

WORKER SAFETY AT DOE NUCLEAR FACILITIES

HEARING
BEFORE THE
SUBCOMMITTEE ON
OVERSIGHT AND INVESTIGATIONS
OF THE
COMMITTEE ON COMMERCE
HOUSE OF REPRESENTATIVES
ONE HUNDRED SIXTH CONGRESS
FIRST SESSION

—————
JUNE 29, 1999
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Serial No. 106-43
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Printed for the use of the Committee on Commerce



U.S. GOVERNMENT PRINTING OFFICE

58-494CC

WASHINGTON : 1999

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WORKER SAFETY AT DOE NUCLEAR FACILITIES

TUESDAY, JUNE 29, 1999

HOUSE OF REPRESENTATIVES,
COMMITTEE ON COMMERCE,
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS,
Washington, DC.

The subcommittee met at 11 a.m., in room 2125, Rayburn House Office Building, Hon. Fred Upton, (chairman) presiding.

Members present: Upton, Burr, Bilbray, Whitfield, Bryant, Klink, Stupak, and Strickland.

Staff present: Mark Paoletta, majority counsel; Dwight Cates, investigator; Edith Holleman, minority counsel; and Penn Crawford, legislative clerk.

Mr. UPTON. Thank you everyone for coming. With the end of the cold war, the Department of Energy's nuclear weapons production responsibilities have subsided. The risk of exposure to radioactivity at DOE nuclear facilities, however, has increased for thousands of workers now engaged in the clean up of the nuclear weapons complex.

In addition to DOE's remaining weapons research and production responsibilities, nuclear activities at DOE facilities now include decontamination of nuclear reactors, stabilization and safe storage of spent nuclear fuel, and clean up of radioactively contaminated soil and groundwater.

Significant occupational risks associated with these activities are not regulated by the NRC or OSHA. Currently we rely on DOE to self-regulate nuclear and industrial safety at its facilities. Accordingly, in the absence of external regulation it is critical that DOE establishes a credible and effective worker safety program.

Today's hearing will focus on DOE's efforts to hold its contractors accountable for protecting workers engaged in nuclear activities at DOE facilities as required by the Price-Anderson Amendment Act of 1998. We will also review whether nonprofit, educational institutions that manage many DOE labs should continue to be exempt from paying civil penalties for nuclear safety violations.

In 1957 Congress enacted the Price-Anderson Act which indemnified private companies engaged in nuclear activities from financial liabilities associated with any damage or injury caused by nuclear accidents. Price-Anderson Amendments Act of 1988 reauthorized and expanded this indemnification, but in light of significant safety problems uncovered at DOE facilities Congress also required DOE to impose civil penalties on indemnified DOE contractors that violate nuclear safety rules.

At the same time Congress exempted several educational institutions including the University of California, Los Alamos, and Lawrence Livermore in the University of Chicago at Argonne Labs from paying these civil penalties due to their nonprofit status.

Established in 1996, DOE's Office of Enforcement and Investigations which reports to the Assistant Secretary for Enforcement, Safety, and Health is responsible for investigating nuclear safety violations and imposing civil penalties or other corrective actions when appropriate. DOE relies on its contractors to identify and report on nuclear safety violations when they occur.

In determining whether enforcement action is necessary DOE considers the safety significance of the violation, the contractor's willingness to take corrective action, the contractor's ability to pay, and prior history of other violations.

DOE will frequently decline enforcement action when a contractor quickly identifies and corrects nuclear safety problems. To date, DOE's Office of Enforcement has identified more than a thousand cases of nuclear safety noncompliance and has issued only 33 notices of violation and assessed \$1.8 million in civil penalties.

Of the \$1.8 million in fines, nonprofit contractors were exempted from \$605,000 or a third of the assessed fines. Of that \$605,000 in phantom fines assessed on nonprofits, the University of California is by far the leader with \$425,000 or 70 percent.

University of California at Lawrence Livermore was cited for two of the largest safety violations in 1998 including severity level-one violations. In one occurrence a Lawrence Livermore employee received such an enormous internal dose of radioactivity that even after treatment to remove the radioactive material his dose still exceeded regulatory limits. This exposure may have been prevented, but someone had turned off the radioactivity alarm in the room that the man was working in.

However, we cannot measure the effectiveness of DOE's enforcement program or the impact that it has had on worker safety simply by looking at an individual case of noncompliance or the total number of violations and assessed penalties.

In a report released today the GAO finds that DOE has not been aggressive in issuing nuclear safety rules or in holding its contractors accountable for complying with some nuclear safety requirements. According to this report DOE's inaction in converting several nuclear safety requirements to enforceable rules has limited the overall effectiveness of DOE's enforcement program.

Furthermore, DOE has not properly classified exactly how many facilities should be subject to its nuclear safety requirements. How could DOE have an effective nuclear safety program if it doesn't know how many facilities to which the rules apply? These and other issues are significant because DOE is not externally regulated and it must rely on the strength of its own oversight to hold contractors accountable.

In addition to these findings DOE also recommends an end to the civil penalty exemption for nonprofit, educational institutions. DOE believes that it's unwise to limit any tools that can be used to ensure safe nuclear practices by its contractors.

In contrast, the NRC, as well as other Federal regulatory agencies do not exempt nonprofit organizations from penalties for safety

violations. Instead the NRC reduces the civil penalty for nonprofit contractors based on their ability to pay. DOE could similarly establish such a reduced penalty system.

Furthermore, the Department's nonprofit contractors now earn annual performance fees that could be used to pay any civil penalties. DOE, however, believes that the civil penalty exemption should be continued and even expanded. DOE believes that contract mechanisms can be used to ensure nuclear safety performance, but that GAO reports that DOE has so far been unsuccessful in applying contractual mechanisms to encourage nuclear safety.

Congress and nuclear workers should not have to rely on the Department's enforcement program to ensure a safe work environment. DOE contractors must work proactively to establish effective nuclear safety programs in a field which prevent nuclear safety accidents from ever occurring.

Line management in the field is responsible for the institutionalization of safe operations, however, if a contractor is unable to prioritize and implement safety considerations, then DOE should not be reluctant to apply every tool possible to make it so.

Today we will hear from DOE, GAO, several nonprofit and for-profit contractors and a union representative of DOE workers on how we can improve nuclear safety at DOE facilities.

I yield at this time for an opening statement from the ranking member, Mr. Klink.

Mr. KLINK. Thank you, Mr. Chairman, that was a good statement. I associate myself with most of it.

Mr. Chairman, I think this is a particularly appropriate time to be holding this hearing in light of the hearing we held just last week on the Rudman Report and the House and Senate consideration of restructuring the Department of Energy. One of the outcomes, I think, of last week's hearing was the realization that people such as Senator Rudman who are focused on the safeguards and the security problems in DOE's weapons complex have no understanding or plan for carrying out the environmental, safety, or health responsibilities of DOE. A theme relevant to today's hearing was the difficulty in changing the entrenched DOE culture.

In June 1989, shortly after Admiral James Watkins took over the Department, he stated that. "For over four decades DOE and its contractors have accepted that its national security mission was incompatible with creating a health and safety environment." He said, "The chickens have finally come home to roost and the years of inattention to changing standards and demands regarding the environment, safety, and health are vividly exposed."

Admiral Watkins proposed to lead DOE to a new culture. Priorities would be changed and environment, safety, and health would receive more weight than weapons production. Indeed, he said that 51 percent of the contract award fee would be based on environmental, safe, and health requirements, and all of the award fee would be at risk for failure in any one of those three categories.

Well, this never happened. In fact, our DOE witness today—a decade later—will tell us that DOE just recently revised its fee policy to allow putting the entire fee at risk because of poor safety performance. We will hear today about recalcitrant nonprofit and for-profit contractors.

The Price-Anderson Amendments holding contractors liable for their nuclear safety violations through the use of civil penalties were written in this committee and passed by Congress in 1988. It was to be an interim provision until the nuclear facilities came under the control of the Nuclear Regulatory Commission and the Occupational Safety and Health Administration. Not only has the Department's record in implementing that law been abominable, we learned recently that it has abandoned external regulations because of the usual internal disputes among the programs.

On Price-Anderson enforcement, the Department has moved with all deliberate speed. You see, we already have noted it has finalized two of 11 rules that it drafted. Fortunately, the workers' protection rule was one because the General Accounting had found in 1990 that radiological protection programs were a major deficiency at DOE. But it is our understanding that the program offices objected to the other rules. Just as adequate security costs money, adequate worker safety protection costs money.

The program offices and the contractors like to use as much of their funds as possible for program purposes and don't want to be interfered with. And, as a result, for 7 years, Mr. Chairman, the rulemaking has been under discussion and then suspended.

DOE has lots of excuses such as they were reinventing Government; working on other solutions to the health and safety problems. But if every agency or every citizen of this country took DOE's position that they didn't have to enforce the laws, then our country would simply not be able to function.

The enforcement program we authorized in 1988 was finally in place in 1996 and today it has a total of five people working for it. Obviously it cannot pursue all or even most of the violations.

The site representation program which was going to put a DOE employee at every site to monitor health and safety issues was never staffed up and is now going to be eliminated. DOE will probably say that it and its contractors have all the Price-Anderson coordinators at each site. Well, these are usually people with other responsibilities. And our staffs' contact with these people did not leave a great impression of either their knowledge or their ability to effect change.

When Secretary Richardson gave up external regulations, he did promise, however, that the following steps would be taken to enhance safety. First, DOE's acquisition regulation would be revised so that the contractor's entire fee would be at risk for poor performance of safety measures; second, that oversight and enforcement programs would be strengthened; third, there would be a complex wide tracking system to make sure that actions to correct safety and emergency management defects would be identified and completed on an expedited basis; and fourth, a Secretarial Safety Council would be established.

I note, Mr. Chairman, the Secretary did not mention this—mention issuing the lost Price-Anderson regulations, and that the proposal to change the acquisition regulations was published in April 1998, and still is not finalized.

Is the enforcement program strengthened? Not that we can see.

Dr. Michaels is going to tell us today that he will have those regulations in place by January of next year. I have to tell you, Mr.

Chairman, I am hopeful that he is right, but yet I'm very skeptical of that promise or any others that are made by the Department.

Let me just say one comment about the exemption from civil penalties for nonprofits. It doesn't appear that it's working. According to the enforcement staff, the labs have been extremely difficult to work with. As scientists they believe that they know better. I know we are going to discuss today with the University of California the careless behavior demonstrated by the Lawrence-Livermore National Laboratory. What's even more distressing was the lab's ability to stop the issuance of a departmental press release concerning its violations. There's something seriously wrong at the Department when contractors have that amount of power.

I also must express bewilderment by the Department's statement that fines work very well with private contractors, but don't work well for recalcitrant labs.

I look forward to today's testimony and the response to our questions.

Mr. UPTON. Thank you, Mr. Klink.

Mr. Whitfield, do you have an opening statement?

Mr. WHITFIELD. Mr. Chairman, I do not have an opening statement. I'll just file one for the record. Thank you.

Mr. UPTON. That's fine. Thank you.

I would note for the record that originally we were supposed to be in session with votes yesterday. On Friday afternoon that was changed so the House is not yet in session and all members of this subcommittee, I'll ask unanimous consent, will be able to file an opening statement by unanimous consent if they so desire, and we expect a number of members to come as their planes arrive as the House is not yet into session this week.

[Additional statements submitted for the record follow:]

PREPARED STATEMENT OF HON. JOE BARTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

I would like to thank Chairman Upton for scheduling this hearing on the very important subject of worker safety at DOE Nuclear Facilities. This is a timely subcommittee hearing as it comes a week after the full Commerce Committee hearing on June 22, 1999, on the Rudman Report and its analysis of the security problem at DOE facilities. Any legislative effort to reorganize the Department of Energy will have to come through the Commerce Committee and is of great interest and concern to the Members of the Committee.

I commend the witnesses we have here today for testifying on the issue of worker safety at DOE Nuclear Facilities. For an issue as important as this to our national security, we need to hear from all parties involved, and I think we have a good representation here today.

Since my days as a White House Fellow working at DOE, I have personally witnessed the organizational problems at the department. I have always been concerned about these problems, as many have, and now our worst fears apparently have occurred. Espionage by the Chinese on our nuclear weapons designs has occurred at Los Alamos lab, and there is additional evidence of national security breaches at the other DOE labs. There have to be changes made in response to these problems.

What are the steps that must be taken now to make sure this does not happen again? To begin with, I believe that those at fault in these security breaches must be held accountable. DOE must be held accountable as well as the contract personnel working at the labs. There is mounting evidence that something is seriously wrong in the management of these labs and in the security operation throughout the DOE lab organization.

I believe that at the labs where these national security breaches have occurred there needs to be serious consideration given to the role of the contractors in contributing to these problems. I support terminating the University of California's con-

tract because of the evidence of negligence involved in the managing of the Los Alamos lab. I also believe that because of all of these problems with the management of the DOE labs, it is necessary to relocate the functions of the labs completely out of DOE.

As Chairman of the Subcommittee on Energy and Power, I look forward to being involved in legislation to address these security problems which would come through my subcommittee. This is an important issue for our country and one which we cannot ignore. Again, I thank Chairman Upton for holding the hearing and I thank the witnesses for taking time to appear before this committee.

PREPARED STATEMENT OF HON. TOM BLILEY, CHAIRMAN, COMMITTEE ON COMMERCE

Mr. Chairman, thank you for holding this important hearing. Today we will review the Department of Energy's implementation of its enforceable nuclear safety program required by the Price Anderson Amendments Act of 1988. Congress expects DOE to hold its contractors accountable for the protection of workers engaged in the important nuclear research and cleanup activities at DOE sites across the country. That is why Congress gave DOE civil penalty authority to oversee and fine contractors that violate nuclear safety rules. In addition to this civil penalty authority, DOE also can demand corrective action of its contractors to ensure that nuclear mistakes are not repeated. Our review of the Department's implementation of nuclear safety requirements will also include a review of the safety *performance* of several of DOE's largest contractors.

Proper planning and contractor control over risky nuclear activities can prevent nuclear accidents. Workers should expect a safe work environment. Unfortunately, several nuclear violations have occurred—and in some cases recurred—at a few DOE sites operated by contractors that have been slow to learn and understand the importance of nuclear safety. It is not enough for a contractor to simply pledge to respond quickly and implement corrective actions *after* a nuclear accident has happened. I am particularly concerned about an apparent pattern of unsafe nuclear work at Los Alamos and Lawrence Livermore National Labs. For example:

In November 1996, there was a fire and explosion involving radioactive material at Los Alamos. Two years after this serious accident, DOE fined the University of California for refusing to implement radiation protection requirements the University had agreed to implement.

In November 1996, a Nuclear Facility Appraisal identified significant and widespread problems with nuclear safety procedures at Lawrence Livermore. Eight months later, five workers were exposed to high amounts of radioactivity during waste processing activities.

In May 1996, a DOE appraisal identified significant problems with Lawrence Livermore's criticality safety program. One year later, multiple and recurring criticality safety failures occurred at Lawrence Livermore, including loss of control of plutonium at Building 332.

These significant nuclear safety violations seem to demonstrate the same pattern of organizational disarray, and managerial neglect, identified by the Rudman report with respect to security violations at the labs. Even more troubling, DOE seems to be unable to hold the University of California accountable for these violations or identify the corrective actions to prevent these violations from recurring. Due to statutory exemptions, the University of California has not paid any of the \$425,000 in fines the DOE has assessed for these violations. Furthermore, in spite of these serious safety violations, DOE continues to rate the University of California's health and safety performance as "good," and has awarded all base performance fees associated with health and safety activities. In light of these circumstances, I may seriously consider GAO's recommendation to end the civil penalty exemption for non-profit educational institutions.

I want to make it clear that hundreds of nuclear activities are safely performed at DOE sites every day. Several DOE contractors have established sound nuclear safety programs that protect workers. However, in written testimony today, GAO reports that there are many holes in the Department's nuclear safety program. Mr. Chairman, where there are gaps in nuclear safety programs, there are nuclear accidents waiting to happen. I look forward to working with the Subcommittee today and in the future to identify ways to improve the Department's nuclear safety program and to hold contractors accountable for poor safety performance.

Mr. UPTON. Our two first witnesses include Ms. Gary Jones, Associate Director for Energy Issues at GAO. She is accompanied by Mr. William Swick, Assistant Director for Energy Issues at GAO.

Also testifying is Dr. David Michaels who is Assistant Secretary for Environment, Safety and Health at the Department of Energy, and he is accompanied by Mr. Keith Christopher, Director of the Office of Enforcement and Investigation.

As you may know, this subcommittee has a long tradition of taking testimony under oath and do you have any objection to that?

[No response.]

Mr. UPTON. Hearing none, we also have—you're allowed to have to counsel in addition to the folks that are with you now, and if you don't have any need for that, if you would just stand and raise your right hand.

Do you swear to tell the whole truth and nothing but the truth so help you God?

Ms. JONES. I do.

Dr. MICHAELS. I do.

Mr. UPTON. They are now under oath. We'll start with GAO, Ms. Jones, do you want to go with your testimony. Again, you have been a frequent visitor here; you know I would like you to keep your comments or your opening statement limited to 5 minutes and the little egg timer is—I don't know if this is poached or whatever, but 5 minutes is now yours.

Ms. JONES. And you promised to give that to me at the last hearing if I—

Mr. UPTON. No, I don't know that I made that promise. You might have made that request.

TESTIMONY OF GARY L. JONES, ASSOCIATE DIRECTOR, ENERGY, RESOURCES AND SCIENCES ISSUES, ACCOMPANIED BY WILLIAM SWICK, ASSISTANT DIRECTOR FOR ENERGY ISSUES, GENERAL ACCOUNTING OFFICE; AND DAVID M. MICHAELS, ASSISTANT SECRETARY FOR ENVIRONMENT, SAFETY AND HEALTH, ACCOMPANIED BY KEITH CHRISTOPHER, DIRECTOR, OFFICE OF ENFORCEMENT AND INVESTIGATION, DEPARTMENT OF ENERGY

Ms. JONES. Thank you, Mr. Chairman.

We are here today to discuss the Department of Energy's efforts to hold its contractors accountable for nuclear safety requirements.

Let me take just a minute to define the framework within which the safety enforcement program operates.

As you mentioned, Mr. Chairman, independent regulators do not help ensure that DOE operations are safe. Instead, DOE relies on its own staff to ensure safety.

One mechanism to hold contractors accountable for safety was provided by legislation passed in 1988 which allows DOE to impose civil monetary penalties on those contractors not meeting nuclear safety requirements. However, that law named seven contractors and research laboratories that along with their subcontractors and suppliers were exempt from having to pay penalties.

The legislation also gave the Secretary of Energy the authority to exempt nonprofit educational institutions under contract to DOE from paying penalties. Given that backdrop, let me discuss the results of our work.

DOE determined that to be able to assess civil penalties existing safety requirements in DOE orders would have to be reissued as

enforceable rules. However, over 10 years after the Congress authorized DOE to assess civil penalties, DOE has issued enforceable rules covering only 2 of the 11 safety areas originally proposed; radiation protection for workers and quality assurance.

The other nine safety areas not included as rules include training and certification of employees performing vital operations and the preparation of safety analysis reports. DOE did not complete the remaining rules because of work on other safety issues and internal discussions about how best to ensure nuclear safety. Not issuing these enforceable rules has limited the overall effectiveness of the enforcement program because DOE has fewer options to ensure that contractors are meeting safety requirements.

In commenting on our report DOE agreed that it should issue additional rules and outlined the strategy for doing so.

We also found that DOE has been inconsistent in placing nuclear facilities under the quality assurance rule. Nuclear facilities are defined as having a nuclear reactor or activities where a nuclear hazard to employees or the public potentially exists. Based on this definition, there are a number of facilities that should have been included under this rule but were not.

For example, Savannah River categorized its reactors as nuclear facilities, Hanford did not. Although none of the reactors are currently operating, radiation exposure remains a potential problem at both sites.

Incorrectly categorizing facilities could affect the type of safety oversight being done as well as the enforcement activity undertaken. DOE agreed that the scope of the quality assurance rule should be clarified and is taking action to do so.

DOE concluded that the enforcement program is a valuable tool for increasing the emphasis on nuclear safety. While DOE assessed penalties against both for-profit and not-for-profit contractors, it collected penalties only from the for-profit contractors.

DOE recommended in March 1999 that the statutory exemption from paying penalties be continued and expanded to include all nonprofit contractors, subcontractors, and suppliers. However, DOE has not made a convincing case for doing so.

First, DOE states that the exemption should be continued because major universities and other nonprofit contractors would not be willing to put their assets at risk paying civil penalties. However, under performance-based contracting for fiscal year 1999, all but one of the contractors that manage and operate DOE facilities, including the nonprofit contractors, can earn a fee. Nonprofit contractors use this fee for unallowable and administrative costs and to conduct laboratory-directed research. The fee could also be used to pay any civil penalties imposed on the contractor.

Second, DOE stated that the contract provisions are a better mechanism than civil penalties for holding nonprofit contractors accountable for safe nuclear practices. Although performance-based contracting can be an effective way to emphasize safety, DOE has not taken full advantage of this mechanism. For example, the University of California, DOE's contractor at Livermore, received 96 percent of the \$6.4 million fee available in fiscal year 1998 even though it had significant nuclear safety deficiencies resulting in enforcement actions.

Third, DOE states that its current approach is consistent with the Nuclear Regulatory Commission's treatment of nonprofit organizations. We don't agree. NRC can and does impose penalties for violating safety requirements on any organization that it regulates without regard for the profit-making status of that organization. However, it usually sets lower penalty amounts for nonprofit organizations.

In addition, both NRC and other regulatory agencies have collected penalties for violating nuclear safety requirements from organizations that DOE exempts from payment.

Mr. Chairman, the GAO report that you have released today suggests that the Congress consider eliminating the statutory and administrative exemptions that currently apply to certain nonprofit contractors. By making that change, all contractors would be held equally accountable for violating nuclear safety rules.

Thank you, Mr. Chairman.

[The prepared statement of Gary L. Jones follows:]

PREPARED STATEMENT OF GARY L. JONES, ASSOCIATE DIRECTOR, ENERGY, RESOURCES, AND SCIENCE ISSUES, RESOURCES, COMMUNITY, AND ECONOMIC DEVELOPMENT DIVISION, GENERAL ACCOUNTING OFFICE

Mr. Chairman and Members of the Subcommittee: We are here today to discuss the Department of Energy's (DOE) efforts to hold its contractors accountable for nuclear safety requirements. DOE has a widespread complex of research and nuclear facilities that contain large quantities of nuclear materials. Some of the materials are in a deteriorated condition, not properly packaged for storage, and may pose a significant risk to workers, the public, and the environment. With few exceptions, DOE's facilities are not inspected or licensed by independent regulators to help ensure that operations are safe. Instead, since 1946, DOE and the agencies that preceded it have relied on their own staff to ensure the safety of these facilities.

Most of the work at DOE facilities is carried out by organizations under contract to DOE. Because of the risks and the potential liabilities inherent with handling nuclear materials, the law authorizes DOE to indemnify, or agree to pay damages for, those contractors that could have an accident associated with handling nuclear materials, and whose actions could cause damage. In 1988, the Congress enacted legislation permitting DOE to hold its contractors accountable for meeting its nuclear safety requirements through a system of civil monetary penalties. DOE determined that to be able to assess civil penalties, existing safety requirements would have to be reissued as enforceable rules. The legislation also named seven contractors at research laboratories, that along with their subcontractors and suppliers, were exempt from having to pay the penalties. In addition, the legislation gave the Secretary of Energy the authority to exempt from paying penalties other nonprofit educational institutions under contract to DOE.

On the basis of the report we prepared for the Committee and are releasing today,¹ our testimony will address (1) what enforceable nuclear safety rules DOE has issued; (2) which DOE facilities and contractors are covered by these rules; (3) how DOE has enforced the nuclear safety rules; and (4) whether there is a continued need for exempting certain contractors from paying penalties for violating nuclear safety rules.

In summary, we found the following:

- Since 1988, DOE has issued enforceable rules covering only 2 of 11 safety areas originally proposed—radiation protection for workers and quality assurance issues that define how work is planned and carried out. The other nine safety areas not included in the rules, such as training and certification of employees performing vital operations, are still covered in DOE orders, and DOE generally includes compliance with them as part of its contracts. However, not elevating safety orders to the status of enforceable rules has limited the overall effectiveness of the enforcement program because DOE has fewer options to ensure that contractors are meeting safety requirements and correcting any deficiencies.

¹ *Department of Energy: DOE's Nuclear Safety Enforcement Program Should Be Strengthened* (GAO/RCED-99-146, Jun. 10, 1999).

- Nuclear safety rules are to be enforced at any DOE facility with the potential to cause radiological harm to the public, workers, or the environment. Although no problems have been identified with the application of the radiation protection for workers rule to the activities of DOE's contractors, DOE field offices have been inconsistent in the degree to which they have placed nuclear facilities under the quality assurance rule. Not properly categorizing DOE facilities as subject to the rules could potentially affect the type of safety oversight carried out by contractors, as well as the enforcement activity undertaken by DOE.
- DOE began its enforcement program in 1996 and concentrates its investigations and enforcement actions on those violations of nuclear safety rules that are the most significant. Between 1996 and 1998, DOE has taken 33 enforcement actions and assessed more than \$1.8 million in penalties. Violations have included such things as unnecessarily exposing workers to radioactivity and not following procedures intended to prevent an uncontrolled nuclear reaction from occurring. DOE has concluded that the enforcement program is a valuable tool for increasing the emphasis on nuclear safety.
- Although DOE recommended in March 1999 that the statutory exemption from paying penalties be continued and expanded to include all nonprofit contractors, subcontractors, and suppliers, the exemption may no longer be needed. DOE cited three reasons for continuing the exemption—nonprofit contractors' unwillingness to put their assets at risk if required to pay civil penalties, effectiveness of existing contract mechanisms in obtaining compliance, and consistency with other regulatory agencies' treatment of nonprofit organizations. However, nonprofit contractors now have contract-related fees available that could be used to pay penalties, contract mechanisms have not been effectively used to address safety-related problems, and, in contrast to DOE, other regulatory agencies collect penalties and administrative costs from nonprofit organizations.

Mr. Chairman, our work clearly shows that, although DOE is ultimately responsible for ensuring nuclear safety at its facilities, the Department has not been aggressive in issuing nuclear safety rules or in holding contractors accountable for complying with the quality assurance rule. The enforcement program is an important complement to existing contract-related mechanisms for ensuring that contractors have safe nuclear practices. Therefore, in the report we are releasing today, we are recommending that the Secretary of Energy take steps to strengthen DOE's nuclear safety enforcement program, and we are suggesting that the Congress consider eliminating the statutory and administrative exemptions—that currently apply to certain nonprofit contractors—so that those contractors would be required to pay the civil penalties assessed for violating nuclear safety rules.

Mr. Chairman, now I would like to discuss our findings in greater detail.

DOE Issued Fewer Nuclear Safety Rules Than Initially Planned

DOE's progress in its efforts to re-issue existing nuclear safety requirements as enforceable rules has fallen far short of its original goal of converting all requirements into rules. Although DOE issued proposed rules covering a broad range of safety issues, only two areas of safety requirements have been addressed with completed rules. DOE largely suspended work on the nine remaining proposed rules because of work on other safety issues and internal discussions about how best to ensure nuclear safety.

DOE issued several proposed safety rules beginning in December 1991.² These proposed rules included existing DOE orders on such matters as protecting workers from exposure to radiation, issuing safety analysis reports, reporting defective items and services, and reporting safety-related problems. In March 1993, DOE issued one more proposed rule dealing with the protection of the public and the environment from radiation. After a public comment and review process, DOE issued two of the rules as final—the rule on radiation protection of occupational workers in December 1993 and the rule on quality assurance requirements in April 1994. The remaining rules have not been finalized.

DOE received extensive comments from contractors and other interested parties on the remaining nine safety requirements proposed as rules. DOE's plan was to issue these remaining rules as final after it completed the analysis of the comments received. However, DOE has issued none of the remaining rules as final. DOE officials said two major factors contributed to the delay—work on other safety issues and discussions within DOE on how best to proceed with safety regulation.

²These proposed rules also included a procedural rule setting up the process that DOE would use to investigate potential violations of nuclear safety rules, issue notices of violation to the contractor, and assess penalties based on the severity level of the violation. After receiving comments and making revisions, DOE issued this procedural rule as a final rule in August 1993.

