Board for Professional Engineers and Land Surveyors

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he 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 revoke or suspend licenses 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 (in-

cluding 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.

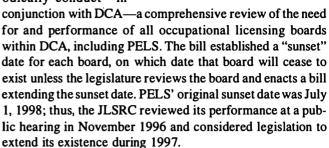
The Board has established four standing committees (Administration, Enforcement, Examination/Qualifications, and Legislative), and appoints other special committees as needed. Pursuant to Business and Professions Code section 6726, PELS has also established several technical advisory committees (TACs)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

Major Projects

Development of 1998 Sunset Review Report

SB 2036 (McCorquodale) (Chapter 908, Statutes of 1994) established the Joint Legislative Sunset Review Com-

mittee (JLSRC) to periodically conduct—in



In early 1997, both the JLSRC and DCA released reports indicating they were not entirely satisfied with PELS' response to several of the issues and problems identified by the Joint Committee, its staff, and the public. Although both the Committee and DCA concurred that some engineers should continue to be regulated and that PELS is the appropriate entity to engage in that regulation, both branches expressed concern about a number of issues, including the Board's attempt to completely restructure the licensure process for engineers in California, the continued need to issue "title act" licenses, and PELS' use of Board-developed examinations—as opposed to nationally standardized exams—

in a number of areas.

At the same time it submitted its first sunset report in October 1996, PELS also submitted a document entitled *Profes*sional Engineers Act Re-

write ("PE Act Rewrite"), which the Board had been working on for three years. [14:4 CRLR 95; 14:2&3 CRLR 99; 14:1 CRLR 771 The Board's proposal would have dramatically changed the way engineers are licensed in California by converting its "licensure by specialty" system to a "generic licensure" system. All engineers would have been licensed as "professional engineers" (PEs), 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. The PE Act Rewrite also addressed the thorny title act issue by permitting the Board to determine, within a two-year time period, which title act categories should be converted to practice acts and which should be deregulated entirely. Further, under early versions of the Rewrite, many of the existing exemptions to the engineer licensing requirement would have been eliminated, thus expanding the number and type of engineers who must be licensed in order to work in California. [15:4 CRLR 122-23]

In an attempt to explain and secure support for its proposal, the Board held twelve informational forums on its

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PE Act Rewrite throughout the state between February 1994 and July 1996. The Board introduced the proposal to the JLSRC at its sunset hearing in late 1996, and sponsored the proposal as AB 969 (Cardenas) in 1997. However, the JLSRC did not think much of the plan. In its final sunset report issued in April 1997, the JLSRC stated that "the Board must demonstrate how the Rewrite will improve the existing regulatory situation for consumers." As for the title act issue, the JLSRC disagreed with the Board's proposal that the legislature delegate it with authority to determine which should go and which should be converted to practice acts: "Considering the inability of the Board to resolve this issue in the past, and the considerable impact these changes may have on the profession, there should be a combined effort on the part of the Board, the Joint Committee, the Department [of Consumer Affairs], and the profession to review this issue of licensure...."

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The Committee recommended, and both DCA and the full legislature agreed, to extend PELS' existence for only two more years (whereas most other boards were extended for four years), and in-

structed the Board to address the unresolved issues described below. The legislature passed SB 828 (Greene) (Chapter 705, Statutes of 1997), which extended PELS' sunset date to July 1, 2000.

Since that time, PELS has engaged in discussion of the following major issues in response to the JLSRC's recommendations; the Board published a report of its progress on October 1, 1998. At this writing, the JLSRC is scheduled to review CSLB at another sunset review hearing in 1999.

