Board for Professional Engineers and Land Surveyors

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The Board for Professional Engineers and Land Surveyors (PELS) is a consumer protection agency within the state Department of Consumer Affairs (DCA). PELS regulates the practice of engineering and land surveying through its administration of the Professional Engineers Act, sections 6700–6799 of the Business and Professions Code, and the Professional Land Surveyors' Act, sections 8700–8806 of the Business and Professions Code. The Board's regulations are found in Division 5, Title 16 of the California Code of Regulations (CCR). The basic functions of the Board are to conduct examinations, issue licenses, set standards for the practice of engineering and land surveying, investigate complaints against licensees, and take disciplinary action as appropriate.

PELS administers a complicated licensing system under which land surveyors and fifteen categories of engineers are licensed and regulated. Land surveyors are licensed under section 8725 of the Business and Professions Code. Pursuant to section 6730 of the Business and Professions Code, professional engineers may be licensed under the three “practice act” categories of civil, electrical, and mechanical engineering. Structural engineering and geotechnical engineering are “title authorities” linked with the civil engineering practice act; both require licensure as a civil engineer and passage of an additional examination. The “title act” categories of agricultural, chemical, control system, fire protection, industrial, manufacturing, metallurgical, nuclear, petroleum, and traffic engineering are licensed under section 6732 of the Business and Professions Code. PELS’ “title acts” only restrict the use of a title; anyone (including an unlicensed person) may perform the work of a title act engineer so long as he/she does not use the restricted title.

The Board consists of thirteen members: seven public members, one land surveyor, four practice act engineers, and one title act engineer. The Governor appoints eleven of the members for four-year terms that expire on a staggered basis. Additionally, the Assembly Speaker and the Senate Rules Committee each appoint one public member.

The Board has established four standing committees (Administration, Enforcement, Examination/Qualifications, and Legislative), and appoints other special committees as needed. Pursuant to Business and Professions Code section 6726, PELS has also established several technical advisory committees (TACs) to provide advice and recommendations in various technical areas.

MAJOR PROJECTS

“Board Policy Resolutions” Stir Controversy, Challenge

At recent meetings, PELS approved several “Board Policy Resolutions” (BPRs) at the request of its technical advisory committees. The BPR approval process began in 1995, when the Board first sought to formalize its opinions and policies on various aspects of the statutes it administers. At that time, its attorneys warned PELS that BPRs could be construed as “underground rulemaking” (the adoption of regulations without undertaking the rulemaking process required by the Administrative Procedure Act), and would be lawful only if (1) they do not amend, supplement, or revise any statute or regulation concerning professionals regulated by PELS; (2) they are merely restatements of existing law and are intended only for clarification; (3) they do not implement, interpret, or make specific any law enforced or administered by PELS; and (4) they do not govern PELS’ procedures. At its July 1998 meeting, PELS adopted a proposal to include a statement in all BPRs that a BPR is “merely a restatement of existing law intended only for clarification.” However, the legitimacy of specific BPRs has been called into question, leading the Board to revoke one at its April 9 meeting. Further, the Board’s attorneys are reviewing the entire BPR process and its consistency with existing law.

♦ BPR #98–02: Surveying and Mapping of Accident Scenes. During 1998, PELS adopted BPR #98–02, regarding the surveying and mapping of accident scenes. BPR #98–02 essentially found that “many of the functions or activities being performed relative to the surveying, data, collection, and preparation of maps of accident scenes are in connection with the practice of civil engineering and land surveying,” and that such activities should be undertaken by a civil engineer, a land surveyor, or by a subordinate who is directly supervised by a licensed land surveyor or civil engineer authorized to practice land surveying. [16:1 CRLR 115]

In adopting BPR #98–02, PELS cited Business and Professions Code section 8726(b), which requires one who “determines the configuration or contour of the earth’s surface, or the position of fixed objects thereon or related thereto, by means of measuring lines and angles, and applying the principles of mathematics or photogrammetry” to be licensed as a land surveyor. Similarly, Business and Professions Code
section 6731.1 states that an individual who “determines the configuration or contour of the earth’s surface, or the position of fixed objects thereon or related thereto, by means of measuring lines and angles, and applying the principles of trigonometry or photogrammetry” must be licensed as a civil engineer. Further, licensure is required to create, prepare, or modify electronic or computerized data resulting from the above-described mapping tasks.