Although the Secretary concluded in a recent report to the Congress that the enforceable rules have been beneficial in improving contractors' safety performance,³ the system of enforceable nuclear safety rules originally envisioned by DOE has not been fully realized. DOE's inaction in converting the many other aspects of nuclear safety into final published rules has limited the overall effectiveness of the enforcement program. Although DOE officials have said that there is a renewed effort within DOE to address the need for additional enforceable rules, there is still no definite schedule for finalizing the remaining proposed rules.

In our report, we recommended that the Secretary of Energy expeditiously complete the process of issuing enforceable rules covering important nuclear safety requirements. In commenting on a draft of our report, DOE agreed that it needed to complete this process and outlined its strategy for doing so.

Clarification Needed About Facilities to Which the Rules Apply

Penalties for violating enforceable nuclear safety rules apply to any contractor, subcontractor, or supplier that has been indemnified from liability for possible damages caused by working with nuclear materials. However, the two rules issued to date—occupational radiation protection and quality assurance—have somewhat different criteria for determining which facilities should be subject to them, with the occupational radiation protection rule having broader coverage. Under the occupational radiation protection rule, DOE facilities are subject to its provisions if the activities conducted there have the potential to result in the occupational exposure of an individual to radiation or radioactive material. The quality assurance rule adds a second test—a facility must be defined as “nuclear.” To be a nuclear facility, a facility must have either a nuclear reactor or activities or operations that involve radioactive and/or fissionable materials in such a form and quantity that a nuclear hazard potentially exists to employees or the public.

Although there are no apparent problems with the application of the occupational radiation protection rule, the number of facilities DOE field offices decided were subject to the quality assurance rule may be somewhat understated. According to the 1998 annual report of DOE's Office of Enforcement and Investigation,⁴ the office has identified a number of facilities that should have been included but were not. Our review of DOE's approach to identifying nuclear facilities confirmed that there are problems in this area. The nuclear reactors at DOE's Savannah River site in South Carolina and Hanford site in Washington State are an example. Both sites have reactors that produced nuclear weapons material between the 1940s and 1980s. Although none of the reactors are currently operating, radiation exposure remains a potential problem, because, for example, all have reactor blocks or vessels in place that contain residual radioactive material. Nevertheless, Savannah River categorized its reactors as nuclear facilities, while Hanford did not.

DOE does not know how widespread this problem of identifying nuclear facilities is so its significance is difficult to determine. However, incorrectly categorizing facilities could potentially affect the type of safety oversight being done by contractors and DOE field offices, as well as the enforcement activity undertaken by the Office of Enforcement and Investigation.

In our report we recommended that the Secretary of Energy ensure that field locations are properly following DOE's guidance in determining which facilities must comply with the nuclear safety rule on quality assurance. In commenting on a draft of our report, DOE agreed that the scope of the quality assurance rule should be clarified and described the steps it has taken and will take to do so.

DOE's Enforcement of Nuclear Safety Rules Has Resulted in Penalties Against Contractors

DOE established the enforcement program in 1996, which relies primarily on a system of self-reporting and corrective actions by its contractors, and concentrates its enforcement actions on those violations of nuclear safety rules that are the most significant, and to situations where the contractor has not promptly identified, reported, and corrected the problem. DOE's enforcement process includes (1) identifying, evaluating, and investigating potential violations of the nuclear safety rules,

³ Department of Energy Report to Congress on the Price-Anderson Act (Mar. 1999).

⁴ 1998 Annual Report, Price-Anderson Nuclear Safety Enforcement Program (Jan. 1999).

(2) determining the severity level of the violation,⁵ (3) calculating the civil penalty,⁶ and (4) notifying the contractors and public of the results of the enforcement action. As our report states, between 1996 and 1998, DOE took 33 enforcement actions with assessed penalties totaling \$1.8 million, with the highest penalty assessed—\$165,000—in November 1998. There have been only two severity level I violations—one against EG&G Inc., at DOE's Mound, Ohio, site for deficiencies in its radiation dosage monitoring program, and the other against the University of California at Lawrence Livermore National Laboratory in California for exposing workers to unnecessary levels of radiation. So far in 1999, DOE has taken four enforcement actions with penalties totaling \$357,500. These included a preliminary notice of violation in May 1999 with an assessed penalty of \$330,000, the largest to date in the program, against Fluor Daniel Hanford, Inc., for repeated violations of the quality assurance rule at its spent nuclear fuels project.⁷

In its March 1999 report to the Congress on the Price-Anderson Act,⁸ DOE stated that its authority to impose civil penalties has proven to be a valuable tool for increasing the emphasis on nuclear safety and enhancing the accountability of its contractors. On the basis of our analysis, we agree that DOE's enforcement program appears to be a good mechanism for increasing both contractor awareness of and accountability for nuclear safety requirements and complements existing contract mechanisms. We believe the advantages of the enforcement program include its independence from the program and field office structure, the objectivity of its enforcement process, its emphasis on verifying that corrective action has been taken, and the visibility of its results.

Continuing to Exempt Nonprofit Contractors from Paying Civil Penalties May Not be Warranted

Of the \$1.8 million in civil penalties assessed by DOE from 1996 through 1998, certain nonprofit contractors exempted by statute or under administrative rule did not pay about \$605,000, or 33 percent, of the total penalties assessed. One part of DOE's March 1999 report on the Price-Anderson Act reassessed the merits of the enforcement program and the need to continue exempting nonprofit educational institutions from civil penalties. Although DOE concluded that the authority to impose civil penalties has proven to be a valuable tool for increasing the emphasis on nuclear safety and for enhancing contractors' responsibility and accountability, DOE also concluded that the exemption from having to pay the penalties for nonprofit contractors should be continued. Our analysis of DOE's reasons raises several questions about the merits of continuing the exemption:

- DOE states that the exemption should be continued because major universities and other nonprofit contractors would be unwilling to put their assets at risk for contract-related expenses such as civil penalties. However, under performance-based contracting,⁹ for fiscal year 1999, all but one of the contractors, including the nonprofits, that manage and operate DOE facilities have the opportunity to earn a fee.¹⁰ This fee, which is in addition to reimbursed costs, is used by the nonprofit contractors to cover certain non-reimbursable contract costs, and to conduct laboratory-directed research activities. The fee could also be used

⁵The severity levels are: level I, the most significant, are those violations that involve actual or high potential for an adverse impact on the safety of the public or workers at DOE facilities; level II are those violations that show a significant lack of attention or carelessness towards the responsibilities of DOE contractors for the protection of the public or worker safety and that could, if left uncorrected, lead to an adverse impact on public or worker safety; level III are violations that are less serious but of more than minor concern and, if left uncorrected, could lead to a more serious condition.

⁶DOE calculates the civil penalty based on the severity level of the violation, with severity level I penalties set at 100 percent of the base civil penalty (currently \$110,000 per violation per day). DOE may also consider other factors, including how promptly the contractor reported a potential violation and initiated corrective action and whether a pattern of repeated violations exists.

⁷The May 1999 preliminary notice of violation also included DOE's first use of a compliance order in the program, which requires the contractor to complete specific corrective action steps within designated time periods.

⁸In the Price-Anderson Amendments Act of 1988, the Congress required DOE and the Nuclear Regulatory Commission to report by August 1, 1998, on the need for continuing or modifying the provisions of the act.

⁹Performance-based contracting, part of DOE's contract reform efforts, links contractors' incentive fees to the satisfactory accomplishment of specific tasks and uses objective measures and criteria to measure contractor performance.

¹⁰Stanford University has a no-fee contract to operate the Stanford Linear Accelerator Center in California. According to DOE, the contractor wants no fee because a fee would be inconsistent with its role as a university research organization.

to pay any civil penalties imposed on the contractor. In addition, in setting the amount of a civil penalty, the Secretary has the authority to consider factors such as the contractor's ability to pay and the effect of the penalty on the contractor's ability to continue to do business. The Secretary could limit the amount of the civil penalty assessed to no more than the amount of the available fee.

- DOE states that contract provisions are a better mechanism than civil penalties for holding nonprofit contractors accountable for safe nuclear practices. Although performance-based contracting can be an effective way to emphasize nuclear safety, DOE has not taken full advantage of this mechanism. For example, at the Lawrence Livermore National Laboratory in California, DOE's main contractor—the University of California—received 96 percent of its \$6.4 million available fee in fiscal year 1998, even though it had significant nuclear safety deficiencies resulting in enforcement actions.¹¹ For fiscal year 1999, it will receive about \$1.1 billion to operate the facility and up to \$6.4 million in fees for meeting or exceeding performance goals, including compliance with health and safety requirements. If the contractor does not perform satisfactorily in the safety and health area, the most this fee could be reduced is \$252,000, according to the agreement with DOE, or only about four percent of the fee.
- DOE states that its current approach is consistent with the Nuclear Regulatory Commission's treatment of nonprofit organizations because DOE issues notices of violation to these nonprofit organizations without collecting penalties but can apply financial incentives or disincentives through the contract. However, DOE's approach generally is not consistent with that of the Commission or other regulatory agencies. The Commission can and does impose penalties on any organization it regulates for violating safety requirements without regard to the profit-making status of the organization. In doing so, the Commission sets lower penalty amounts for nonprofit organizations than for the for-profit organizations. Although this option is also available to the Secretary, DOE does not currently take this approach. In addition, both the Commission and other regulatory agencies have assessed and collected penalties or additional administrative costs for violating nuclear safety requirements from organizations that DOE exempts from payment. For example, between 1989 and 1993, the California State Department of Toxic Substances Control assessed and collected \$88,000 in "administrative costs" from the University of California for violating state environmental laws at two DOE national laboratories—Lawrence Livermore and Lawrence Berkeley.
- In our report, we recommended that the Secretary of Energy eliminate the administrative exemption from paying civil penalties for violations of nuclear safety rules that DOE granted to nonprofit educational institutions. In commenting on a draft of our report, DOE said that the issue of exemption from civil penalties is ultimately one for the Congress to decide and that, if the Congress should eliminate the exemption, the Department would assess penalties against the nonprofit organizations in a manner similar to that used by the Nuclear Regulatory Commission.

Thank you, Mr. Chairman and members of the Subcommittee. That concludes my testimony, and I will be happy to respond to any questions you may have.

Contact and Acknowledgment

For future contacts regarding this testimony, please contact (Ms.) Gary L. Jones at (202) 512-3841. Individuals making key contributions to this testimony included William R. Swick and Carole J. Blackwell.

Mr. UPTON. Thank you.
Dr. Michaels.

TESTIMONY OF DAVID M. MICHAELS

Mr. MICHAELS. Mr. Chairman and members of the subcommittee, I am pleased to be here today to discuss worker safety at the Department of Energy's nuclear facilities and in particular the find-

¹¹The University of California was assessed \$313,125 in civil penalties in 1998 for severity level I and II violations of nuclear safety rules at the Lawrence Livermore National Laboratory in California. The University of California is statutorily exempt from paying the penalties assessed.

ings of the GAO in its draft report on the DOE nuclear safety enforcement program.

Let me say at the outset, we very much appreciate this committee's continued strong interest in worker health and safety at DOE. We all know that, with good reason, concerns with security have been very much on everyone's mind in the past several months. But it is vital to remember there are very real worker safety and environmental hazards at all DOE facilities.

This committee certainly has a strong record in these issues and has been at the forefront of much of the progress we have seen over the past decade. I encourage you to maintain this interest in worker safety and environmental health as we address important issues over the next few months.

I will submit my entire statement for the record and will summarize my remarks today.

Joining me today is Mr. Keith Christopher, Director of the Office of Enforcement and Investigations who oversees the Department's Price-Anderson enforcement program. Mr. Christopher came to the Department from the Nuclear Regulatory Commission with a strong background in nuclear safety and regulatory issues, and he has been instrumental in developing this program at DOE. I'm sure his insights and experiences will be helpful to the committee.

Mr. Chairman, the Department endorses the GAO's overall conclusion that DOE's nuclear safety enforcement program has been effective and should be strengthened further. Following a brief summary of the program, I will address the GAO's specific recommendations in detail.

The Price-Anderson Amendments Act of 1988 continued indemnification of DOE contractors and increased the amount available in the case of any single nuclear accident to more than \$9 billion. At the same time Congress recognized the need for enhanced accountability for nuclear safety and authorized DOE to issue civil penalties against contractors who failed to comply with DOE nuclear safety rules or orders.

In establishing the program the Department adopted a policy of promulgating formal rules in accordance with the Administrative Procedures Act. This process meant substantial review within the Department, consultation with the Defense Nuclear Facilities Safety Board, and full opportunities for comment by members of the public including DOE contractors. To date we have final rules on quality assurance requirements and on occupational radiation protection.

In 1993 the Department published its procedures and policy and notified DOE contractors about the upcoming regulatory program. By October 1995 the Department had completed the process of recruiting staff, building and organization and providing training to the complex.

On April 3, 1996, the Office of Enforcement and Investigation issued its first enforcement action, and on July 16 that year we issued its first civil penalty.

The Enforcement Office is currently staffed by a director, Mr. Christopher, who reports directly to my office. There are four enforcement officers at headquarters and a legal counsel. The headquarters office is supported by a network of approximately 30

Price-Anderson coordinators who work in various field offices. These coordinators report to the Department's field office managers and have significant interaction with the headquarters enforcement staff.

The Enforcement program was structured to closely resemble the regulatory process of the NRC. At the same time, DOE recognized that it needed an approach that reflected the complex and decentralized nature of DOE and its unique relationship with our contractors.

Early on it was determined that the goal of the office would be to encourage behavior that would enhance nuclear safety across the complex; not to accumulate stacks of penalties to individual contractors that once paid would have no effect. It was also recognized that staff resources were and would continue to be limited.

The Enforcement program was therefore structured to leverage its resources in two ways. First, we created strong incentives for contractors to act on their own initiative to identify problems, to report potential noncompliances, and initiate timely and effective corrective actions.

On the other hand, any effort by the contractor to hide or avoid reporting serious problems is the basis for escalated penalties.

The staff is also leveraged through the use of Price-Anderson coordinators. Overall the coordinators have played a critical role in our success. We feel that it is very important that DOE field offices are active in the program. The Enforcement program needs to be a Department of Energy wide program, not a program of the Office of Environment Safety and Health.

Frankly, we found this to be working better at some sites than others depending on the commitment of the individual field office management. And we will be taking some steps to address gaps where they exist. But we do not believe that we should have a large central headquarters-directed staff that primarily relies on numerous inspections to drive safety and issue civil penalties as a matter of course.

In adopting the 1988 amendments to the Price-Anderson Act, Congress elected to exempt seven specifically named, not-for-profit institutions from payment of civil penalties. The Department believes the reasons for this action in 1988 remain valid today and recently recommended to Congress the exclusion be extended to all not-for-profit contractors.

In making this recommendation the Department reviewed the effectiveness of the current program on both for-profit and not-for-profit contractors. We also looked at the most likely impacts on the Department of subjecting not-for-profit institutions to civil penalties. In the end the Department's recommendation reflected the concern that universities who manage our laboratories would be unwilling to risk their educational endowments for civil penalties that potentially could be very substantial.

It's important to keep in mind that even though not-for-profits are exempt from civil penalties, they are not exempt from enforcement of the Department's nuclear safety rules. It's the Department's position that all of its contractors, for profit or not, who are subject to the rules are required to comply with them.

In the case of a potential violation by an exempted laboratory, the full enforcement process is carried out. Civil penalties are calculated just as with for-profit contractors. In a public announcement that includes a national press release the contractor is told that, were it not for the statutory exemption, the full amount of the fine would have to be paid. And just as with our for-profit contractors corrective actions are required and monitored.

It has been our experience that this process has been effective in assuring appropriate contractor response.

The Department also believes that current safety-related contractual provisions can be effective tools in holding not-for-profit contractors accountable for safety. These contract provisions have been substantially strengthened over the past decade. They include reduction or elimination of fee, stop work orders, and ultimately contract termination as was the case at Brookhaven National Laboratory.

The Department also recently revised its policy to allow DOE to put the contractor's entire performance-based fee at risk where warranted by poor safety performance. In addition, Secretary Richardson has asked the recently-established Safety Council to report back by the end of September on further recommendations of contract mechanisms available to DOE to reinforce the priority he assigns to safety performance. Among the options the Safety Council is considering for not-for-profit contractors are: reducing performance fee by the amount of any remitted penalty assessed through the enforcement process; taking safety performance into consideration in providing program funding to a DOE facility; and assuring the removal of personnel responsible for major safety deficiencies.

The GAO recommends the Department act expeditiously to issue the remaining enforceable rules covering nuclear safety requirements. We agree it is now time to move forward and complete the rulemaking. I have directed my staff to work toward the goal of issuing the final rulemaking and we'll address all remaining issues by October 1.

In its third recommendation the GAO points out that some DOE contractors have misinterpreted requirements about exactly which facilities and activities are subject to enforcement action under the Department's quality assurance rule.

It has been the Department's clear and consistent view that the scope includes all reactor and non-reactor nuclear facilities. We are now confident that this issue has been made clear to the contractor community and appreciate GAO's interest in this matter.

That completes my statement, Mr. Chairman. We will be pleased to answer the subcommittee's questions.

[The prepared statement of David Michaels follows:]

PREPARED STATEMENT OF DAVID MICHAELS, ASSISTANT SECRETARY, ENVIRONMENT
SAFETY AND HEALTH, DEPARTMENT OF ENERGY

Mr. Chairman, I am pleased to be here today to discuss the Department of Energy's enforcement of nuclear safety and our views of the General Accounting Office (GAO) draft report entitled *DOE's Nuclear Safety Enforcement Program Should Be Strengthened*.

The Department endorses the overall conclusion of the GAO that DOE's nuclear safety enforcement program has been effective in protecting worker safety at DOE and that it should be strengthened further. The program has proven itself to be an extremely valuable tool for enhancing nuclear safety and contractor accountability

throughout the Department. The Department also agrees with the two specific GAO recommendations that the Department should complete action on all proposed nuclear safety rules, and that there should be better clarity and agreement in the Department about which facilities must comply with Price-Anderson rules. We have already taken actions to address each of these areas.

The Department does take exception with the GAO recommendation to Congress that, when the Congress considers the Price-Anderson Act reauthorization in two years, it should discontinue the current statutory exemption from civil penalties for not-for-profit entities contractors. In the recent report to Congress on the Price-Anderson Act reauthorization, the Department expressed its view that the current statutory exemption for not-for-profit contractors should continue, and should be expanded to include all not-for-profit contractors.

This past March, Secretary Richardson announced a series of steps to strengthen the Department's safety performance and increase accountability for safety. These actions included an increased emphasis on accountability and enforcement of nuclear safety through the enforcement program. We now have enough experience with the program to know where we are already effective and where we need to improve. We are also, at Secretary Richardson's request, exploring ways to link the enforcement program and other activities in the Office of Environment, Safety and Health to evaluations of contractor safety and health performance pursuant to both contracts and determinations of award and performance fees, as I will discuss later in my testimony.

Following a brief overview of the evolution of the DOE enforcement program, I will address each of the GAO recommendations in more detail.

DOE Enforcement Program

Congress passed the Price-Anderson Amendments Act in 1988. This Act continued indemnification of DOE contractors and increased the indemnification available in the case of a nuclear accident to more than \$9 billion. At the same time, Congress authorized DOE to issue civil penalties against those contractors who violate DOE nuclear safety rules or orders. DOE pursues enforcement actions through the issuance of Notices of Violations and, where appropriate, civil monetary penalties of up to \$110,000 per day for continuing and significant violations. At the time, DOE's nuclear safety requirements were established by DOE Orders, negotiated with its operating contractors, and enforced by DOE Field Offices through the contract evaluation process. In conjunction with establishing the Price-Anderson civil penalty enforcement program, the Department adopted a policy of promulgating formal rules in accordance with the Administrative Procedures Act. This process included substantial review within the Department, consultation with the Defense Nuclear Facilities Safety Board (DNFSB), and full opportunities for comment by members of the public including DOE contractors. To date, we have promulgated final rules on Quality Assurance Requirements (10 CFR 830.120) and on Occupational Radiation Protection (10 CFR 835). We have found that, over the past several years, these two rules have allowed for a wide scope for enforcement activities.

In 1993 the Department published its enforcement procedural rules and policy to notify and educate contractors about the upcoming regulatory program. By October 1995, the Department had completed the process of recruiting staff, building an organizational infrastructure, and providing the training and formal guidance to the DOE complex needed to implement the enforcement program. On April 3, 1996, the Office of Enforcement and Investigation (Enforcement Office) issued its first enforcement action and on July 16, 1996 issued the first civil penalty.

The Enforcement Office is currently staffed by a Director who reports directly to the Assistant Secretary for Environment Safety and Health, four enforcement officers, and a legal counsel. The headquarters office in turn is supported by a network of "Price-Anderson coordinators" who work in the various field offices. Though not a part of the enforcement staff per se, these coordinators serve a critical role in the program. They report to the Department's field office managers, who are ultimately responsible for overseeing the work and safety performance of the contractors, and have significant interaction with the headquarters enforcement staff.

The enforcement program was structured to closely resemble the regulatory process of the Nuclear Regulatory Commission. In structuring the enforcement program, however, DOE recognized that an approach was required that reflected the complex and decentralized nature of DOE and its unique relationship with its contractors. Early on, it was determined that the goal of the office would be to encourage behavior that would enhance nuclear safety across the complex, not to accumulate a stack of penalties to individual contractors that, once paid, would have no effect. It was also recognized that staff resources were and would continue to be limited.

The enforcement office was therefore structured to leverage its staff resources in two ways. First, the program creates strong incentives for contractors to act on their own initiative to identify problems, report potential non-compliances, and initiate timely and effective corrective actions. Where we find that contractors have taken effective and timely action to identify problems, report them, and fix them, we generally do not take formal Enforcement Action. On the other hand, any effort on the contractor to hide or avoid reporting serious problems is the basis for escalated penalties. Penalties can also be partially or fully mitigated if the contractor demonstrates that it has aggressively moved to identify and effectively correct problems.

The staff is also leveraged through the use of Price-Anderson coordinators in the field, as I mentioned before. Overall, these personnel have played a critical role in the program's success. The field office coordinators provide a bridge between the headquarters enforcement office—an independent office within the Office of Environment, Safety and Health—with the field offices, who are part of line management. We have felt that it is important to actively involve the field offices in the program because the enforcement program needs to be a Department of Energy-wide program, not a program of the Office of Environment, Safety and Health.

Frankly, we've found this arrangement to be working better at some sites than in others, depending on the commitment of the individual field office management, and we will be taking some steps to address gaps. But we do not believe that we should have a large, central, Headquarters-directed staff that primarily relies on numerous inspections to drive safety and issues civil penalties as a matter of course. That kind of approach would not serve to improve safety at the Department, and it would not provide the right incentives for contractors to be primarily responsible for their own safety programs.

The current enforcement and investigation process is clear and straightforward. DOE's process and regulatory authority for enforcement actions is embodied in a regulation (10 CFR Part 820), and supplemented by the Enforcement Policy (Appendix A to 10 CFR Part 820) and various guidance documents. The Office of Enforcement, in consultation with field and program office management, decides which potential reported or unreported noncompliances are significant enough to warrant enforcement action. The first step is generally an investigation. The investigation includes document review and on-site visits to gather facts and circumstances, conduct confidential interviews, and understand contractor actions already taken. The potential for mitigation of civil penalties in enforcement actions provides an incentive for contractors to improve safety performance.

If necessary, an informal enforcement conference is held with senior contractor management and DOE field and program office management to review the circumstances of the noncompliance, mitigating factors, and the timeliness and adequacy of corrective actions. The primary consideration in determining whether to move ahead with an enforcement action is the actual or potential safety significance of a violation, coupled with a determination of how aggressively the contractor identified, reported and corrected the problem. DOE also classifies the violation as either Severity Level I (the most significant, with actual or potential significant consequences to workers or the public), Severity Level II, or Severity Level III (greater than minor significance and important to avoid a more significant condition). The results of the investigation are documented in an Investigation Summary report.

Based on the facts and significance of the noncompliance, DOE can take any of the following enforcement actions:

- Enforcement letter, indicating that, based on the proper actions having been taken by the contractor, the investigation is being closed without further action.
- Notice of Violation with no civil penalty.
- Notice of Violation with civil penalty.
- Referral to the Department of Justice for criminal prosecution.

In response to a Notice of Violation, contractors are required to complete and document specific actions taken and planned to prevent recurrence of similar events. Field Office personnel verify that corrective actions are effective and complete before the case is closed, and failure to complete effective corrective actions is the basis for further enforcement action. Contractors have a wide variety of administrative and judicial procedures available to them to respond to a Notice of Violation. Information on the enforcement proceeding is available to the public once DOE issues the Preliminary Notice of Violation; prior to that point, material is confidential and considered pre-decisional. It is the Department's policy to issue a press releases with each issuance of a civil penalty.

Exclusion of Not-for Profit Laboratories From Civil Penalties.

In adopting the 1988 amendments to the Price-Anderson Act, Congress elected to exempt seven specifically-named DOE not-for-profit institutions from payment of

civil penalties. The Department believes that the reasons given for this action in 1988 remain valid today, and recently recommended to Congress that the exclusion be extended to all not-for-profit contractors. At the same time, the Department recommends that Congress eliminate the current provision that allows for-profit sub-contractors of these institutions to avoid penalties.

In making this recommendation, the Department reviewed the effectiveness of the current program on both for-profit and not-for-profit contractors. It also looked at the most likely impacts on the Department of subjecting not-for-profit institutions to civil penalties. The views and experiences of each of the program offices were considered, and different views were expressed in the course of lengthy analysis and deliberation.

The Department's recommendation reflected the concern that universities and other not-for-profit institutions who manage our laboratories are unwilling to put their educational endowments at risk for potential civil penalties that could be very substantial. Another concern that was expressed is that if these contractors were subject to penalties, DOE would have to increase the fees it pays to its nonprofit contractors to compensate for the additional risk. Thus, making not-for-profit contractors subject to civil penalties could have the undesirable consequence of diverting funds away from DOE research with no apparent concomitant increase in safety.

In judging this recommendation, it is important to keep in mind that even though not-for-profits are exempt from civil penalties, they are *not* exempt from enforcement of the Department's nuclear safety rules. It is the Department's position that all of its contractors who are subject to the rules—for-profit or not—are required to comply with them.

In the case of a potential violation by one of the exempted laboratories, the full investigation and enforcement process as described above is carried out. That means the potential violations are investigated, an enforcement conference is held, a determination is made, and civil penalties are calculated just as with for-profit contractors. In a public announcement, the contractor is told that were it not for the statutory exemption, the full amount of the fine would have to be paid. And just as with for-profit contractors, corrective actions are required and monitored. It has been our experience that this process has been generally effective in ensuring appropriate contractor response.

The Department also believes that current safety-related contractual provisions are an effective mechanism for holding not-for-profit contractors accountable for safety. These contract provisions, as well as DOE's application of contract mechanisms for its for-profit and not-for-profit contractors, have been substantially strengthened over the past decade. They include fee reduction or elimination, stop work orders, and, ultimately, contract termination as was the case at Brookhaven National Laboratory. All DOE contracts also now include provisions on integrated safety management and clearly identify the environment, health and safety requirements applicable to activities under the contract. The Department also recently revised its fee policy to allow DOE to put the contractor's entire performance-based fee at risk where warranted by poor safety performance or failure to implement integrated Safety Management systems.

In addition, Secretary Richardson has asked the recently-established Safety Council to report back by the end of September on further recommendations of contract mechanisms available to DOE to reinforce the priority he assigns to safety performance. Among the options the Safety Council is considering for not-for-profit contractors are: reducing performance fee by the amount of any remitted penalty assessed through the enforcement process; taking safety performance into consideration in providing program funding to a DOE facility; and ensuring the removal of personnel responsible for major safety deficiencies.

Additional Nuclear Safety Rules

The GAO recommends that the Department act expeditiously to issue the remaining enforceable rules covering nuclear safety requirements. I agree with the GAO recommendation that it is now time to move forward and complete the nuclear safety rulemaking. I have directed my staff to work toward the goal of issuing a final rulemaking that will address all the remaining issues by October 1. A major consideration is to ensure that DOE contractors (1) implement the requirements included in a contract pursuant to the ISM process in a manner that ensures adequate protection of workers, members of the public, and the environment and (2) evaluate the work and associated hazards sufficiently to define the safety basis and then perform work within that safety basis.

Let me emphasize that we do not believe that nuclear safety has suffered because these rules have lagged behind. All the requirements in the un-issued rules are con-

tained in the Department's directives, which are to be enforced through all the contracts.