- PEAct Rewrite. Following the issuance of the JLSRC's critical April 1997 report, the Board was unable to generate any significant legislative support for its proposal during 1997. The PE Act Rewrite language was dropped from AB 969 in early 1998, and the bill as enacted simply changes the name of the Board, substitutes the word "license" for "registration" throughout the Board's enabling act, and eliminates the title act categories of corrosion, quality, and safety engineering due to the absence of national examinations in these fields (see LEGISLATION).
- Continued Issuance of Title Act Licenses. In its April 1997 sunset report, the JLSRC stated that "the concept of 'title acts' should be reevaluated," and instructed the Board to evaluate twelve specified criteria and make recommendations on which of the remaining ten title acts could 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."

In its October 1998 report, PELS provided background information on the genesis of its various title act categories, and succinctly described the problem facing it and the legislature regarding the title act concept: "The question remains how the public is protected by granting engineers a license

which regulates the use of the title but not the practice. That is, anyone, registered or not, can legally practice any title-act discipline as long as it doesn't fall within non-exempted civil, mechanical, or electrical engineering practice. Furthermore, if there is an enforcement case against a title-act engineer, the Board can revoke the title-act license, but the individual can still practice in that discipline, just as anyone not licensed can practice in a title-act discipline. Unlicensed people are only prohibited from using the title."

The Board also provided detailed information on each of its remaining title act categories, including the following facts:

(1) "Six disciplines have a percentage of currently registered grandfathered engineers greater than 50%: agricultural (83%), control systems (66%), fire protection (75%), manufacturing (98%), nuclear (93%), and traffic (57%)." In other words, a large percentage of the current licensees in these six disciplines were simply licensed without being examined. As the Board has taken only an average of 19 disciplinary ac-

tions against its 100,000 active licensees each year for the past four years, it is fair to say that these unexamined licensees are not causing an enormous problem in terms of discipline. Even if they

were, PELS' only remedy is to revoke the right to use the title; the Board is not able to restrict any individual from practicing in any of these disciplines.

- (2) "The vast majority of engineers licensed in title-act disciplines are employed by exempt industries"—meaning they are not required to be licensed in the first place.
- (3) "Very few title-act engineers consult to the general public." This fact responds to a key concern of the JLSRC—the identity of the consumer in this marketplace, and whether that consumer is sophisticated enough to choose a qualified engineer without the intervention of the state. Apparently, the "consumers" of the services of title-act engineers are largely government agencies and exempt industry employers, obviously capable of choosing an engineer and protecting themselves in the event of incompetent or negligent work. Further, the Board's report indicates that government agencies which hire title-act engineers in eight of the ten remaining title act categories do not require registration or licensure.
- (4) Three title act disciplines were eliminated effective January 1, 1999 by virtue of AB 969 (Cardenas) (see LEGIS-LATION), but not because PELS conducted an in-depth analysis of consumer need for licensure and found it lacking. PELS agreed to deregulate these categories because no national exam is available in these areas, thus requiring the Board to spend its own resources to develop an examination and register engineering titles not recognized by many other states. At no time did PELS or the JLSRC engage in a health and safety analysis of these three areas; they were deregulated simply because of the absence of a national examination.

Indeed, PELS' October 1998 report fails to engage in the twelve-step analysis of the remaining ten title act disciplines as instructed by the JSLRC, but the Board nevertheless

recommends that the ten title acts "remain in place...for the present." PELS also states that it is "considering the possibility of eventual elimination of the title acts, either through actual elimination of the title or through conversion to practice acts. There has been discussion at the NCEES [the National Council of Examiners for Engineering and Surveying, the vendor which provides PELS with many of its examinations] of eliminating examinations for some of the title-act disciplines. Should that happen, we would consider introducing legislation to allow the Board to discontinue administering other title-act examinations (and therefore discontinue issuing new registrations) if there is no national examination in that branch." Thus, the Board proposes continuation of its ten remaining title act licenses not because they are required in order to protect the public health and safety in California, but because national exams are available in these areas and other states recognize these titles.

◆ The "Supplemental Work"
Concept. Currently, civil engineers are the only licensees who may 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 (the Board opposes the notion of permitting title act engineers to engage in supplemental work in the civil, mechanical, or electrical engineering areas) and so long as the "supplemental work" is incidental to their primary work.