Following its adoption of BPR #98–02, PELS was deluged with letters of opposition from law enforcement officials and accident reconstructionists. Accident scene mappers, many of whom are not licensed engineers or land surveyors, use fixed works to reference skid marks and the position of articles, such as automobile parts, found at the scene of an accident. They can map an accident scene with a cloth tape measure or other primitive tool, or—as is increasingly occurring—they can use modern equipment typically used in land surveying or civil engineering. They contended that nothing about their jobs has changed, except that they are using better technology with a higher degree of accuracy to record data at an accident scene. Most noted that it would be expensive to require local police departments to employ Board licensees to map accident scenes electronically, and impractical to require nonlicensees to map them by hand on paper. They also argued that the use of modern technology permits police to clear an accident scene from the road more quickly and safely. In his letter to the Board, professional engineer Melvin M. Friedlander, who provides accident reconstruction services, stated that the Board’s resolution “was passed without considering all the ramifications and problems that would occur if efforts were made for strict enforcement. It is impractical, it is unfair to accident reconstructionists who are best qualified to resolve vehicle accident scenes and, finally, it is unjust to identify civil engineers and land surveyors with the sole responsibility of safeguarding life, health, property, and public welfare in this area.”

At the Board’s February 25 meeting, several representatives of the law enforcement and accident reconstructionist community testified in support of their request that the Board rescind BPR #98–02. In response, the Board agreed to reconsider the resolution, and referred it to the Legislative Committee for further study. Following discussion at its April 8 meeting—during which it noted the pendency of AB 1341 (Granlund), which would exempt local law enforcement officers from PELS’ licensure requirement when they map accident scenes electronically (see LEGISLATION)—the Committee voted to recommend revocation. At its April 9 meeting, the Board agreed to rescind BPR #98–02 by an 8–1 vote.

♦ BPRs #98–01 and #98–04: Joint Utility Trench Design. Adopted in February 1998, BPR #98–01 finds that plans for the design of municipal improvements consisting of underground trenches in public streets, easements, and/or rights-of-way (such as those trenches which are to contain public or private gas, electric, cable, and telephone utilities and related structures) must be prepared by or under the responsible charge of a licensed civil engineer. BPR #98–04, adopted by PELS in September 1998, states that, unless otherwise exempted by the Professional Engineers Act, the design of utility systems (such as public or private fuel, fluids, electric, cable, telephone, and/or related utility systems) located within joint utility trenches in public streets, easements, and/or rights-of-way must be performed under the responsible charge of licensed professional engineers who are qualified to design such systems, such as electrical or mechanical engineers. [16:1 CRLR 115]

At PELS’ February meeting, Larry Todd of Southern California Edison (SCE) addressed the Board on the utility’s contention that, because it is regulated by the Public Utilities Commission, it is exempt from Board jurisdiction and any requirement that it hire engineers to design and construct utility systems. Todd cited Business and Professions Code section 6747(a), which states that the Professional Engineers Act, “except for those provisions that apply to civil engineers and civil engineering, shall not apply to the performance of engineering work by a...public utility... provided that work is in connection with, or incidental to, the products, systems, or services of that corporation or its affiliates.” SCE suggested amendments to the BPRs which would affirm the exemption from the licensure requirements for utility trenches designed pursuant to the standards of the Public Utilities Commission.

PELS rejected SCE’s recommendations on an 11–0 vote. The Board noted that because section 6747(a) does not exempt public utilities from the PE Act’s civil engineering provisions, amendment of BPR #98–01 would be unacceptable. Although section 6747(a) appears to exempt public utilities engaged in certain activities from the PE Act’s provisions relating to electrical and mechanical engineering, the Board disapproved of the language suggested by SCE because it relies on whether a utility system is designed according to the standards of the PUC, which is irrelevant under the PE Act.

♦ “Fields of Expertise” BPR Challenged as Underground Rulemaking: The Legality of BPRs. In 1996, PELS adopted BPR #96–10, intended to be a joint statement between PELS and the Board of Registration for Geologists and Geophysicists (BRGG) that differentiates between the responsibilities and duties of civil engineers and geologists. The so-called Fields of Expertise document identifies activities within the scope of practice of engineering and geology, reviews the “gray areas” where civil engineering and geology overlap, and lists activities that are normally performed by both professions. Recently, the two boards have been at odds with each other about the document, and a task force consisting of representatives from both boards has been meeting to try to iron out the disagreements over the content and format of the document. [16:1 CRLR 115–16]

A recent development that could substantially impact this matter and the legality of PELS’ BPRs generally is former BRGG member Howard “Buzz” Spellman’s submission of a request for determination to the Office of Administrative Law
(OAL). Spellman contends that the 1996 version of *Fields of Expertise*, which was approved by PELS as BPR #96-10 but later rejected by BRGG, constitutes a "regulation" as defined in Government Code section 11342(g), and is thus subject to the rulemaking requirements of the Administrative Procedure Act. Neither board has ever adopted *Fields of Expertise* as a regulation. On January 15, OAL published a summary of Spellman’s petition in the California Regulatory Notice Register. Section 126, Title 1 of the CCR, requires that OAL’s written determination be issued within 75 days of that publication; however, at this writing, OAL has not yet issued its determination.

At its April 9 meeting, the Board suggested that staff seek additional guidance from the Attorney General’s Office regarding the legality of the BPR program. PELS expects to receive the Attorney General’s opinion in time for review at its June meeting.