Need to Clarify Applicability of Rules

The GAO accurately pointed out that some DOE contractors have misinterpreted requirements about exactly which facilities and activities are subject to enforcement action under the Department's QA provisions in 10 CFR 830.120. The Department's clear and consistent view is that the scope of the provisions includes all reactor and nonreactor nuclear facilities. This was clear in the preamble to the QA rule issued in 1994 which was reiterated in the General Counsel interpretation, Ruling 1995-1, issued in 1996. We also expressed this position to the contractor community in the 1998 Annual Report for the Office of Enforcement. After the GAO finding, the Office of Enforcement developed and will soon issue a formal Enforcement Guidance Supplement to all field sites to further clarify the scope of Part 830. Finally, as noted previously, the nuclear safety final rule will reiterate the broad scope of the QA rules and other nuclear safety rules. The rulemaking effort mentioned above will provide additional clarity regarding the regulatory scope of all Part 830 provisions, including QA.

That completes my testimony, Mr. Chairman. I would be pleased to answer the Subcommittee's questions.

Mr. UPTON. Thank you. Thank you, Dr. Michaels, and a I apologize to Mr. Christopher, it's "doctor"; correct? It is not—oh, Dr. Michaels, oh, I'm sorry.

Dr. Michaels, I don't know whether you've seen the letter which I'm going to put into the record and we'll address to Chairman Bliley from an individual by the name of David Lappa.

Mr. MICHAELS. No, sir.

Mr. UPTON. It just was faxed to us in the last couple of days. But Secretary Richardson advocated a zero tolerance policy for reprisals taken against whistle-blowers who raise safety concerns. And according to this record—this letter which I'm going to enter into the record, and maybe we can walk that down.

Mr. David Lappa was an employee at Lawrence Livermore Lab. He was apparently retaliated against for raising safety concerns at the plutonium facility at Lawrence Livermore, and in a letter sent in 1998, last year, exactly a year ago, excuse me, a letter from OSHA to the director at Lawrence Livermore confirmed that retaliation was taken into account by University of California against Mr. Lappa for raising the safety concerns that he indicates in this letter.

As you know DOE fined the University of California for safety violations at the plutonium facility; however, according to Mr. Lappa safety problems at the facility are more serious than were expected. I'm just curious to know about the University of California's documented retaliation against Mr. Lappa to see if they are consistent with the Secretary's zero tolerance policy and what might we see in the future for similar cases?

[The letters follow:]

DAVID A. LAPPA
LIVERMORE, CA 94550
June 27, 1999

HON. TOM BLILEY, *Chairman*
House Committee on Commerce
2409 Rayburn House Office Building
Washington, DC 20515

FAX: 202-226-2447

DEAR CONGRESSMAN BLILEY, Your staff recently contacted me about my experiences relevant to upcoming hearings on DOE's Price-Anderson compliance. They subsequently asked me to write you to describe those experiences. I believe your in-

terest in this subject is important and timely, and I am hereby responding to your staff's request.

Since obtaining my MS in nuclear engineering from the University of Michigan in 1979, I have been employed full-time at Lawrence Livermore National Laboratory (LLNL). Like Los Alamos National Laboratory (LANL), LLNL has always been operated by the University of California (UC) under contract to the federal government.

In the summer of 1997, I served on a committee investigating criticality safety infractions in LLNL's Plutonium Facility. Because the committee's report failed to include important evidence about a serious, potential root cause of the infractions, I declined to approve the report. In return, I was reprimed by UC management.

Initially, I made internal complaints; first to my department supervisor and subsequently to LLNL's Staff Relations manager. Lacking an adequate response, and having no recourse for further appeal within UC, in 1997 December I filed a complaint with DOE under 10 CFR 708. (You may want to examine that regulation's implementation by DOE. In practice, it affords little protection to contract employees. Note especially that complaints are now investigated by DOE-OIG.)

For the first two months, I engaged in what DOE termed "informal resolution" discussions. By 1998 mid-February, informal resolution had collapsed, and I had lost confidence in DOE-OIG's willingness and ability to investigate my complaint. I believed DOE-OIG would not soon investigate my complaint, nor that it would have adequate resources for a serious investigation. I therefore filed a complaint under 42 USC 5851 with the US Department of Labor, effectively terminating my 10 CFR 708 complaint.

The DOL immediately began a serious investigation into my allegations. By 1998 May, the DOL investigator had determined there was merit in my complaint. On 1998 June 29, DOL issued a finding of reprisal against UC, which UC did not appeal.

Unfortunately, UC spokesmen were quoted in the press as saying UC "had done nothing wrong to Mr. Lappa", and that UC did not appeal the DOL decision in order to "save taxpayer dollars." Moreover, on my first day at work following the DOL decision, my department head advised me that, "It doesn't matter who's right or wrong." Worst of all, the reprisals did not end.

Consequently, in 1998 September, I filed suit in California superior court under California Government Code 8547.10 and other statutes. That civil suit is in the discovery phase, in which we are continuing to gather evidence of UC wrongdoing. In the course of that discovery, we may uncover additional, significant evidence about UC's willingness and ability to comply with Price-Anderson.

In assessing DOE's compliance under Price-Anderson, I hope your committee carefully will examine UC's record of compliance. The overwhelming majority of employees at LLNL are UC employees, subject to UC policy and management. LLNL's activities covered under Price-Anderson are greatly affected by UC management's attitude toward compliance.

By virtue of its non-profit status, UC is not subject to paying the fines levied against it under Price-Anderson. Moreover, when I asked DOE management if they intended to act on the DOL finding of UC's reprisal against me, I was told DOE does not want to "micromanage" LLNL.

I wish you success in your examination of DOE's Price-Anderson compliance, and I again ask you to examine thoroughly UC's compliance under that law. I regret that my civil suit complicates my communications with your staff. UC policy strictly prohibits certain types of communication with Congress, and my attorneys therefore have instructed me to proceed cautiously in that regard.

Respectfully,

DAVID A. LAPP

U.S. Department of Labor

Occupational Safety and Health Administration
71 Stevenson Street, Suite 420
San Francisco, California 94105

Reply to the Attention of: Discrimination
Investigations

JUN 29 1998

Mr. Bruce Tarter, Director
Lawrence Livermore National
Laboratory, P.O. Box 808
Livermore, CA 94551

RE: Lawrence Livermore National Laboratory/Lappa/1082312

Dear Mr. Tarter:

This letter is to notify you and respondent of the results of the investigation in the above noted case, in which Mr. David A. Lappa alleged violations of Section 211 of the Energy Reorganization Act of 1974, 42 U.S.C. 5851. Our initial efforts to conciliate the matter did not result in a mutually agreeable settlement. A fact finding investigation was then conducted. Based on our investigation, the weight of evidence to date indicates that Mr. Lappa was a protected employee engaging in a protected activity within the scope of the aforementioned Statute, and that discrimination, as defined and prohibited by the statute, was a factor in the actions which comprised his complaint. Our investigative findings in support of this determination are:

Mr. Lappa was assigned as a member to an Incident Analysis Committee (IAC) to investigate incidents which occurred in the Plutonium Facility during July 1997. Lappa disagreed with wording in the final report because it omitted reference to the degree of the violations noted as a result of the IAC. As a result of his complaints to management, Mr. Lappa received what he considered as inappropriate comments from his immediate supervisor during his performance review about his actions as a member of the IAC. Mr. Lappa subsequently filed an administrative complaint against his supervisor and a Section 708 complaint with the Department of Energy over the same issues. Mr. Lappa perceived the actions taken against him by management, because of his involvement in protected activities under the Statutes, as reprisal in violation of the Statute.

Mr. Lappa was told by his supervisor that management was frustrated with his performance in connection with the IAC. Mr. Lappa was not considered for assignment to projects for which he was qualified, and told by more than one management person that he should not have filed and pursued the complaint to the Department of Energy or Department of Labor against the Laboratory. Mr. Lappa was demoted from the position as Acting Group Leader at a time and in such a manner that the action was perceived by other employees as retaliation against him by management because of his involvement in protected activity.

This letter is notification to you that the followings actions are required to remedy the violation:

- No drop in Mr. Lappa's ranking as long as his performance remains satisfactory. Future ranking and/or raise challenges will be handled in accordance with currently established policy and procedures at LLNL.
- Immediate salary adjustment by \$125.00, retroactive to October 1, 1997, making his new salary

\$6,545.00 per month.

- Expungement of all negative references in Mr. Lappa's personnel file dated from June 1, 1997 to the resolution of the complaint.
- Expungement of Mr. Lappa's transfer appraisal dated February 1998.
- Continued good faith efforts to secure an assignment for Mr. Lappa to the Accelerated Strategic Computing Initiative. Assignment to be made when an opening occurs.
- Immediate provision of high-quality, professional career counseling and employment out placement services through Drake Beam Morin in accordance with the terms and conditions of the LLNL contract with that agency.
- Placement assistance to Mr. Lappa by providing a letter of recommendation upon his request.
- Immediate provision of 1 month paid leave of absence for rest and recuperation.
- Immediate provision of \$1,500 to Mr. Lappa for counseling costs.
- Immediate compensation of \$15,000 for compensatory damages.
- Immediate compensation of \$16,000 for attorney fees and incidental expenses connected with this complaint.
- Posting in a place where notices are normally posted of notice to employees informing them of their rights under Appendix A to 29 CFR Part 24.

This letter is also notification to respondent that, if they wish to appeal the above findings and remedy, they have the right to a formal hearing on the record. To exercise this right respondent must, within five (5) calendar days of receipt of this letter, file a request for a hearing by facsimile, overnight/next day delivery mail or telegram to:

Chief Administrative Law Judge U.S.
 Department of Labor, Ste 400,
 Techworld Building 800 K Street
 Washington D.C. 20001-8002
 Telephone: 202/565-5341 FAX:
 202/565-5325

Unless a request for appeal is received by the Administrative Law Judge within this five-day period, this notice of determination will become the final Order of the Secretary of Labor which must be implemented within 30 days. By copy of this letter, Mr. Lappa is being advised of the determination and the right to a hearing. A copy of this letter and complaint have also been sent to the Chief Administrative Law Judge. If respondent decides to request a hearing, it will be necessary for respondent to send copies of the request to Mr. Lappa, to his designated representative and to this office at the address noted in the above letter head. If there are any questions, please call Charles E. Byers, DPM at 415/975-4342.

It should be made clear to all parties that the U.S. Department of Labor does not represent any of the parties in a hearing. The hearing is an proceeding in which the parties will be allowed an opportunity to present their evidence for the record. The Administrative Law Judge who conducts the hearing will issue a recommended decision to the Secretary based on the evidence, testimony, and arguments presented by the parties at the hearing. The Final Order of the Secretary will then be issued after consideration of the Administrative Law Judge's recommended decision and the record developed at the hearing and will either provide for appropriate relief or dismiss the complaint.

Sincerely,

FRANK STRASHEIM

Regional Administrator

Mr. MICHAELS. Thank you for sharing this with me. I've heard of this case, I had not seen this letter. But obviously this is of great concern to us and I'm certainly concerned about the safety, alleged safety violations that are continuing at the Livermore Laboratory and also greatly concerned about the possibility that there are reprisals around whistle-blowing, around safety at the facility. And certainly we'll pursue that.

My understanding of the Secretary's policy is, he will permit no reprisals or any negative activity against whistle-blowers on safety issues or other issues. And this certainly would be—a reprisal against him would obviously be inconsistent with the Secretary's and DOE's policy.

Mr. BURR. Mr. Chairman, could I ask you to yield?

Mr. UPTON. Sure.

Mr. BURR. I just want a clarification. Dr. Michaels, you said you heard of the case?

Mr. MICHAELS. Yes.

Mr. BURR. Did you hear of the case, or did you know of the action?

Mr. MICHAELS. I'm not sure, could you—

Mr. BURR. Could you describe for us how you heard about this case? Was it in passing when you had a meal with somebody, or was it official notification?

Mr. MICHAELS. No, there was no official notification.

Mr. BURR. Was there a conversation with the University of California where they spelled this out?

Mr. MICHAELS. No, in discussing with Mr. Christopher the various activities at Livermore, I heard about it.

Mr. BURR. Did you ever follow up to see whether there was any credibility to what you heard?

Mr. MICHAELS. No, sir.

Mr. BURR. I thank the chairman for letting me clarify that.

Mr. UPTON. Dr. Michaels, there seems to be some resistance from the contractor community, including several contractors on the second panel today, to your plans to promulgate additional enforceable nuclear safety rules. And there have been claims that it would cost millions of dollars for contractors to comply with the new rules without adding a lot of new safety. Do you believe more nuclear safety rules will improve safety performance by the contractors?

Mr. MICHAELS. Yes, sir. Though I believe that our current nuclear safety rules cover virtually everything that we need to cover. What we found is that the quality assurance rule has been very effective because it's a broad rule that applies to virtually everything we need to get to in addition to the radiation protection.

The additional rules that we think need to be promulgated are not the entire list of nine that were in the original list referred to, but the safety authorization basis rules we think need to be put into what is called "rule space". They are currently in our orders. And we think having them in rules will be important. We would like to have the opportunity to use them if we need them. I'm not sure that they would actually have a direct impact, and I don't think there's a hazard out there which we will address as a result of having that rule, but we think having that rule will be one more implement that we can use to protect people.

Mr. UPTON. And just to follow up with your testimony you thought that the remaining nine would be done and out the door by October 1?

Mr. MICHAELS. No, sir. What we plan to do is issue rules that cover the areas that we think are not covered by our current rules. We don't need to issue all nine. We've looked very carefully at the effect of our two rules currently. And we think the quality assurance rule actually covers many of the areas that are listed in the original nine that weren't covered. We think there are three, the unanswered—there are three of them in here—unreviewed safety questions, safety analysis reports and technical safety requirements—that require some rulemaking. The others are really covered in our current rules.

The original list is essentially a duplication of our—a mimicking of some of the NRC rules. What we found, and this, again, was before I came here, but the complexity of the DOE mission and primarily the DOE mission around decommissioning and decontamination rather than building new facilities doesn't require this set of rules. And we think we can do just as well with new rules on those three areas as well as clarifying this question of facilities versus activities which is another area that GAO brought up.

Mr. UPTON. Thank you. Mr. Klink.

Mr. KLINK. Thank you, Mr. Chairman.

First, I would offer for the record a memorandum to the Department Secretary from Mary Anne Sullivan dated September 25, 1998, and would ask that it be passed out to the members and to the witnesses.

[The memorandum follows:]



Department of Energy

Washington, DC 20585

ES98-009278

September 25, 1998

MEMORANDUM FOR THE DEPUTY SECRETARY

THROUGH: Ernest Moniz
Under Secretary

FROM: Mary Anne Sullivan 
General Counsel

SUBJECT: **ACTION:** Recommendations for renewal of the Price-Anderson Act (Act) which indemnifies DOE contractors for nuclear liability.

ISSUES:

(1) Whether DOE should recommend elimination or retention of the exemption for nonprofit DOE contractors from civil penalties for violation of DOE nuclear safety requirements.

(2) Whether DOE should recommend adding authority to recover amounts paid to indemnify DOE contractors for liability resulting from gross negligence or willful misconduct of managerial personnel

BACKGROUND: The Price-Anderson Act requires DOE to file a report with Congress on August 1, 1998, recommending renewal, repeal, or modification of the Act relating to indemnification provisions of DOE contractors for public liability for a nuclear incident. DOE's authority to indemnify expires on August 1, 2002. At the Environmental Quality Line of Business meeting on May 7, 1998, there appeared to be a broad consensus that DOE should recommend renewal of the Act in substantially the same form as current law. The attached issue paper addresses the two issues on which there appeared to be no consensus.

DISCUSSION: **Issue 1: Civil Penalties Exemption for Nonprofit Contractors.**
The Act currently exempts certain specifically identified non-profit contractors from civil penalties (e.g., University of California). The Office of Energy Research (ER) believes that DOE should recommend no change in this exemption or should recommend it be expanded to include all nonprofit contractors. It argues that civil penalties are not an appropriate means of influencing the behavior of nonprofit contractors and that the possibility of civil penalties has the undesirable consequence of diverting funds away from DOE research because it results in higher fees to nonprofits. ER believes that contractual mechanisms and a program-based management system are a better way of dealing with nonprofits. The Office of Environment, Safety, and Health (EH) believes that DOE

should recommend the elimination of the exemption because civil penalties can influence the behavior of nonprofits, that NRC imposes civil penalties on the non-profits it regulates (although at a reduced level which EH would also adopt), and that the Act already gives DOE the ability to tailor civil penalties to the special circumstances of nonprofits. Efforts to find a consensus position have been unsuccessful. A middle ground might be to exempt all nonprofits but not any of their for-profit subcontractors or suppliers.

Issue 2: Recovery for Gross Negligence and Willful Misconduct.

The Act currently indemnifies DOE contractors for all legal liability incurred as a result of a nuclear incident, even if the incident results from their gross negligence or willful misconduct. During the debates preceding the Price-Anderson Act Amendments of 1988, many in Congress advocated making DOE contractors more accountable for their actions by not indemnifying a contractor to the extent a nuclear incident resulted from its gross negligence or willful misconduct. DOE and its contractors resisted such action because any change in the omnibus indemnification could undermine the special relationship between DOE, as owner of the facilities, and its contractors, as operators of the facilities. Congress adopted civil penalties as a compromise alternative to any change in the omnibus indemnification.

Since the legislative battle on this issue in 1988, a general consensus has developed within DOE that contractual remedies and civil penalties are a legitimate alternative means of making contractors accountable for their actions. However, this issue can be expected to resurface in the upcoming debates on extending the Act since many in Congress may still believe that DOE contractors are afforded unwarranted special treatment in cases involving gross negligence or willful misconduct. In DOE's current rulemaking on fees, DOE is proposing a so-called "killer clause" that could eliminate a contractor's fee entirely in appropriate cases involving a catastrophic accident or failure to implement Integrated Safety Management. If a decision is made to address this issue by recommending a change in the Act, one possible approach, which was considered by Congress in 1988, would be to preserve the omnibus indemnification (and thus the advantageous provisions on compensation of victims), while granting the Attorney General the discretionary authority to seek reimbursement of any Price-Anderson indemnification paid to a DOE contractor because of gross negligence or willful misconduct by its managerial personnel. In order to avoid the possibility of subjecting DOE contractors to potentially unlimited liability, any such reimbursement could be capped at a specified amount (e.g., five times the annual fee under the contract, which would be equivalent to the profit on a five-year contract).

SENSITIVITIES: DOE nonprofit contractors strongly lobbied in 1988 to obtain the nonprofit exemptions and would be expected to oppose any attempt to eliminate them. This issue could be controversial and will likely be complicated by the ongoing discussion of NRC regulation of the laboratories. NRC currently does not exempt non-profit licensees from civil penalties and has indicated opposition to exempting DOE non-profit contractors if they become subject to NRC licensing.

In 1988, DOE contractors also resisted the addition of any recovery for liability for gross negligence and willful misconduct of contractor managerial personnel. They can be expected to oppose again any mechanism that would erode omnibus indemnification for nuclear incidents, expose their corporate assets and endowments, and discourage responsible institutions from contracting with DOE.

The report will contain no explicit legislative proposal. Prior to submitting any legislative proposal in the future, it would be necessary to seek OMB approval in accordance with the normal procedures.

OPTIONS:

- Issue 1:** **Civil Penalties Exemption for Nonprofit Contractors.**
- Option 1A Status quo--continue existing exemption for 5 nonprofits and their subcontractors and suppliers, as well as authority to automatically remit civil penalties imposed on other nonprofits.
- Option 1B Eliminate exemption for nonprofits and their subcontractors and suppliers.
- Option 1C Exempt all nonprofit contractors, subcontractors, and suppliers, but eliminate exemption for their for-profit subcontractors and suppliers.
- Issue 2:** **Recovery for gross negligence and willful misconduct.**
- Option 2A Status quo--no recovery for contractor gross negligence or willful misconduct.
- Option 2B Recovery for contractor gross negligence or willful misconduct up to a percentage of the contract amount.

RECOMMENDATION: Select one option for each issue. Based on his review of the enclosed materials, including the positions supported by the respective programs Secretarial Officers, the Under Secretary recommends Option 1C and 2A.

CONCURRENCES: See attached summary. Twelve programs represented on the Price-Anderson Act Task Force were asked to concur with or without expressing preferences for options.

OPTIONS:

ISSUE 1:

| | | |
|-----------|-------------------|------------------|
| OPTION 1A | APPROVE _____ | DISAPPROVE _____ |
| OPTION 1B | APPROVE _____ | DISAPPROVE _____ |
| OPTION 1C | APPROVE <u>BR</u> | DISAPPROVE _____ |

ISSUE 2:

| | | |
|-----------|-------------------|------------------|
| OPTION 2A | APPROVE <u>BR</u> | DISAPPROVE _____ |
| OPTION 2B | APPROVE _____ | DISAPPROVE _____ |

Addendum to Action Memo

Concurrence sheet and comment summary

Initials/Date/Program:

CI, DP, NN, RW Concur on attached action memo and issue paper to be sent to Acting Secretary for decision without preference for options below.

(See below) Concur on attached action memo and issue paper to be sent to Acting Secretary for decision with preferences for options as checked off below.

Issue 1: Civil Penalties Exemption for Nonprofit Contractors

Option 1A (Status quo—continue existing exemption for 5 nonprofits and their subcontractors and suppliers, as well as authority to automatically remit civil penalties imposed on other nonprofits)

Approve: EM, PR¹

Option 1B (Eliminate exemption for nonprofits and their subcontractors and suppliers)

Approve: EH, NE², PO

Option 1C (Exempt all nonprofit contractors, subcontractors, and suppliers, but eliminate exemption for their for-profit subcontractors and suppliers.)

Approve: ER³, FM⁴, MD

¹PR prefers Option 1A to avoid recommending a change to Congress but if Congress decides to address the issue anyway, DOE should change its position to Option 1C.

²NE prefers Option 1B to provide a consistent enforcement policy for all DOE contractors and supports reduced civil penalties for nonprofits in the same manner as the NRC approach.

³ER prefers Option 1C but would suggest that the issue be held until Secretary-Designee Richardson is confirmed and sworn in because he was involved in the 1988 PAAA legislation concerning nonprofits being exempt from civil penalties.

⁴FM prefers Option 1C but would expand the discussion of “for-profit subcontractors” in the issue paper.

Issue 2: Recovery for gross negligence and willful misconduct.

Option 2A (Status quo--no recovery for contractor gross negligence or willful misconduct)

Approve: EH, EM, ER⁵, MD, NE⁶, PO, PR

Option 2B (Recovery for contractor gross negligence or willful misconduct up to a percentage of the contract amount)

Approve: FM⁷

⁵ER prefers Option 2A because inserting a recovery clause would result in millions of wasted dollars going into reserve funds to cover liability.

⁶NE prefers Option 2A because DOE and its contractors strongly supported this position in 1988; since then, DOE has implemented the civil penalties system and contract reforms to encourage safe operations; allowing for recovery under these circumstances would have little effect on contractor safety performance but could deter some contractors from bidding on DOE contracts due to the possible vulnerability of their assets; this approach is also consistent with the NRC approach.

⁷FM prefers Option 2B favoring recovery for contractor gross negligence or willful misconduct up to a percentage of the contract amount and circumstances that do not put into doubt prompt and full compensation of the public.

Mr. KLINK. I would like to say that one of the issues here is whether or not the nonprofit education institutions should be exempted from civil penalties. Dr. Michaels, your office recommended that they be subject to civil penalties, I believe; is that correct?

Mr. MICHAELS. That's correct.

Mr. KLINK. And you lost that argument?

Mr. MICHAELS. My office, but I wasn't present at the time.

Mr. KLINK. Oh, our office made it, you weren't there at the time?

Mr. MICHAELS. Right.

Mr. KLINK. But your office made that?

Mr. MICHAELS. It predates me. There was a—well, I wouldn't say that we lost the argument, there was a decision made, a number of different offices within DOE registered their opinions and the Secretary made a decision. We didn't concur—

Mr. KLINK. You made an argument and it didn't stand up?

Mr. MICHAELS. Yes, sir.

Mr. KLINK. Mr. Christopher said that he believes that he gets a better response from the private contractors than from the nonprofits. In fact, he told us that in 1996 Los Alamos and Lawrence Livermore labs were in total denial. Your Price-Anderson report to Congress says that civil fines work very well. Can you explain to me why fines inspire better behavior for profit contractors than for nonprofits?

Mr. MICHAELS. I think the theory the Department uses in this case is looking how the contract and the relationship with not-for-profits would work if we put in civil penalties that were collectible. Given these are educational institutions which have endowments on the line, it was felt that the contract—the negotiation of the contracts—would be such that the additional fees we would be required to pay them to cover their liability would be far greater than the amount we would collect in the fines. It would have relatively little additional impact on safety because we believe safety is quite—is protected very well with our current practice with the nonprofits which is to go through the whole process, issue the phantom fine, have the press release go out and essentially raise the issue to the public and the university. And universities obviously are very concerned about public appearance.

Mr. KLINK. Ms. Jones, does that argument hold water to you?

Ms. JONES. No, sir, I don't believe so. Just the last point that Dr. Michaels was making that the not-for-profits are really concerned about that publicity. I would also think the for-profits would also be concerned about the publicity, so why fine them?

The other issue is that for the nonprofits, maybe back in 1988 when they weren't getting a fee you could say that the endowments of the university were at risk. But today there are only two nonprofit contractors that manage and operate DOE facilities that have a fee less than \$1 million, and those annual fees go up to \$8 million. Those fees are used for lab-directed research and to pay administrative costs. GAO sees no reason why these same fees could not be used to pay fines and penalties.

Mr. KLINK. Well, Dr. Michaels, the universities have already said that they're afraid that their entire endowment will be put at risk, and you, I think, mentioned this in your opening statement. Is

there any way we could work something out where they would be liable only for the amount of their fee?

Mr. MICHAELS. Absolutely. And, in fact, what we are now considering through the Safety Council is actually exactly that, to have the—and we could do this administratively without changing legislation. We could subtract the amount of the fine up to the level of the fee. And I mentioned that in my testimony, that is one of the things we are considering.

Mr. KLINK. I want to make sure that we're talking about the same thing. We're not talking performance management, we're talking actually fines. You're talking about a—we're talking about actually fining them.

Mr. MICHAELS. Well, we give the contractor, the not-for-profit contractors, what you could call a "fee" essentially that they can use and Ms. Jones talked about this in her testimony, for various activities, they can't pocket the money, they can use it for research. We could actually subtract the amount of the fine or any other amount from that fee.

Mr. KLINK. But the for-profits, if I'm not mistaken, and then I'll ask Ms. Jones to step in here, they also get a reduction in their fee, but they also can be fined in addition to that. And I think that's—I'm talking about, can't we work out the same thing with the nonprofits that they would be fined. But, again, you're not risking the entire endowment, but you're risking at least the amount up to the total of the fee and fines?

Ms. JONES. You're correct, and the Secretary of Energy does have the flexibility to base the amount of fines on the contractor's ability to pay. So that would give him wide latitude in terms of the amounts of fines that were assessed against nonprofit contractors.

Mr. KLINK. Just one final thing if you will bear with me, Mr. Chairman, I'll pass out to the members and the witnesses, we have an e-mail communication here from the University of California and it lists all of the fines that it has paid to various State and Federal agencies that do not exempt universities when they violate the law. Without objection, I would like to put that in the record, Mr. Chairman.

Mr. UPTON. So done.

[The information follows:]

In the telecon with Bob Van Ness last Friday you requested information on environmental fines at Los Alamos (LANL) and Lawrence Livermore (LLNL) National Laboratories.

1992 - to date

LLNL

1994 \$ 60,000 payment to California Department of Toxic Substances Control

LANL

1993 \$700,000 payment to the New Mexico Environment Department (NMED)

1994 \$ 62,750 payment to NMED for RCRA violation (NMED-94-09)

\$ 13,020 payment to NMED for RCRA violation (NMED-94-12)

\$ 100 payment to NMED for UST violation

1995 \$ 43,329 payment to NMED for RCRA violation (NMED-95-03)

\$ 11,190 payment to NMED for RCRA violation (NMED-95-08)

\$ 100 payment to NMED for UST violation

\$ 16,000 payment to Department of Transportation for manifest violations

1998 \$ 35,000 payment to NMED for RCRA violation (NMED-98-03)

Mr. KLINK. It lists a total of \$941,489 in fines from 1992 to date. And I would like to note that all but \$60,000 of these fines were assessed against Los Alamos National Laboratory. The university was not shut down because of this liability in fines; why should they be exempt from Price-Anderson fines when they are liable for these other fines? And I would like to hear from Dr. Michaels and Ms. Jones.