- Expansion of the Industrial Exemption. Employees of industrial corporations have long been exempt from PELS' licensure requirement. At its 1996 sunset review, PELS suggested expansion of the exemption to include independent contractors of industrial corporations; however, SB 828 (Greene) (Chapter 705, Statutes of 1997) went beyond PELS' recommendation and expanded the exemption to cover "consultants, temporary employees, contract employees, and those persons hired pursuant to third-party contracts." PELS was not supportive of the expansion then, and remains concerned about it now. The Board is working with the software and electronic industries (both of which supported the expansion) to draft regulatory language to interpret the phrase "third-party contracts" and other terms in the new statutory language.
- ◆ Engineer-in-Training Examination. PELS requires all practice act engineers 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 ques-

tioned the value of the exam and asked PELS to justify its requirement. In its October 1998 report, PELS argues that taking and passing the EIT confers two benefits to California candidates: (1) because passing the exam demonstrates a fundamental knowledge in the area of engineering, EIT certification "drastically reduces the number of years of work experience or onthe-job training required before a candidate can sit for the professional engineering exam"; and (2) 24 state boards require passage of the EIT exam for comity registration; thus, passage of the EIT in California will assist California engineers in becoming licensed more easily in other states.

• The Seismic Principles Exam for Civil Engineers. In its 1997 sunset report, the JLSRC instructed PELS to review the current "seismic principles" examination which must be taken by civil engineer candidates to ensure that it is only testing those seismic design principles which are critical to prac-

tice in California, and to determine whether other disciplines should also be required to take the seismic principles examination. This exam was developed by PELS in response to a report and recommendation by the Seismic Safety Commission after the 1994 Northridge earthquake. PELS noted that the test was recently updated in 1996, and advocated

that electrical and mechanical engineers also be required to take the exam.

• The Engineering Surveying Exam for Civil Engineers. In its 1997 sunset report, the JLSRC instructed PELS to justify the administration of its "engineering surveying" exam to civil engineering candidates. PELS explained that the proper practice of civil engineering requires knowledge of land surveying; prior to 1982, all civil engineers were authorized to practice all aspects of land surveying. However, land surveying professionals argued that civil engineers are not educated or examined in all aspects of land surveying; thus, in 1985, the legislature enacted a law requiring civil engineers to be examined in engineering surveying. PELS noted that its engineering surveying exam is based upon occupational analyses, and recommended that civil engineers continue to be examined in engineering surveying.

• Continued Use of California's Structural Engineering Exam. In its 1997 sunset report, the JLSRC questioned why PELS administers its own structural engineering exam rather than utilizing NCEES' structural engineering exam. In its October 1998 report, PELS explained that the NCEES exam is an entry-level exam which is not suitable for licensing purposes, whereas California's exam is a "mastery-level exam" and requires candidates to have three years of experience as a licensed civil engineer prior to taking it. PELS also noted that the quality of the NCEES exam is not as high as the quality of California's exam, and that California's exam is specifically tailored for the state's seismic conditions. The Board recommends continued use of the California exam as opposed to the NCEES exam.

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licensing fees.

• Use of NCEES 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, the JLSRC recommended that PELS use NCEES' land surveyor examination, supplemented by a California-specific exam which tests in those areas which are essential to practice in California. Again, PELS found 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. At its September 1998 meeting, the Board began to develop 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.

◆ The Experience Requirement. PELS currently requires candidates to have six years of education and experience before permitting them to sit for a professional engineering ex-

amination; according to PELS, all other states and territories require eight years. PELS believes this may be one reason that California licensure candidates have somewhat lower examination pass rates than do candidates from other states. The Board has attempted to

raise its standard to eight years through legislation on several occasions (a 1986 attempt was vetoed, and others did not make it through the legislature [14:2&3 CRLR 100; 14:1 CRLR 77]), and advocated an eight-year requirement during its 1996–97 sunset review. The JLSRC demanded a demonstration of how such an increase will enhance consumer protection. In its October 1998 report, PELS states that engineering has become more technically demanding, and that schools have "backed away from teaching some of the practice-oriented issues, such as contracts and specifications, and ethics."