**Delinquent License Reinstatement Process**

For the past several months, PELS has been reviewing its delinquent license reinstatement process. [16:1 CRLR 114] Business and Professions Code sections 6795 and 8801 require professional engineers and land surveyors to renew their licenses every four years. A license that is allowed to lapse is considered "expired." Under Business and Professions Code sections 6796 and 8802, a licensee with an expired license may reinstate his/her license any time within three years of expiration by simply paying the normal renewal fee plus a delinquent fee. However, if a license remains expired for more than three years, the licensee is considered “delinquent” and may not have his/her license reinstated without satisfying several conditions. Business and Professions Code sections 6796.3 and 8803 outline the requirements for reinstating a delinquent license: (1) the delinquent licensee must not have committed any act or crime substantially related to the qualifications, functions, and duties of his/her profession; (2) the licensee must take and pass the same examination as would be required of a first-time applicant; and (3) the licensee must pay all of the fees that would be required of a first-time applicant. These sections also authorize the Board to waive the examination requirement if the delinquent licensee demonstrates that he/she is qualified to practice; in making this determination, the Board must “give due regard to the public interest.” Section 424.5, Title 16 of the CCR, outlines the information which must be provided by a delinquent licensee to the Board, and the criteria which must be evaluated by the Board in determining how to rule on a reinstatement request (and whether to waive the examination requirement).

The Board’s current process of reviewing reinstatement applications and evaluating exam waiver requests consists of many time-consuming steps and is problematical from an enforcement standpoint, because the statutory and regulatory scheme essentially permits delinquent licensees to practice without a license and guarantees reinstatement of the license if the licensee has not violated any other law or been the subject of a complaint. Staff believes it is important to determine what the licensee has been doing during the period of license expiration/delinquency (e.g., not practicing, practicing out of state, practicing legally under an exemption to the licensure requirement, or practicing illegally in California), and that the Board should clarify its preferences as to each situation. For example, section 424.5 does not even contemplate the possibility of Board disciplinary action against a licensee for practicing in California with a delinquent license. Staff has prodded the Board to find a way to prevent someone who has been actively practicing in California with a delinquent license from being reinstated with no additional requirements.

At PELS’ February meeting, staff presented information on its survey of the way the National Council of Examiners for Engineering and Surveying (NCEES) and other California boards treat licensees who have let their licenses expire. Under NCEES’ “model law,” “the responsibility for the timely renewal of a licensee’s license rests solely with the individual licensee.” The license of an individual who does not pay renewal fees in a timely fashion is “void” and a new application for licensure must be filed. Of 30 other California licensing agencies surveyed, only four permit reinstatement of a delinquent license as does PELS; the remaining 26 require that a new license be issued. Some boards permit a waiver of some of the requirements for the issuance of a new license, but few have adopted regulations codifying the criteria for such a waiver.

Staff also provided summaries of comments from Board members on the issue. Public members Myrna Powell and Kathy Hoffman stated that engineers and land surveyors should act like professionals and take responsibility for renewing their licenses on time; they also faulted the four-year renewal period, which is double the two-year renewal period of most other California occupational licensing agencies. Several professional members thought the process should be left alone, or reiterated their belief that PELS should create an “inactive status” or “retired status” license for those who do not intend to practice but do not want to abandon their license entirely (see LEGISLATION). Others suggested that PELS send a second and “final” renewal notice by registered mail (return receipt requested) to licensees who fail to timely renew, and track whether the notice is received by the licensee. Staff sought direction from the Board on whether to seek legislation to modify the relevant statutes, or regulatory changes to section 424.5 to simplify the delinquent reinstatement process. PELS directed staff to work with the Board’s
liaison within the Attorney General's Office to develop changes to the process and to determine which changes must be made via legislation and which may be made through rulemaking. PELS directed staff to prepare an "action plan" regarding the various proposals discussed and whether each would require legislation, rulemaking, or policy changes.

At the Board's April 9 meeting, staff returned with the action plan. Staff noted that any change to the four-year renewal period, modification of the grace and/or delinquent periods in the Business and Professions Code, or creation of a "retired" or "inactive" status license would require legislation. A program of mailing renewal notices during the delinquency period could be accomplished through a Board policy change. PELS would have to amend section 424.5 of its regulations in order to prevent a person who has been practicing or offering to practice in California during the delinquency period from being able to reinstate his/her license without any other requirements.

Staff presented, and the Board approved for publication, proposed amendments to section 424.5. New subsection 424.5(c) would expressly state that the Board may pursue disciplinary action, including but not limited to revocation or suspension of the license, issuance of a citation and fine, and the filing of criminal charges, if a delinquent applicant for license reinstatement has practiced or offered to practice during California during the delinquency period. PELS agreed to release this modified language for an additional 15-day comment period, in compliance with the Administrative Procedure Act.

