

**Minutes of the Meeting of the Board of  
Licensure for Professional Engineers and  
Surveyors held November 7, 2003 in Las  
Cruces, NM.**

**Members Present:** Severiano Sisneros, PE, Chair  
Dr. Rola Idriss, PE, Vice Chair  
Fred Sanchez, PS, Secretary  
Gilbert Chavez, PS  
Subhas Shah, PE  
Clifford Anderson, PE/PS

**Members Absent:** Stevan J. Schoen, Public Member  
Patricio Guerrerortiz, PE  
Charles Atwell, Public Member  
David Marble, PE/PS

Rev.

**Others Present:** Elena Garcia, Executive Director  
Mary Smith, Assistant District Attorney, Legal Counsel to the  
Board  
Amanda Quintana, Licensing Manager  
Edward Ytuarte, PE/PS, Complaint Manager for the Board  
Hank Rosoff, PE, NMSPE

**1. CONVENE/ROLL CALL/INTRODUCTION OF GUESTS**

Mr. Sisneros convened the meeting at 9:28 am.

**2. APPROVAL OF THE AGENDA**

It was moved by Mr. Shah, seconded by Mr. Sanchez and unanimously,

**VOTED:** To approve the agenda as presented with the addition of a discussion on promoting the Engineering and Surveying Professions under item 10, "other".

**3. APPROVAL OF THE MINUTES**

**3.1 Approval of the Minutes of the August 2003 Regular Meeting** -It was moved by Mr. Sanchez, seconded by Mr. Shah and unanimously,

**VOTED:** To approve the minutes of the August 2003 Meeting.

**4. NEW BUSINESS**

## 5. CORRESPONDENCE/COMMUNICATIONS

**5.1 Robert C. Krebs, PE/LS, Past President, NCEES Correspondence to Larry D. Nixon, PE, President, ABET** – Ms. Garcia stated the correspondence explains NCEES' concerns regarding the low passing rate on the FE exam. There is a concern that under ABET's accreditation criteria 2000 students may not be learning what is being tested by the FE exam. The letter indicates NCEES also understands ABET's concerns and is open to discussions. Mr. Chavez added that the big concern that NCEES has is that the universities are more concerned in meeting the criteria for ABET than trying to teach principles and theory. Dr. Idriss stated that all engineers regardless of their discipline have to take the core classes. What is happening is that undergraduates are becoming very specialized. The question is whether NCEES is testing the students on what they are actually taught. No formal action was taken.

**5.2 Dr. Kenneth R. White, PE – Re: NCEES Communication Avenues** – Mrs. Garcia stated Dr. White's letter apprises all NCEES members of the manner in which NCEES strives to keep its individual members apprised of its activities. Some of the communications include: the Licensure Exchange newsletter published six times a year, Zone Update sent out five times a year, and the NCEES web site that is very extensive and updated regularly. It was noted that Dr. White had been elected Emeritus Member of the NM Board.

Mrs. Garcia introduced Dr. Quentin Ford, PE in the audience as former board member and WZ Vice President. He spoke briefly and encouraged the new Board members to become active with NCEES.

## 6. COMMITTEE REPORTS

### **Standing Committees:**

**6.1 Professional Engineering Committee** – Mr. Shah reported that the PEC discussed several issues one being correspondence received from the Environment Department inquiring whether a PE license is needed to design wastewater storage and disposal systems. The committee also discussed pre-manufactured designs and as-built drawings. The committee reviewed a request to take the Control Systems PE exam, and determined that the applicant may sit for the Control System exam if his application is approved. There is not, however, a Control Systems engineering discipline in the regulations; therefore he will have to be licensed as a PE with another closely related discipline, e.g. electrical, provided the Board approves such experience. The Committee discussed several cases: 03-03-10 (made offer to settle), 03-03-12 (No action taken), 04-03-05 (Need more information). The Committee also discussed water-harvesting systems as they pertain to engineering. This matter will be referred to the Joint Practice Committee for further discussions with the Board of

Architects and the Landscape Architects Board. The Committee approved two inactive status applications and three retired status applications. The committee also reviewed twenty-seven applications for licensure by exam and endorsement.