• Continuing Education Requirements. Currently, PELS does not require any of its licensee categories to complete continuing education (CE) as a condition of license renewal. The Board recommended imposition of CE requirements in its 1996 sunset report; the JLSRC demanded a demonstration that CE will improve licensee competency and have a measurable impact on consumer protection. In its October 1998 report, PELS noted that it has now dropped its call for CE for

all engineers; PELS uses CE requirements as a term of probation in disciplinary proceedings, and will confine CE to that area.

• Retired/Inactive Status Licenses. In early 1998, PELS attempted to adopt regulations creating a retired or inactive status license, to enable professional engineers and land surveyors to retire without simply failing to renew and allowing their licenses to be considered delinquent. However, the Board withdrew the regulations after the Office of Administrative Law (OAL) registered concern about their consistency with section 462 of the Business and Professions Code. Although the JLSRC found that "there is no justification at this time for granting a retired status to engineers and land surveyors," PELS' 1998 report indicates that it intends to seek legislation creating a retired/inactive status license category, similar to language in the Board of Pharmacy's enabling act (see below).

Board Amends Exam Appeal Regulations

In April 1998, PELS published notice of its intent to amend section 443, Title 16 of the CCR, which sets forth the procedures under which licensure candidates may inspect their examinations for purposes of preparing an appeal. The previous rule permitted any applicant for professional engineer or land surveyor licensure who failed to obtain a passing grade on an exam to inspect his/her exam for purposes of appealing; PELS' amendments now restrict that right to applicants who scored no more than eight points below the passing score on a professional engineering exam approved by NCEES, or who scored no more than 15% below the passing score on a state-specific professional engineering or professional land

surveying examination. PELS also announced its intent to amend section 407(d), Title 16 of the CCR, to increase its fee for an exam appeal from \$98 to \$134. Following a public hearing on June 5, the Board adopted both changes; OAL approved them on

August 25, and they became effective on September 24.

Board Eliminates Credit for Passage of Exam Toward Land Surveyor Licensure

PELS recently amended section 424(d), Title 16 of the CCR, to effectively increase the number of years of experience required for land surveyor licensure. Previously, section 424(d) allowed applicants for licensure as a land surveyor who have passed the land surveyor-in-training examination to be credited with two years of land surveying experience toward the six years necessary for licensure. Pursuant to SB 2239 (Committee on Business and Professions) (see LEGISLATION), the Board's amendment eliminates that credit effective January 1, 2000. OAL approved this change on August 25.

Fee Increase Proposals

Throughout the fall of 1998, the Board and its Administrative Committee discussed several proposals to increase

PELS' examination and quadrennial licensing fees. Currently, the professional engineer and professional land surveyor application/exam fee is \$175, the engineer-in-training and land surveyor-in-training certification fee is \$60, and the quadrennial renewal fee for professional engineers and land surveyors is \$160 (meaning PEs and PLSs pay only \$40 per year in licensing fees). PELS considered proposals to increase these fees to \$220, \$75, and \$240, respectively; the Board also debated converting to a biennial renewal system. Alternatively, 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).

The various proposals attempted to deal with projected budget shortfalls due to a decline in revenue from the Board's PE applications. According to current projections, PELS' fund will fall below its required three-month budget reserve requirements in fiscal year 2000–2001, and will begin to run at a deficit in 2001–2002. Any fee increase proposal pursued by the Board will require authorization by the legislature.