Mr. MICHAELS. I think they speak for themselves. That they are—

Mr. KLINK. You agree that they should not be exempted.

Mr. MICHAELS. I think the Department has taken the position that they should be exempted.

Mr. KLINK. If they are not exempted in these other fines, why should they be exempted in DOE fines? Should there be a different rule for DOE versus any other kind of fines?

Mr. MICHAELS. Well, I think the Department and the Secretary have essentially weighed these issues and we think we can be as effective exempting them from the fines, but also going through the regular process and using the contractual mechanism.

Mr. KLINK. Mr. Christopher, do you think they're as effective? I mean, just your opinion and I'm not—you are under oath, I just want to know—do you think it's—just to remind you, I want to know if you think it's as effective.

Mr. CHRISTOPHER. I think the sometimes virulent reaction I've gotten from the contractors, the not-for-profits to the press releases suggests that not having to pay the fines does not make it as less noticed as you would think, but I think the payment of fines would have some degree of effect particularly with the—when you come to the equities, there are very hazardous facilities at the University of California and others as there are at the for-profits.

Mr. KLINK. I was going to say, if it weren't true, I think maybe what we would try to do, we would eliminate traffic tickets and we would just publish everybody's name that speeds an runs a stop sign. To heck with fines, if the publicity is bad enough.

You make a very good point the fines are obviously detrimental to the operation and probably would seem to me, just as much to the nonprofits as the for-profits, and Ms. Jones, I ask you—my time is up, I ask if you have any comments?

Ms. JONES. I agree with the point that you're making, Mr. Klink. Our report makes the same point—others have been fining these nonprofits, they've been paying the fines, we think it's an equity issue, and certainly the nonprofits should be paying the fines just like the for-profits.

Mr. KLINK. Thank you, Mr. Chairman.

Mr. UPTON. Mr. Whitfield.

Mr. WHITFIELD. Thank you, Mr. Chairman.

Dr. Michaels, in your answer to the chairman and Mr. Burr's brief discussion about Mr. Lappa and the alleged reprisal against him, I had the opinion that you were really not aware of that or it was not an issue that you had followed up on. In reading the letter from Mr. Lappa and then also reading the decision by the Department of Labor that in their opinion reprisal action had been taken against him and he was demoted, they required that certain actions be taken to compensate him like \$15,000 for compensatory damages, \$16,000 for attorney fees, expungement of all negative references, so forth and so forth. Would you, in keeping with the Secretary's policy of not reprising against any individual that brought up a safety issue, report back to the committee the action that DOE has taken in relationship to the University of California on this specific case?

Mr. MICHAELS. I would be very pleased to.

[The following was received for the record:]

In March 1999, Secretary Richardson issued a policy statement on "Safety Accountability and Performance." In this directive, he said that "there must be open communication between management and employees and a zero tolerance policy for reprisals against those who raise safety concerns. Free and open expression of employee concerns is essential to safe and efficient accomplishment of the Department's missions."

The Secretary relies on DOE line and program management to enforce this policy. Our office has worked with DOE field offices and contractors on an ongoing basis for more than ten years to develop the tools to prevent retaliation of any type. We have generally been successful. When there are cases where retaliation has been determined to have occurred, Secretary Richardson counts on his line managers to take appropriate actions. DOE's contract with the University of California prohibits the University from retaliating against employees for whistleblowing. The University's final evaluation plan will be reviewed to determine whether the fee can be reduced in response to a finding of employee retaliation, or whether some other action will be required under the contract.

Separately, through the enforcement process, DOE has the discretionary authority to issue a Notice of Violation, when appropriate, to a not for-profit contractor who is determined to have retaliated against a contractor employee for raising a nuclear safety concern.

In the case of Mr. Lappa, the Department of Labor issued an opinion that Mr. Lappa was subject to reprisal. DOE is awaiting information from the Department of Labor to determine whether there is a sufficient basis upon which to issue a Notice of Violation under DOE's nuclear safety enforcement program.

Mr. WHITFIELD. Thank you. Now, you're familiar with the uranium enrichment plants at Paducah, Kentucky and Portsmouth,

Ohio. They've been privatized and now are operated by a private company called USEC. But does the nuclear safety program of DOE apply to the uranium enrichment plants?

Mr. MICHAELS. Only to the—what we call the “legacy” parts of the plant, not the actual uranium enrichment part. The NRC is the regulatory agency for those. There are some areas, though, around the facilities which DOE maintains its responsibilities for. Essentially in the waste areas.

Mr. WHITFIELD. Okay.

Mr. MICHAELS. It's a limited—quite a limited part of those facilities and involving far fewer workers than the USEC facilities.

Mr. WHITFIELD. So it's included as one of the 34 sites in the 13 States that are in your response bill—

Mr. MICHAELS. Yes, sir.

Mr. WHITFIELD. What relief would be available to a worker who suffered an illness from exposure to some material in the area that you're responsible for? Actually, what are they able to do?

Mr. MICHAELS. Well, if an illness has already occurred, that would be a very unfortunate outcome because that's already beyond the enforcement issues, that's already someone is sick. The current relief would be the State Workers' Compensation System in either Kentucky or Ohio.

Mr. WHITFIELD. Right. Okay.

Mr. MICHAELS. The Secretary, as you may know, is working on a proposal to develop additional mechanisms for relief for our contractor employees at places like Paducah and Portsmouth. In those cases where the State Workers' compensation system are not adequate because the nature of the diseases are—you know, they're often based on exposure to esoteric chemicals or to radiation, state programs often don't deal with those programs very well. And if at some point you would like additional information on that we would be happy to provide it.

Mr. WHITFIELD. Now, it's my understanding that Bechtel Jacobs is the contractor for environmental issues of that plant, are you—

Mr. MICHAELS. Which plant are we speaking of? Of Paducah?

Mr. WHITFIELD. Paducah.

Mr. MICHAELS. Are they?

Mr. WHITFIELD. I'm not sure. Okay.

Mr. MICHAELS. Yes, but for the environmental—for the legacy component of it, not for the use of—

Mr. WHITFIELD. For the legacy component, okay. But are you aware if they've been fined for any non-compliance with safety issues at all?

Mr. MICHAELS. No, sir, they have not.

Mr. WHITFIELD. Okay. All right. Mr. Chairman, I'll yield back the balance of my time.

Mr. UPTON. Thank you. Mr. Burr.

Mr. BURR. Thank you, Mr. Chairman.

Dr. Michaels, let me ask you, you've heard about retaliation; did you follow up on it at all?

Mr. MICHAELS. No, I recently heard that in the overall briefing on Lawrence Livermore and the situation there.

Mr. BURR. Were you aware that it was against DOE policy for the DOE or any contractor to retaliate against whistle-blowers?

Mr. MICHAELS. I certainly—yes, I'm aware of that.

Mr. BURR. Given that you heard it, do you wish now you had followed up on it?

Mr. MICHAELS. Well, no, I—I said, you know, in discussing with Mr. Christopher recently around this particular Livermore and he raised it and said, this is, you know, one of the issues coming up. I said, "Well, let's make sure we deal with this."

Mr. BURR. Mr. Christopher, do you know of anybody at the Department of Energy that's looked into this retaliation rumor?

Mr. CHRISTOPHER. I can add a little bit more—more to that. When the DOL finding—when we learned of the DOL finding, and I'm not sure exactly how we learned of it through the process, my staff has on several occasions requested the DOL report of investigation so that we could review the facts of the case and make some kind of recommendations to Dr. Michaels. We have not received that yet, and I haven't pursued it since my last request to the Department of Labor in lieu of other issues.

Now, I can explain to you what our options are, once a finding—a retaliatory finding has been made by the Department under Section 708 of the Atomic Act, which is what we would first have to do. I could then issue a notice of violation to the contractor—in this case the University of California—for the act of retaliation itself and could then issue an appropriate phantom find in this case for the act of retaliation similar to the way we conducted the program in the Nuclear Regulatory Commission once the finding and the appellate process through the Department of Labor has concluded to their investigatory and appeal process that retaliation did occur.

Mr. BURR. And I didn't have a chance to read Mr. Lappa's letter, but let me go down to the fifth paragraph, first page. It says, "For 2 months, I engaged in what DOE termed 'informal resolution' discussions. By 1998, mid-February, informal resolution had collapsed, and I had lost confidence in DOE-OIG's willingness and ability to investigate my complaint."

Let me ask you Mr.—is it Christiansen?

Mr. CHRISTOPHER. Christopher.

Mr. BURR. [continuing] Christopher. This was not a rumor at DOE.

Mr. CHRISTOPHER. Union

Mr. BURR. Mr. Lappa actually filed a formal complaint.

Mr. CHRISTOPHER. Correct. Correct.

Mr. BURR. Now, there is, or there was, or there was a request for it to be investigated. Is it currently being investigated by the Department of Energy?

Mr. CHRISTOPHER. No. To my knowledge it is not. Although the entity that there is an Office of Employee concerns that actively is responsible for the investigation of—

Mr. BURR. Now, this is a policy that the Secretary has referred to frequently with some of the issues that surround DOE labs that there is a zero tolerance for retaliation. This complaint was made, as I read it, 1997 in December. How long do you think that a complaint of this nature should take for a resolution?

Mr. MICHAELS. Again, I'm going to have to say, I don't really know because the—we don't do the—have the responsibility for the investigatory process. And there is a process within the Office of Inspector General.

Mr. BURR. Is there a policy within EH as it relates to your responsibility over contractors that there not be retaliation? Is there anywhere in the contract that it says that a contractor cannot retaliate on a whistle-blower?

Mr. MICHAELS. I don't know the answer to that.

Mr. BURR. Let me ask you about the contract, if I could, specifically Los Alamos. As I read the contract, correct me if I'm wrong, that contract calls for University of California to receive a \$7 million performance fee of which a program performance fee of \$4.9 million shall be at risk in accordance with paragraph [b] below. Paragraph [b] below reads, fee at risk, "if the contractor's performance in any administrative operational function area fails to achieve a good rating the contractor's performance—program performance fee shall be reduced by \$245,000 for each administrative and operational function area in which a good rating is not achieved."

Let me ask you how many times since 1997 and for the beginning of this current contract have in fact the University of California lost 245 for—245,000 for a rating that did not reach good?

Mr. MICHAELS. I don't know. We would have to ask the contract administrators.

Mr. BURR. Again, in clause 5.4, special assessment sections, it says that "the DOE shall conduct special assessments of the laboratories. The purpose of the reviews is to determine whether the overall level of performance achieved is satisfactory with regard to the performance objectives in Appendix F and whether substantial progress has been made in meeting the requirements of this clause." Can you give me any indication as to the performance of the University of California as it relates to the Los Alamos contract?

Mr. MICHAELS. I can't give you specifics. It's only very recently that in discussions with the Secretary that this issue has come up in terms of contract—our involvement, the Agency's direct involvement in contracts and he's in discussions around this particular issue. He has said, I want—

Mr. BURR. You shared with us your personal belief, I believe.

Mr. MICHAELS. Excuse me?

Mr. BURR. You shared with us that it was now EH's position that nonprofits should be exempt.

Mr. MICHAELS. It's the Department's position.

Mr. BURR. I'm asking you about EH. EH had a recommendation that they should not be exempt, you said, "I wasn't there then"; what is your position on it? Should they or shouldn't they be exempt?

Mr. MICHAELS. I have no personal position on this.

Mr. BURR. You as the head of EH, what is your position?

Mr. MICHAELS. If the same discussion arose again, the positions would be unchanged. EH would hold the position that contractors should not be exempt.

Mr. BURR. So the argument that—or the position that I heard stated by you and by the Department of Energy is that we would put at risk the endowments of these institutions. Let me ask you if the structure of this contract puts at risk the endowment of these nonprofits?

Mr. MICHAELS. Oh, I don't know—

Mr. BURR. Performance-based fees?

Mr. MICHAELS. The piece of the contract you read doesn't, but I certainly can't comment on the whole contract.

Mr. BURR. Clearly if they didn't receive a good rating or above, they lost money. They were fined. I mean, in the technical terms they lost part of their performance fee. Does that put their endowment at risk?

Mr. MICHAELS. That piece of it doesn't, no.

Mr. BURR. If it did, do you think they would sign the contract?

Mr. MICHAELS. I suspect not.

Mr. BURR. What do you see that's different in this performance-based incentive that they go through and the fine that they might be subjected to if we did not reauthorize the Price-Anderson Act?

Mr. MICHAELS. The fines that they could be subjected to are theoretically quite a bit larger than the amount of money you're speaking about.

Mr. BURR. Consistent with the charts that I've seen relative to what you have fined them.

Mr. MICHAELS. Well, the amounts we have fined them—

Mr. BURR. They have \$4.9 million at stake on an annual basis.

Mr. MICHAELS. In their fee, correct.

Mr. BURR. Two-thirds of their contract amount is in jeopardy if your rating is below good.

Mr. MICHAELS. If the environmental health rating and safety, correct.

Mr. BURR. Let me ask you, what was there—since the contract calls for an annual DOE review, one of the areas is safeguards and safety, what was their rating in the last review?

Mr. MICHAELS. Oh, I couldn't tell you that. I would be happy to get back to you with that. But we don't conduct that review.

Mr. BURR. But would that review affect in any way, shape, or form your decision relative to the extension of the Price-Anderson Act?

Mr. MICHAELS. I'm not following your question.

Mr. BURR. I mean, is it something that you looked at as you determined EH's position on whether Price-Anderson should be reauthorized—extended? To see what the performance, what the rating was that they currently had to see whether there was a profit?

Mr. MICHAELS. I would think—

Mr. BURR. And isn't an annual rating going to be an indication as to what you're going to see next year, and—

Mr. MICHAELS. Sure.

Mr. BURR. [continuing] the year after, and the year after?

Mr. MICHAELS. It's one of the piece we take into account, yes.

Mr. BURR. So what was their rating?

Mr. MICHAELS. I don't know. This decision—I can't personally tell you, these decisions were all made before I arrived.

Mr. BURR. You're in an enviable position of denial.

The chairman has been lenient so let me take this opportunity to yield back.

Mr. UPTON. Thank you. Mr. Bilbray?

Mr. BILBRAY. Mr. Chairman, I'll just try to be real short. I just wanted to make sure that we did not make assumptions based on a single model without looking at other aspects. And I guess I'd like to drop this between the Doctor and Ms. Jones, and I know you guys are sort of dominating the field here. But the issue of fining nonprofits, making an assumption that they would be more accountable; Ms. Jones, would you say they would be more accountable if their endowments were susceptible to fining?

Ms. JONES. I think DOE has reached the conclusion that the fines and penalties in their enforcement program have certainly enhanced safety for the for-profits. I think that same fine and penalty would help enhance safety at the not-for-profits as well, but we are not suggesting that the endowments be placed at risk.

Mr. BILBRAY. Now, in certain other fields such as enforcement of hazardous substances and other stuff from the State fining they've gone in there, has there been any indication though under those fines that the nonprofits have become, let's say, more sensitive or more efficient in addressing those problems because they were fined by the State agencies?

Ms. JONES. I'm not sure we have the direct evidence that would show that, Mr. Bilbray. I think that inherent value of a fine or penalty is in a sense to hurt somebody's pocketbook.

Mr. BILBRAY. Okay. And, Doctor, you can jump in on this, but here's the thing I want to get to, and I'll say this as somebody who spent 20 years in local and State Government agencies, the for-profit does not have the inherent large bureaucracy and I want to make sure we separate small, not-for-profit organizations that are very cost effective and very responsive as opposed to larger non-profit agencies especially educational institutions that are very insulated bureaucracies. Now, when someone in the for-profit gets a fine, you know there's going to be heads rolling. I think that's a pretty—pretty, you know, hard fact. But in a large bureaucracy, when you have civil service protection, when you have tenure, I just got to ask you very fairly, can we really say that we're going to compare apples to apples and oranges to oranges? Do we think we'll ever get the efficiencies and the responsiveness and the sensitivity out of these large bureaucracies with their built in insensitivities; can't fire somebody, can't demote them, and whatever to the level.

Will you admit that we're not going to—basically we do have limits to the ability to make those large, not-for-profit organizations as responsive as a for-profit organization? And Doctor, jump in, either one.

Mr. MICHAELS. We certainly think so. That's why we think actually in terms of the not-for-profits, the whole mechanism of safety enforcement including essentially, you know, what we hope is some public humiliation will have at least some major impact, but we know we have to be ever vigilant because we know that in fact the dynamics of organisms that are not-for-profit are different than for-profits. And it's a hard challenge and one we always have to deal

with. And certainly that's one of the issues, I think it's come up not just in safety, but in security.

Mr. BILBRAY. Ms. Jones.

Ms. JONES. Yes, I think there are two issues here. One is that fining for-profits, is going to hurt their profit, it's going to hurt the money that they want to make. But if we're going to be fining, for example, the University of California, where it's going to hurt them is that they won't be able to do as much lab-directed research. The second issue is that we're talking about accountability here, Mr. Bilbray, and I'm not sure that it's fair to say that because they have a larger bureaucracy that they shouldn't be held equally as accountable as a private for-profit company.

Mr. BILBRAY. Okay. Well, when we get into these issues and we talking about these organizations or groups, the fact is accountability to really be effective in an you management team is for the accountability to finally trickle down to the individuals who have actually made the decisions within those organizations.

I'm just saying that working with traditional bureaucracies with all the civil service protection, all the tenure protection, especially when you get into the larger educational institutions. The ability to hold any one individual accountable is quite different than what we have in the private sector. You know, there's so many firewalls built to stop abuses in the public sector that it's created basically fireproof situations where it's really hard to finally get into the individual who is responsible. That's why we have lateral transfers, people being moved from one department to the other, basically because you can't do what you can do with the private sector. And I just want us to just accept the nature of the creature that for-profits have a sensitivity that it's going to be really tough for us to make the major institutions address.

Thank you, Mr. Chairman.

Mr. UPTON. Mr. Stupak?

Mr. STUPAK. Well, thank you, Mr. Chairman, and I apologize for being late. My plane was over an hour late getting in. But I do have some questions, if I may of Mr. Christopher, if I will.

Is it your practice to issue press releases when you have assessed a fine against a contractor?

Mr. CHRISTOPHER. The process that's been—yes; the process that's been established is that once we complete the deliberative investigatory process, make a determination, prepare the necessary documentation that working with the communication staff that they then prepare a press release boil the issue down to more understandable, less technical terms and then a press release is issued as for cases that involve civil penalties.

We don't now issue civil penalties for what we call the "routine notice of violation" without a civil penalty.

Mr. STUPAK. And for nonprofits?

Mr. CHRISTOPHER. We treat them the same.

Mr. STUPAK. Treat them the same?

Mr. CHRISTOPHER. Yes.

Mr. STUPAK. And is that—I guess you would call it bad publicity, is that about the only club you have on the nonprofits?

Mr. CHRISTOPHER. Well, it's clearly the reason that we developed the concept of the phantom fine is in the absence of the ability to

do something, it seemed to be the best to treat them the same as the for-profits and go through the entire process including the press release because it would appear to be at least somewhat effective in raising the sensitivity to the issues.

Mr. STUPAK. Sure. So you call that the phantom fine?

Mr. CHRISTOPHER. Yes.

Mr. STUPAK. In the non-profits, they realize that you're going to issue a press release including the phantom fine in that press release?

Mr. CHRISTOPHER. Yes, as the process has evolved over the last 2 years, it's become apparent that that's how we do business; yes.

Mr. STUPAK. What happened to the press release that your office drafted for the second Livermore fine?

Mr. CHRISTOPHER. I'll tell you what I know. The action was issued as a normal—the enforcement action itself was issued as a normal course of business, and in the process I just described, a press release was prepared and the communications folks, I did validate it's technical accuracy, and from there it is forwarded to the front office through the public affairs and congressional affairs, and from there I don't know what happened to it.

Mr. STUPAK. So somewhere between public affairs and congressional affairs it never was put out publicly?

Mr. CHRISTOPHER. It was not issued publicly; that's correct.

Mr. STUPAK. Mr. Chairman, I would like to place in the record a set of e-mails concerning the press release. Jeff Garberson from Livermore's public affairs office complains that he can't understand, "how DOE management can claim to want to form and promote a cohesive organization, some kind of happy family in which contractors rush eagerly to Washington to be part of the "good news" machine, with this practice of no notice, 'gotcha' publicity."

[The material follows:]

Jeff Sherwood@NOTES2CC
08/03/98 08:43 AM

To: MARY ZACCHERO@EH
cc:

Subject: Re: Kneecap

----- cc:Mail Forwarded -----
From: Bill Wicker AT CP-02
Date: 07/31/98 05:25 PM
To: Robert Sevigny AT ER-02
Cc: Jeff Sherwood
Subject: Re: Kneecap

Let's talk.
Jeff

Forward Header

Subject: Re: Kneecap
Author: Bill Wicker at CP-02
Date: 7/31/98 5:25 PM

Thanks for the exchange of info, Bob. Garberson's anger is palatable. I think Brooke is going to call him. Also, we intend to discuss the communication protocol on these Price-Anderson actions, as well as the statutory requirement for public communications, on next week's lab- field-hq PA "megacall."

Reply Separator

Subject: Kneecap
Author: Robert Sevigny at ER-02
Date: 7/31/1998 11:17 AM

FYI

Subject: Kneecap
From: karsjen@ameslab.gov_at_internet at X400PO
Date: 7/30/98 4:18 PM

>Date: Thu, 30 Jul 1998 12:40:18 -0700
>From: Jeff Garberson <garberson1@llnl.gov>
>Subject: Kneecap
>X-Sender: e302188@popup.llnl.gov

>To: ercc@mailhub.ornl.gov
 >MIME-version: 1.0
 >Precedence: bulk

Jeff,

Your horror story is unfortunate but certinly not unusual. You have my sympathy. The only answer I can come up with (well, maybe not the only one) is to keep bringing these occurrences to DOE's attention so they can see the problems they cause us.

Steve

>
 >ERCC colleagues:
 > Here's a sad little story with some of the ironies that we have
 >confronted before and discussed in ERCC meetings. While DOE
 >continues to >insist that we notify it of news releases and
 >supply "good news" to improve >its image, it also continues to
 >shoot its contractors in the kneecap. >Sometime today, DOE plans
 >to issue a news release in the SF area and in >Washington
 >strongly criticizing Lawrence Livermore for safety violations in
 >our plutonium operations and levying a \$157K fine which can't
 >actually be >collected because of the terms of our contract. I
 >understand DOE has >already promoted the news release on the Hill
 >in Congressional offices.
 > The violations, which happened in 1997, are real and we acknowlegd
 >them. They are also procedural. They brought our plutonium
 >operations >nowhere near criticality -- although that fact is not
 >mentioned in the DOE >release (and in fact the criticality danger
 >is played up.) Our errors >resulted in no injuries, no spills,
 >no releases, no public hazard. We did >not learn about the news
 >release from DOE public affairs, either from Hq or >Oakland, but
 >from a technical contact, yesterday. We confirmed it this
 >morning with DOE PAO in Oakland, at our initiative.
 > The importance of procedural violations are can obviously be debat
 >I don't mean to minimize them. But I'm having a hard time
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 >that we were close to criticality when we weren't) in return.
 >Our community gets plenty of misleading sky-is-falling warnings
 >from >anti-nuclear groups already. Sam, Bill, weigh in on this,
 >will you? >Anyone else? I think we've all made the best effort
 >I've seen in more than >25 years at Livermore to promote DOE as
 >an organization. DOE's response in >this case is to boost its
 >position in Washington by attacking a contractor >through the
 >press. Is that the way NASA does it? Anybody have comments or
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 >Jeff Garberson
 >Public Affairs Office

>To: ercc@mailhub.ornl.gov
 >MIME-version: 1.0
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 >Jeff Garberson
 >Public Affairs Office

>Lawrence Livermore National Laboratory
>Email: jbg@llnl.gov
>Phone: 925-423-3125, fax -2943
>

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fax: (515) 294-3226



Department of Energy
Washington, DC 20585

August 13, 1998

MEMORANDUM TO THE ACTING SECRETARY

FROM: PETER N. BRUSH
ACTING ASSISTANT SECRETARY
ENVIRONMENT, SAFETY AND HEALTH *Peter N. Brush*

SUBJECT: PRESS RELEASE ON LAWRENCE LIVERMORE
NOTICE OF VIOLATION

We propose to recast this draft press release and future such release to reflect your concerns as expressed in our 8/1/98 discussion as follows:

- ▶ Casting the action as a DOE-wide effort involving line and headquarters program offices in joint action with EH. The quote for the Livermore case is changed from one from me to one by Jim Turner. Jim has agreed to this strategy. To the extent feasible this approach will be used in all future PNOVs.
- ▶ More emphasis is given to the Livermore corrective action plan. Future PNOV announcements will give appropriate credit to the existence of such action plans. (Note: In the Livermore case these actions should not be overstated in light of the fact that another new 'overmass' criticality violation was discovered in the same Building at Livermore last week).

Because the Preliminary Notice of Violation was widely reported in energy trade and local California press, we suggest that in this case the press release announce the final NOV expected by the end of this month. Since the formal DOE rules establishing the Price Anderson program require that issuance of a PNOV constitutes public information, our intent is to continue to make public announcements at the time the PNOV is issued when.

The Office of Enforcement is also aggressively exploring wider use of the 'consent order' similar to that used with Kaiser Hill at Rocky Flats (see attached press release). In that case, Kaiser Hill agreed to make a reduced payment in exchange for the department's willingness to forgo a formal enforcement action and the negative publicity associated with such an action. We are looking into whether the laboratories' statutory exemption from civil penalties would prohibit them from participating in such an arrangement. I will keep you informed of developments.

cc: Brooke Anderson
Ellen Livingston



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DRAFT - NOT FOR DISTRIBUTION OUTSIDE DOE - DRAFT

The Lawrence Livermore National Laboratory in Livermore, California has received a Final Notice of Violation (NOV) from the U.S. Department of Energy for violating procedures designed to prevent a criticality, or an uncontrolled nuclear chain reaction. The final NOV signifies that the Laboratory has accepted responsibility for violations described in a Preliminary NOV last month, and that they have instituted an effective corrective action plan.

The violations, which took place between May and December 1997 in the laboratory's plutonium storage and processing areas, did not cause an actual criticality event. However, they did cause the Laboratory to operate outside of the limits established by its criticality safety controls for an extended period of time. The Department's investigation determined that this situation, coupled with numerous missed opportunities on the part of the Laboratory to identify and correct the problems, caused a serious safety concern. The investigation and enforcement action was conducted jointly between DOE Headquarters and the DOE Oakland (CA) Operations Office.

The civil penalty that would be associated with the severity of the violations is \$153,750. The Department reduced the potential fine by 25 percent in recognition of the corrective actions planned by the Laboratory to prevent recurrence of the violations. The entire fine was waived due to the Laboratory's statutory exemption from civil penalties under the Price Anderson Amendments Act.

"Criticality safety depends upon maintaining multiple layers of controls so that even if one system fails, another will be in place. Problems with the Laboratory's criticality safety program have been of concern to us for some time, and have also been a concern of the Defense Nuclear Facilities Safety Board" said Jim Turner, Manager of the DOE Oakland Operations Office. "We are pleased to see that the Laboratory now recognizes the serious nature of this problem and that we now see some tangible improvements resulting from the activity resumption process."

Laboratory corrective actions have made progress in strengthening the foundation for operations at the affected facility, including worker training. Administrative controls are being verified and improved to assure they are adequate to protect against identified hazards.

Violations were first detected by Laboratory officials in July 1997 when numerous and repeated infractions by plutonium workers caused 'overmass conditions,' -- where the amount of plutonium in a particular area exceeded limits -- defeating one of the barriers put in place to prevent a criticality accident. It was later determined that some of the plutonium handlers, who had been poorly trained and did not understand criticality controls for their own work stations, had trained other workers on these procedures.

As a result, operations within the Building related to fissile materials were brought to a halt. Other activities, such as inventory checks, shipping and receiving, and movement of fissile material to storage vaults continued and resulted in additional violations. For example, plutonium parts were moved from a workstation to a storage vault and caused violation of criticality overmass controls. And in December 1997, fissile material was removed from sealed metal containers and repackaged without following all criticality safety requirements. Numerous self-evaluations by the contractor failed to identify the problems and prevent recurrence.

Additional information on this action and the DOE Enforcement Program is available via the Internet at "<http://tis-hq.oh.doe.gov/enforce>."

Mr. STUPAK. Now, Mr. Garberson seems to think that DOE cannot say anything about his lab. What do you think? The labs don't want fines, you have the phantom fine; they don't want the publicity. So how are we going to change their behavior? Where is the accountability of these labs?