At this writing, PELS has not yet published this proposed regulatory amendment for a 45-day public comment period.

Board Proposes Amendments to Rule 411 Regarding Seal and Signature

Business and Professions Code sections 6735, 6735.3, and 6735.4 require each civil engineer, electrical engineer, and mechanical engineer, respectively, to sign plans, specifications, and reports (to indicate that they have been prepared by an engineer or by a subordinate under his/her direction) and to stamp those documents with his/her official seal (which must include his/her license expiration date). Section 411, Title 16 of the CCR, sets forth the design, contents, and requirements of the seal required by the Business and Professions Code. Under current section 411, the PE seal must include the term "registered professional engineer." The existing regulation does not address other issues related to the licensee's signature and the use of the official seal. PELS believes section 411 should state specifically whether an abbreviated form of the licensee's name may appear on the seal, whether seal replicas are permitted, and how work performed under the responsible charge of more than one professional should be signed and sealed. Additionally, the Board has determined that the issues of whether or not an electronically generated seal and an electronically generated signature are acceptable should be addressed in section 411.

On January 29, PELS published notice of its intent to amend section 411 to accomplish several goals. First, AB 969 (Cardenas) (Chapter 59, Statutes of 1998) deletes the use of the term "registration" and provides instead for the licensure of professional engineers. [16:1 CRLR 117] Thus, the amendments to section 411 would permit engineers to use either "registered professional engineer" or "licensed professional engineer" on the seal. Land surveyors could use either "licensed land surveyor" or "professional land surveyor."

As published, proposed subsection 411(c) would permit the seal to contain an abbreviated form of the licensee's given name or a combination of initials representing the licensee's given name, provided the surname listed with the Board appears on the seal and in the signature. Proposed subsection 411(d) would prohibit a licensee from preprinting blank forms with his/her seal and from using decals or other seal replicas.

Under proposed subsection 411(e), work performed by, or under the responsible charge of, more than one licensee must be signed and sealed in accordance with the PE Act and the Land Surveyors' Act and in a manner such that all work can be clearly attributed to the responsible licensee. "When signing and sealing work on which two or more licensees have worked, the signature and seal of each licensee shall be placed on the work with a notation describing the work done under each licensee's responsible charge."

Finally, as published, proposed subsection 411(f) would specify that the seal must be capable of leaving a permanent ink, impression, or electronically-generated representation on the work. Subsection 411(g) would prohibit a licensee from using signature reproductions, including but not limited to rubber stamps and electronically-generated signatures, in lieu of his/her actual signature.

At its April 9 meeting, PELS considered several comments received during the 45-day comment period. David J. Ryan, Associate Land Surveyor from Humboldt County, commented that the Board should prohibit the use of "embossing seals" (those that leave only an impression) because they are not visible when duplicated. After considerable discussion, the Board agreed to modify the text of subsection 411(f) to read as follows: "The seal shall be capable of leaving a permanent ink representation, an impression, or an electronically-generated representation on the work. The seal image shall be capable of being reproduced." PELS agreed to release this modified language for an additional 15-day comment period, in compliance with the Administrative Procedure Act.

Bob Coleman, Deputy Director of the California Department of Transportation (Caltrans), filed two letters opposing the Board's proposed prohibition on the use of electronically-generated signatures on plans. "If adopted, elimination of the use of electronically-generated signatures will have a significant impact on the way Caltrans, as well as our other transportation partners, delivers cost-effective and timely transportation projects on the State Highway System." Coleman noted that, pursuant to a 1986 opinion from its own legal counsel and a 1990 letter from former PELS Executive Officer Darlene Stroup (who stated in the letter that she had consulted with the Board's legal counsel and that Caltrans' use
of electronic signatures is “permissible”), Caltrans has been using electronically-generated seals and signatures on its electronically-published construction contract documents for over ten years.

However, Board members expressed reservations over the use of electronic signatures because the professional may not have to actually look at his/her final work project before “signing” it, as occurs when applying a “wet” signature. Other members disagreed, noting that many different types of businesses are using electronic commerce, and that encryption programs are designed so that a signature may not be applied without a required password. Nonetheless, a motion to adopt Caltrans’ amendment failed on a vote of 5–6. Following the vote, the Board directed staff to obtain additional information on the issues surrounding electronic signatures for discussion at its June meeting.

**PELS Selects New Exam Vendor**

Following interviews with two prospective vendors on January 28, the Board selected Professional Management Evaluation Services (PMES) as its new exam vendor during a meeting by teleconference on February 1. PMES will help PELS develop its structural engineering, geotechnical engineering, special civil engineering, and land surveyor examinations. The vendor will participate in all aspects of the examination development process, including grading and standardsetting. [16:1 CRLR 114] PELS voted to seek a three-year contract with PMES, and delegated to its Executive Officer the authority to negotiate the terms of the contract.