After extensive discussion at its November meeting, the Board agreed to delay any fee increase legislation for at least one year, and instead pursue a variety of cost savings measures. Because the Board's applicant population is in decline, it stands to save on budgeted examination-related costs such as postage, contracts, proctor pay, site rental, and travel. Additionally, staff suggested that savings could accrue by holding fewer Board, committee, and technical advisory committee meetings and by closely monitoring travel, training, postage, equipment, and supply purchases. Staff estimates that close monitoring of these expenses could save the Board \$350,000 in 1998–99, which may enable it to avoid a fee increase.

PELS Seeks New Exam Vendor

The Board is currently looking for a new vendor to help 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. The Board solicited proposals from 16 different examination vendors around the country in October and conducted a vendor conference on November 4 at its Sacramento office. At this writing, Board staff plans to conduct final interviews with firms on January 28, and make a recommendation at PELS' February meeting.

Delinquent License Reinstatement Process

For the past several months, PELS has been reviewing its delinquent license reinstatement process. Currently, 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 the 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 somewhat 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. Recently, Board staff has asked several questions geared to ascertain whether the Board wishes to change the process via legislative or regulatory amendments. At its December meeting, the Board received and reviewed the delinquent renewal processes of other state engineering boards and other DCA boards, and has asked Board staff to prepare a recommendation on this issue for review at the February meeting.

Retired/Inactive Status Licenses

PELS receives many calls from professional engineers and land surveyors regarding an inactive license status for retired licensees. In early 1998, PELS attempted to respond to these requests by submitting a proposal to OAL to adopt section 466, Title 16 of the CCR, which would create a retired/inactive status license for professional engineers and land surveyors. The retired/inactive status license would allow a PE or PLS to pay a \$40 quadrennial fee and avoid delinquent fees in the renewal of his/her license. A retired/inactive engineer or land surveyor would not be allowed to perform any activity for which his/her license is required. In order to ensure that professional engineers and land surveyors would not use the inactive status as a mechanism to avoid paying renewal fees, section 466 would also have required licensees who have been placed on inactive status to retake the examination for his/her practice in order to reactivate his/her license. However, the Board withdrew the regulatory proposal after OAL suggested that it is inconsistent with the Business and Professions Code section 462 regarding reinstatement of

delinquent licenses. In OAL's view, section 462 does not allow boards to require retesting as a condition for license renewal. Thus, PELS withdrew the proposal and went to work redrafting the language for resubmission.

At its July 1998 meeting, the Board's Examination/ Qualifications Committee recommended that PELS sponsor legislation authorizing it to create a retired license category similar to the Board of Pharmacy's retired licensee statute (Business and Professions Code section 4200.5); at its November meeting, PELS' Legislative Committee confirmed its intent to seek such legislative language.

1997-98 Enforcement Statistics

At its July meeting, the Board reviewed its enforcement statistics for the 1997–98 fiscal year. From July 1997 through June 1998 16,381 known inquiries were made to the Board; this number includes all telephone and written contacts with the enforcement unit involving questions regarding licensing status, complaint/disciplinary history, engineering and land surveying business, Board rules, and contacts leading to the actual filing of complaints.

From these inquiries, the Board opened 245 investigations in 1997–98. The majority of these cases dealt with competence or negligence issues (155). Other major complaint categories include failure to record survey results (71), unlicensed/unregistered activity (36), and examination subversion (35).

The Board closed 223 cases during the year. Most of these cases were either dismissed for no violation or no jurisdiction (80), or were resolved through mediation or because compliance was obtained (89). Fifteen cases were handled with cease and desist letters, and eight resulted in the issuance of a citation. Another 22 cases were referred to the Attorney General's Office. The Board took a total of 16 disciplinary actions, including five revocations or voluntary surrenders, nine stayed revocations with probation, and two other actions.

PELS Approves "Board Policy Resolutions"

At recent meetings, PELS approved several "Board Policy Resolutions" (BPRs) at the request of its technical advisory committees. Mindful that such resolutions could arguably be construed as "underground rulemaking" (the adoption of regulations without undertaking the rulemaking process required by the Administrative Procedure Act), PELS adopted, at its July 31 meeting, a proposal to include a statement in all BPRs that a BPR is "merely a restatement of existing law intended only for clarification."