Mr. CHRISTOPHER. Well, I think in terms of—from my perspective as a regulator in the isolate filed of Price-Anderson, you know, our function is to try to raise the sensitivity of, you know, of accountability to assign responsibility to the University in an appropriate public way so that there is some public—one you want the public to know that there is some reasonably credible resolution to an issue to bring an issue to closure. I think it's very, very important, and in cases where we've operated properly at many sites, that press release which has demonstrated to the public that something of a serious nature happened at one of their sites which it inevitably will because of the difficulty—the inherent difficulty with our sites that if the Department can illustrate that it demonstrates that it had its act together, that it's had an appropriate measured response being my case from an enforcement perspective requiring certain things to be done and specific accountabilities if that fails to be done, then I think—and we've communicated that through the press release, I think our experience has shown that the public has said that's what we expect DOE to do, to take care of business. So—

Mr. STUPAK. But if you're going to bring this to closure, if we take the second Livermore fine and if it got up to, as far as you know, public affairs, we understand, or we've been told that the Acting Secretary has sort of put an end to that one, how do you bring that one to closure then?

Mr. CHRISTOPHER. From a regulator's standpoint I'd stay in regulatory space and I ensure that the commitments that they've made to correct the situation are adhered to and if they're not, then pursue them—pursue them again. That's about as far as I can go—

Mr. STUPAK. That's as far as—

Mr. CHRISTOPHER. [continuing] Yes, sir.

Mr. STUPAK. Mr. Chairman, I've got one more question, if I may?

Mr. UPTON. Go ahead.

Mr. STUPAK. Dr. Michaels, this did not happen on your watch, did it? And can you explain it or are you going to allow this to happen again?

Mr. MICHAELS. No, sir. In fact, when I heard about this after I took office in the initial Price-Anderson notice of violation that came out of Mr. Christopher's office, you know, I inquired about this history and it was made very clear to me that that would never happen again, or at least not on my watch. In fact, I'm quite impressed that the Secretary is—you know, to the contrary, is eager to get these out and to play a role to make sure that the maximum impact can be had.

It also is worth noting, though, that the mechanism for getting the press release and the information about notice of violations out is not merely sending a press release. The information goes on our web site automatically, and, in fact, the second Livermore notice of violations actually did get out to the media and was widely disseminated because it was up on our web site and the reports at this point know to look for it. So even though there was some problem in getting it out, it actually did get out quite widely and I was, you know, certainly pleased that that did happen. But it would—I would like to be able to tell you that that's never going to happen on my watch. Obviously I can't guarantee it, but—

Mr. STUPAK. Thank you. Thank you, Mr. Chairman.

Mr. UPTON. Mr. Bryant.

Mr. BRYANT. Thank you, Mr. Chairman and I thank you for holding this hearing. Likewise, I had the airplane flying in too. I don't think we were on the same plane, but I apologize to the panel. I would like to ask Ms. Jones a question and I'm sure you've answered this already in my absence. But I would ask you the GAO apparently now is recommending something different than perhaps it recommended earlier this year, March maybe of 1999 regarding this issue. Would you again sort of boil it down for me as to why that change has occurred with GAO in its review of this issue?

Ms. JONES. I think the basic reason for that change, Mr. Bryant would be because things have changed since 1988 particularly in terms of the argument that DOE and its non-profit contractors have been making that their assets would be at risk, university assets, for example, would be at risk if, in fact, they had to pay the monetary fines.

Our position is that almost all of these nonprofit contractors, all but one, in fact, are getting fees and that the monetary penalties could be paid from those fees. So that's one of the basic reasons why we believe that the Congress should consider changing the law.

Mr. BRYANT. Mr. Chairman, I will yield back my time.

Mr. UPTON. Thank you. There may be some members with additional questions. I guess I just want to follow up on Mr. Whitfield's question. Would you then say that you believe that the assets need to be somewhat at risk beyond otherwise the penalties that might be there?

Ms. JONES. I'm sorry, Mr. Upton, I'm not sure I understand the thrust of the question.

Mr. UPTON. The contract mechanisms that are there, the fines, the phantom fines, do you think we need to go beyond that and actually have some of the assets at risk?

Ms. JONES. Oh, no, sir, I didn't mean to imply that. No, I believe that back in 1988 when these exemptions were granted, the nonprofits were not getting fees. Maybe a small administrative fee, but they were not getting the kind of fees that they get now. As I said earlier, there's only two contractors that are getting below \$1 million in available fees. So what I was saying is that any penalty or fine could come from those fees and therefore the assets, the actual assets of the nonprofit universities would not have to be at risk. It would just be the fee that would be at risk.

Mr. UPTON. Okay. Got it.

Mr. Stupak, do you have additional questions?

Mr. STUPAK. No.

Mr. UPTON. Mr. Whitfield?

Mr. WHITFIELD. No, thank you.

Mr. UPTON. Mr. Burr?

Mr. BURR. Yes, sir. Thank you, Mr. Chairman.

Let me ask you, Dr. Michaels, you said, I believe, that other departments had the ability to comment on the decision that DOE had relative to Price-Anderson Act extension through other offices.

Mr. MICHAELS. Yes.

Mr. BURR. Tell me which offices those were?

Mr. MICHAELS. I assume, now, again, I wasn't here for this, but I assume that all of the program offices would have some role if you ask for comment; defense programs, the Offices of Science, perhaps environmental management.

Mr. BURR. Let me ask Mr. Christopher, were you here?

Mr. CHRISTOPHER. Yes, I was.

Mr. BURR. Okay. Were there any other departments that expressed the same concern that E&H did at the time?

Mr. CHRISTOPHER. My recollection is that I'm gone off in my memory now. There were several field office elements—field office organizations that expressed, and I don't remember which ones to be frank, support for the original EH proposal. My recollection is also that most of the major program offices were in opposition to that proposal.

Mr. BURR. Were in opposition to?

Mr. CHRISTOPHER. To the proposal to eliminate the exemption of civil penalties.

Mr. BURR. So E&H for sure and others expressed—

Mr. CHRISTOPHER. It is my recollection that several, at least two field offices communicated their belief that the civil penalty exemption for laboratories should be removed. The majority or the remainder opposed—

Mr. BURR. How do you think that your contractors are going to respond to your stated belief that maybe we ought to take these fines out of the fees? This is something new; right?

Mr. CHRISTOPHER. It is, yes.

Mr. BURR. Are they going to be supportive of that?

Mr. CHRISTOPHER. I wouldn't doubt it.

Mr. BARR. As a matter of fact, in Mr.—I believe in Mr. Stupak's e-mail copy—

Mr. STUPAK. It's not on my e-mail.

Mr. BARR. The one that he submitted, I thank you, I think from Jeff Garberson, public affairs office, I would take at the University of California, he said that Washington strongly criticizes Lawrence Livermore for safety violations in our plutonium operations and levying a \$157,000 fine which can't actually be collected because of the terms of our contract.

Mr. CHRISTOPHER. Well, actually it's not—it's true, it's not the terms of the contract, it's the statutory exemption the contract—

Mr. BARR. Don't the terms of the contract allow you to penalize them for performance less than exceptional?

Mr. CHRISTOPHER. I don't—in terms of the—when it comes to the contract performance measures, as a regulator I don't fee—

Mr. BARR. Let me go to Ms. Jones.

Mr. CHRISTOPHER. [continuing] so I can't answer your question.

Ms. JONES. Mr. Barr, yes it does.

Mr. BARR. Do we have a huge disconnect between different arms of the Department of Energy where regulators, and I don't say this to be critical, regulators have no clue as to what's in the contract for the contractor that they're trying to manage for safety and for security.

Ms. JONES. Yes. I would also say that we support performance-based contracting that. We think it's a good mechanism for safety.

Mr. BARR. Could you define your understanding of performance fees?

Ms. JONES. Performance fees are something where you would say to the contractor, you need to operate the his facility within the safety rules promulgated by the Department of Energy. And then there's a judgment on the Department of Energy's side of how well they did in terms of meeting that goal.

Mr. BARR. Under the criteria that you would use to evaluate if somebody had a plutonium explosion. Now, I'm not going to profess to know the magnitude of something like that. I believe you might. Would that receive, in that given year, a good, satisfactory, excellent, what type of rating?

Ms. JONES. The problem, Mr. Barr, is that unfortunately that's one event. And the way DOE determines if it's good, excellent, fair, or poor—

Mr. BARR. It's under a point system—

Ms. JONES. [continuing] in terms of safety, —

Mr. BARR. [continuing] it's a point system, isn't it?

Ms. JONES. [continuing] is lots of different events. So they might take away a little bit of money for that one thing, but they could give them an overall good or excellent rating.

Mr. BARR. So under the contract method that we're currently in, a contractor could have a serious violation but because of the points methods that they use, they might never be penalized based upon the performance fee?

Ms. JONES. That's correct. Our report points out that we don't think DOE has had a really good track record of using these contract mechanisms to penalize the contractor whether you're talking about safety, security, or other things. I think we used the example

of Lawrence Livermore last year. They got 96 percent of the fee that they were able to get, and yet they had a number of very significant safety problems.

Mr. BURR. Let me ask you, either Dr. Michaels or Mr. Christopher, now, that's a site profile for Lawrence Livermore, this is one for Los Alamos. I would take for granted that an annual site profile is done on all facilities; is that an accurate—

Mr. MICHAELS. I don't know if they're done. That document was done by the Office of Oversight, is that—

Mr. BURR. The office of Oversight and Environmental Safety in Health.

Mr. MICHAELS. Well, we tried to visit one. We try to visit each site, it's a little more than every year at this point, unfortunately, so I don't know that we produce a new one every year on an annual basis.

Mr. BURR. But that's under your area; isn't it?

Mr. MICHAELS. Yes, sir.

Mr. BURR. And tell me what the latest site profile of Lawrence Livermore suggested?

Mr. MICHAELS. I couldn't tell you that off-hand. If you have it in front of me, perhaps you could share that with me.

Mr. BURR. I would be happy to.

Mr. MICHAELS. Yes.

Mr. BURR. Have you ever seen it?

Mr. MICHAELS. No, I have seen it, but, you know, we have quite a few sites and I'm not up-to-date on all of them.

Mr. BURR. It's not very complimentary. And it's your area.

Mr. MICHAELS. No, I'm not surprised. We tend to—when we go out to some of these sites, some of them we think we are doing well, we know that Livermore is not doing that well.

Mr. BURR. And yet what I hear you saying today is we want to continue what we're doing because it's working. And what I hear over here is no matter how much they continue to do what they're currently doing, it ain't going to work.

Mr. MICHAELS. No, you don't hear that from me. What you hear from me is the Department has made a decision which actually, and you asked my personal opinion, I think a good argument could be made on the other side that fines will not necessarily improve that performance. I think we have to think about ways to improve the performance, but if the issues is merely on fines, I frankly think that's not going to have a major impact. If we collected \$200,000 from the University of California last year, I'm not sure we would have that much better of a safety performance, sir.

Mr. BURR. You and I found something to agree on. I'm less concerned with the question of Price-Anderson which I understand is your expertise. And I'm more concerned with how we get the safety of these facilities to where our friends on the other side of the table can look at it and say, my gosh, it's working.

Mr. MICHAELS. No, I agree with you, and we are trying to look at the contract to say, are there are things we can do, are there other mechanisms we can use? And frankly, that's a great concern of mine that I would, you know, look for assistance from—

Mr. BURR. Let me in conclusion suggest to you that I think the Department of Energy has a great deal of work to do, if for no more

understanding what's going on with their contractors. I don't think that there's a good understanding of, one, what the relationship is. I think that was expressed in one of the documents entered for the record. I think that the belief that there is this fear under the current system or potentially under some modification of the Price-Anderson Act, that fear doesn't exist, Dr. Michaels. I think that it's time you sit down and figure out with the recommendations of GAO what gives it teeth, what assures the safety, and clearly these are institutions that are going to be under assault from the standpoint of security as well, and I expect to be as tough if not tougher on that side than I am on the safeguard side.

With that, Mr. Chairman, I yield back.

Mr. WHITFIELD. Mr. Chairman, I would like to ask one additional question.

Mr. UPTON. Go ahead then.

Mr. WHITFIELD. The Price-Anderson Act was adopted in 1988, so in those 11 years the Department of Energy has evidently promulgated only 2 of 11 rules. Do you have a date in the future that you are expecting to complete the other nine rules?

Mr. MICHAELS. Yes, sir. Well, we don't expect to complete the other nine rules because what we've determined is that original projection of 11 rules is not what we need. What we—as you know, we promulgated two rules, radiation protection and quality assurance. The quality assurance rule is a very broad rule. Essentially what it says is, contractors will be held accountable for the procedures that they state that they will follow. And they state that they will follow good procedures because they have to in every area. And when we go and we simply say, did you follow this procedure, and virtually everything we need to do is covered by that rule. There are some areas which we think are not covered by that rule, 3 of the 9, and we hope to get them out by the end of this year and my staff is working hard on that.

Mr. WHITFIELD. So basically you're saying you think you need 5 rules rather than 11?

Mr. MICHAELS. Yes, or you could count them. We could put one rule out that will cover those three. It's an arbitrary distinction.

Mr. WHITFIELD. Okay.

Mr. MICHAELS. But the distinction really is arbitrary. We think we can have a complete set of rules by the end of the year.

Mr. WHITFIELD. And that's the plan by the end of the year?

Mr. MICHAELS. That's the plan, absolutely, sir.

Mr. WHITFIELD. I yield back the balance of my time.

Mr. UPTON. Mr. Bilbray, do you have any additional questions?

Mr. BILBRAY. No, I don't.

Mr. UPTON. Mr. Whitfield?

Mr. WHITFIELD. No.

Mr. UPTON. Okay. Thank you very much for coming out.

This panel is excused.

The second panel will consist of Mr. Richard Miller from PACE; Mr. Robert Van Ness, Assistant Vice President, University of California; Mr. Arthur Sussman, Vice President of Argonne National Labs in Chicago; Mr. Robert Card, President of Kaiser-Hill; and Mr. Lincoln Hall, Vice President for Operations, Energy and Environment Sector, Lockheed Martin.

Gentlemen, welcome. As you saw with our first panel, we have a long-standing tradition of taking testimony under oath. Do any of you have objection to that?

[No response.]

Mr. UPTON. If not, can you get ready, do any of you need counsel? With that, if you would stand and raise your right hand. Do you swear to tell the truth, the whole truth, and nothing but the truth so help you God?

Mr. MILLER. I do.

Mr. VAN NESS. I do.

Mr. SUSSMAN. I do.

Mr. CARD. I do.

Mr. HALL. I do.

Mr. UPTON. Thank you, you're now under oath, and as you know, some of you based on experience would try to limit your opening remarks to 5 minutes.

We'll start with Mr. Miller. Thank you for coming.

TESTIMONY OF RICHARD D. MILLER, POLICY ANALYST, PAPER, ALLIED-INDUSTRIAL, CHEMICAL AND ENERGY WORKERS UNION; ROBERT L. VAN NESS, SENIOR VICE PRESIDENT, UNIVERSITY OF CALIFORNIA; ARTHUR M. SUSSMAN, VICE PRESIDENT, ARGONNE NATIONAL LABORATORY, UNIVERSITY OF CHICAGO; ROBERT G. CARD, PRESIDENT, KAISER-HILL COMPANY, L.L.C., ROCKY FLATS ENVIRONMENT TECHNOLOGY SITE; AND LINCOLN E. HALL, VICE PRESIDENT FOR OPERATIONS, ENERGY & ENVIRONMENT SECTOR, LOCKHEED MARTIN CORPORATION

Mr. MILLER. Thank you, Mr. Chairman.

I would like to thank the committee for inviting us to testify today. My name is Richard Miller, I'm a policy analyst for the Paper, Allied Industrial Chemical and Energy Workers Union. We represent workers at 11 DOE sites within the nuclear complex. These include Hanford, the Idaho National Engineering Labs, Grand Junction, the waste isolation pilot project, Oakridge, Portsmouth, Mound, Brookhaven, Argonne East and West, and the Paducah Gas Use Diffusion plant. And I'm pleased to see Mr. Whitfield is here today. He's been a very vigilant ally in overseeing activities at that facility.

The Price-Anderson civil enforcement authority is established in a context for DOE indemnified contractors up to \$9.43 billion per nuclear incident. Thus it should be seen that not only do nuclear workers, but tax payers have a distinct interest in assuring complete and unflinching compliance by its contractors with nuclear safety rules.

Second, today's hearing we believe should be viewed in another context, and that is that over the past several years DOE has permitted its site representative program to virtually wither on the vine from staff reductions and reductions in diminished responsibilities.

We also understand that DOE is planning to abolish this formerly valuable site oversight program and so we're losing a measure of accountability.

Second, the Secretary of Energy announced earlier this year that the Department no longer intends to pursue external safety regulation. Thereby reversing the path it had been following for the past 4 years. Thus, despite the rhetoric about increasing accountability for safety the Department has proposed no alternatives to save discussions about adjusting contractor award fees for safety performance.

These are blunt and largely unworkable policy devices which come into effect only after failure which are in competition with other incentive fees to expedite completion of work activities and are viewed quite skeptically by the workers who are ostensibly the beneficiaries of these policy devices. In light of this vacuum, we believe this hearing is timely and quite welcomed.

As noted earlier DOE has promulgated only 2 of the 11 nuclear safety rules in 11 years. We think this is wholly inadequate. Second, we believe that there's a reason that has not been adequately explored in the earlier testimony about why the rules have not gone out the door. The reason is, is that within the Department there are forcing mechanisms whether they be the senior field management counsel that's been established, or other devices where anybody who wants to block a rule can say, I object. And at that point the Assistant Secretary of Energy for Environment, Safety, and Health is deprived of the tools he or she needs to do their job.

In fact, the Assistant Secretary has to seek permission from the regulated entities in order to regulate them. And that is the root cause of the problem. The pattern of bureaucratic undermining of accountability for safety we note is strikingly similar to the undermining of security controls identified by Senator Rudman and the special panel of the President's Foreign Intelligence Advisory Board. That panel found that, and I quote, "The DOE and weapons laboratories have a deeply rooted culture of low regard for, and at times, hostility to security issues which has continually frustrated the efforts of its internal and external critics, notably the GAO and the House Energy and Commerce Committee. Thus, even when there's been leadership within DOE that supported contractor accountability measures for safety the bureaucracy has advantages which the FAIB also noted. And these are namely time and proven skills and artful dodging and passive intransigence. These advantages have given the bureaucracy the upper hand to ward our efforts to get these rules out the door over the past 11 years.

And we heard today how the DOE is discussing an October 1999 deadline to make a decision on rules and issue them by January 2000. We would like to encourage this committee to pass legislation to take DOE up on its January 2000 commitment and legislate that as a hammer date, and further to provide the public with the right to sue the Department if they don't live up to that hammer date.

Given the obstacles that have to be overcome and the endless delaying tactics, we think it's time for Congress to solve the problem for the Energy Department.

Second, DOE as noted earlier relies on five people to cover 34 nuclear sites in 13 states. Let me point out, that's over 2,000 nuclear facilities and you've got five people to cover it. We believe DOE has staff resources from the former site oversight representative pro-

gram that it could move. It could move 14 to 17 people into enforcement right away because they're not doing anything. They've got the staff slots and you don't have to appropriate another nickel. We would urge you to push the Department of Energy to take that internal reform.

We agree that nonprofits should be fully fined and penalized up to the limit of 3 years retroactive of their award fees and finally we believe that the DOE should provide workers and the public with access to its noncompliance tracking system. This is the computer system where the self reports by the contractor go to the Energy Department. Apparently workers have no idea if violations are even reported to the DOE voluntarily. We think that the workers have a right to know.

We thank you for holding this hearing.

[The prepared statement of Richard D. Miller follows:]

PREPARED STATEMENT OF RICHARD D. MILLER, POLICY ANALYST, PAPER, ALLIED-INDUSTRIAL, CHEMICAL AND ENERGY WORKERS UNION

As part of the 1988 Price Anderson Act Amendments ("PAAA"), Congress authorized the Department of Energy ("DOE") to impose civil penalties against contractors to deter nuclear releases and injuries. Eleven years later, DOE has promulgated only 2 of 11 nuclear safety rules, and manages its enforcement program of 34 nuclear production, research and environmental cleanup sites in 13 states with an enforcement staff of only 5 people.

Over the past several years, DOE has permitted its safety and health "Site Representative" oversight program to wither on the vine through staff reductions and diminished responsibilities. During this fiscal year, we understand that DOE is planning to abolish this formerly valuable safety accountability program. Also this year, the Secretary of Energy indicated that the DOE no longer intends to pursue external health and safety regulation, thereby reversing the path it had been following after receiving recommendations in favor of external regulation from both the Advisory Committee on External Regulation (December 1995) and the National Academy of Public Administration (January 1997). The Department has proposed no alternatives to assure contractor accountability for worker safety. Given this vacuum, the Subcommittee's investigation into the effectiveness of DOE's nuclear safety program is timely.

In the absence of external regulation from NRC and OSHA, and DOE's increasing emphasis on privatization and fixed price contracting, my testimony will raise these points:

- The DOE's Price Anderson Act Amendments ("PAAA") enforcement program, to which DOE nuclear workers turn for assuring contractor compliance with radiation protection rules, is NOT sufficiently robust at present to protect worker health and safety.
- Non-profit contractors should be subjected to the payment of penalties in the same manner as for-profit contractors, up to the limit of their earned fees.
- DOE's promulgation of nuclear safety rules has been stifled by bureaucratic foot dragging and lack of leadership, all to the detriment of worker safety.
- Congress should pass legislation to compel DOE to vigorously implement Price Anderson, by setting milestones for its rulemaking and permitting citizen suits.
- To strengthen the enforcement program, the Secretary should immediately transfer the DOE-EH Site Representative Program staff slots over to Office of Enforcement.

The Paper, Allied-Industrial, Chemical and Energy Workers International Union represents 320,000 workers in the manufacture of pulp, paper, chemicals, pharmaceuticals, gasoline, and motorcycles, as well as many of those engaged in the production and cleanup activities at 11 DOE nuclear sites. These DOE sites include Hanford, INEEL, Argonne West, Argonne East, Grand Junction, WIPP, Oak Ridge K-25, Paducah, Portsmouth, Mound and Brookhaven Labs. PACE was formed from the merger of the Oil, Chemical & Atomic Workers Union ("OCAW") and the United Paperworkers International Union in January 1999.

1) IS THE DOE'S PRICE ANDERSON ACT AMENDMENTS ("PAAA") ENFORCEMENT SCHEME SUFFICIENTLY ROBUST TO PROTECT WORKER HEALTH AND SAFETY?

A. *Why nuclear workers value the PAAA program as the primary means to force contractors to implement radiation protection rules in the DOE complex: the Mound facility as a case study.*

DOE has taken enforcement actions at many of the sites where PACE represents workers, including 2 at the Mound facility in Miamisburg, Ohio. The Mound facility provides a case study on why a viable PAAA Enforcement program is so essential.

Between 1991 and 1994 DOE's former contractor at the Mound facility, EG&G, allowed bioassay samples for workers, who were performing decontamination work involving actinium-227, to sit on a shelf for three years unanalyzed. Workers were also directed to perform work without knowing what isotopes they were likely to encounter or if protections were adequate. Without timely bioassay, workers could exceed the annual radiation exposure limits established by DOE Orders. A large backlog of bioassay samples (>100) accumulated because reliable laboratory services were not procured by the contractor. Ultimately, a large percentage of one group of workers tested positive for actinium-227 (15 of 31); however, the contractor withheld this information from the DOE for 9 months. An assessment team was assembled in 1994 and found that the contractor did not have a functioning dosimetry program, was out of compliance with DOE's laboratory accreditation program, radiation worker training was out of compliance with DOE's radiation control manual and PAAA regulations, radiation control technician training was out of compliance, and individual exposure reports were not provided to workers for 3 years. Alarmed by a contractor whose rad program had veered out of control, twelve Mound workers and OCAW filed a class action suit seeking to: (1) enjoin the contractor from violating rad protection rules, (2) bring in an expert to assess the root cause of problems at the site, (3) provide health care and (4) compensate workers for harms.

After implementing a "recovery plan", the contractor, EG&G, self-assessed its rad program in December 1996 and opined that it had established a sound rad protection program. However, in May 1997, DOE HQ conducted a review after a worker questioned why the contractor waited 7 months to obtain a bioassay sample to determine whether she received internal doses of high fired oxides of plutonium-238. This DOE-HQ team found that the Mound contractor had been woefully undercounting doses of radiation by failing to set the proper Minimum Detectable Activity Levels (MDA), and improperly calculating worker uptakes in a way that concluded no uptake had occurred when in fact many results were positive. The contractor was not ensuring that workers were participating in the bioassay program, thus resulting in situations where workers could have an uptake of radionuclides and not be identified. In turn, this could lead to a failure to remove over-exposed workers from further workplace exposures of radiation. At the same time, the contractor was not requiring respiratory protection—despite worker protests—where it was needed to prevent the ingestion of high fired oxides of plutonium. Assistant Secretary of Energy Al Alm visited the site and urged the DOE, management and workers to jointly develop a reliable bioassay program. Finally, DOE's PAAA enforcement office investigated and proposed penalties for 2 sets of violations against EG&G Applied Technologies totaling \$112,500—at the time the largest PAAA penalty ever assessed.

Later in 1997, DOE brought in a new site contractor, Babcock and Wilcox. However, events discovered in early 1998 compelled our local union leaders to once again write the PAAA Enforcement staff with. PACE learned that 1,440 bioassay samples were improperly analyzed because background levels had been deducted twice, and 409 americium bioassay samples dating back to July 1997 had yet to be assessed. On May 1, 1998 the site manager, Leah Dever, ordered the second radiation "stand down" related to these breakdowns in the rad protection program. The PAAA Enforcement Program subsequently fined Babcock & Wilcox \$165,000 for 2 sets of violations in 1988. Subsequently, the site discovered it lacks an adequate bioassay program for metal tritites (metallic forms of tritium) and the Defense Nuclear Facilities Safety Board (DNFSB) is providing technical assistance.

B. *Award fees incentives, while a plausibly helpful tool, are a weak mechanism to protect workers on the front line who need immediate intervention and a strong hand to alter contractor misconduct.*

The civil penalty metered out by the PAAA Office of Enforcement combined with the Mound contractor's award fee reduction totaled over \$400,000 in 1997. This monetary disincentive was not sufficient to alter the conduct of the Mound contractor in 1998, as the subsequent enforcement action illustrates. Incentive fees do not change a bureaucratic culture saturated with cynicism and disregard for author-

ity. Only persistent accountability actions that punish bad behavior can alter that culture.

C. DOE-EH has persistently failed to build an adequate staff or request adequate funding for the PAAA program, due to the push-back by the contractor and Field Organizations to accountability measures.

DOE has nuclear operations at 34 sites in 13 states. Nuclear safety regulations are enforced by a staff of 5 PAAA investigators nationwide who rely, almost exclusively, on the self reporting of non-compliance events by their contractors. Contractors employ almost 100,000 workers.

In addition, DOE relies upon 50 or so non-dedicated Price-Anderson "coordinators" who, in general, serve as points of contact within the various field offices, but do not act as independent oversight and enforcement officials. These "coordinators" are not accountable to the Office of Enforcement, but serve under the direction of DOE's Field Offices.

The PAAA program relies upon taking a few high impact enforcement actions intended to send a signal that the Enforcement Program means business. This is a reasonable approach for a small program take in order to leverage its limited resources.

The problem, of course, is that the contractors are not intimidated unless there are repeated citations or, where there is a high degree of public concern in a locale, intense adverse publicity. Contractors also know that the DOE's entire budget for the PAAA program is approximately \$600,000 per year, and efforts to increase this amount have been defeated. This sends a second signal that DOE's enforcement program will be exceptionally modest, and that the probability of detection for not self-reporting most violations is very low. Moreover, DOE's increased reliance on "privatization" and subcontracting means that there are a gaggle of contractors coming and going at any given time who are operating under fixed price contracts that often place safety in competition with productivity and profits. Unfortunately these fixed price contractors are largely left to self-regulate this conflict, undeterred by a nearly invisible Price Anderson enforcement program.

Today, the PAAA program is more like the mouse that roared, than the daunting enforcer that DOE contractors would have you believe.

Prior to the passage of PAAA in 1988, DOE's nuclear safety requirements were embodied in "Orders", which were legally unenforceable. After the PAAA was signed into law, DOE announced it would convert its 11 nuclear safety orders into rules so that they could be clarified and rendered enforceable. As DOE admits, it has only promulgated only 2 of 11 rules in the past 11 years.