**Board Continues to Ponder 1.9% Pass Rate on Land Surveyor Examination**

PELS administers its own examination to land surveyor candidates; recently, the pass rates on this exam have plummeted to 15% in 1993, 8% in 1995, and 1.9% in 1998. In its 1997 sunset report on the Board, the Joint Legislative Sunset Review Committee (JLSRC) recommended that PELS use NCEES’ land surveyor examination, supplemented by a California-specific exam which tests only those areas which are essential to practice in California. In a 1998 response, PELS argued that NCEES’ exam is an entry-level exam similar to the land surveyor-in-training (LSIT) exam, and is not suitable for licensing land surveyors in California. The current California exam contains both multiple-choice and essay questions, and is based on a 1995 task analysis; whereas the NCEES exam is all multiple-choice and is based on a 1991 task analysis. PELS noted that NCEES completed a new land surveyor task analysis in 1997 and is in the process of rewriting its exam; the Board will continue to monitor NCEES’ progress, but recommends continued utilization of the California exam at this time. The Board has no explanation for the extremely low pass rates, especially the 1998 rate of 1.9%, but insists that it compared the 1998 exam to exams from the previous two years and found them comparable in terms of test plan coverage, difficulty, and fairness. [16:1 CRLR 113]

At its September 1998 meeting, the Board charged its Examination/Qualifications Committee with developing a plan to evaluate whether the low pass rates are due to flaws in the examination itself, serious deficiencies within the candidate pool, a significant change in the practice of land surveying in general, or a combination of these factors. At its February 25 meeting, the Examination/Qualifications Committee discussed a letter it had received from a land surveying association expressing concern about the 1.9% pass rate. The association asked that PELS: (1) release the completed exam questions, in keeping with past practice, so that the surveying community at large can examine the complexity of the test and provide feedback through existing trade associations; (2) publish statistics on the educational background of those applicants who have passed the exam over the past few years; and (3) approve the use of the NCEES exam on a one-year trial basis to see how California applicants do when compared to the rest of the nation.

In response to the letter, the Committee reiterated that the 1998 land surveyor examination has been “extensively analyzed,” and that these analyses “strongly suggest” that the major contributing reason for the low pass rate is that “the candidate population does not have adequate education, training/experience, and preparation to take the examination.” Although it reported no formal recommendations to the Board on the letter (and in fact continued to discuss the letter at its April 8 meeting), the Committee did not favor the idea of releasing the exam questions, because that “would result in higher examination development costs for the Board as more problems and items would need to be developed from scratch for each examination administration.” As to suggestion (2) above, the Committee felt that releasing statistical information on the educational backgrounds of those who have passed the exam “would not have any adverse effects on the Board.” In fact, a psychometrician from Professional Management Evaluation Services, the Board’s new exam vendor (see above), suggested that the Board also publish educational background statistics on those who have not passed the exam, so that the correlation between education and passing the exam becomes immediately apparent. As to use of the NCEES exam for one year, PELS’ legal counsel advised the Committee that the Board has discretion to administer any examination it sees fit for determining minimally competent land surveyors; further, NCEES has no objection to PELS’ use of the exam for one year. However, the Committee believes that use of the NCEES exam would not relieve PELS of the need to administer some state-specific land surveying examination in California. Construction of this new
exam would require an occupational analysis and the development of a new test plan; this effort would require substantial personnel resources and consume up to 1.5 years. At the Committee’s April 8 meeting, member Ted Fairfield suggested that PELS wait and evaluate the results of the 2000 NCEES land surveyor exam to determine whether to administer that exam on a one-year trial basis.

At its February 25 and April 8 meetings, the Committee also discussed alternative formats for its land surveyor examination. The possibilities include the current format, which involves a combination of non-optional design problems and some multiple-choice items; an all multiple-choice examination; an exam that contains both multiple-choice and design questions but which gives candidates the option to choose which design questions they want to answer; and a module format which would allow a candidate who has passed some parts but failed others to retake only the failed parts. Again, the Committee discussed these alternatives but took no action, agreeing only that no new format could be developed in time for the April 2000 exam administration.

**PELS Facing Sunset Review**

PELS faces its second “sunset review” hearing on November 30. The 1999 review follows the Board’s initial 1996–97 review, at which time the Joint Legislative Sunset Review Committee extended the existence of PELS for only two years and instructed it to investigate and resolve several critical issues, including the following:

- The status of the so-called “PE Act Rewrite,” PELS’ attempt to restructure the licensure process for engineers in California: The Board spent three years drafting a new statute which would have converted its existing “licensure by specialty” system to a “generic licensure” system. All engineers would have been licensed as “professional engineers,” with designations as to areas of practice in which they have been “deemed qualified” by virtue of testing; however, all licensed PEs would have been allowed to practice in any area in which they are competent. In late 1997, the Board amended its proposal into AB 969 (Cardenas), but gutted the bill prior to its first hearing.