Mr. Sanchez added that the septic tank issues have become a problem for the surveyors also because some of the counties are asking them to furnish proof that the soils of a piece of land are suitable for septic tank installation. Surveyors are not qualified to do that and at the same time the average land owner is not qualified either. An engineer should be required to make the determination. Mr. Anderson added the Environment Department will be promulgating a rule that is going to require every septic tank submittal to be completed by either a technician or a PE who has obtained a Department sponsored certification for septic tank with a discharge of less than 2,000 gallons per day. Mr. Sanchez stated that his concern is over unlicensed individuals doing this kind of work--who is responsible for things such as contamination, etc.? Insurance companies do not cover any non-licensees; so it is very dangerous to start certifying individuals and leaving the public with no recourse. Mr. Sanchez stated that this board has been very indecisive when doing things. The Board is only dealing with things as they come. The Board needs to try to keep up with things that affect this Board and the professions; it takes more than sitting at a four-hour meeting, four-times a year to keep up with these issues. Mr. Sisneros stated that the Board needs to get together with the county association and perhaps do a workshop to apprise individuals of the Boards' views.

**6.2 Professional Surveying Committee** – Mr. Chavez explained that the PSC was unable to meet yesterday because of a lack of a quorum. The committee is in the process of rescheduling. Mr. Chavez asked Mr. Sanchez to bring everyone up to speed on the recent LFC meeting. Mr. Sanchez explained that he attended the LFC budget hearing with Mrs. Garcia and Chair Sisneros at the Capitol Building. Senator Arthur Smith stated he had a concern over the decline in the number of professional surveyors in New Mexico. He urged the Board to do something or the legislature might consider permanent sunset of the Board. He believes the decline has occurred since 1995. Mr. Sanchez also stated that Senator Smith opened the door for the Board to have communication with the individuals that approve funding; and the Board needs to respond because he has threatened permanent sunset as a solution, and that is not a solution. Since he has been on the Board, the PSC has approved 5 to 6 surveyors for licensure, and if this is an average we are losing surveyors fast. Mr. Sanchez indicated he had drafted a response letter which Mrs. Garcia distributed to all Board; however, he has only received comments from Mr. Anderson. Mr. Sanchez stressed that the Board needs to respond. Mr. Sisneros noted that this is definitely a wake-up call, and the Board needs to respond in some way. Mr. Sanchez would like the Board to approve the letter and respond on a timely manner. Mr. Chavez stated that he concurs with Mr. Sanchez' efforts and the Board needs to make a commitment to follow up with this. Mr. Anderson stated that several men and women have graduated from technical surveying schools, have been licensed, and are doing

very well professionally. Right now, however, applicants do not have that opportunity. A lot of time people do not understand what is involved in surveying and once they begin to practice they get real excited about it. Right now the career path is fairly limited to a four-year surveying degree [or four-year related science degree], and that has hurt some very qualified people that may have otherwise gone on and become licensed surveyors. Mr. Shah agrees that a response needs to be given, but here is a problem that the Board needs to fix, should fix, and has the authority to push for the appropriate changes. Mr. Sisneros stated that the problem is economics in the field of surveying. Surveyors are under paid, which deters individuals from entering the profession—perhaps the Board should request funding for public outreach, and the Board can go out and recruit. Once young people know what engineers and surveyors do, maybe they will be interested in pursuing these professions. Mr. Chavez recommends that we charge this to a task force or a committee to focus on how we are going to address the problem at hand. Mr. Sisneros stated that there are two issues: (1) we need to get a response out to Senator Smith, and (2) determine the direction the Board wishes to take. Dr. Idriss stated that one of the big problems is the education issue. The Engineering Department at NMSU monitors very closely the enrollment rates, if the rate drops even a small amount, the department will recruit. She was not sure if the surveying department operates in the same manner. It was noted that a task force needs to follow up on this issue. Members interested were: Chair Sisneros, Mr. Sanchez, Mr. Chavez, and Dr. Idriss. It was moved by Mr. Chavez, seconded by Dr. Idriss and unanimously,

**VOTED:** To establish a task force headed by Mr. Sanchez to take charge, set a deadline, and prepare a response to Senator Smith, with a cc to the Chairman of the Committee.

**DISCUSSION:** Mr. Sanchez stated that he has already drafted a letter and he wants responses from the task force within ten (10) days via e-mail through Mrs. Garcia.

Mrs. Garcia stated that the task force should meet and review all the data available regarding the decline in licensed surveyors and decide a course of action. It was moved by Mr. Shah, seconded by Mr. Chavez and unanimously,

**VOTED:** To have the task force look at the surveying education requirements, etc. and its effects on the decline.

**DISCUSSION:** The Board will discuss the results of the findings during the April Board meeting and during the April annual meeting of the NM Professional Surveyors Association.