However, if and when these 9 other rules are promulgated, it is likely contractors will be obligated to self report added non-compliance events that now go unreported. This will add to the burdens already imposed on the five person program staff. Likewise, the Costello Amendment to the FY 2000 Defense Authorization Act requires the PAAA program to impose civil monetary penalties against for-profit and non-profit contractors for violations of the Department of Energy rules and regulations regarding security of classified or sensitive information or data. If incorporated into law, this provision will add further responsibilities to the five person enforcement program.

As part of the settlement of the Mound lawsuit, DOE had begun funding a \$250,000 contract for a jointly-selected health physicist to assess the Mound's rad protection program (press release attached). The expert reports non compliance to the PAAA Enforcement Office. The expert has been so beneficial that the DOE's Ohio Field Office Manager Leah Dever has agreed to extend the expert's tenure after his initial contract expires at the end of this year. DOE has effectively privatized its PAAA oversight function because it lacks the staff to police the Mound facility. The PAAA "coordinator" does not, and cannot, fulfill this function.

All of these factors point to the need for a more robust program which can conduct regular wall-to-wall inspections, and respond readily to concerns of workers. The PAAA could be substantially bolstered without additional appropriations by redeploying existing underutilized staff resources. Currently 14-17 FTE's who have been serving as site reps are going to be cut loose from the Office of Environment Safety and Health when the Program is formally terminated. These slots could and should be made immediately available to the PAAA program.

2) SHOULD THE NON-PROFIT CONTRACTORS BE SUBJECTED TO THE PAYMENT OF FINES IN PENALTIES IN THE SAME MANNER AS FOR-PROFIT CONTRACTORS?

There is no reason to exempt non-profit contractors from paying fines and penalties for nuclear safety violations. To the extent that Universities are concerned about the financial exposure of their institution, we believe that fines and penalties

can be capped by the maximum total fees that have been paid by the DOE over the past three years to that non-profit institution. Alternatively, the contractor's fees can be reduced by the dollar amount of civil penalties.

We find it ironic that a several non-profits were participating in DOE sponsored pilot programs for external regulation under NRC and OSHA, but at no time was this shift to external regulation predicated on an exemption from fines and penalties.

3) WHAT OBSTACLES HAVE IMPAIRED DOE'S PROMULGATION OF NUCLEAR SAFETY RULES?

As noted above, DOE has only promulgated 2 of 11 rules in the 11 years since Congress passed PAAA. These 2 rules, Quality Assurance and Radiation Protection for Occupational Exposure, are not sufficient to protect workers at DOE sites, especially where there is no other oversight mechanism in place. DOE has failed to promulgate rules for Training and Certification, Unreviewed Safety Questions, Conduct of Operations, Radiation Protection of the Public and Environment, Technical Safety Requirements, Maintenance Management, and Conduct of Operations.

GAO has noted several causes for the 11 year delay: a decision to work on other safety issues, internal disagreement about the desirability of having an enforcement program, and preference for an integrated safety management approach over enforceable regulations.

A related reason for delay is that DOE won't finalize a regulation unless there has been consensus from all program offices. In other words, objections from any corner of DOE can kill the issuance of a final rule. Consequently, the Office of Environment, Safety and Health has been deprived of the tools to hold contractors accountable for safety by internal bureaucratic obstructionism and lowest common denominator decision making. *When it comes to protecting health and safety, the DOE Assistant Secretary of Energy for Environment Safety & Health has traditionally had to seek permission from the system to impose accountability—a system that fiercely resists accountability.*

This pattern of bureaucratic undermining of accountability for safety is strikingly similar to the undermining of security controls identified by the Special Panel of the President's Foreign Intelligence Advisory Board ("FIAB") Report.¹ The FIAB panel found that the "DOE and weapons laboratories have a deeply rooted culture of low regard for and, at times, hostility to security issues, which has continually frustrated the efforts of its internal and external critics, notably the GAO and the House Energy and Commerce Committee."²

Even when there has been leadership that supported accountability measures, the bureaucracy has advantages—time and proven skills at artful dodging and passive intransigence³—that has given them the upper hand to ward off efforts to get rules out of the door over the past 11 years. It can be summarized as "bureaucratic insolence to dispute, delay and resist implementation." These same words were used by the FIAB to describe why nuclear security measures were never implemented, despite Presidential directives.

In its May 17, 1999 response to the GAO's draft report DOE's *Nuclear Safety Enforcement Program Should be Strengthened* (June 1999), DOE builds in the option for backing out of any hard commitments to issuing the 9 overdue nuclear safety rules. The DOE states:

The Department agrees that it needs to complete the process of issuing enforceable rules covering fundamental nuclear safety requirements. As the report mentions there is a renewed effort within DOE to do this. This effort will consider ongoing efforts to implement Integrated Safety Management to ensure that the rulemaking does not hinder or impede ISM development. Further rulemaking will need to ensure the compatibility of enforceable rules with the Department's efforts on ISM. The Department expects to make a final decision on the rules by October 1999 and issue them by January 2000.

DOE does not need to "consider ongoing efforts to implement Integrated Safety Management" in deciding when and whether to issue rules. Integrated Safety Management is simply a work planning process which includes the front line workers and managers. What DOE does with ISM should not affect the promulgation of enforceable rules.

¹ *Science at its Best, Security at its Worst*, June 1999

² Foreword to the Report *Science at its Best, Security at its Worst*, pp iii

³ *Ibid*, pp.5

4) SHOULD CONGRESS PASS LEGISLATION TO IMPROVE DOE'S IMPLEMENTATION AND CONTRACTOR PERFORMANCE UNDER THE PAAA PROGRAM?

We recommend that the Commerce Committee accept DOE's commitment to have all of its nuclear safety rules issued and enforceable by January 2000. However, to assure that there is no slippage, we recommend that the Committee pass legislation which sets this January 2000 date into law, and provide the public with a right of action to sue the Department in federal court if it doesn't meet this deadline. It is time for Congress to hold the DOE accountable.

We recommend that Congress provide citizens and workers with a self-help provision to enforce the PAAA rules. This would allow workers and the public to bring legal actions to enjoin violations of Price Anderson Act violations actions—not seek fines or penalties—when the Department of Energy fails or is unable to investigate violations of its rules.

Precedent for allowing third parties to seek enforcement was established in the settlement of the suit brought by the workers at the Mound facility. Under this settlement, the DOE agreed that in those cases where the contractor failed to correct a violation of Price Anderson rules and the DOE Assistant Secretary of ES&H, after notice, declined to investigate or make a finding, PACE members at Mound could seek enforcement through an arbitrator.

Where DOE's program lacks enough staff investigators, and DOE is refusing to bring in external regulation, self-help mechanisms such as a citizen suit remedy is in order.

5) WHAT COMMITMENTS ARE NEEDED FROM DOE TO RENDER THE PAAA PROGRAM CREDIBLE?

DOE should commit to shift the qualified personnel from the Site Rep Program (that it is abolishing) over to the PAAA enforcement program. This will allow DOE to immediately assign 14-17 added investigators to the field to conduct investigations of nuclear facilities and follow up on the contractors' reports to the DOE's Non-compliance Tracking System. While this shift of 14-17 staff slots will not result in a robust program staff, it is an incremental step towards strengthening the program and protecting workers. Given the absence of external regulation, anything less should be considered a lost opportunity and an abrogation of DOE's responsibility to its workforce.

DOE should also provide workers and the public with access to the Noncompliance Tracking System (NTS), which is the computerized system into which contractors file non-compliance reports. Contractors should be required to post these reports on bulletin boards at the DOE sites. If workers are kept in the dark about nuclear safety reports under the PAAA program, they are unable to take proactive steps to assure that these problems have been corrected.

SUMMARY

The DOE must strengthen the Price Anderson Enforcement Program by transferring staff slots from the soon-to-be disbanded Site Representative program, requiring non profits to pay fines and penalties up to the limits of their fees, providing workers with the tools to take enforcement actions against DOE when it fails to protect their safety, and promulgating the 9 overdue regulations no later than January 2000.

Mr. UPTON. Thank you. Mr. Van Ness.

TESTIMONY OF ROBERT L. VAN NESS

Mr. VAN NESS. Mr. Chairman and members of the committee, I appreciate the opportunity to come before the subcommittee to discuss implementation of nuclear safety regulations at the University of California to operate a Department of Energy Laboratories and the exemption of nonprofit institutions from civil fines and penalties for Price-Anderson Act violations.

The University of California has enjoyed an outstanding record of accomplishment in science, education, and technology. That reputation of excellence is the single most valuable asset that the University possesses, both at our campuses and at the national laboratories that we operate for Department of Energy. It is that reputa-

tion that continues to draw outstanding scientists to our doors and retains them to carry out world class research.

Today's student does not typically set as his or her goal to become a nuclear weapons scientist. But the intellectual challenges—theoretical, mathematical, chemical, metallurgical, and engineering—inherent in nuclear weapons and other "big science" projects at the Department of Energy laboratories will continue to attract the finest minds if the opportunity remains to work with colleagues of national and international repute. The University has that reputation because of the quality of staff we attract and retain.

Having recruited this outstanding workforce we are committed to providing them with a safe workplace. Because our work includes nuclear hazards not only must our workers be safe, but we must assure the public that they too will not be harmed. The University is committed to this standard of safety.

In my written statement I have outlined the integrated safety management programs at our laboratories, our record of overall performance improvement including safety performance accomplished through the effective use of performance-based management methodologies. Our work smart standards program and our practice of encouraging employees to report safety problems and to stop work if it cannot be safely done.

In spite of our commitment and the excellence of our overall safety record there have been three instances in which nuclear safety violations were deemed serious enough for DOE enforcement action under the Price-Anderson Amendments Act.

I have included in the written statement information on those enforcement actions and other noncompliances. The violations were self-reported and our laboratories have responded aggressively to correct deficiencies and to discipline employees who violated procedures.

The University supports continuing the exemption for nonprofit contractors and in support of that I offer five points. First, academic institutions and other nonprofit organizations have created environments at the national laboratories that attract the finest scientific talent to work on problems of significance to a Nation. It is important to retain these environments to maintain the quality of science being accomplished by the national laboratories.

Second, obtaining better performance from academic institutions and other nonprofit organizations is an important objective including high performance in the areas of environment, safety and health. But the mechanisms that encourage improvements should not undermine the nonprofit and the public service nature and motivations.

Third, financial rewards and punishments are inconsistent with the fundamental character of these institutions and are a serious challenge to their public service orientation. At some point the level of financial risks inherent in DOE contracts may drive nonprofits from the ranks of Government contractors.

My written statement includes the efforts the University has made to cover risks without undermining our public service orientation.

Fourth, because of the trend over the last 15 years to impose more operating risks on contractors, nonprofits have begun to take

fees. Fees are another cost of doing business that must be born by funds appropriated to conduct scientific research. You increase the need for fee, you reduce the amount of science that can be produced for any given amount of funding. This cost may be justified if it motivates and improves safety. But as I have indicated fines and penalties are neither the only means nor the most effective means of motivating improvement for nonprofit organizations.

Finally, there are an abundant set of contract management tools already available to DOE to ensure contractor compliance and performance improvement. These include performance assessments, adjustable fees, fee at risk under zero tolerance policies, reduction in programmatic funding, and partial or complete contract terminations. These are reinforced in the National Laboratories by the commitment to excellence of the scientific staff and the management practices that hold individuals accountable for their performance.

To ensure the continued vitality of our not-for-profit research environments these existing DOE and laboratory management tools should be used in lieu of Price-Anderson Act fines and penalties. Thank you for your attention to this matter and I will answer any questions.

[The prepared statement of Robert L. Van Ness follows:]

PREPARED STATEMENT OF ROBERT L. VAN NESS, ASSISTANT VICE PRESIDENT FOR
LABORATORY ADMINISTRATION, UNIVERSITY OF CALIFORNIA

Mr. Chairman and Members of the Committee, I am Robert L. Van Ness, Assistant Vice President for Laboratory Administration for the University of California (UC). The University operates three DOE laboratories—the Los Alamos National Laboratory (LANL), the Lawrence Livermore National Laboratory (LLNL), and the Lawrence Berkeley National Laboratory (LBNL). My responsibilities include administering the performance-based management aspects of our contracts with the Department of Energy (DOE) and conducting oversight of the administrative and operational activities of the laboratories.

The University is indemnified against public liability under the Price-Anderson Amendments Act (PAAA), and, as such, is subject to DOE nuclear safety regulations at the three laboratories. The University is also one of the entities exempt from the civil fines and penalties under Section 234A (d) of the Act.

Thank you for the opportunity to appear before you today to address the Committee's concerns regarding the implementation of nuclear safety rules at our laboratories and consideration of extending the statutory exemption from civil fines and penalties under the Act.

SEEKING EXCELLENCE AND MAINTAINING A REPUTATION FOR EXCELLENCE

The University of California is an institution that has enjoyed an outstanding record of accomplishment in science, education, and technology. Our faculty and staff have produced an enviable body of work that is reflected through numerous awards and honors. That reputation of excellence is the single most valuable asset that the University possesses, both at our campuses and at the national laboratories we operate for DOE. It is that reputation that continues to draw outstanding scientists to our doors and retains them to carry out world class research. A student does not typically set as his or her goal to become a nuclear weapons designer. But the intellectual challenges—theoretical, mathematical, chemical, metallurgical, and engineering—inherent in nuclear weapons and other "big science" projects at the DOE laboratories will continue to attract the finest minds if the opportunity remains to work with colleagues of national and international repute. The University has that reputation because of the quality of staff we attract and retain.

The future of the University depends on its ability to obtain excellence in all endeavors. This objective is as true for the administration and operations in support of science as it is for the scientific programs themselves. When our competence is challenged, in any field, it has a significant adverse effect on the reputation of the people involved and the University. We compete in the marketplace for the best

minds and talent. We want and need our employees to be proud of their institution and to feel that there is no better institution with which to be associated. When we make a mistake, we respond by taking aggressive corrective action, immediately addressing deficiencies, modifying systems to anticipate and avoid future problems, and better communicating with our stakeholders about what we are doing.

The University conducts significant nuclear operations at our two DOE national security laboratories. We well appreciate that nuclear hazards are a mystery to many Americans; that mystery requires that we not only be safe, but be seen to be safe. Our reputation for nuclear safety is as important to the University as is our record for outstanding scientific research. We are fully committed to the safety of the public and our workers. Our commitment to the DOE is a public service. Our commitment to the safety of the public and our workers is a public trust. Our future depends on maintaining that public trust.

IMPLEMENTATION OF NUCLEAR SAFETY

University-operated facilities are safe

The University is fully committed to protecting the health and safety of its employees and the public as our first priority. This commitment is embodied in our contract with DOE in a number of ways. We have the standard contract clause that requires compliance with all applicable laws and regulations. We commit to performing the work in a manner that ensures protection of the employees and the public and to being accountable for the safe performance of work. The performance evaluation and management plans in our contracts measure our results in worker safety, waste minimization, and environmental compliance.

The University follows through on its ES&H commitments through its performance-based management system and has demonstrated success over the past six years. Our results show the laboratories' success in maintaining radiation exposures to workers far below regulatory standards and consistent with ALARA (As Low As Reasonably Achievable) goals. Public exposure to radiation from our laboratories is far below National Emission Standards for Hazardous Air Pollutants (NESHAPS) set by the US Environmental Protection Agency and below DOE standards for radiation exposure from all pathways. Occupational illness and injury rates show a declining trend approaching "best-in-class" performance as determined through benchmarking with the private sector.

Performance-based management

The University's performance-based management system as expressed in our contracts with DOE is designed to provide assurance that our employees and the public are being protected and to drive improvement of the performance of our laboratories over time. It relies on establishing and maintaining effective working relationships with DOE and the public and on a robust self-assessment program that includes reviews by line and support organizations within the laboratories. Since the University's implementation of performance-based management in 1993, there has been a trend of continuous improvement in all administration and operations areas of the DOE laboratories, with DOE ratings moving from barely satisfactory to excellent overall.

Performance metrics are negotiated annually between the University, the DOE and the laboratories. These metrics describe what is to be measured and contain target performance levels that are used to rate performance as part of an annual contract appraisal process. All three parties monitor performance during the year and performance is evaluated at the end of the year by the University and DOE. The ES&H performance metrics are designed to evaluate both the ES&H outcomes as discussed above and the management systems that produce those outcomes. The DOE, the laboratories and the University have been working to understand the ES&H performance metrics used by the best performing organizations in both the public and private sectors and have adopted or adapted their methods and their performance measures where applicable. Overall ES&H performance has improved substantially over the past 6 years using performance-based contracting techniques.

The University-operated DOE laboratories are, of course, also subject to the PAAA rules. Each DOE laboratory maintains an independent office reporting at the highest levels of laboratory management to provide independent review and reporting of potential violations of the requirements in these rules, and to track corrective actions when deficiencies are identified. The PAAA requirements are of the utmost importance to both the University and the laboratories, and violations of these requirements are treated very seriously. We have taken aggressive corrective actions to address the deficiencies that led to those events with the intent of avoiding similar safety incidents in the future.

Integrated Safety Management

The University is fully committed to Integrated Safety Management (ISM) as a method for integrating ES&H into our work. This means that: line management is responsible for the protection of employees, the public and the environment; there are clear and unambiguous lines of authority and responsibility for ES&H; our personnel possess the experience, knowledge, skills and abilities that are necessary to discharge our responsibilities; resources are effectively allocated to address ES&H, programmatic and operational considerations; before work is performed, the associated hazards are evaluated and an agreed-upon set of ES&H standards and requirements are established; administrative and engineering controls to prevent and mitigate hazards are tailored to the work being performed and its associated hazards; and the conditions and requirements to be satisfied for operations to be initiated and conducted are established and agreed-upon by DOE and the University.

The ISM systems at our laboratories generally describe how the work scope is defined, how hazards associated with the work are identified and analyzed, how the hazards are controlled, how work is performed within the controls, and how information is fed back to improve safety management. This approach applies to all work at the laboratories, including that subject to compliance with PAAA.

The worker plays a key role in this framework and is responsible for doing the work safely. If the worker notices an unsafe situation or a situation that could cause harm to the public or the environment, he or she has the authority to stop the work.

The PAAA compliance program at the laboratories is fully aligned with ISM at the laboratories. It relies on self-assessment/reporting and a mechanism for feedback to both the DOE and the University and is part of the continuous improvement cycle that is at the core of ISM.

The controls that are identified and implemented through ISM are drawn from a set of external and DOE derived standards that have been incorporated into our contract. These standards come from external regulatory agencies, industry standard setting organizations and the DOE. For those operations subject to PAAA compliance, the standards that have been selected are those developed by DOE in the area of nuclear safety. The University believes that these standards (Work Smart Standards) are effective for managing nuclear safety at our laboratories.

Management, Oversight and Accountability for PAAA Compliance

The University takes PAAA compliance very seriously. At the laboratories, management and employees in nuclear facilities are trained in procedures for safe operations and for reporting violations of procedures or other incidents to the PAAA Coordinator who reports to the Deputy Director for Operations. The PAAA Coordinator also independently reviews other sources of information about ES&H matters in the area of nuclear safety, such as external audit reports and Defense Nuclear Facility Safety Board (DNFSB) staff issue reports. The PAAA Coordinator evaluates self-reported incidents to determine if a noncompliance with DOE nuclear safety rules has occurred. If an incident is determined to be a noncompliance, it is reported either to DOE's Noncompliance Tracking System (NTS) or to an internal tracking system maintained by each laboratory, following guidance provided by the DOE Office of Enforcement and Investigation in its Operational Procedures. The noncompliance report, whether internal or to the NTS, describes associated corrective actions including a schedule of their completion. The PAAA Coordinator routinely does analysis and trending of violations to see if there are systemic concerns or programmatic weaknesses that need to be addressed. In the course of identifying, categorizing, and tracking PAAA noncompliances, the PAAA Coordinator at each laboratory works closely with his or her respective DOE PAAA Coordinator. The laboratory PAAA Coordinators periodically meet with other DOE contractors and the DOE PAAA enforcement staff to review complex-wide information on nuclear safety. The laboratories also conduct independent assessments to determine if the self-reporting system needs improvement. The laboratories use a combination of line management safety evaluations, independent laboratory safety evaluations, DOE evaluations and management reviews as part of the overall safety program at the laboratories.

The University has established two additional safety review and improvement mechanisms called the Laboratory Operations Management Committee (LOMC) and the ES&H Panel of the President's Council on the National Laboratories. The LOMC includes the three Deputy Directors for Operations from the three laboratories and the Assistant Vice President and Executive Director for Operations from the UC Laboratory Administration Office, and is staffed by the ES&H specialists at the University and at the laboratories. The LOMC works to ensure that the best practices in government and industry are being applied to safety at the laboratories and that the three laboratories work in concert to improve operations. The ES&H Panel consists of experts in environmental protection, safety and health from indus-

try and academia who independently review ES&H performance at the laboratories and advise the President's Council on the National Laboratories on the quality of those programs.

As part of the system for ensuring accountability for safety performance, laboratory managers and workers are assessed annually on their personal performance as part of the laboratory management system. Performance in safety is an important component of this assessment. The University holds managers and workers accountable as part of the review of safety events. In the case of the three FY1998 PAAA violations and a safety incident in FY1999, disciplinary actions were taken against managers and workers.

Account of PAAA Nuclear Safety Incidents

Since the beginning of the PAAA enforcement program, there have been 45 nuclear safety noncompliance events reportable under the DOE Noncompliance Tracking System (NTS) at the three DOE laboratories operated by the University of California. Three of these incidents have resulted in a Notice of Violation (NOV) being issued by DOE. Another event is currently under investigation to determine whether a NOV is appropriate.

All three NOVs were issued during calendar year 1998 for violations that occurred in 1997. One NOV involved a shredding incident in which five workers were exposed to levels of airborne radioactive material (curium-244) at the Hazardous Waste Management Facility at LLNL. One of the workers received a dose in excess of federal limits, and he is not expected to have any long term health consequences. No radioactive material left the laboratory and no members of the general public were affected by this event. A second NOV involved multiple infractions of criticality safety controls in the Plutonium Handling Facility at LLNL. These infractions demonstrated a lack of rigor in the handling of special nuclear material that could not assure criticality safety to the level required by either the laboratory or the DOE. There was a voluntary and complete multi-month stand-down of operations at the plutonium facility and a retraining of the staff; full operations were gradually restored only after a comprehensive Activity Resumption Plan, developed under DOE oversight and incorporating extensive corrective actions, was implemented. The third involved a fire and explosion at the LANL Chemistry and Metallurgy Research Building that involved radioactive material and other related events in that facility that demonstrated a lack of adequate work planning and work controls to manage the facility safely. No individuals were injured or contaminated, but there was the potential for serious harm. The facility stood down for a number of months during which a significant number of upgrades to the facility were made and all employees working in the building were retrained.

All three of these violations resulted in disciplinary actions taken against the individuals who did not comply with safety requirements—including workers, their supervisors, and more senior personnel. The prompt actions by the laboratories and the implementation of a comprehensive set of corrective actions resulted in DOE determining that substantial mitigation existed in the assessment of each of the enforcement actions.

A fourth incident involved a LANL worker being exposed to radiation in the Chemistry and Metallurgy Research Building in November 1998. Additional retraining has been specified for the individuals involved, and disciplinary action has been taken against individuals who ignored procedures. Discussions are ongoing to determine if DOE enforcement action is appropriate.

All of the above incidents and the subsequent Price-Anderson Act implications were self-reported by the laboratories and immediate actions were taken to review the incidents and develop corrective actions while the PAAA implications were unfolding. The laboratories have systems in place to respond to any radiological or nuclear-related event in an expeditious manner to determine the consequences and develop corrective actions.

STATUTORY EXEMPTION FROM CIVIL PENALTIES

The University concurs in DOE's recommendation that the statutory exemption from civil fines and penalties be retained and consideration be given to extending the exemption to all non-profit contractors and subcontractors.

The University has operated three DOE laboratories from their inception as a public service without the desire for financial gain. The University, as a non-profit entity, has consistently opposed federal contract policies that have at their base a financial reward or punishment purpose. We believe this approach blurs the important line between for-profit and non-profit motivations and is fundamentally inconsistent with the nature and character of the University. The non-profit nature of the University is an essential element of our makeup and is critical to providing

the extraordinarily successful environment for the conduct of outstanding science at the University and its laboratories. That environment is often cited as the principal attraction in the recruitment and retention of the world's leading scientists.

At the time of the Price-Anderson Amendments Act, the University and a number of other DOE laboratory operators performed contract work solely on a cost-reimbursable basis. In the 1980's there was a series of investigations conducted by the federal government that revealed serious abuses of cost-reimbursement contracts in the defense industry. These investigations led to legislation affecting defense contracts that were later extended government-wide. The legislation failed to distinguish between for-profit and non-profit contractors, particularly where those contractors were engaged in large cost reimbursable contracts of the type that DOE uses at its federally-funded research and development centers (the DOE laboratories). As a consequence, nearly all non-profit contractors have entered into some form of fee arrangement in the last decade. They did so not to enrich themselves, but to make it possible to continue their public service to the nation given these new risks and the inappropriateness of applying funds from their endowments to the costs of operating DOE laboratories. Non-profit contractors, such as the University, have a track record of attracting scientific talent to the DOE laboratories that would be lost should non-profit organizations become unable to manage the laboratories because of financial risk.

Fees are paid as part of the cost of performing scientific programs funded by the Congress. The greater the fee, the lesser the funds are available to perform scientific research for any given amount of federal appropriation. Non-financial rewards and punishments are important alternatives to fines in order to maximize the amount of science produced at the national laboratories. (It should be noted that fees to non-profit contractors average less than 1% of budgets at the facilities they operate as compared to about 6% of budget at facilities operated by for-profit contractors.)

The University accepted a fee starting in 1992 that enabled us to continue performing a public service for the nation in the face of increasing risks of non-reimbursement for laboratory operating costs and assessment of penalties. (To do otherwise would be inconsistent with our fiduciary obligation to the State of California, its citizens, and our students and donors.) That does not confer immunity to the University from any consequences associated with poor management. As mentioned above, our most important asset is our reputation for excellence that enables us to attract and retain outstanding workers. Laboratories with poor records run the risk of adverse contract actions, having their facilities shut down, funding from sponsors decreased, loss of confidence in the surrounding communities, and loss of employee morale. Avoiding these consequences is a strong motivation for the University. On the other hand, being known as one of the "best-in-class" managers creates an environment where reputation is enhanced, additional work is funded, communities are highly supportive, and employees thrive and attract more quality workers.

The DOE submitted a report in March recommending that the statutory exemption be continued and expanded to include all non-profit contractors and subcontractors. Others have made arguments against the statutory exemption, citing the current practice of fees being paid to non-profits, the practice of regulatory agencies, and the need for stronger enforcement tools. In response, it is important to note, again, that the fee paid to the University is not for the generation of a profit which would inure to the financial benefit of the University, but is solely to meet our fiduciary obligation to the State of California, its citizens, and our students and donors. This is a very different circumstance than that of a for-profit contractor. In our current contract the fee has been structured to be adjustable based on our performance in accordance with the DOE's contract reform initiatives. Consistent with our non-profit character and our desire to maximize the conduct of scientific programs, we use every dollar not required to meet our fiduciary obligations to the conduct of research at or for the DOE laboratories. We understand that the DOE has the ability to tailor fines to minimize the impact on science, but that impact would still be greater than it is now. With regard to the fact that regulatory agencies fine non-profits, we believe it is important to note that such agencies do not have the contract mechanisms currently available to the DOE such as adjustable fees, changes in the amount of programmatic work, annual performance ratings, fee at risk in special circumstances and partial or complete terminations. The potential loss of the contract is much more significant than any fine that would be assessed. Similarly, poor DOE contract ratings have a profound adverse effect on the reputation of the University and the laboratory staff, and may reduce the opportunity for future assignment of programmatic work. In addition there is the capacity in the DOE's various fee mechanisms for significant financial impact. The DOE's contract management tools are supplemented and reinforced at the laboratories in their strong culture of excellence in all endeavors and in the reflection of safety performance in in-

dividual performance assessments. We do not believe that adding fines would be a useful addition to this existing set of mechanisms.

The University believes that the DOE's Performance-Based Management initiative has proven to be a highly effective management improvement program. At the University of California-operated DOE laboratories we have seen substantial improvements in the management of our administrative and operational functions, including safety. Our record of improvement over the past six years is exemplary. In the past six years the DOE rating of our performance in these areas has gone from barely satisfactory to excellent while at the same time we have reduced the annual cost of these operations by well over \$100 million. Our procurement and property operations, once seen as unsatisfactory, are now at the level of the best in the DOE complex. The performance-based management system in our contract with the DOE promotes the commitment of laboratory management and employees to safety and ensures that there is an active driver for ongoing improvement in all aspects of laboratory operations.