- The continued need to issue “title act” licenses: The JLSRC instructed the Board to evaluate twelve specified criteria and make recommendations on which of the remaining ten title acts can be eliminated without endangering the health, safety, property, or welfare of the public. If PELS recommends continuation of a title act, the Joint Committee directed the Board to “clearly demonstrate why the title act should be continued.”

- The resolution of the “supplemental work” (or “overlap”) concept: Currently, civil engineers are the only licenses who may lawfully perform work in any of the other branches of professional engineering; other PELS licensees are restricted to their discipline. During its first sunset review, PELS proposed that mechanical and electrical engineers (the other practice act disciplines) be permitted to perform “supplemental work” in other engineering disciplines, as long as they are competent in these areas based on education, training, and experience. PELS continues to support this concept, so long as it is confined to practice act engineers; however, it has introduced no legislation to codify this concept. Further, other states’ licensing acts have recognized that there is often considerable overlap between what are characterized in California as “title act” and “practice act” disciplines; in fact, some title act disciplines are specialty subdivisions of one or more practice acts. However, no California law or regulation recognizes this overlap, and PELS does not support codification of the right of title act engineers to engage in practice act work. Although SB 191 (Knight) would permit non-practice act engineers to engage in practice act work (see LEGISLATION), PELS opposes that bill and offers no alternative.

- Whether practice act engineer applicants should continue to be required to pass the Engineer-in-Training (EIT) exam provided by NCEES: In order to take the EIT exam, an applicant must have completed at least three years of college coursework in a Board-approved engineering curriculum or have had at least three years of engineering-related work experience. In its 1997 sunset report on PELS, the JLSRC questioned the value of the exam and asked PELS to justify its requirement.

- Whether the existing “seismic principles” exam which must be taken by civil engineer candidates is testing only those seismic design principles which are critical to practice in California, and whether other disciplines should also be required to take the examination.

- Whether civil engineer candidates should continue to be required to pass the “engineering surveying” exam. In its 1997 sunset report, the JLSRC instructed PELS to justify the administration of its “engineering surveying” exam to civil engineering candidates.

- Whether PELS should continue to administer its own structural engineering examination, or whether it should instead administer NCEES’ exam.

- Whether PELS should continue to administer its own land surveyor examination with its 1998 pass rate of 1.9% (see above), or whether it should instead administer NCEES’ exam.

- Whether the current six-year experience requirement for engineers should be expanded to eight years, as advocated...
by PELS: The JLSRC instructed the Board to demonstrate how an increase in the experience requirement will enhance consumer protection.

- Whether engineers and land surveyors should be required to complete continuing education as a condition of license renewal.

- Whether a "reired status" license category should be created.

In 1998, PELS published a report responding to these issues [16:1 CRLR 110-13], and—at this writing—staff is completing a supplemental report which includes a description of 1999 PELS activities which are responsive to the Joint Committee's concerns. While PELS has taken action on some of the less complex issues on the JLSRC's list (such as the "reired status" license category) and devoted attention to issues not included by JLSRC (such as proposing amendments to its delinquent reinstatement regulation and its rule governing the contents of the official engineer's seal—see above); it has not yet meaningfully addressed the Joint Committee's instructions regarding its title acts, the "supplemental work" concept, or even the 1.9% pass rate on its land surveyor examination. It remains to be seen whether the Board will address these issues prior to its November 30 sunset review hearing.

**PELS Likely to Pursue Fee Increase Legislation in 2000**

Throughout the fall of 1998, the Board and its Administrative Committee discussed several proposals to increase PELS' examination and quadrennial licensing fees. The various proposals attempted to deal with projected budget shortfalls due in part to a reduction in revenue from the Board's PE applications, which declined by an average of 10% per year from 1994-95 through 1997-98. According to DCA projections, PELS' fund will fall below its required three-month budget reserve requirements in fiscal year 2000-01, and will begin to run at a deficit in 2001-02. Also, because the Board's renewal fees partially subsidize its examination costs, PELS considered proposals which would require examinees to pay the full cost of their licensing examinations (such that renewal fees would not have to be increased). After extensive discussion at its November 1998 meeting, the Board agreed to delay any fee increase legislation for at least one year, and instead pursue a variety of cost savings measures which—it was hoped—would save the Board $350,000 in 1998-99 and enable it to delay any request for a fee increase for several years. [16:1 CRLR 113-14]

At the Board's February and April meetings, staff reported that—although its efficiency efforts and other unexpected cost savings had in fact saved the Board money—these savings will be offset by new expenses (such as state employee salary increases) and are insufficient to ward off the expected deficit in PELS' reserve fund. Despite the Board's efforts, that fund is still projected to dip far below the required level in fiscal year 2000-01, and will be in deficit in fiscal year 2001-02.

At this writing, Board staff is preparing fee increase legislation for introduction in 2000; that legislation will be submitted to the Board for its approval at a future meeting.