**6.3 Arch./Eng./Landscape Arch. JPC** – Mr. Sanchez stated that he, Mr. Marble and Mrs. Garcia attended the JPC meeting held October 15, 2003. The Committee discussed various issues and problems. Mr. Sanchez reported that he

had communicated his concerns over the pricing of surveying services because both engineers and architects frequently and inappropriately request it. The committee was organized and planned discussions for the next meeting. It was noted that the two representatives from the Board were from the PSC, however, Mr. Sanchez indicated worked well because Mr. Marble is both an engineer and a surveyor.

**6.4 Professional Development Committee** – No report.

**6.5 Rules & Regulations Committee** – No report.

**6.6 Executive Committee** – Mrs. Garcia reported that she had met with Mr. Guerrerortiz and had gone over the budget with him prior to its submittal in September.

**6.7 Examination Committee** – Dr. Idriss reported on exam trends that were brought to her attention during the NCEES annual meeting in Baltimore. NCEES is discussing allowing examinees to take the PE exam earlier, voted on limiting certain types of calculators in the exam room, limiting the number of times a person is allowed to take the exam, and assigning a specific I.D. number for all candidates. She indicated that it appears that many of the issues NCEES is now reviewing, New Mexico is ahead of the game. Mrs. Garcia reported that as noted during the last meeting, there is a problem with the rule that was approved in December 2002 regarding FE candidates being able to retake the exam after three consecutive failing attempts. The statute is specific regarding FE candidates, and the Board cannot waive the statutory requirement. It has been noted in previous meetings, that the Board can waive or change the rule as approved to allow PE candidates to sit for the exam after three failing attempts provided they submit documentation of further study to the Board for approval. However, not for the FE exam. Mrs. Garcia will follow-up on this issue.

**6.8 Fire Protection Engineering Committee** – No report.

**6.9 Committee on Consumer Information Publication** – No report.

**6.10 Committee on Construction Staking** - Mr. Sanchez reported that he distributed to Board Members a report in June regarding Construction Staking and has had no response. Mr. Sanchez reviewed some of the things that the previous board had considered allowing. They were basically allowing engineers to do surveys that have always required a professional surveyor's stamp. He indicated surveyors live and die by their signature and their stamp. If you sign and stamp something, you better know exactly what you're stamping and signing or the Board will come after you. Mr. Sanchez referred to and read from the document he distributed under "Verifying Existing" on the example plans before the Board and on file with the Board office. He asked "Isn't this asking the contractor to re-design the project after you signed it and stamped it, how can this be going on?" He indicated those are the types of things that really concern him. His assignment was "construction staking by the contractor". Mr. Sanchez then read the attached "Construction Staking Committee – Draft Worksheet" dated June 26, 2003. After reading number 3 (b) Mr. Sanchez stated, "I can't say here is my survey it is up to the owner to go out and see if it's correct. If I can't do that, then an engineer should not be able to do that." Engineers legally disclaim responsibility by notes

after signing and stamping plans. Mr. Sanchez goes on to read 3. (c) to the end of the report. Mr. Sanchez goes on to say that “The Possible Changes to the Act (Re: construction surveying, engineering surveys and public works projects)” that were drafted by the previous board are classic examples of what is in the letter to Senator Smith, that we have some influences from everything that is detrimental to the profession of surveying. It’s coming from the board itself in some cases. I have just presented existing conditions, and I have given you what I think conflicts with the Engineering and Surveying Practice Act which we are charged to uphold. Mr. Sisneros asked what the Board could do, what were the solutions? Mr. Sanchez indicated that what the previous board had allowed is already in serious conflict with the Act. The Board can say that it can not allow this type of activity because it is not in the Act. Mr. Sisneros asked if the Board should write a letter to State Purchasing regarding the State Procurement Act. Mr. Sanchez agreed and added that the State Procurement Act specifically says that it is unlawful for anyone to obtain professional services based solely on price. Mr. Sisneros stated that “Engineering Survey” needs to be defined. [Mr. Sanchez’ opinion is that the proposed definition from the previous board is not acceptable.] The Board would then communicate with all state agencies involved in construction staking to explain the difference between what an engineering survey is and what it is not. Mr. Sisneros went on to say that there are some people that can survey land and boundaries and there are some people that can perform construction staking. Mr. Sanchez asked with which licenses? Mr. Sisneros responded that the question of the license is not the issue. It seems to him that the professional surveying field has predominantly worked in boundary surveying-- and in construction staking they have not had a voice; therefore if the board is going to branch into construction staking, well then it better be able to differentiate between the two. We have two types of surveying, like it or not, it’s two different things and until it’s clarified the board is going to lose the battle. Mr. Sanchez stated his position was this “what is the difference between him me finding the boundary on a piece of land or finding the right-of-way on a highway project or placing items within that right-of-way in a specific location. It seems to him that it leans more towards the surveying profession than to engineering.” Mr. Sisneros stated that it may not seem that he is in agreement with Mr. Sanchez, but he is. They need to somehow attack this issue; but he is unsure at this time how to go about it. Mr. Chavez agreed that the Board needs to define the two areas and differentiate between the two. The board needs to be specific and say, this is what the engineer is responsible for, and this what the surveyor is responsible for. Mr. Sisneros reiterated that he understands Mr. Sanchez’ point completely and this doesn’t only occur on highway projects, it occurs on building projects also. It occurs on every form of project within the state and across the U.S. but the definition always comes down to where does it cross from surveying to engineering and, right now, surveyors are viewed as boundary surveyors. People who go out and do property lines, everything else leans more toward engineering and that is the grey area. He believes this needs to go back into committee because these are very good points. The Board needs to define these issues and then once they are defined, the Board can license it. Mr. Chavez brought up that