SUMMARY

The future success of the University at both its campuses and the DOE laboratories requires that we have and maintain a reputation for excellence in all endeavors, including nuclear safety. The University employs a performance-based management system in conjunction with the DOE that conveys expectations, measures results and encourages everyone to identify problems and make corrections. The University-operated DOE laboratories have made tangible improvements in administration and operations, including environment, safety and health and are committed to make excellence a reality in all management aspects of the laboratories.

Improvement is not perfection. We have learned from these incidents and are taking aggressive measures to prevent similar problems from arising in the future.

The University concurs with the DOE's recommendation that Congress retain the statutory exemption and consider expanding it to all non-profit contractors and subcontractors. This recommendation is consistent with the public service nature of non-profit management of the DOE laboratories and the objective to keep costs of scientific research as low as practicable. Fees paid to DOE laboratory non-profit contractors are driven by statutory and policy changes over the last fifteen years. Non-profit organizations face the dilemma of either obtaining a fee or declining to operate national laboratories. Fees are paid for out of the funds appropriated by Congress for the conduct of scientific programs. The need for fee must be minimized to maintain the lowest practicable cost of conducting scientific research. There are an abundant set of contract management tools already available to the DOE to ensure contractor compliance and performance improvement. This is reinforced within the laboratories through the commitment to maintaining a reputation for excellence and individual safety performance assessments. These existing DOE and laboratory management tools should be used in lieu of PAAA fines and penalties.

Mr. UPTON. Thank you. Mr. Sussman.

TESTIMONY OF ARTHUR M. SUSSMAN

Mr. SUSSMAN. I thought I could start before you—

Mr. UPTON. Yes—

Mr. SUSSMAN. Thank you very much for inviting me to speak with you today regarding the important issues of worker safety at DOE nuclear facilities.

The University of Chicago, is a private, not-for-profit educational institution. They managed Argonne National Laboratory, a multi-purpose basic research and development laboratory whose mission includes nuclear research activities since its inception, in fact, prior to its inception dating back to the Manhattan project which had its origins underneath the stands of the University's football stadium where Enrico Fermi and his colleagues performed the first sustained chain reaction.

From its beginnings to the present time the University has successfully managed this national enterprise which controls nuclear hazards where control of nuclear hazards was and remains a primary responsibility.

Why has the University remained as a contractor for Argonne National Laboratory? The University's commitment to Argonne is a commitment to the national laboratory system and the importance of research university involvement in this vital segment of our national research infrastructure. We agree with the Calvin Commission—Calvin Commission that the national laboratories are important. The Department of Energy and its predecessors have contracted with different entities for the governance of the national laboratories, including a consortia of universities for-profit entities and individual universities.

We believe it is important in this mix of contractors that the major research universities of this country remain linked to the national laboratories. We believe we can bring to the laboratories the values of inquiry and excellence that define our institution; values which can, in addition to other things, be of assistance to the laboratories in recruiting some of the best scientists and engineers.

The University of Chicago is therefore part of the laboratory system not out of seeking financial gain, but because we believe it is part of the public service mission of the University. This is not about profit.

In 1988 and again in 1998 the University stated on the record that Price-Anderson indemnification which protects the public against nuclear risk is also vital to the University's ability to continue as a contractor. The trustees of the University of Chicago have an obligation under law to protect the University's endowment and to use it for the purposes for which it was donated, that is to support the core educational and research missions of the University. The contractual obligations the University undertakes with the Department of Energy as contractor for Argonne are ones that the University may not put its endowment at risk for.

Having said this, I want to now say with this testimony that this testimony is not about a refusal to be accountable. Nor is this nor should this be a question of safety and adversarial matter. The University takes its responsibilities for the safety of its workers seriously and believes that it should be and is held accountable for its stewardship of Argonne in a number of significant ways.

First and foremost, we put at risk our reputation, not a trivial matter to our community and not a trivial matter to our trustees.

Second, the University is contractually obligated to fulfill many safety and environmental responsibilities including full compliance with DOE's nuclear safety requirements under Price-Anderson.

As part of these obligations, the University has agreed to put its entire performance fee on the line. In addition the University is already, as has been pointed out earlier, subject to exposures beyond the fee. Removal of the exemption from civil penalties for violation of nuclear safety requirements under Price-Anderson would greatly add to these exposures without adequate protection for the University endowment.

So let me say again, this is not about a commitment to safety, or about accountability for the university's actions. Through its board of Governors for Argonne National Laboratory and in particular the safety committee as well as through the University's contract with DOE and procedures for implementing its require-

ments, the University clearly states and performs its commitment to worker and environmental safety.

What we want understood is that we believe that our ability to remain as a contractor for this laboratory is dependent up on the willingness of the Government to understand both the value that not-for-profit educational institutions can bring to the management of the labs as well as the fact that a not-for-profit can only take risks consistent with its trustees fiduciary obligations to its donor and to the management of its endowment.

Thank you very much and I'll be happy to answer any questions. [The prepared statement of Arthur M. Sussman follows:]

PREPARED STATEMENT OF ARTHUR M. SUSSMAN, VICE-PRESIDENT FOR ARGONNE NATIONAL LABORATORY, THE UNIVERSITY OF CHICAGO

Mr. Chairman and members of the Committee, thank you for the invitation to come before you to discuss the important issues of worker safety at the Department of Energy (DOE) nuclear facilities and DOE's enforcement of its nuclear safety requirements under the Price-Anderson Amendments Act of 1988.

The University of Chicago is the management and operating contractor for the Department of Energy's Argonne National Laboratory (Argonne). Argonne is a multiprogram basic research and development laboratory, whose mission includes certain research and development activities in the field of nuclear energy; approximately 5000 people work at Argonne, in locations in Illinois and Idaho. The University of Chicago, a not-for-profit educational institution, is directly responsible and liable for performance under the contract with the United States government, through DOE, for the management and operation of Argonne.

The University of Chicago has been the contractor for Argonne from its inception in 1946, and before that was the contractor with the Manhattan District for the project at the University campus during World War II that included the Fermi experiment, under the stands of our football field, that ushered in the nuclear age. Throughout this period, the University has acted in the belief that its stewardship of Argonne is a public service. The Laboratory has made and continues to make outstanding contributions to the nation's programs in many areas of science and technology.

Argonne's work encompasses a broad array of research, ranging from studies of the atomic nucleus to global climate change research to innovative ways to detect disease and develop medicines to treat them.¹ Argonne research has led to important discoveries and inventions, such as a new biological microchip technology that could dramatically speed the discovery of the genetic causes of disease, identification of infectious diseases and presence of biological warfare agents, and one day may help doctors diagnose illness and offer customized treatments based on an individual's genetic makeup. Other Argonne research has led to the development of an ultrahard coating that is many times slicker than Teflon, and that may have the lowest coefficient of friction of any carbon-based material in the world; promising applications include automobile and engine parts such as fuel injector components, oilless bearings, and spacecraft mechanisms. Another important recent invention,

¹Argonne's research encompasses four major categories: Basic Science, which seeks solutions to a wide variety of scientific challenges. This includes experimental and theoretical work in materials science, physics, chemistry, biology, high-energy physics, mathematics and computer science, including high-performance computing; *Scientific Facilities*, which are sophisticated research facilities, such as Argonne's Advanced Photon Source, designed, built and operated by the laboratory that would be too expensive or impractical for a single company or university to build and operate. They are used by scientists from Argonne, industry, academia, other national laboratories and agencies, as well as by scientists from other nations. The laboratory is also home to the Intense Pulsed Neutron Source and the Argonne Tandem Linear Accelerator System, among other facilities; *Energy Resources* programs, which help insure a reliable supply of efficient and clean energy for the future. Argonne scientists and engineers are developing advanced batteries and fuel cells, as well as advanced electric power generation and storage systems. They also are working to improve the safety and longevity of both American and Soviet-designed nuclear reactors; and, *Environmental Management*, which includes work on managing and solving the nation's environmental problems and promoting environmental stewardship. Research in this area includes alternative energy systems, environmental risk and economic impact assessments, hazardous waste site analysis and remediation planning, electrometallurgical treatment to prepare spent nuclear fuel for disposal, and new technologies for decontaminating and decommissioning aging nuclear reactors.

which arose out of research in the area of nuclear reactor safety, is an early warning expert system for monitoring the performance of sensors, equipment and plant processes that detects the smallest developing faults at the earliest possible time, thereby substantially enhancing system safety, availability, and operating efficiency for a wide range of applications in utilities, manufacturing, aerospace, telecommunications and other industries.²

In addition, visiting researchers working at Argonne's renowned User Facilities such as the Advanced Photon Source (APS) have made "breakthrough" discoveries in their fields; research demonstrating that x-ray analysis of human hair could become an early-warning test for the incidence of, and predisposition for, breast cancer recently was performed at the APS. Since 1990, Argonne researchers have worked with more than 600 companies, numerous federal agencies and other institutions in pursuit of broad-based scientific and technological objectives.

The University's commitment to Argonne is a commitment to the national laboratory system and the importance of research-university involvement in this vital segment of the national science infrastructure; as noted in the Galvin Report, "the laboratories" research role is a part of an essential, fundamental cornerstone for continuing [scientific] leadership by the United States."³ The University believes that it is important that the major research institutions of this country remain linked to the national laboratories. We bring to the laboratories the research and educational values of our institutions. We assist the laboratories in recruiting some of the best scientists and engineers to work at the national laboratories. We, therefore, are part of the laboratory system because we believe that it is a part of the public service mission of the University.

A cornerstone of the University's stewardship of Argonne always has been to fulfill Argonne's scientific mission in a manner that preserves and enhances the safety, health and environment of Argonne's employees and the public in all areas. The University remains committed to being directly accountable for these important responsibilities. To this end, given the unique safety and environmental challenges presented by scientific work involving nuclear activities, throughout the history of our management of Argonne we have been especially sensitive to addressing safety and environmental issues presented by such work. We firmly support the specific focus on nuclear safety issues provided by the Price-Anderson Act and DOE's accompanying nuclear safety requirements and rules under Price-Anderson. Under our contract with DOE, we are formally obligated to adhere to these requirements and rules, and follow specific policies and procedures for implementing them.

In addition, we have established a track record of implementing detailed policies, procedures (including those related to self-reporting of deficiencies or incidents), and independent oversight, audit and governance mechanisms by which risk of harm from nuclear and other activities is minimized, and errors or potential faults in our safety system are identified and remedied. The University's Board of Governors for Argonne, through its Safety and Environment Committee, performs special responsibilities in this regard; the Board's official policy statement proclaims that "worker and public safety is given the highest priority in the conduct of Laboratory activities including the safety of nuclear operations, and the protection of the environment."

Also, our performance-based contract with the Government for the management and operation of Argonne, which has been in place since 1995, requires us to meet a variety of detailed safety measures, rules and regulations; specifically included are the DOE's nuclear safety rules and requirements under the Price-Anderson Act. Failure to meet these, as well as other requirements, can result in significant adverse impact to the University's reputation (e.g., through the occurrence of an accident, and/or imposition of an Enforcement Action/Notice of Violation), the loss of all of the performance fee provided in the contract, and even the University's removal as the contractor for Argonne. While the University strives for continuous improvement in important areas of performance such as environment, safety and health, as well as science and technology, to date Argonne has performed very highly overall in these critical areas.

The Price-Anderson Act provides ample and prompt means with which to protect the public against nuclear risks, which in general are uninsurable, through its mandate that DOE provide complete indemnification in its contracts that involve the risk of a nuclear incident (Indemnification). The Indemnification allows Argonne to fulfill its mission involving nuclear activities, and allows the University to continue

²This, as well as the near-frictionless-carbon coating, inventions were each recipients of an 1998 "R&D 100" Award.

³See "Alternative Futures for the Department of Energy National Laboratories," Prepared by the Secretary of Energy Advisory Board Task Force on Alternative Futures for the Department of Energy National Laboratories, February, 1995, commonly referred to as "the Galvin Report".

to serve as the steward for Argonne. In addition to protecting the public from nuclear risks, the University, as a not-for-profit educational institution whose assets are dedicated to its mission of education and research, is thus able to protect its endowment and other assets from the special and distinct risks of the nuclear field. Indeed, such indemnification has been a fundamental condition of the University's undertaking nuclear activities at Argonne because the University's Trustees have a fiduciary obligation to protect the University's endowment and to use the endowment for the support of the educational and research missions of the University; the contractual obligations the University undertakes with DOE as contractor for Argonne are obligations for which the University may not put its endowment at risk.

When Congress extended Price-Anderson's Indemnification in 1988, it again recognized that DOE's ability to attract and retain high-quality not-for-profit educational institutions to serve as contractors for its research laboratories is fundamental to DOE's ability to fulfill its mission. It did this by exempting certain named not-for-profit educational institutions from civil penalties for violations of nuclear safety requirements for as long as these entities served as contractors of these facilities,⁴ because it recognized that such entities do not undertake to manage DOE facilities for profit, do not receive fees on the basis of risk-taking analysis, and cannot risk their endowments for undertaking the special risks inherent in the nuclear field.

We recently have completed negotiations with DOE for a five-year extension to the contract for the management and operation of Argonne, to begin on October 1, 1999. Under the contract, the University will continue to be responsible for specific performance requirements in many areas, including the implementation of, and adherence to, a system of integrated safety management, nuclear safety requirements under Price-Anderson, and the exposure to penalties (including placing all fee at risk) and liabilities. We believe that the contract's terms and the University's record of running Argonne demonstrate that adequate and appropriate mechanisms are in place to ensure the highest possible level of worker and public safety, and to minimize risks, with respect to nuclear and other activities carried out at Argonne.

The new contract and its predecessor already have significantly increased the financial risk facing the University due to the imposition of certain statutory, regulatory, and contractual liability provisions; in fact, at present the University's fees received from the operation of Argonne already are less than the costs and risks undertaken by the University in operating Argonne. This contract assumes continuation of the Price-Anderson Indemnification and the continuation of an exemption from civil penalties. Any change in the rules in this regard would cause the University to reconsider whether it can continue its stewardship of the contract for the management and operation of Argonne.

The University of Chicago continues to strongly support the implementation and enforcement by DOE of its nuclear safety requirements under the Price-Anderson Act; we believe that the most effective means by which to do so are through mechanisms currently available to, and utilized by, the Department. In addition, the University supports extension of the Price-Anderson Indemnification, and continuation of the exemption of not-for-profit educational institutions from civil penalties (See January 30, 1998 The University of Chicago Comments on DOE Notice of Inquiry Concerning Preparation of Report to Congress on the Price-Anderson Act, attached). The University believes that the nation's vital science and technology mission continues to benefit from having not-for-profit educational institutions such as the University serve as stewards of its national laboratories: Any changes to the rules with respect to Price-Anderson should not act to discourage nonprofit educational entities from operating these laboratories.

⁴ See Senate Report No. 100-70, p.23.

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January 30, 1998

U. S. Department of Energy
Office of General Counsel
GC-52
1000 Independence AV. SW
Washington, DC 20585

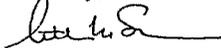
Re: Notice of Inquiry concerning preparation of report to
Congress on the Price-Anderson Act

Ladies and Gentlemen:

The University of Chicago, contractor for Argonne National Laboratory, believes that extension of the Price-Anderson Indemnity in Management and Operating contracts is essential to the continuation of the DOE's programs involving nuclear facilities and materials. We could not continue as contractor for Argonne National Laboratory without such protection. We therefore urge the Department to report favorably to Congress on the extension of the indemnity provisions in its report due August 1, 1998. We hope the DOE will recommend a lengthy extension, and suggest twenty-five years.

Attached are our responses to the specific questions in your Notice of Inquiry, dated December 31, 1997.

Sincerely,



Arthur M. Sussman
Vice President

cc: Dean E. Eastman

THE UNIVERSITY OF CHICAGO
Operator of Argonne National Laboratory

Comments on the Department of Energy
Notice of Inquiry Concerning Preparation of Report to
Congress on the Price-Anderson Act
January 30, 1998

Following are responses to the questions in the Notice of Inquiry published in the Federal Register on December 31, 1997:

1. *Should the DOE Price-Anderson indemnification be continued without modification?*

The extension of Price-Anderson indemnification is critically important to the continuation of the DOE program respecting nuclear materials and facilities. We recommend several changes in the Act in answer to succeeding questions, but a continuation of the indemnity as is would be preferable to any changes that might endanger the Act's basic scheme of protection of the public.

2. *Should the DOE Price-Anderson indemnification be eliminated or made discretionary with respect to all or specific DOE activities? If discretionary, what procedures and criteria should be used to determine which activities or categories of activities should receive indemnification?*

We strongly oppose elimination of the indemnification. The indemnity is intended to protect the public and therefore it should not be discretionary wherever the public is at risk.

3. *Should there be different treatment of "privatized arrangements"?*

We express no opinion on this question inasmuch as the Argonne Contract is a "management and operating" contract.

4. *Should there be any change in the current system under which DOE activities conducted pursuant to an NRC license are covered by the DOE Price-Anderson indemnification, except in situations where the NRC extends Price-Anderson coverage under the NRC system? ...*

We believe the present arrangement makes good sense and see no reason to change it.

5. *Should the DOE Price-Anderson indemnification continue to provide omnibus coverage, or should it be restricted to DOE contractors or to DOE contractors, subcontractors, and suppliers? Should there be a distinction in coverage based on whether an entity is for-profit or not-for-profit?*

The basic purpose of the indemnification is to protect the public. For this reason it would be unwise to limit the indemnification to contractors, subcontractors and suppliers; similarly it would be

unwise to provide different coverage for organizations depending on their status as for-profit or not-for-profit.

6. If the DOE indemnification were not available for all or specified DOE activities, are there acceptable alternatives? Possible alternatives might include Pub. L. No. 85-104, section 162 of the AEA, general contract indemnity, no indemnity, or private insurance. To the extent possible discussing alternatives, compare each alternative to the DOE Price-Anderson indemnification, including operation, cost, coverage, risk, and protection of potential claimants.

The difficulty with all of the proposed alternatives is that they do not adequately protect the public. As to individual proposed alternatives, we have the following comments:

- 85-804 does not provide the equivalent coverage for contractors and their subcontractors and suppliers; there are exceptions to coverage. For certain activities outside the United States which are not covered by Price-Anderson, 85-804 has been an acceptable alternative, and the University has received such coverage. In these situations the Government interest is not specifically to protect the public outside of the United States, who would come under the laws and protection of their home countries, but rather to enable U.S. contractors to perform work outside of the country which furthers the interests of the United States and which otherwise could not be performed by American companies because of the excessive risks of liability for a catastrophic incident. While there may be a reason for the DOE to treat requests for indemnity outside of the country on a contractor by contractor basis, requiring individual applications for indemnities on domestic activities would be administratively burdensome, arbitrary, and, above all, would not assure protection of the American public.
- Section 162 of the Atomic Energy Act authorizes the President to exempt any specific action of the DOE in a particular matter from the provisions of law relating to contracts when the President determines that such action is essential in the interest of the common defense and security. Having to apply to the President for an action assures that this would be invoked rarely, and, we understand that the section has been used only in a few instances. Further, the criteria for use would not fit many situations where Price-Anderson is used. And the section would only be useful in protecting a contractor from certain risks; it would not provide complete protection for the public.
- General contract indemnities are subject to the availability of funds. Because of the enormous potential liabilities in a catastrophic incident, these would not provide the protection needed for contractors to engage in extra-hazardous work involving nuclear energy, and would not provide protection for the public.
- Private insurance is not obtainable for the full extent of risk involved in a catastrophic incident. For the lower level of coverage that might be obtainable through insurance, DOE has been reluctant to support the very substantial cost of private insurance, a cost that would be charged to the contracts.

It is clear that Price-Anderson is the only indemnification that protects the public and enables contractors, subcontractors and vendors to undertake extra-hazardous work in the nuclear field in the national interest. Thus far Price-Anderson has provided this protection at minimum cost to the Government.

7. To what extent, if any, would the elimination of the DOE Price Anderson indemnification affect the ability of DOE to perform its various missions? Explain your reason for believing that performance of all or specific activities would or would not be affected?

DOE performs its mission programs through contracts. Without Price-Anderson indemnification contractors would be unwilling to perform work that entails the risk of a catastrophic incident. No company or non-profit institution is in a position to risk its continued existence by undertaking risk of loss of its assets, which could put any — organization in bankruptcy.

Further, the existence of Price-Anderson indemnification has enabled DOE to carry on its mission activities without the concern that the public is unprotected from the potential economic cost of widespread damage due to nuclear incidents. DOE mission activities that would be severely hampered without Price-Anderson are those where nuclear materials are involved in substantial quantities, reactor and other facilities with the high potential for damage due to the properties of nuclear materials, and increasingly, sites and operations where there is nuclear waste.

8. To what extent, if any, would the elimination of the DOE Price-Anderson indemnification affect the willingness of existing or potential contractors to perform activities for DOE? Explain your reasons for believing that the availability of goods and services for all or specific DOE activities would or would not be affected?

The University of Chicago would be unwilling to continue as contractor for Argonne National Laboratory without a continuation of the Price-Anderson indemnity. We believe that all other management and operations contractors currently covered by Price-Anderson would come to a similar conclusion. Without Price-Anderson, DOE would be unable to obtain responsible contractors for its nuclear facilities. On the other hand, we believe DOE could continue to find contractors for non-nuclear facilities, where Price-Anderson coverage is not applicable.

9. To what extent, if any, would the elimination of the DOE Price-Anderson indemnification affect the ability of DOE contractors to obtain goods and services from subcontractors and suppliers? Explain your reason for believing that the availability of goods and services for all or specific DOE activities would or would not be affected?

Without Price-Anderson, prime contractors would be unable to obtain goods and services from companies and institutions that are

aware of the risks of the nuclear business. This would include all organizations sophisticated enough to be aware that they could suffer catastrophic losses that could endanger their existence if they were held liable for any nuclear incident.

10. *To what extent, if any, would the elimination of the DOE Price-Anderson indemnification affect the ability of claimants to receive compensation for nuclear damage resulting from a DOE activity? Explain your reasons for believing the ability of claimants to be compensated for nuclear damage resulting from all or specific DOE activities would or would not be affected?*

Unlike Price-Anderson, where the public interest is to assure that all claimants are compensated, without Price-Anderson, claimants would have to prove liability on the part of companies and organizations which are able to pay claims and judgments. If they are not protected by Price-Anderson, contractors and other defendants would vigorously contest liability and damages. The defendants would not be obliged to waive defenses, and it would be in their strong economic interest to assert all defenses. With the ensuing costs of litigation and delays some worthy claimants would never be compensated for catastrophic losses. Moreover, aggregate claims for losses in a catastrophic accident could overwhelm the resources of any organization or group of organizations.

11. *What is the existing and the potential availability of private insurance to cover liability for nuclear damage resulting from DOE activities? What would be the cost and the coverage of such insurance? To what extent, if any, would the availability, cost and coverage be dependent on whether the activity was a new activity or an existing activity? If DOE Price-Anderson indemnification were not available, should DOE require contractors to obtain private insurance?*

Existing private insurance would not be adequate to protect against the extraordinary hazards of nuclear activities. The aggregate amounts would be inadequate by orders of magnitude and insurance companies would not be prepared to waive defenses and provide the other protections of the public that are accorded by Price-Anderson.

12. *Should the amount of the DOE-Price Anderson indemnification for nuclear incidents for all or specified DOE activities inside the United States (currently approximately \$8.96 billion) remain the same or be increased or decreased?*

The logic for the present number is that it is the same amount applied for commercial reactors licensed by the NRC. We believe the present method of determining the aggregate number is appropriate, but, in any event, the amount should not be decreased.

13. *Should the amount of the DOE Price-Anderson indemnification for nuclear incidents outside the United States (currently \$100 million) remain the same or be increased or decreased?*

The amount is grossly inadequate and should be increased. In

addition, the definition of incidents covered abroad should be expanded, as we have noted below in answer to question 20.

14. Should the limit on aggregate public liability be eliminated? If so, how should the resulting unlimited liability be funded? Does the rationale for the limit on aggregate public liability differ depending on whether the nuclear incident results from a DOE activity or from an activity of a NRC licensee?

The limit on aggregate liability, which for contractors corresponds to the maximum amount of financial protection covered by the Act, provides a ceiling on the Government's commitment, a useful element of a responsible policy. The Act provides that Congress will review any situation where the aggregate damages exceed the limit and take action to meet the claims resulting from such a major catastrophe. We see no compelling reason to reopen this question in the deliberations over extension of the Act. Further there would be no convincing rationale to treat DOE activities differently from NRC licensees in this regard.

15. Should the DOE Price-Anderson indemnification continue to cover DOE contractors and other persons when a nuclear incident results from their gross negligence or willful misconduct? If not, what would be the effects, if any, on (1) The operation of the Price-Anderson system with respect to the nuclear incident, (2) other persons indemnified, (3) potential claimants and (4) the cost of the nuclear incident to DOE? To what extent is it possible to minimize any detrimental effects on persons other than the person whose gross negligence or willful misconduct results in a nuclear incident? For example, what would be the effect if the United States government were given the right to seek reimbursement for the amount of the indemnification paid from a DOE contractor or other person whose gross negligence or willful misconduct causes a nuclear incident?

In answer to the first question, the indemnity should continue to cover DOE contractors in those situations. The protection of the public demands that there be a defendant who is liable regardless of fault. The United States should not be given the right to seek reimbursement from a management and operations contractor of the amount of indemnification paid. This would contradict the basis for such contracts, under which contractors are engaged to perform the work without the risk of liability for catastrophic accidents. Price-Anderson does create mechanisms to penalize contractors that disregard safety considerations through civil and criminal penalties.

16. Should the DOE Price-Anderson indemnification be extended to activities undertaken pursuant to a cooperative agreement or grant?

If DOE supports work which necessarily involves risk of a nuclear incident, we believe the Price-Anderson indemnity should apply, for the protection of the public. To the extent a cooperative agreement or grant is used as a mechanism by DOE to accomplish its missions with respect to nuclear research, the extension would clearly be warranted.

17. *Should the DOE Price-Anderson indemnification continue to cover transportation activities under a DOE contract? Should coverage vary depending on factors such as the type of nuclear material being transported, method of transportation, and jurisdiction through which the material is being transported?*

So long as it is necessary for contractors to transport nuclear materials to perform their work and such transportation involves risk of a nuclear incident, the indemnification should apply to such transportation.

18. *To what extent, if any, should the DOE Price-Anderson indemnification apply to DOE clean-up sites? Should coverage be affected by the applicability of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) or other environmental statutes to a DOE clean-up site?*

For the protection of the public, the indemnification should apply to clean-up sites. The applicability of CERCLA and other environmental statutes should not affect the need for protection of the public afforded by Price-Anderson.

19. *To what extent, if any, should the DOE Price-Anderson indemnification be available for liability resulting from mixed waste at a DOE clean-up site?*

To the extent that nuclear hazards are involved.

20. *Should the definition of nuclear incident be expanded to include occurrences that result from DOE activity outside the United States where such activity does not involve nuclear material owned by, and use by or under contract with the United States? For example, should the DOE Price-Anderson indemnification be available for activities of DOE contractors that are undertaken outside the United States for purposes such as non-proliferation, nuclear risk reduction or improvement of nuclear safety? If so, should the DOE Price-Anderson indemnification for these additional activities be mandatory or discretionary?*

In addition to the limited situations currently in the Act, we believe the definition of nuclear incident should be expanded to include occurrences outside the United States that result from DOE activity. DOE has important mission activities in non-proliferation, nuclear risk reduction and improvement of nuclear safety. DOE's activities in these areas, as well as domestic nuclear activities, are performed by contractors. Contractors have been unwilling to accept the risks of these outside-United States activities without indemnity against the risks of liability for catastrophic losses from nuclear disasters. DOE has acknowledged the need for such indemnification by granting P.L. 85-804 indemnities on a case by case basis for some of these risks, particularly nonproliferation and nuclear risk reduction. However, in the important area of improvement of nuclear safety, DOE has refused 85-804 protection, hence American contractors have been very limited in what they are willing to do to help other countries with their reactor safety programs. Some protection for contractors

may come through other countries and treaty provisions, but such protection is not deemed adequate.