• Surveying and Mapping of Accident Scenes. At the request of its Land Surveying Technical Advisory Committee, PELS adopted BPR #98-02 at its July 31 meeting; the BPR concerns the practices of land surveying and civil engineering related to the surveying and mapping of accident scenes. In the document, the Board noted that the surveying, data collection, and preparation of maps of accident scenes by unlicensed individuals is becoming more prevalent. According to the Board, "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 "those functions or activities affect the life, health, safety, and welfare of the public." The BPR quotes from various sections of the Business and Professions Code relevant to the practice of civil engineering and land surveying which relate to activities performed in the surveying, data collection, and preparation of maps of accident scenes, and notes 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.

• Geographic Information Systems and Land Information Systems. Also at the request of its Land Surveying Technical Advisory Committee, PELS adopted BPR #98-03 at its July 31 meeting; the BPR concerns the practices of land surveying and civil engineering by unlicensed individuals in connection with the creation, preparation, or modification of electronic or computerized data contained within Geographic Information Systems (GIS) and/or Land Information Systems (LIS). According to the Board, the creation, preparation, and distribution of data contained in GIS and LIS by public agencies and private companies is becoming more prevalent, and many of the tasks undertaken in such activities are defined as the practice of civil engineering or land surveying. Any 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.

• Design of Utility Systems Within Joint Utility Trenches. At the request of its Mechanical and Electrical Engineering Technical Advisory Committees, PELS adopted BPR #98-04 at its September 18 meeting. The BPR 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 shall be performed under the responsible charge of licensed professional engineers who are qualified to design such systems.

Geologist and Civil Engineer "Fields of Expertise" Document

In 1989, PELS and the Board of Registration for Geologists and Geophysicists (BRGG) developed a document entitled Fields of Expertise for Geologists and Civil Engineers. The document was intended to differentiate between the responsibilities and duties of registered civil engineers and geologists; it 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.

In 1995, PELS and BRGG agreed that the document should be updated to reflect changes in both industries. After several meetings between committees of both boards, the committees developed a new document that both sides agreed was ready for adoption by both boards. The document

contains a chart describing tasks and functions that may be performed by civil engineers, geologists, or both, in the areas of classification and physical properties, rock mechanics, soil and rock mapping, slope stability, project planning, surface waters, groundwater, earthquakes and ground vibrations, subsurface exploration, construction observation, expansive materials, regulatory requirements, embankment fill, interpretation and installation of instrumentation, geosynthetics, ground and water contamination, and solid waste facilities.

In October 1996, PELS officially adopted the document and published it in its licensee newsletter. At BRGG's request, the document was revised; PELS approved the revised document in February 1997 and put it on its website. However, BRGG has now decided not to adopt the revised document, and has asked PELS to rescind its approval as well. PELS has refused to rescind its approval, but is currently considering modifications proposed by BRGG. The modifications significantly change the structure of the document from the chart

of functions to a shorter and less detailed narrative discussion of tasks and functions. At this writing, a two-person task force of PELS' Geotechnical Engineering Technical Advisory Committee is working with BRGG on possible revisions to the document.

On August 13, OAL issued a ruling that PELS' policy of refusing to investigate billing or fee disputes constitutes illegal

rulemaking, and hence is without force.

The goal of the EE-TAC in revising the definition is to keep up with changes in the electrical engineering field as well as to exclude any areas in the definition that are covered by the industrial exemption. The TAC is trying to define the aspects of "electrical engineering" which directly affect the life, health, and public welfare of the people in California. At this writing, the TAC has not yet forwarded any draft regulatory language to the Board for review.