there have also been discussions regarding designations for surveyors. For example, a surveyor could be a construction surveyor, boundary surveyor, etc.

Mr. Rosoff (NMSPE) stated that the society would be happy to make comments regarding the report for the next meeting.

Mr. Chavez stated that for the last twenty years there have been established minimum standards; since then construction staking has always been an issue and this is because contractors and engineers are very much opposed to it.

Mr. Sisneros stated that the Department of Transportation had their own engineers and surveyors on staff who did all the work internally. It was when they went out to contract when so much changed. He would like to go back and discuss this again in committee. The Board is not going to solve this today because it has taken thirty years to get to where it is today. Mr. Sanchez stated that the reason he did this report back in June was because he was hoping to get some input from somewhere; and when he was asked at the previous meeting if this report could be released to the public he said yes but he thought some action would be taken quickly.

Mr. Shah stated that the board should wait for comments from the NMSPE and any other input from other board members and discuss it further at the next meeting or in committee. Mr. Sanchez asked if he could have a feeling from the engineers on the board about what they think about putting something like [this] on plans that by disclosure they seem to absolve themselves from all responsibility of the design work on plans, can that be done? And the Board does not need a lot input from the whole world, it can just say this part of it can not be done. Mr. Anderson stated that just writing that statement on the plans does not create a conflict necessarily with rules and regulations or the Act. He could not see that the statement itself is in violation, but it might lead to that, and that is definitely an issue. Mr. Sisneros stated that he still would like to go to committee on this in order to discuss it at length since it is something he feels very strongly about. This is something that if accomplished as a board, it would be the only board in the United States that has been able to do so. However, it can not be accomplished today although this is an issue that is very true and dear to all.

Mr. Chavez stated that it appears to him that it is a legal issue. Engineers are required to provide a set of plans that are certified and stamped. When an engineer places a disclaimer on plans, it nullifies the engineer's certification. Mr. Sisneros stated that it is because an engineer survey has never been defined. Mr. Sisneros added that the Board is very fortunate that it has members that understand the problem more clearly. He feels the board can come up with a solution, but it is not going to happen today. Unless he is totally wrong, it will take two to three years to solve.

Mr. Sanchez asked if the board can take pieces of it and get rid of it. He believes that placing that statement on a set of plans is illegal and unprofessional.

Mr. Shah stated that he is not comfortable making this kind of decision right now. Mr. Anderson stated that if there is a complaint filed, the Board can respond to it. Mr. Sanchez stated that as a board member he can not file a complaint. Mr. Sisneros reiterated that this needs to be sent to committee. Mr. Sanchez stated that he had posed these things because they are illegal and against the Act and we are saying...well in three years we may answer it. He indicated that is unacceptable. He will give it some more thought, but he believes the Board either needs to say that it is going to clean this up, or it say it is above us and can not do a thing about it. Mr. Sanchez said that if the Board chooses to take no action, he will not just give it up. He will work through to the Legislature, but he brought it to the Board first. Mr. Sisneros asked Mr. Sanchez he wants the Board to do. He added that the board and gone through six months of everything from working on the EIT's in Socorro to many other different things. It has had limited amount of time as a Board and it is not going to solve the problem of construction staking today because it is bigger than anyone in the room, however, it can get done eventually. Mr. Sanchez stated that he is only saying that it seems to him that if a licensee can absolve himself/herself of responsibility for whatever he/she stamps and signs by disclosure--then something is very wrong and it needs to be cured very quickly. Mr. Sisneros asked Mr. Sanchez to put forth a motion since he is not sure what he wants. Mr. Sanchez stated that he would like to see this board take the issues presented by him and try to resolve them.