**PELS' TACs Mulling Regulatory Definitions of Mechanical/Electrical Engineering**

The legislature has not established the scope of practice for electrical engineers and mechanical engineers in the Business and Professions Code; instead, it has delegated that task to PELS in section 6717, which requires the Board to codify these standards through rulemaking. In turn, PELS has delegated development of these critical definitions to its technical advisory committees (TACs), which are composed entirely of industry members and which meet (at most) quarterly outside regularly-scheduled Board meetings.

PELS and its Electrical Engineering Technical Advisory Committee (EE-TAC) have been attempting since 1992 to revise the definition of "electrical engineering" in section 404(1), Title 16 of the CCR. In May 1995, OAL rejected PELS' proposed changes to the existing definition [15:4 CRLR 124], and the EE-TAC took up the effort again in 1998. Similarly, PELS' Mechanical Engineering Technical Advisory Committee (ME-TAC) spent much of 1998 developing revisions to the Board's current regulatory definition of mechanical engineering in section 404(1), Title 16 of the CCR. However, neither TAC reported its recommendations to PELS during 1998, nor have they done so through April 30, 1999. Instead, both TACs have embarked on a five-step process involving the following: (1) preparation of a list of reasons for revising the definition, (2) preparation of the proposed revisions, (3) distribution of the proposed definitions to engineering trade associations and professional societies, surveying their acceptance or rejection, and revising the definitions based upon the comments received, (4) requesting "acceptance resolutions" from the trade associations and professional societies, and (5) preparation of a final "resolution" and presentation of that proposal to the Board with the full acceptance of the various private organizations. If PELS accepts the proposal, it would then begin the rulemaking process to revise the regulations.

Despite the facts that these definitions are critical issues for engineers generally, that pending SB 191 (Knight) proposes to repeal PELS' authority to establish the EE and ME scope of practice by regulation (see LEGISLATION), and that this issue is sure to be raised during the Board's 1999 sunset review, the TACs have not expedited their proceedings, nor has the Board instructed them to. After a year and a half of work, both TACs are engaged in Step 2 (development of the proposed revisions), and are drafting the letter which will accompany Step 3's distribution of the proposed language to interested trade associations.

**LEGISLATION**

SB 191 (Knight), as introduced January 15, would repeal Business and Professions Code section 6717, which authorizes PELS to define, by regulation, the scope of each
branch of professional engineering other than civil engineering for which registration is provided. Instead, the bill would specifically authorize a professional engineer to practice civil, electrical, or mechanical engineering if he/she is by education or experience fully competent and proficient; however, the use of any branch title would be subject to being registered in that branch. The bill would also specifically provide that the PE Act does not prohibit the practice of any other legally recognized profession, trade, or science if the person is practicing within that profession, trade, or science.

The analysis of SB 191 prepared by the Senate Business and Professions Committee offers helpful background information on the bill. The three engineering practice acts (civil, mechanical, and electrical) limit and regulate who may offer engineering services that fall within the scope of those three engineering practices. Only the scope of practice of civil engineering is specified in statute; the scope of regulated practice for mechanical and electrical engineering is subject to specification by the Board through rulemaking. SB 191 is sponsored by the California Legislative Council of Professional Engineers (CLCPE) to eliminate existing civil, mechanical, or electrical engineering practice restrictions on (a) other registered professional engineers who are competent to practice in those engineering branches, and (b) other persons when they are practicing in other lawful professions or occupations. According to the proponents, the current engineering practice restrictions do not protect the public health and safety, but serve only to limit who may offer those engineering services and inhibit the economy. The proponents argue that the current PE Act prevents engineers registered in one of the title disciplines or non-engineers who are working in other professions or occupations from competing in the marketplace to offer services for which they are trained and competent to perform. The proponents argue that the bill would provide for reasonable overlap to occur between the various branches of engineering, similar to what has been permitted in other states such as Washington. Public protection, safety, and competency would be assured because of marketplace competition and the requirements in other laws such as the State Building Code, Education Code, Health and Safety Code and elsewhere that prescribe when a particular type of work must be performed by a particular type of licensed engineer.

Although PELS itself has been criticized on several occasions for its failure to sponsor legislation clarifying its statute or adopt regulations defining the scope of practice of its practice act disciplines [14:1 CRLR 76-77], the Board argues that the proponents have not articulated an identifiable problem and that SB 191 is thus unwarranted. The Board also argues that elimination of the authority to define engineering scope of practice could leave the practice of engineering "vague and confusing." Further, the Board argues that any engineer would be able to self-certify his/her competence to practice civil, mechanical, or electrical engineering without ever having demonstrated his/her competence in that area.