The Definition of "Mechanical Engineering"

At its August 25 meeting, the Mechanical Engineering Technical Advisory Committee (ME-TAC) recommended revisions to the Board's current regulatory definition of mechanical engineering. Currently, section 404(u), Title 16 of the CCR, defines "mechanical engineering" as the branch of professional engineering "which deals with engineering problems relating to generation, transmission and utilization of energy in the thermal or mechanical form and also with engi-

neering problems relating to the production of tools, machinery, and their products and to heating, ventilation, refrigeration and plumbing. It is concerned with the research, design, production, operational, organizational, and economic aspects of the above."

The proposed definition would expand the definition of mechanical engineering. The draft language states that mechanical engineering is the branch of professional engineering is the branch of professional engineering "which deals with the conversion, transmission, and utilization of energy in the thermal, fluid or mechanical form; the design and application of systems for heating, ventilation, refrigeration, plumbing, and flow and storage of fluids; and the design of tools and machinery. It encompasses the planning, research, design, production, construction, management and the operational and economic aspects of the above."

At its December 8 meeting, the ME-TAC discussed a five-step plan for redrafting this definition, which will involve collaboration with PELS' EE-TAC and circulation of the proposed definition to professional societies. The Committee will continue work on the definition during 1999.

OAL Rules Board's Policy Against Investigating Fee Disputes Constitutes Underground Rulemaking

On August 13, OAL issued a ruling that PELS' policy of refusing to investigate billing or fee disputes constitutes illegal rulemaking, and hence is without force.

The ruling came in response to a request for determination filed on April 22, 1991 by the Center for Public Interest Law (CPIL). [11:3 CRLR 104] The dispute arose over a policy that PELS printed on the form used by consumers to complain about PELS licensees. The complaint form read, "The Board does not have the authority to investigate disputes regarding client fees. Such disputes are considered civil

The Definition of "Electrical Engineering"

PELS' Electrical Engineering Technical Advisory Committee (EE-TAC) is once again proposing changes to the definition of "electrical engineering" in section 404(1), Title 16 of the CCR. Since 1992, PELS has been discussing the adoption of regulatory language to clarify the scope of electrical engineering and what constitutes qualifying experience for licensure as an electrical engineer. In May 1995, OAL rejected PELS' proposed changes to the existing definition. [15:4 CRLR 124]

The current definition in section 404(I) describes electrical engineering as "that branch of professional engineering...which embraces studies or activities relating to the generation, transmission, and utilization of electrical energy, including the design of electrical, electronic and magnetic circuits and the technical control of their operation and of the design of electrical gear. It is concerned with research, organizational, and the economic aspects of the above."

At its September 24 meeting, the EE-TAC discussed the following draft definition: "Electrical engineering is that branch of professional engineering which requires such education and experience necessary to understand, apply, and prepare designs, calculations, analyses, studies, reports, specifications, and perform periodic observations in regards to generation, transmission, distribution, and grounding of electrical power systems and electrical signal systems relating to fixed works, buildings and structures. It is also concerned with the environmental, electrical energy, public health and safety, codes and standards, and economic aspects of the above."

matters. If you have a fee dispute, you may wish to contact an attorney of your choice or to resolve the dispute in small claims court." This policy was also restated in the Board's newsletter to licensees.

CPIL challenged this policy on the grounds that PELS is abdicating an entire area of its legislatively mandated disciplinary jurisdiction under Business and Professions Code section 6775, which expressly authorizes PELS to take disciplinary action against licensees who "have been found guilty by the board of any deceit, misrepresentation, violation of contract, fraud, negligence, or incompetency in his practice" (emphasis added). CPIL contended that, in order to interpret its statute, PELS should have gone through the mandated Administrative Procedure Act rulemaking process which provides opportunity for public comment and legal review by OAL.

