

Meeting of the Professional Engineering Committee
of the Board of Licensure for Professional
Engineers & Professional Surveyors held 8:00 a.m.,
April 17, 2008 at the Middle Rio Grande
Conservancy District Office, 1931 Second St., SW,
Albuquerque, NM

Members Present: Patricio Guerrerortiz, PE, PEC Chair, Board Vice Chair
John T. Romero, Sr., PE, PEC Vice Chair, Board Secretary
Stevan Schoen, Esq, Public Member
Dr. Rola Idriss, PE, arrival noted in minutes
Severiano Sisneros, PE, by teleconference

Members Absent Subhas Shah, PE

Others Present: Perry Valdez, Acting Executive Director, BLPEPS
Candis Bourassa, Licensing Manager, BLPEPS
Edward Ytuarte, PE/PS Complaint Manager, BLPEPS
Roman Garcia, Investigator, BLPES
Mary Smith, Assistant Attorney General, Board Counsel

Guest Rodger Zimmerman, PE, Engineering Analysis
Raymond Hensley, NMSPE
Marcos Abeyta

1. CONVENE/ROLL CALL/INTRODUCTION OF GUESTS

Mr. Guerrerortiz convened the meeting and roll call was taken. It was noted that a quorum was present.

2. CONVENE EXECUTIVE SESSION

Mr. Guerrerortiz motioned, Mr. Romero second and a roll call vote was taken. Voting yes: Dr. Idriss, Mr. Sisneros, Mr. Romero, Mr. Schoen, and Mr. Guerrerortiz. Motion carried unanimously

***VOTED:** To convene in closed or executive session pursuant to NMSA 1978, Section 10-15-1(H)(1) to discuss cases 07-07-30, 07-07-31, 07-07-32, 07-07-14, 08-07-18, 08-07-19, 08-07-20 in the agenda and item 5.2 the application of Mr. Abeyta listed in the agenda and discussion of case 05-05-43 and 05-05-41.*

Mr. Guerrerortiz convened the Board into open session stating that the discussions in closed session were limited to those cases listed above and Mr. Abeyta's application.

3. **APPROVAL OF THE AGENDA**

Mr. Sisneros motioned to amend the agenda, second by Mr. Romero and unanimously,

VOTED: To approve the agenda with the addition of item 5.7 – NM Environment Department approval of engineering plans.

4. **APPROVAL OF THE MINUTES**

4.1 July 20, 2007 Minutes of Working meeting – Mr. Sisneros amends the minutes on page 4 item 7. *Direction/discussion on Engineering Technology Majors BSCET, etc.* to state “He would like to explore a statutory change to create an engineering technology discipline.” and remove the sentence “Mr. Sisneros would like a statutory change made to not include them” Motion by Mr. Sisneros, second by Mr. Romero and unanimously,

VOTED: To approve the minutes as amended.

4.2 December 14, 2007 Minutes – Motion by Mr. Guerrerortiz, second by Mr. Schoen and unanimously,

VOTED: To approve the minutes of December 14, 2007

4.3 January 10, 2008 Minutes – Mr. Guerrerortiz acknowledges the discussions held at this meeting that had no quorum present.

5. **NEW BUSINESS**

5.1 Roger Zimmerman, PE NMSPE- Request for NCEES to Develop a PE Exam for Software Engineering – 10:00 a.m. – What is software engineering ?

- Software Engineering is the application and/or study of a systematic, disciplined, quantifiable approach to the development, operation, and maintenance of software that has an impact on the lives, property, economy, or security of people or the national defense; that is, the application of engineering to software.
- Software Engineering requires the application of higher mathematics and the physical sciences to writing software that controls key pieces of infrastructure with a potential impact on public health, safety, and welfare.

This discipline would be responsible to program or oversee software engineering for areas of financial, governmental systems, communications, military, medical, public water systems, railway etc. software program needs. There are 15 ABET Degree programs for software engineering in 11 states at this time and some Canadian ones. The goal is to administer the first SWEngr P&P exam by fall 2011. It starts with engagement with state boards to acquire 10 requests for development of an exam. In a range of 24-30 months after NCEES Board of Directors’ approval there will be a Group 2 Exam. The budget is covered by NCEES \$30,000 and other for \$100,000.

