled the same as the courses on this list. Ms. O'Neill explained if the titles aren't a match, Registration Department Staff perform further research to determine course content and evaluate compliance. Usually, Staff will request a course evaluation from the school to determine course content. The Committee approved the list for use by Registration Department Staff.

## **Review of Applications**

### **Comity Applications**

*Anderson, Charles R.* – The Committee reviewed an application for registration as a civil engineer by comity for Mr. Anderson. He is applying based on his registration in Utah. His official verification from the Utah Professional Engineers and Professional Land Surveyor's Board (UT) indicates that he passed an NCEES FE examination. However, his NCEES Record summary indicates that he passed a state-specific FE examination in 1961. At that time, OSBEELS also administered a state-specific FE examination. OSBEELS has no information regarding the content of the FE examination administered in 1961, therefore, Staff is unable to determine if the UT FE examination would be substantially equivalent, as required in Oregon Revised Statute (ORS) 672.148(1)(d). After discussion, the Committee determined to consider the UT FE from 1961 as substantially equivalent to the OSBEELS FE from the same time period. The Committee recommends the Board approve Mr. Anderson's application for registration as a civil engineer by comity.

*Rizman, Raymond.* –The Committee reviewed an application for registration as a civil engineer by comity. He is applying based on his registration in California. His official NCEES Credential Evaluation indicates that his bachelor's degree in Electrical and Computer Engineering from the University of Technology, Sydney, Australia, is deficient by eight semester hours in math/basic science and does not fulfill the required curricular content of the NCEES Engineering Education Standard. Mr. Rizman is currently licensed in California. He has four years of qualified experience, which is not enough to qualify him based solely on experience. After discussion, the Committee determined that Mr. Rizman must complete his math/basic science requirements or provide references who verify 12 years of qualifying experience. The Committee recommends the Board deny Mr. Rizman's application for registration as a civil engineer by comity.

### **Examination Applications**

*Martin, Michael* – The Committee reviewed an application for the October 2013 Professional Land Surveying (PLS) examination for Mr. Martin. He submitted five complete references. However, the references provided only verify seven years and eight months of his qualified land surveying experience, which is not in compliance with OAR 820-010-0213(1)(A)(c) and 820-010-0231(1)(b). Mr. Martin previously used two years of qualified land surveying experience to qualify for the FLS examination under OAR 820-010-0226(3)(h). As a result, Mr. Martin must demonstrate an additional six or more years of qualifying land surveying experience to qualify for the PLS, for a total of eight years of qualifying experience. Mr. Martin requested a waiver of the remaining required experience, as he is not personally comfortable using some of his previous supervisors as references.

AAG Lozano reminded the Committee that waivers have been granted, in the past, for individuals who can verify all of the required experience through references, but not all references are registered. She said there has been no previous waiver for insufficient experience. Mr. Burger asked if there was any issue with Mr. Martin identifying himself as a utility coordinator/crew chief on his application. Mr. Tappert clarified that registration is not always required to be a crew chief. Ms. Lopez pointed out that Mr. Martin's identification block in correspondence clearly indicates that he is a land surveying intern and, therefore, there isn't an issue with the job title used. After discussion, the Committee determined to deny Mr. Martin's request for waiver of a reference to verify the four months experience needed.

*Miller, Melinda* – The Committee reviewed an application for the October 2013 Acoustical PE examination for Ms. Miller. She has submitted five complete references; however, only two of the references are registered in an NCEES jurisdiction. OAR 820-010-0212(1)(c) requires that at least three references hold registration in an NCEES jurisdiction. Ms. Miller's registered references verify five years and seven months of her engineering experience, in accordance with OAR 820-010-0212(1)(c)(A) and 820-010-0230(2). Ms. O'Neill explained that Ms. Miller is from a state where acoustical registration is not required; therefore, it's difficult to obtain a high number of registered references. However, Ms. O'Neill pointed out that all of her required experience is verified, just not by registrants. Ms. Miller also holds an ABET-accredited master's degree. Mr. Burger pointed out that one of the registrant references for Ms. Miller is fairly negative. He asked if it was an issue that she only had two of the three registered references required and one of those was negative. Mr. Tappert pointed out that Ms. Miller's next reference was positive, which shows improvement over the course of her experience. Mr. Burger also said that he didn't like using academic references to qualify individuals for examination. He said it's far more important to know what practitioners in the field think of the individual's engineering skills than an instructor. AAG Lozano clarified that Ms. Miller's academic reference is also an active practitioner of acoustical engineering and oversaw her master's thesis work. After discussion, the Committee determined to approve the waiver of Ms. Miller's third registered reference, as all her qualifying experience was verified by other parties.

*Sykes, Beth* – The Committee reviewed an application for the October 2013 FLS examination for Ms. Sykes, based on a combination of education and experience. Mr. Burger recused himself from discussion. Ms. Sykes provided three references; one is registered in an NCEES jurisdiction and verifies five years and six months of her land surveying experience. All other references verify the same time period. After reviewing Ms. Sykes provided transcripts, it was determined that her courses do not meet the requirements of OAR 820-010-0228. The Committee discussed if her coursework could count for the two years and 6 months required to sit for the examination without a qualifying degree, as per OAR 820-010-0228. AAG Lozano pointed out only three courses in Ms. Sykes transcripts were related to land surveying – two land surveying courses and a calculus course. Ms. Sykes coursework was more liberal arts-focused than land surveying. The Committee determined to not consider Ms. Sykes coursework completed and experience verified as qualifying for the FLS examination. The Committee recommends the Board deny Ms. Sykes application for the October 2013 FLS examination.

### Reapplications

*Jenkins, Colleen* – Mr. Burger recused himself from discussion. Ms. Jenkins' record shows she has applied for the Civil PE examination four times, has attempted the exam twice and has withdrawn twice. Since her last application, she has been self-studying in preparation for the examination. Mr. Tappert pointed out that there is no current standard to determine adequate additional preparation. AAG Lozano said the Committee hasn't previously required proof of formal preparation classes for individuals with a lower number of attempts. Mr. Tappert asked when Ms. Jenkins plans on taking the examination. Ms. Gilbert said Ms. Jenkins has requested to be forwarded to the April 2014 examination administration. The Committee recommended approving Ms. Jenkins' reapplication.

*Hill, Kareem* – Mr. Hill's record shows he has applied for the FE examination 7 times, has attempted the exam four times, has failed to register or no-showed twice and his application for examination was denied once. Since his last application, he has enrolled in formal class in preparation for the examination. Mr. Hill also requested to be forwarded to the April 2014 examination administration. The Committee recommended approving Mr. Hill's reapplication.

The meeting adjourned at 10:21 a.m.