



CALIFORNIA LEGISLATIVE COUNCIL OF PROFESSIONAL ENGINEERS

August 10, 2012

Governor Jerry Brown
State Capitol, Suite 1173
Sacramento, CA 95814

Subject: High Speed Rail cannot be built unless the State Engineers' Act is ignored

Dear Governor Brown:

The California Legislative Council of Professional Engineers (CLCPE) is an organization of engineering societies that has been supporting efforts to reform the Professional Engineers Act (PE Act). A major disaster in the last century demonstrated the need to protect the public by ensuring the competence people who are responsible for the design of major infrastructure projects. This resulted in the adoption of the PE Act which requires the licensing of civil engineers. It is now a law that poses a risk to public safety. As the president of CLCPE, I am able to explain why this is the case.

The approval of the construction of high speed rail creates a highly complex engineering project. It will involve the use of all available technical expertise. The PE Act will control the design and construction of what could be the largest public project in the history of the state. However California's PE Act requires every person providing services in this project to be licensed as a civil engineer.

The PE Act contains sections 6730, 6731 and 6731.1 of the Business and Professions Code which require "any person" performing "civil engineering" to be licensed as a civil engineer. Civil engineering, as defined in sections 6731 and 6731.1, is so broad it includes all disciplines of engineering, other professions and science. Railroads are specifically subject to this law. All activities, such as designing, planning and even the "investigation of the laws, phenomena and forces of nature" are listed. Every planner, scientist or other licensed engineer, or any other provider of expertise, must be licensed as a civil engineer.

The Legislative Counsel Bureau has issued an opinion that concludes there are no exceptions to this requirement. It specifically considers engineers licensed in other disciplines. California has a law that is so extreme that it is basically ignored. But not by the major engineering organizations that are opposed to its reform. CLCPE would be remiss if we did not bring this situation to your attention. We also must explain why the opposition to reform is working against the best interests of California's citizens.

The need to protect the public will require the use of experts from the entire nation, and probably from countries already having high speed rail, to address the complexities of what is the most advanced form of high speed rail. While it is possible these experts will all be licensed as civil engineers, it is highly unlikely. It is even more unlikely they

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will be aware of the need to become licensed as civil engineers. California is unique in having this as a law.

California lead the nation in the early part of the twentieth century in protecting the public, and the PE Act was a model for the rest of the country. However the rest of the country now recognizes that today's technology far exceeds that contained in the single discipline of civil engineering.

Major components of the project are the electrification of the rail to provide its power, and the control systems to make the operation of the system safe. Electrical engineers will be necessary to design the electrification component of the system. But the law prohibits an electrical engineer from providing services unless that engineer is also licensed as a civil engineer. All of the experts needed to design the sensors and global positioning systems necessary for safety are also subject to the law.

The Professional Engineers in California Government and the Association of Consulting Engineering Companies are the two organizations that are opposing the reform of the law. Senate Bill 692, which would require competence to be the standard for protecting the public, rather than subjecting the public's safety to a monopoly for civil engineers, was defeated this year. Since the bill had the support of academia and users of engineering services this action is an expression of legislative intent. The PE Act can no longer be considered to be a mistake or something to be ignored. CLCPE does not expect reform will be successful unless the public becomes aware of the law's effect on safety and the economy.–

The opposing organizations made it clear that the PE Act is, in their opinion, the best way to protect the public. They claim reform would be confusing, and incompetent engineers would be allowed to provide services best provided by civil engineers. This turns the engineering profession on its head. This is a perverse claim since it undermines the integrity of all forms of expertise.

The enforcement of the PE Act will expose the public to the possibility of unsafe conditions. It is not possible to continue to ignore it; we have gone beyond the point of no return.

A lesser, but still important, issue is the notification to investors in California bonds, and the federal agencies that are providing funding for this project. They should be made aware that this project will go forward, if that is possible, under a law which requires any person providing services to be licensed as a civil engineer, a law which exists nowhere else.

We respectfully request you consider the need to reform the law in order to increase the possibility the high speed rail project can succeed. We would be pleased to answer any questions you may have.

Sincerely,



Robert A. Katin, PE
CLCPE President