Also in opposition to the bill, the Consulting Engineers and Land Surveyors of California (CELSOC) argue that SB 191 will allow any engineer to practice all forms of engineering, and allow them to design the most complex civil engineering projects subject only to their own determination of competence. CELSOC states that the bill would immediately allow 31,000 title act engineers to practice in any of the three engineering practice branches—despite the fact that 49% of them were grandfathered in as a licensed engineer without ever having to pass an examination. CELSOC also argues that eliminating the state licensure law’s practice restrictions would mean that 58 counties, 471 cities, and more than 1,110 special districts would be left to determine who is adequately prepared to practice engineering.

Opponents also argue that the exemption for any "legally recognized profession, trade or science" is broad and vague. They argue the PE Act already contains various exemptions, particularly the recently expanded industrial exemption [16:1 CRLR 112], and that the bill would essentially deregulate the practice of engineering. They also argue that this is a "turf battle" by a minority of title act engineers and others who want to be able to practice civil, electrical, or mechanical engineering without having to obtain a license and demonstrate minimum competency through examination.

SB 191 is a two-year bill, and its concepts will likely be further discussed during PELS’ sunset review hearing in November 1999. [S. B&P]

AB 1341 (Granlund), as amended April 5, would exempt from the Professional Land Surveyors’ Act all state, county, city, or city and county public safety employees investigating any crime or infraction for the purpose of determining or prosecuting a crime or infraction. AB 1341 was introduced to supersede PELS’ adoption of BPR #98-02, which interpreted the Land Surveyors’ Act to encompass certain activities engaged in by those who map accident scenes.
without being licensed as a land surveyor. The bill would also provide that a crime scene or infraction map may not be admitted in a civil action to quiet title or determine rights to real property. [S. Jud]

AB 1342 (Granlund). The Professional Land Surveyors' Act specifies instances when a land surveyor or civil engineer, after making a survey, must file a "record of survey" with the county surveyor; prescribes the contents of records of surveys; and specifies instances when a record of survey is not required. The Act also provides that a person who is authorized to practice land surveying must complete and file with the county surveyor or engineer of the county where corners are situated a written record of corner establishment or restoration known as a "corner record" for every corner established, and requires PELS to prescribe the information which must be included in a corner record, the form in which a corner record shall be submitted, and the time limits within which the form must be filed. This bill would provide that neither a record of survey nor a corner record is required when the survey is a survey of a mobilehome park interior lot; require a corner record to be on a single 8.5" by 11" inch page; and delete an outdated method of describing a parcel of real property by "descriptive name" in the required grant language. [A. LGov]

SB 1306 (Committee on Business and Professions), as amended April 12, would extend the Board's sunset date to July 1, 2001, to enable legislative review of PELS' performance during the fall of 1999 and the passage of legislation determining its future during 2000 (see MAJOR PROJECTS). [S. Appr]

SB 1307 (Committee on Business and Professions), as amended April 14, would require PELS to issue, upon application and payment of a fee (which may not be more than 50% of the renewal fee in effect on the date of application), a retired professional engineer's license and a retired land surveyor's license. [16:1 CRLR 114-15] The purpose of this provision is to allow engineers and land surveyors who are no longer practicing and who therefore do not wish to pay the $160 quadrennial renewal fee ($40 per year), to be designated as "retired" rather than "delinquent." The holder of a retired license issued pursuant to this provision may not engage in any activity for which an active engineer's/land surveyor's license is required. In order for the holder of a retired license issued pursuant to this provision to restore his/her license to active status, he/she must pass the second division examination that is required for initial licensure with the Board.

SB 1307 would also make it a crime for any person to impersonate or use the seal of a licensed professional engineer or land surveyor. Finally, the bill would also make misrepresentation in the practice of land surveying a basis for license suspension or revocation. [S. Appr]

RECENT MEETINGS

At its April 9 meeting, the Board selected George Shambeck as President and Kathy Hoffman as Vice-President for 1999–2000. Both will take office at PELS' July meeting.

Also in April, PELS voted to clarify several provisions in its complaint disclosure policy, which guides its release of licensing and disciplinary information about licensees to inquiring members of the public. Under the policy, PELS will keep records of criminal convictions of Board licensees and complaints of violations of the PE Act, the Land Surveyors' Act, and the Board's regulations for five years, and will disclose specified information on such complaints to inquiring members of the public only if investigation reveals a probable violation of law.

The Board amended the policy to clarify that it will disclose no information about a complaint while it is under investigation. If investigation reveals a probable violation of law, PELS will disclose the disposition of the complaint (e.g., whether compliance was obtained, the complaint was mediated, or the complaint was referred for legal and/or disciplinary action, such as criminal action, citation issuance, and/or accusation filing), and any action taken (formal or informal). PELS also clarified that it will release this information upon oral or written request by a consumer. Finally, the Board specified that it will publicize criminal convictions by publishing articles in Board publications and on its Internet website, and in any other manner the Board deems appropriate.

FUTURE MEETINGS

- June 3–4, 1999 in Ontario.
- September 16–17, 1999 in San Diego.
- November 4–5, 1999 in the Bay Area.
- December 16–17, 1999 in Sacramento.