It would provide a path to professional licensing for as many as 30,000 IEEE-USA members. Mr. Zimmerman points out the discipline will be consistent with the model law. Requiring graduate from ABET-accredited curriculum, pass the Fundamentals of Engineering Exam, four years of acceptable experience, pass the P&P Exam. Advantages for the profession would be; setting a path for licensure that allows state boards to attract these graduates, licensure would serve to distinguish them from lesser qualified professionals in the public's perception of the profession, licensure would provide an extra level of scrutiny where public safety, health, and welfare are at issue, and a separate PE exam for Software Engineering provides the formal path to licensure. What is needed to support the consortium's recommendation for a path to software engineering licensure is a written request to NCEES requesting the development of a Group 2 Exam for software engineering. He has supplied inside the meeting book a sample transmittal letter [pg. 23] to consider and request for a state board resolution [pg. 24]. Mr. Schoen asked the difference in the existing electrical & computer discipline or network discipline and this one. Mr. Zimmerman explains electric & computer engineering deals with the development of computer hardware and network engineering is more hardware wiring. The new discipline deals strictly with the software and programming part of computer systems. Mr. Guerrerortiz believes this would only require regulatory changes to add a discipline. He would also want us to be ready to supply that discipline with our NCEES endorsement. Dr. Idriss asked what the ABET accredited degree being offered would be? Mr. Zimmerman explained it is a degree with specific program criteria. Mr. Romero asks what is the separation between electrical engineering and software engineering. Mr. Hensley explains for example, the contractor puts in the programming control software for an air conditioning system after the electrical engineer finishes. Mr. Guerrerortiz explains the committee will have to consider the presentation and make a motion addressing the adoption. Mr. Romero and Dr. Idriss would like to see the ABET curriculum required and Mr. Zimmerman will send one from one of the universities as an example for them to review. Mr. Hensley points out that the engineers are specifying a sequence of operations that are given to the contractor to complete the software to achieve. It would not be the engineers' responsibility if the contractor walks away. There is currently no liability for the software creation. Mr. Schoen questions if software is a product or a profession. Mr. Guerrerortiz sees similarities in fire protection and electrical/mechanical engineers finding an area not covered by their expertise. Over the last ten years, Mr. Hensley has seen software needs grown exponentially. Mr. Guerrerortiz would like to form a task force to study the need. Mr. Sisneros supports getting a test created and then overcoming any licensure complications as references. Mr. Sisneros motioned the letter of support submitted [pg. 23] without the second paragraph, second by Mr. Guerrerortiz and discussion began. Mr. Sisneros understands calculating how many will qualify for testing may be difficult to answer in the second paragraph. Motion will be to support the concept of NCEES creating an examination. Mr. Guerrerortiz will create a letter and Mr. Schoen would like to see it circulated among the PEC for review.

VOTED: Three "yes" votes, two "no" votes and motion passes

Mr. Romero asks Mr. Zimmerman for two or three ABET school software curriculums to review

5.2 Application for Principles and Practice Exam – Marcos Abeyta – 11:00 a.m. Mr. Abeyta explains he graduated in 1997 with a Bachelor of Science from NM Tech [general multiple disciplinary degree] and a MS degree in mechanical engineering from UNM, specializing in material science in 1999. Since then he has worked for IBM, the US Department of Energy and Bernalillo County Public Works Division. He passed the FE in 1997 in NM. Mr. Abeyta clarifies the licensure discipline of his seven references and the change from mechanical engineering to civil engineering. His work experience has become civil in nature with work on roads, highways and nuclear material transportation. Motion by Mr. Romero, second by Mr. Schoen and unanimously,

VOTED: To allow Mr. Abeyta to register for the PE examination.

5.3 Job Description – Engineering Technician [pg. 26] – Brought to Mr. Valdez's attention that this work description is asking that surveying to also be done. Mr. Guerrerortiz suggests this is a possible item for a complaint to be filed and recommends that Mr. Chavez define his concerns of this work description to the PEC.

5.4 Applicability of Section 61-23-14.1 to Engineering Technology Degrees [pg. 27] Mr. Valdez has been questioned on this statute asking if it pertains also to Engineering Tech degrees. The way the statute reads it refers to waiving professional references, but years of experience qualifying for waiver have been mixed in the statute. Mr. Hensley was involved with the Sunset committee in 2005 changing the statute and the 12-year waiver item was not removed. Upon examination, no changes were made in this section of the Act in 2005. Ms. Smith advises the Act should be changed adding section 3 and 4 to include education and experience qualifications at 61.23.14.1 with corrected numerical indexing, so the Administrative Code at 16.39.3.9 only clarify the Act. This should be referred to the Rules and Regulations Committee for the next legislature. Motioned by Dr. Idriss, second by Mr. Romero and unanimously,

VOTED: That all waivers of the FE exam be brought before the Board

5.5 License Renewals: Convictions, Pleas, Discipline – Mr. Schoen explains the importance of finding out how these were treated by the court. Dr. Idriss said the repeaters as in DWIs should be looked at closely. Mr. Valdez said there are about 12 a year and the Board decided to have all of the presented for consideration. On the next renewal the question "Within the last two years..." will be changed to "Have you been convicted..." in order to see their history.

5.6 For Clarification: Number of references required for PE exam applicants with less than two years experience. Mr. Guerrerortiz prefers the requirements at the 2-year level to be only three for a minimum. Ms. Smith notes 16.39.3.9 should clarify this. As it reads in the NMSA 61.23.14.1 A (2) for final licensure 3 PE references must be in the branch applied. The Board agrees that approval will be by references from 3 PEs but they will review reasons why the applicant could not do this on an individual basis.

5.7 NM Environment Department approval of engineering plans – It is discussed that EI's should have a review of their changes to a PE's work by another PE. – Mr. Sisneros notes there has been a problem with an EI of NMED changing designs. The earlier meeting with them has not rectified the problem and he would like them to meet with us again. Mr. Guerrerortiz has also recognized this problem and inconsistency. The NMED had asked whether a licensed engineer needs to supervise the work of an engineer intern. Staff can file a complaint using Mr. Sisneros information and start the process.