Immediately after CPIL filed its challenge, PELS responded to the charge by removing the offending language from its complaint form. According to PELS, the removal was not because the language constituted an illegal rule, but because the language could cause confusion and discourage the filing of some complaints which the Board is authorized to investigate. Before OAL, PELS argued that its removal of the offensive language rendered the issue moot; however, OAL agreed with CPIL's argument that rescission of the challenged policy does not relieve OAL of its duty to issue a regulatory determination.

On the merits, OAL found that the Board's policy of refusing to investigate fee disputes clearly meets the definition of a "regulation" under the Administrative Procedure Act because it interprets a law which PELS has a duty to enforce; it is not subject to any of the APA's exceptions to the rulemaking requirement; and, because it was not promulgated through the rulemaking process, it is without effect.

Legislation

AB 969 (Cardenas), as amended May 4, changes PELS' name from "Board of Registration for Professional Engineers and Land Surveyors" to "Board for Professional Engineers and Land Surveyors," and provides for the licensure (instead of registration) of persons practicing engineering in California. This bill prohibits the use of the title "licensed engineer" in any manner unless the user is licensed as a professional engineer.

AB 969 also deletes the titles "corrosion engineer," "quality engineer," and "safety engineer" from the list of title act engineering branches (see MAJOR PROJECTS). All persons completing the examination process in one of the three eliminated branches before January 1, 1999 may continue to use the title; after January 1, 1999, PELS is prohibited from administering further examinations in any of these fields. The Governor signed this bill on June 4 (Chapter 59, Statutes of 1998).

SB 2239 (Committee on Business and Professions), as amended August 24, increases the experience requirement for land surveyors. Existing law requires that candidates for the

second division of examination for licensure as a land surveyor have graduated from a four-year postsecondary curriculum, and completed at least two years of actual experience in land surveying, including (1) one year of responsible field training and one year of responsible office training; or (2) actual experience in land surveying for at least six years, including one year of responsible field training and one year of responsible office training; or (3) registered as a civil engineer with two years of actual experience in land surveying. This bill requires that for all three methods of complying with these requirements, the actual experience be broad-based, progressive, and satisfactory to the Board. SB 2239 also eliminates PELS' discretion to grant up to two years of credit for experience in land surveying to candidates who have successfully passed the first division of the examination.

Existing law provides for the submission of surveying records known as corner records, and requires every corner record submitted to a county surveyor or engineer to be examined or endorsed. If the filing party (usually a land surveyor or civil engineer) and the county surveyor have a disagreement over a corner record, the county surveyor is required to place an explanatory note on the corner record and file it. SB 2239 requires the county surveyor, if he/she places an explanatory note on a corner record, to transmit a copy of the filed corner record within ten working days of the filing to the licensed land surveyor or civil engineer who submitted the corner record. This bill was signed by the Governor on August 28 (Chapter 878, Statutes of 1998).

SB 2238 (Committee on Business and Professions), as amended August 28, requires PELS to initiate the rulemaking process by June 30, 1999 to require its licensees to identify themselves to their customers as being licensed by the state of California. Additionally, the bill requires PELS to submit to the DCA Director, on or before December 31, 1999, its method for ensuring periodic evaluation of every licensing examination that it administers. This bill was signed by the Governor on September 26 (Chapter 879, Statutes of 1998).

AB 2721 (Miller), as amended August 10, clarifies that the term of office for Board members is four years expiring on June 1. The bill also provides that any PELS licensee who engages in, or aids and abets, prostitution in the workplace is guilty of unprofessional conduct and is subject to disciplinary action against his/her license; the bill also provides for the imposition of a civil penalty in such cases. This bill was approved by the Governor on September 29 (Chapter 971, Statutes of 1998).

Future Meetings

- February 25–26, 1999 in San Diego.
- April 8–9, I 999 in Sacramento.
- June 3-4, 1999 in Ontario.
- July 22-23, 1999 in Burlingame.
- September 16-17, 1999 in San Diego.
- November 4-5, 1999 in the Bay Area.
- December 16–17, 1999 in Sacramento.