It was **moved** by Mr. Sanchez that a professional of any kind not be able to, by disclosure, absolve himself or herself from the responsibility of whatever he/she signed and stamped according to the Act. Motion died for a lack of second.

Mr. Anderson stated he believes this is a broad subject. Mr. Sisneros stated that he would be very comfortable in bringing the person that stamped these plans before the board to ask him/her why he/she stamped them as such. Mr. Sanchez said that the examples were not uncommon; he just presented a couple of examples. Mr. Chavez stated that the Board needs to conduct an investigation to determine how much of this is happening. Mr. Shah stated that he agreed with Mr. Sanchez, but since they are all part of a new board and do not have all the information, he feels more information and history is needed before any action is taken.

## 7. **ADMINISTRATOR'S REPORT**

**7.1 Staff Activity Report** – Since some of the board members were under time constraints, Mrs. Garcia briefly described the remaining items on the agenda stating that copies were mailed in advance and were also included in the meeting books.



**7.1.1 Update on ELSESES – Exam Administration** – For information only. A copy of the statistical data for FY 2003 was included in the books. She indicated that the examinations had been completed without any major problems by NCEES/ELSESES. Staff had worked very closely with ELSESES staff to ensure a smooth administrative transition. She had been an observer at the UNM exam site. She reviewed the correspondence received from Todd S. Rastorfer and Armando Najera as included in the meeting books regarding the handling of reference material contained in obscured boxes/suitcases. She indicated that the proctor had directed examinees to empty boxes and containers if they were not “see-through” and place their reference materials on the floor. This was difficult to candidates who had their material organized in their containers. Correspondence was also received regarding the calculators to be prohibited effective with the April exam.

**7.1.2 Proctor requests – Canada** – For information only.

**7.1.3 Board’s Proposed Retention Schedule – Included** in the meeting notebooks for information purposes.

**7.2 Information from NCEES – Exam Security Breach Procedures; Ban of Certain Calculators** – Mrs. Garcia summarized the September 15, 2003 “Exam Security Breach Procedures” from NCEES. She also commented on the August 27, 2003 NCEES News Release which banned calculators such as the HP 48GX, HP 49G, TI-83 Plus and TI-83 Plus Silver Edition, TI-89, and TI-92 and Voyage 200. This was a list of calculators that either had communicating and/or text editing capabilities. Calculators with QWERTY keypads are also not allowed. The prohibited list is not an all-inclusive list. It is to be used as a guide.

**7.3 FY 05 Appropriation Request – Strategic Plan / Performance Measurements (copies mailed in September)** – It was moved by Mr. Shah, seconded by Dr. Idriss and unanimously,

**VOTED:** To approve the FY 05 budget.

**7.4 Financial Status Report – July 2003 Reports** – Copies of the July, 2003 reports were included in the meeting notebooks. The Board reviewed and approved the financial statements.

## **8. OLD BUSINESS**

**8.1 Status Report on Exam (FE) Loss Incident** – Mrs. Garcia gave a report on the reimbursement outcome and results of the NM Tech candidates who re-took the FE exam.

**9. CLOSED SESSION (Complaints and Violations)**

The board did not go into closed session.

**9A. OPEN SESSION**

**9.1 In the matter of Timothy Oden, PS (Status of Court Appeal)** – Mrs. Garcia indicated that the County of Santa Fe, First Judicial District Court had upheld the Board’s Decision in the Timothy Oden case.

**10. OTHER**

**10.1 Certificates of Appreciation for Former Board Members** were signed by the board members present.

**10.2 Process for Presentation of Certificates to Interns/Licensees** – Chair Sisneros indicated that he would like to have the Board look into awarding Engineering and Surveying Interns who pass the FE & SI exams their certificates in conjunction with the universities’ diploma in an effort to recognize the profession and advance the licensing process.

**11. ADJOURNMENT** Chair Sisneros adjourned the meeting at approximately noon.

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**Date Approved**

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**Elena Garcia, Executive Director**

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**Severiano Sisneros, III, Board Chair**