6. **CORRESPONDENCE**

6.1 Robert C. Schulz, PE, Permission to Make-up 2 hrs Ethics Course - Motion by Mr. Romero, second by Mr. Schoen and unanimously,

VOTED: To allow 90 days from today to complete his ethics or the licensure will be expired.

6.2 Rich Hovey, PE, Permission to waive Ethics PDHs – His grounds for ethics exemption is based on his expertise in ethics. Motion by Mr. Romero, second by Mr. Schoen and unanimously,

VOTED: Not to approve Mr. Hovey's request to waive ethics PDHs.

6.3 Waiver of NCEES Council Record - Staff has received numerous letters asking for waiver on the ground it is not part of the NMSA and NCEES can be very slow in creating this record. Currently it is not in the rules or statutes as a requirement. Mr. Guerrerortiz would like NCEES address the time it is taking them and inform them of the complaints the board has been receiving. Mr. Valdez has two completed applications without council records and two that are just asking for a waiver. Ms. Smith stated as long as it is a policy, there is no enforceability even when adopted by the Board. Mr. Romero motioned, second by Mr. Guerrerortiz and,

VOTED: 4 yes and 1 no vote, motion passes for further investigation at the next meeting in June.

6.2.1. Guillermo Martinez - Motion by Mr. Guerrerortiz, second by Mr. Schoen and unanimously,

VOTED: Mr. G. Martinez application is deemed incomplete at this time, as it does not have all the information submitted according to the rules. Staff will be writing a letter directing him with the required materials according to the Act.

6.2.2 Michael Anderson and

6.2.3 Karl Petroff - Motion by Mr. Schoen, second by Dr. Idriss and unanimously,

VOTED: The applications for Mr. Michael Anderson and Mr. Karl Petroff are approved as submitted.

6.4 Letters of Support for "Engineering Surveys" Changes to the Model Law – Mr. Valdez pointed out the letters are for Board information.

6.4.1 Montana Board of Registered Land Surveyors

6.4.2 Western Federation of Professional Surveyors

6.4.3 California Land Surveyors Association

7. **COMPLAINTS & VIOLATIONS - Closed Session** - Complaints were reviewed in Executive session at agenda item 2.

7A. **COMPLAINTS & VIOLATIONS - Open Session**

Action on the cases listed at agenda Item 2. [Note: *...All charges, unless dismissed as unfounded, trivial, resolved by reprimand, or settled informally shall be heard in accordance with the provision of the ULA, 61-23-27.11(D), NMSA 1978*]

7.1, 7.2, 7.3 Case 07-07-30, Case 07-07-31 and Case 07-07-32 – Motion by Dr. Idriss, Mr. Romero and unanimously,

VOTED: To settle informally with recommendation to send a letter to all county agencies stating that if EI are giving recommendations on plans they should also be signed and stamped by the PE in charge.

7.4 Case 08-07-14 – Motion by Dr. Idriss second by Mr. Romero and unanimously,

VOTED: To table the case.

7.5 and 7.6 Case 08-07-18 and 08-07-19 – Motion by Dr. Idriss, second by Mr. Romero and unanimously,

VOTED: To dismiss case 08-07-18 and case 08-07-19 as settled informally.

7.7 Case 08-07-20 [pg. 78-123] – Motion by Dr. Idriss, second by Mr. Schoen and unanimously,

VOTED: To table case 08-07-20

7A. Appoint hearing officers (if required) for new cases - none required

8. **REVIEW OF APPLICATIONS**

8.1 Applications for Retired Status & Inactive Status & Waiver of PHDs due to Medical Exemption – Motion by Dr. Idriss, second by Mr. Romero and unanimously,

VOTED: To approve the retired, inactive and medical waiver request.

8.2 Applications with "MLE" Council Records and "Substantial Equivalency" – Motion by Dr. Idriss, second by Mr. Romero and unanimously,

VOTED: To approve the MLE.

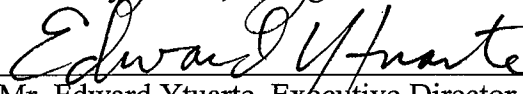
8.3 Review of New Comity and Examination Applications - Outcome is posted in the individual applicant folders

9. **ADJOURNMENT** – Mr. Guerrerortiz recessed the meeting until 8:00 a.m., April 18, 2008. Upon completion of applicant review, Mr. Guerrerortiz adjourned the meeting at 8:45 a.m., April 18, 2008.

Submitted by:

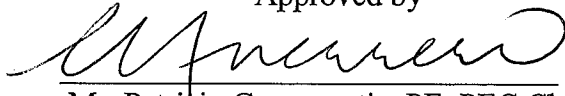


Mr. Perry Valdez, Acting Executive Director



Mr. Edward Ytuarte, Executive Director

Approved by



Mr. Patricio Guerrerortiz, PE, PEC Chair

July 31, 08 Approved Date