

**Testimony of Dr. Charles V. Shank  
Director, Lawrence Berkeley National Laboratory  
Before the  
House Commerce Committee  
Subcommittee on Energy and Power  
March 22, 2000**

Mr. Chairman and Members of the Subcommittee:

It is my pleasure to be here today to provide my perspective on three bills dealing with the environment, health and safety of the Department of Energy complex.

Just to reacquaint you, Berkeley Lab is the oldest of the DOE national laboratories, founded in 1931 and located next door to the University of California, Berkeley campus. Today we operate on a budget of approximately \$415 million performing research for the Department of Energy (DOE), other Federal agencies and the private sector. Before becoming Director of the Lawrence Berkeley National Laboratory in 1989, I spent 20 years at the AT&T Bell Laboratories, ultimately directing the Electronics Research Laboratory in Holmdel, New Jersey. In addition, I now serve as Professor in three Departments at the University of California at Berkeley, in Physics, Chemistry and Electrical Engineering and Computing Sciences.

The regulatory framework for the national laboratories is important for their scientific productivity, the safety of our employees, and the protection of the environment.

Providing a safe and healthy environment is a critical management responsibility of the Laboratory Directors.

The first bill, H.R. 3383, would eliminate the exemption for non-profit contractors from paying fines and penalties levied under the Price-Anderson Act. As the University of California official responsible for managing my laboratory, I take compliance with the Price-Anderson Act very seriously. I am proud of the fact that we have an outstanding record of operating safely and of demonstrating the utmost concern for the environment.

The University operates the Lawrence Berkeley National Laboratory, along with the Livermore and Los Alamos laboratories, as a public service without the desire for financial gain, and has instituted numerous mechanisms to insure compliance with Price-Anderson and all Federal and state statutes. The fees paid to the University for their management activities are derived from support for the laboratories' scientific programs. Therefore, any additional fees that might be paid as fines and penalties would be additional "taxes" on our research programs, while not increasing our outstanding level of compliance.

The second piece of legislation, H.R. 3906, would establish a new Office of Independent Security Oversight within the Department, along with additional procedures for safeguards and security evaluations. I want to point out that Lawrence Berkeley National Laboratory performs no classified research on its site and has no ability to store classified information on site. We do, however, operate DOE's largest civilian supercomputing facility, along with managing DOE's Internet operation, so we do take seriously cyber security and other security measures appropriate for our site.

My concern with the measures proposed in H.R. 3906 is that it imposes yet another new layer of bureaucratic management and oversight. A successful security program requires line management accountability and employee support. This bill will apply yet another burden on the scientific programs performed at the laboratories.

Finally, let me turn to H.R. 3907, which would provide for external regulation of nuclear safety and occupational health and safety at DOE facilities. I would like first to talk about our experience with external regulation pilot studies with both the Nuclear Regulatory Commission (NRC) and the Occupational Health and Safety Commission (OSHA), and then turn to some more general comments about the legislation.

As you may know, Berkeley Lab is located adjacent to the University of California, Berkeley campus, and we share many faculty and students. For many years, it has mystified me that identical activities carried out on the campus and at the laboratory are regulated by different entities, and with different standards. As a consequence, when NRC proposed a pilot project for external regulation of DOE facilities, I quickly volunteered our institution. My dream is for a world where similar work is regulated with uniform standards independent of the entity that performs the work. Scientists could then be trained with a single set of expectations for environment, health and safety considerations throughout the country.

The NRC pilot took place between October 1997 and January 1998, with two planning visits to the laboratory, two one-week simulated regulation visits, and a public meeting to seek community input and comments. The results of the pilot were encouraging. NRC found that there were no significant safety findings to report, and that the laboratory had an adequate program to protect the health and safety of employees, the public and the environment. The NRC indicated that they would be willing at that time to issue the laboratory a broad scope license for their operation, and indicated that they could carry out their responsibility for our site with 0.1 FTE, or approximately one person-month per year.

There are, however, a number of serious concerns. Would external regulation be layered on top of current DOE orders? We fear a world of overlapping and redundant responsibilities that would make it difficult for us to do our work. Who will hold the NRC license? The DOE report on our pilot indicates that additional people would have to be hired if DOE held the license. Who will be responsible for legacy issues? We at Berkeley Lab have old facilities for which clean-up funds have not been allotted. Who will regulate x-ray units, accelerators and naturally occurring radioactive materials?

Based on our experience with the NRC pilot, and the private sector experience of our ES&H staff, we volunteered to conduct a similar pilot with OSHA. This effort took place between December, 1998 and January 1999. It involved two planning conference calls, one eight-day site visit, an all-hands meeting with laboratory staff and meetings with our local labor unions. The visiting team included representatives from NRC, DOE, OSHA,

Cal-OSHA, the California Department of Health Services and the EPA. They reviewed all our facilities and programs applying the concept of simulated regulation and inspection, with comprehensive safety and health inspections and simulated citations for alleged violations.

The overall conclusion was that the OSHA regulatory framework could be applied to Berkeley Lab, and that the laboratory's Integrated Safety Management program is consistent with OSHA's Voluntary Protection Program. OSHA did identify 63 simulated citations, for a total simulated penalty of \$57,700 or an average of \$916.00 per violation. They also had a number of issues that would need further attention, but none of them could be considered significant enough to prevent their efficient regulation of the site.

As a result of these pilot studies, I believe that external regulation of Berkeley Lab is not only possible but also desirable, with the caveat that this is done with clear lines of authority and priority is given to efficient, risk-aware implementation. This would mean that contractors would deal directly with regulatory agencies, and that much of the existing DOE ES&H infrastructure would be reassigned to the Department's core mission. Let me be perfectly clear on this point: a layered, redundant oversight, subjecting the laboratories to regulatory oversight by both the DOE and NRC and OSHA, would result in a more expensive and confusing ES&H climate.

Finally, I am very concerned that the results of these pilots not be used to generalize this approach to all the work performed at DOE facilities. In some cases, such as at weapons

laboratories and production facilities, external regulation may not be desirable owing to the specialized expertise necessary for managing risks in unique facilities and security concerns.