Extending Price-Anderson indemnification in these areas would serve the policies of the United States and avoid the necessity for case by case consideration of indemnities. It may be advisable to consider the criteria and terms and conditions of such indemnification since the circumstances are different. The primary concern for indemnification in these situations is to enable contractors to conduct business abroad which is in the interests of the United States and bears the risk of catastrophic damage. In general we would suggest that some form of Price-Anderson indemnification should be granted wherever DOE supports or sanctions activities abroad by its management and operating contractors that bear the risk of a nuclear incident.

21. *Is there a need to clarify what tort law applies with respect to a nuclear incident in the United States territorial sea? Should the applicable tort law be based on state tort law?* --

Price-Anderson should apply with respect to a nuclear incident in the United States territorial sea. The University expresses no opinion on the tort law that should apply in this situation.

22. *Should the definition of nuclear incident be modified to include all occurrences in the United States exclusive economic zone...*

The definition of nuclear incident should be modified to include all occurrences in the United States exclusive economic zone.

23. *Should the reliance of the Act on state tort law continue in its current form?...*

The University finds the present rules satisfactory and has no suggestions to offer for modification.

24. *Should the Act be modified to be consistent with the legal approach in many other countries under which all legal liability for nuclear damage from a nuclear incident is channeled exclusively to the operator of a facility on the basis of strict liability? If so, what would be the effect, if any, on the system of financial protection, indemnification and compensation established by the Act?*

Practically speaking, the present system probably works out the same as that in which the operator is the sole liable party, with strict liability. Should the Congress decide to move in that direction, the public and contractors would still be protected. Since such a proposal might be considered a radical change in concept without genuine value added, we fear its consideration would detract from the basic purpose of extending the Act.

25. *Should the procedures in the Act for administrative and judicial proceedings be modified? If so, describe the modification and explain the rationale?*

We are aware of no reasons to change the procedures in the Act.

26. *Should there be any modification in the types of claims covered by the Price-Anderson system?*

Price-Anderson indemnification is most essential for catastrophic incidents. The scheme of coverage in the Act was developed carefully over a period of years and there does not seem to be a compelling reason to change it.

27. *What modifications in the Act or its implementation, if any, could facilitate the prompt payment and settlement of claims?*

The University has no suggestions to offer on this question.

28. *Should DOE continue to be authorized to issue civil penalties pursuant to section 234A of the AEA? Should section 234A be modified to make this authority available with respect to DOE activities that are not covered by the DOE Price-Anderson indemnification? Should DOE continue to have authority to issue civil penalties if the Act is modified to eliminate the DOE Price-Anderson indemnification with respect to nuclear incidents that result from the gross negligence or willful misconduct of a DOE contractor?*

Inasmuch as The University of Chicago is exempt from civil liabilities under the Act, the University has no comment on this set of questions.

29. *To what extent does the authority to issue civil penalties affect the ability of DOE to attain safe and efficient management of DOE activities? To what extent does this authority affect the ability of DOE and its contractors to cooperate in managing the environment, health and safety of DOE activities through mechanisms such as integrated safety management? To what extent does this authority help contain operating costs including the costs of private insurance if it were to be required?*

The University is not subject to civil penalties, so it does not have an opinion on this set of questions. However, the University points out that it has very strong incentives, reinforced by contract provisions, to carry out its responsibilities in the public interest in maintaining the safe and efficient management of the activities at Argonne National Laboratory, and to cooperate with DOE in this regard.

30. *Should there continue to be a mandatory exemption from civil penalties for certain nonprofit contractors? Should the exemption apply to for-profit subcontractors and suppliers of a nonprofit contractor? Should the exemption apply to a for-profit partner of a nonprofit contractor?*

The mandatory exemption for civil penalties should be retained for nonprofit contractors. The logic of extending this exemption to for-profit subcontractors and suppliers is that this enables there to be one rule for the contract operation. Similar logic would apply to the

for-profit partner of a nonprofit partner, but, since the University is the sole contractor for Argonne it takes no position on this question.

31. *Should DOE continue to have a discretionary authority to provide educational nonprofit institutions with an automatic remission of civil penalties?*

We believe it would be fairer to provide for automatic remission of civil penalties for such institutions in the Act, rather than to require action by the DOE to provide each such remission on a case by case basis.

32. *Should the maximum amount of penalties be modified? If so, how?*

We have no comment on this question.

33. *Should the provisions in section 234Ac, concerning administrative and judicial proceedings relating to civil penalties be modified? If so, how?*

We have no comment on this question.

34. *Should there be any modification in the authority in section 223.c. to impose criminal penalties for knowing and willful violations of nuclear safety requirements by individual officers and employees of contractors, subcontractors and suppliers covered by the DOE Price-Anderson indemnification? Should this authority be extended to cover violations by persons not indemnified?*

The University questions that part of section 223.c. which would make criminal a violation of a safety regulation which "if undetected, would have resulted in a nuclear incident". We believe this is an impermissively vague standard for a criminal statute.

Mr. UPTON. Thank you. Mr. Card, welcome.

TESTIMONY OF ROBERT G. CARD

Mr. CARD. Thank you. Mr. Chairman and members of the subcommittee, my name is Bob Card, President and CEO of Kaiser-Hill Company. We operate the Rocky Flats Environmental Technology Site.

Kaiser-Hill's mission at Rocky Flats is to safely close the site the year 2006. Accomplishing this mission will: No. 1, eliminate worker and public risks from the sites many hazards; No. 2, make over 6,000 acres of prime suburban Denver property available for other uses; No. 3, save taxpayers over \$400 million per year of basic future operating costs; No. 4, increase the nation's safeguards and security posture by moving weapons components and weapons grade material to more suitable long-term storage; and No. 5, reduce the Government's safety, environmental and natural resources liability.

Safety is a core component of Kaiser-Hill's strategy for closing Rocky Flats. It's part of our business strategy to position for other nuclear work in a very safety-conscious industry. Additionally because we have a stop work for any safety condition culture at Rocky Flats coupled with aging facilities and safety infrastructure,

safety is the key enabler to allow us to accomplish our 2006 closure date and maximize or incentive fee.

Through our contract DOE can retain part or all of our incentive fee, even terminate our contract for safety shortcomings, many of which do not have to result in actual injuries. And they actually have implemented that portion of our contract to Rocky Flats.

The Defense Nuclear Facility Safety Board, another—we view them as a regulator, although I guess technically they are not, can refuse startup permission for key activities and issue embarrassing letters pointing out safety concerns. And by the way, if we can't startup, then we don't earn any fee.

Last, but not least, DOE can embarrass and fine us through enforcement of Price-Anderson rules. I believe that the results of our safety first strategy have been very impressive. We dramatically reduce public and worker risks and exposure by eliminating more than 80 percent from the clean up schedule and work effort. After delivering more than 30 million work hours, Kaiser-Hill has never experienced a single debilitating injury or radiological or chemical exposure above regulatory limits. We made significant improvements in key safety performance measures while making step change increases in productivity and I included some of those in my written testimony.

DOE headquarters assessments before and after Kaiser-Hill's takeover validate improvements in the safety culture and infrastructure. Price-Anderson has been a useful component in our safety improvement. It provides a structured approach to identify and address safety issues and their deep underlying causes well before they can become a significant event.

It's financial and image impact is sufficient to cause senior executive management to personally engage in important safety issues. And importantly we believe that Price-Anderson along with the Defense Board provides our community and stakeholders comfort that a tough regulator is watching. This in turn helps build support for us engaging in the high-risk, non-routine work required to close the site.

And at Rocky Flats, I want to comment that we believe Price-Anderson has been administered fairly and politically. From our perspective we would recommend that the Price-Anderson status quo be continued with two caveats. One, while we're impressed with the management of the program to date, there is a lot of flexibility in there for the program to become politicized and bureaucratized under different future leadership and we would like to see that tightened up.

Second, we believe that QA rule provides all the enforcement leverage needed and no further rules are necessarily unless they are designed to streamline work and make it safer.

As Dr. Michaels testified, DOE orders already contain all the necessary language. Although we wouldn't be opposed to rules and in fact, streamline the work. We find that safety and complexity are inversely related and the more targeting concise regulations the better.

Thank you.

[The prepared statement of Robert G. Card follows:]

PREPARED STATEMENT OF ROBERT G. CARD, PRESIDENT AND CEO, KAISER-HILL COMPANY, LLC

Mr. Chairman and Members of the Subcommittee, my name is Bob Card, and I am the President and Chief Executive Officer of Kaiser-Hill Company, the management and integration (M&I) contractor at the Rocky Flats Environmental Technology Site (RFETS, or "the site") near Denver, Colorado. Kaiser-Hill has managed Rocky Flats since 1995, when it was awarded one of the Department of Energy's (DOE's) first significant performance-based contracts.

Kaiser-Hill's efforts at Rocky Flats are familiar to the Subcommittee. As you know, when we first arrived at the site, it was estimated that the cleanup effort would not be completed until the year 2060 at a cost of over \$37 billion. With an aggressive project planning and management approach, we are in the process of slashing that estimate and transitioning the site to a planned 2006 closure at a cost of under \$7 billion. This will save U.S. taxpayers more than \$30 billion dollars, and will result in a more timely and responsible cleanup for the communities surrounding Rocky Flats. As you will see from my later testimony, it also provides a safer cleanup of the facility.

The matter before the Subcommittee today is worker safety at DOE facilities, and the impact of Price-Anderson Act requirements on our safety culture. In order to fully understand how Price-Anderson fits into our regulatory framework, it is important to have some background on Kaiser-Hill's approach to safety at Rocky Flats.

Kaiser-Hill's Business Philosophy

First of all, we have not just a legal responsibility, but a *moral and ethical responsibility* to provide a safe environment for our workers. RFETS has some of the most hazardous environmental problems in the United States. Even in the midst of these dangers, however, I can confidently say that we do not have the most hazardous working *conditions* in the nation. Our record is the proof of this: it shows that we are safe, and we are getting safer. For our workers, the price of failure can be a high one. For that reason, it is the responsibility—the obligation, even—of each individual employee to stop any work activity he or she feels is unsafe. While this does produce a higher-than-average number of work stoppages, it is far easier to rethink the work logic of an activity at the front end than to undo the damage of a job gone wrong.

Safety is also a core *business value* of Kaiser-Hill. The structure of our contract with DOE—its emphasis on performance and production—demands a strong commitment to safety. Nuclear and radiological safety issues account for a significant percentage of down time at Rocky Flats. If our safety program is not operating properly, we do not work. If we are not working, we cannot perform. If we cannot perform, we are not earning the contract incentives needed to make Rocky Flats a viable business enterprise. I am pleased to be able to tell you that our commitment to safety is paying off. We are accomplishing much at Rocky Flats, and taxpayers are saving a lot of money because of it.

Kaiser-Hill also needs a strong safety posture to maintain its role in the nuclear industry. If we are not operating safely, we will not attract the type of high-quality, qualified people we need to make our business work at Rocky Flats. As we hope to finish our cleanup of the site by 2006, we need an impeccable safety record if we are to have any hope of succeeding with other projects and ensuring our business viability in the future.

In short, it's pretty simple. Safety is one of the most important keys to productivity at Rocky Flats and Kaiser-Hill's success as a business. If we don't operate safely, we don't operate at all.

The Challenge at Rocky Flats

The Subcommittee is already familiar with the magnitude of what we are trying to accomplish at Rocky Flats. As I testified last month, we are fairly fortunate not to have technological hurdles of the proportions seen at some other DOE sites. However, this should not detract from the challenges we face at RFETS. When we started the Closure Project, Rocky Flats had more bulk plutonium than any other site in the DOE complex. We have over 500,000 square feet of contaminated building space in production buildings, about 80 contaminated soil sites, and about three million total square feet of office and industrial space.

Accomplishing a 2006 closure requires us to properly execute an immense amount of work over the next seven years. We have to decontaminate and decommission the site's nuclear facilities—an enormous undertaking that requires us, among other things, to drain and stabilize a total of 26,500 liters of plutonium and highly enriched uranium solutions, stabilize and repackage a total of 106,000 kilograms of plutonium residues, and ship all of the site's inventory of special nuclear materials

to other locations in the DOE complex. We must demolish all of RFETS's 700 buildings, and conduct environmental restoration of the site's contaminated areas. And we must conduct every one of these activities safely. I could go on about the challenges we face in shutting down Rocky Flats, but I think this rough sketch is sufficient to put the importance of our safety strategy into context.

Kaiser-Hill's Safety Strategy

Kaiser-Hill takes a *preventative approach* to safety, attempting to anticipate problems before they become problems. One of the most important elements of this is the implementation of Integrated Safety Management (ISM) at the site. It involves five steps that seem like simple common sense—and they are—but which still require a conscious commitment to execute properly. First, we define the scope of work to be completed, whether it is the entire Rocky Flats Closure Project or an individual work activity. Second, we identify and analyze the hazards we expect to encounter during the work. Third, we identify and implement controls to mitigate those hazards. Only at that point do we move to step four: actually performing the work. Fifth, and very important from an efficiency and productivity standpoint, we provide feedback to apply to future activities.

With ISM, we are hopefully identifying problems and hazards before they have a chance to negatively impact our work at the site. When problems do arise, we can take those lessons learned, incorporate them into our future efforts, and avoid complications and contingencies with our remaining work.

Kaiser-Hill also takes an *honest approach* to safety. We need an open, truthful, blunt, and communicative process from bottom to top—from the radiation worker on the floor through every management level—in order to accurately assess the work we are doing and whether these activities are being conducted safely. Again, we operate this way for two reasons: first, because our workers deserve it, and, second, because it just makes good business sense.

Ultimately, Kaiser-Hill is responsible for all aspects of site safety. We are the ones responsible for maintaining a safe operating environment, both for our workers and the surrounding communities. We expect to be held accountable for our safety performance. On the one side of the coin, we recognize that we should be negatively affected when our safety performance does not match regulatory and statutory requirements. On the other side, we also expect to be rewarded when our safety performance exceeds expectations and allows the site's cleanup work to progress more quickly than anticipated.

The Results at Rocky Flats

Kaiser-Hill has made significant strides in safety at Rocky Flats since we began managing the site in 1995. I can sum up these improvements with the help of a few of our safety statistics. Figure 1 shows the Rocky Flats total recordable case rate, which is a standard Occupational Safety and Health Administration (OSHA) measurement. This measures the number of recordable injuries per 200,000 hours of work. As you can see, we have reduced our recordable case rate from about five in 1995 to just over three today—well below the national construction industry average of almost ten. Another OSHA indicator, the lost workday case rate, is shown in Figure 2. This measurement is a subset of the recordable case rate, and indicates the number of cases resulting in lost workdays per 200,000 hours. Again, we have shown a steady reduction since 1995, and we are well below the construction industry average in lost workdays.

We also track a number of safety indicators on our own at Rocky Flats. The next three figures are self-assessments Kaiser-Hill uses to track the health of its safety regime. Figure 3 shows the number of radiological infractions at the site by month. A radiological infraction as charted here can be as simple as forgetting to properly sign into a controlled area, or failing to wear a dosimeter in a radiological area. It still reflects an improper procedure and a failed attention to detail. We view these infractions as precursors to the potential for more serious incidents—our canary in the coal mine.

Figure 4 is another self-assessment we have at Rocky Flats, and measures our nuclear licensing infractions. These point to possible actions that would violate the safety requirements of our authorization basis—DOE's version of the Nuclear Regulatory Commission operating license. From a Kaiser-Hill standpoint, these are the most troubling violations we have at the site, and the ones we hope to keep to a minimum.

Finally, Figure 5 measures our criticality safety infractions. Again, this is another self-assessment Kaiser-Hill tracks at Rocky Flats. It does not indicate that a criticality occurred—in fact, during Rocky Flats' entire existence, there has never been an actual criticality event at the site. Instead, this tracks the precursor events and

conditions that, if left unchecked and combined with other failures, could have eventually led to a criticality event.

All in all, each of these major indicators shows a steady trend of improvement. These gains are even more impressive because the level of work, and the possibility of exposures to workers, has increased dramatically during that time. Our work activity has been increasing, and our incident rate per work unit has been decreasing steadily. As the Subcommittee knows, Kaiser-Hill recently submitted its proposal to achieve a 2006 closure at the site. From a safety standpoint, this impressive schedule compression would provide major reductions of total risk for both our workers and the surrounding communities, as shown in Figure 6.

These improvements have been validated by DOE's Office of Environment, Safety and Health (EH), in its assessments of safety at Rocky Flats. EH conducted comprehensive evaluations of the site just before our takeover in March 1995 and again in May of this year. In its May 1999 report, *Focused Safety Management Evaluation of the Rocky Flats Environmental Technology Site*, EH found that "[t]he improvements in the RFETS safety management program since the 1995 Oversight evaluation is notable. . . . Much of the progress in the past four years can be attributed to the attention and leadership by managers at all levels. . . ." Three of the noteworthy practices it identified were our strong subcontractor accountability mechanisms, our site-wide work planning and control approach, and our lessons-learned database. These tools, along with others, are important components of achieving continued improvement in our safety management efforts.

Price-Anderson and Kaiser-Hill

The Department of Energy's judicious application of Price-Anderson enforcement, as set forth in 10 CFR 820 Appendix A, has been an important ingredient in safety improvement at Rocky Flats. At the site, Price-Anderson is viewed not as a regulatory burden, but as a problem detection and process improvement program. We view the self-identification, reporting, and corrective action program of Price-Anderson as an important tool in maintaining a safe work place at Rocky Flats. As such, the message of Price-Anderson enforcement has been well received at Rocky Flats.

This is primarily due to the manner in which the policy is applied at Rocky Flats. It is not a dogmatic or control-oriented regulatory hammer, but is truly aimed at safety improvement. Price-Anderson's basis in sound nuclear safety principles promotes a fair process designed to maximize a safe working environment. If I am presenting a picture of Price-Anderson as a toothless tiger, however, let me quickly eliminate that impression. We take the requirements of Price-Anderson very seriously, and recognize that it has the ability to quickly shut down operations at Rocky Flats and result in substantial financial penalties for Kaiser-Hill. If the positive incentives of our performance-based contract are the carrot to accomplishing the safe closure of the site, Price-Anderson is certainly one of the sticks which *requires* us to conduct a safe and responsible cleanup.

The Price-Anderson enforcement process is very comprehensive compared to other enforcement mechanisms. It looks at underlying factors in its enforcement investigations. The enforcement focus of Price-Anderson is the identification and correction of programmatic failures, and no credit is given for responding to individual incidents which collectively indicate larger programmatic issues. This has helped to focus our senior management on important issues that were not receiving appropriate priority. As a result, Kaiser-Hill has instituted major overhauls in our safety approach. For example, problem management does not simply examine the event of the moment, but expands beyond those borders to investigate deep causal factors that could have contributed to the condition. As a result, ensuring the effectiveness of our corrective actions has become much more significant, and we have heightened the accountability of our organization—especially the lower tier—to be responsible for identifying and exposing safety problems.

Throughout Rocky Flats, I can say that we have experienced little unjustified cost due to the Price-Anderson enforcement process. The process has identified real gaps in our safety approach, and the cost of rectifying these problems was a necessary expense not just from a regulatory standpoint, but from an operational standpoint. Since taking over the Rocky Flats site in 1995, Kaiser-Hill has received three enforcement actions under Price-Anderson—including two fines—and in each case, unfortunately, the action was well deserved.

For Kaiser-Hill, a regulatory enforcement action—even with no fine—is a major concern as it cuts to the core of our ethical and moral responsibility to our workers and to our competitive strategy: the ability to efficiently, responsibly, and safely accelerate the cleanup of RFETS. We go to great lengths to attempt to stay out of compliance space, a concept we call "regulatory margin." Regulatory margin requires us to go above and beyond the call of duty in matters of regulatory compliance. Rather

than skirting right at the edge of compliance, we would prefer to operate with some breathing space between our actual performance and the requirements of our regulators. Price-Anderson requirements help us establish the thresholds for events and trends from a regulatory standpoint, providing a real-time screen for nuclear and radiological safety performance. This, in turn, allows Kaiser-Hill to establish bounds for its own expectations of performance, which then translates into the regulatory margin we hope to accomplish.

One important component of this effort is the timely self-reporting of violations and declining trends in safety. Self-reports show that we understand the facts and conditions at the site and are willing to face up to them—a necessary first step in correcting problems. Timely reporting may not prevent violations, but it does ensure that we and our regulators are aware of problem situations and taking steps to fix them.

Price-Anderson's Quality Assurance Role

Price-Anderson has a dual purpose in ensuring confidence in the activities we are undertaking at Rocky Flats. First, and most important, is the validation Price-Anderson provides for the safety of our work logic and execution. This has required Kaiser-Hill to translate best-in-class commercial practices to the DOE environment. It includes an aggressive implementation of ALARA (As Low As Reasonably Achievable) principles to reduce worker exposure to radioactivity to the greatest extent possible, and a concerted effort to bring private sector expertise in safety systems and decontamination and decommissioning licensing to Rocky Flats.

Implementation of Price-Anderson at the site establishes a very clear line of responsibility for actions and problems. Deniability is not an option, as there is full disclosure of information and a full, prompt investigation of any possible safety shortcoming. Kaiser-Hill views the primary importance of Price-Anderson not as a regulatory enforcement regime, but as a mechanism to help the site establish and maintain a safe and efficient operating environment. Often, an event investigation into one condition will reveal other conditions adverse to proper safety management, giving us an opportunity to correct a deficiency before it can lead to a consequential event. With the emphasis of Price-Anderson on preventing repeat events or events that follow obvious precursors, Kaiser-Hill has begun to treat non-consequential "near-misses" just like real, consequential events. The actions we have taken to mitigate these precursor conditions have quite likely prevented consequential events.

Price-Anderson has also helped build confidence with our stakeholders. The public needs to know that a strong, committed, and capable regulator is present at Rocky Flats. Lack of regulation is generally not a problem at the site: we have multiple layers of oversight, including the Department of Energy, the Environmental Protection Agency, the Defense Nuclear Facilities Safety Board, the State of Colorado, and local governments. Effective oversight and regulation helps establish the comfort level among stakeholders that Kaiser-Hill needs to execute the more complicated activities we have to accomplish to achieve an accelerated closure of the site. If they do not trust the regulatory framework to ensure a safe working environment, achieving stakeholder acceptance for the work is much more difficult.

Price-Anderson at Rocky Flats

While Price-Anderson has been a positive force at Rocky Flats, it is important to recognize that it is only one of the tools DOE has at its disposal to enforce regulatory compliance. The structure of our performance-based contract with DOE is also a major compliance driver. The fact that we are only rewarded for performance is a significant inducement to remain in compliance with applicable regulations. These provisions are highly positive aspects of the contract and ensure a high priority for safety. On the other hand, our contract also provides DOE several tools to penalize unsafe behaviors.

For example, one quarter of our annual fee is at risk should a fatality occur at the site—an event we will hopefully avoid at Rocky Flats. However, under construction industry standard measurements, statistics indicate that several fatalities would be expected at a comparable commercial site of this magnitude. It has nothing to do with the radiological dangers involved at Rocky Flats, but simply reflects the fact that the site is a very large industrial area with a major demolition effort underway. What it means for Kaiser-Hill is that we must strive to operate significantly more safely than best-in-class industry standards for our business to succeed at RFETS.

Another significant contract matter is Kaiser-Hill's liability for problems at the site. In essence, Kaiser-Hill has the full responsibility for anything that goes wrong. We have unlimited liability for fines and penalties incurred for site operations. We

have liability for claims from third parties, for any lost or damaged property at Rocky Flats, and management liability for business judgments that result in an improper use of taxpayer monies, all as defined by our contract.

We view these elements—at-risk fee and liability—as end-of-process penalties. If Kaiser-Hill is doing its job responsibly and properly from the beginning, we will hopefully never be subject to these penalties. This is why Price-Anderson has an important role at Rocky Flats. We view Price-Anderson as one of the primary ways in which we guarantee quality assurance from start to finish in the work at the site.

Observations and Recommendations

One of our primary concerns with Price-Anderson is its uncertainty. At Rocky Flats, at least, we strongly support the manner in which Price-Anderson has been interpreted and implemented by DOE. Our fear, however, is that the program may be too dependent upon personality. Used by judicious and intelligent management, as is our current experience, Price-Anderson is a highly valuable tool to help DOE sites raise the bar on nuclear safety. In less capable hands, there are few safeguards to prevent Price-Anderson from becoming a meddling, bureaucratic, and political monster that could severely hamper the effort to get work accomplished at Rocky Flats and other DOE sites, and could, in fact, actually undermine safety at sites. Under such circumstances, obviously, our support for the Price-Anderson structure would quickly evaporate.

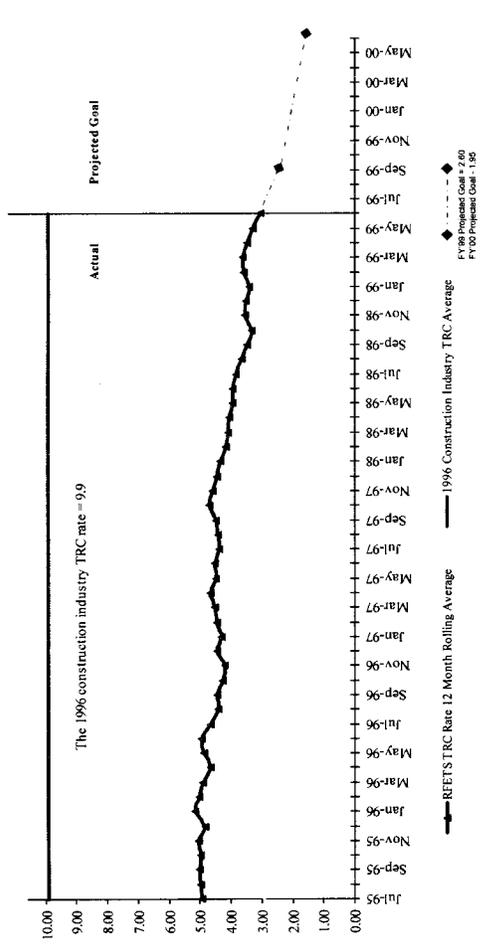
As you look forward to the reauthorization of Price-Anderson in the next Congress, I do have a couple of recommendations how to ensure the effectiveness of the enforcement policy. At this point, given the responsible manner in which it is being implemented, Kaiser-Hill does support maintaining the enforcement policy and program as it is currently functioning. The most helpful actions you could take would be those designed to institutionalize DOE's current management of the program, removing the potential for improper or subjective interpretation of the statute.

The other recommendation is that no further rulemaking is necessary or desired to ensure the effectiveness of Price-Anderson. The radiological control rule, as set forth in 10 CFR 835, and the quality assurance rule, as found in 10 CFR 830.120, are sufficient. The quality assurance rule currently provides all the regulatory enforcement leverage DOE will ever need. It is akin to the Nuclear Regulatory Commission's 10 CFR 50 Appendix B, which has been the basis for the majority of enforcement actions against commercial nuclear facilities.

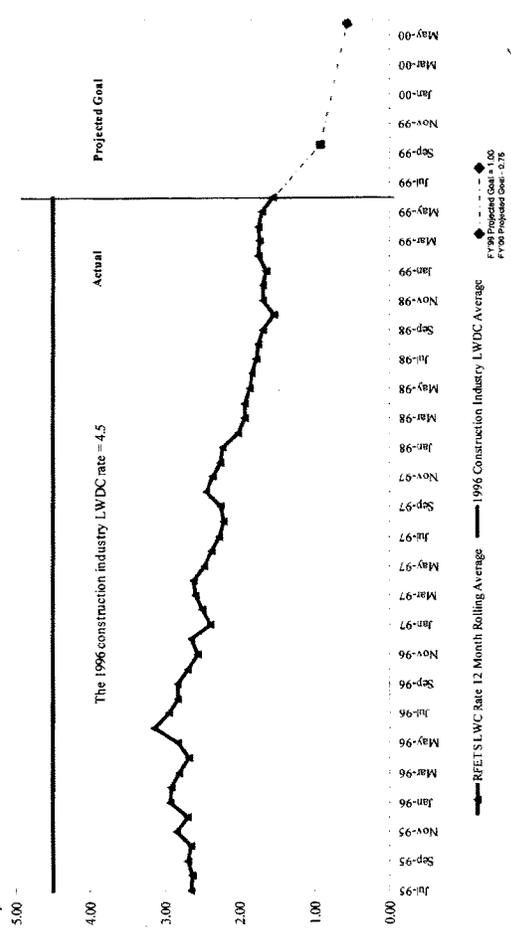
Conclusion

Price-Anderson, as it is currently being implemented, has been a very helpful and positive influence at Rocky Flats. It has prompted significant changes in the safety culture of the site, and its strong emphasis on catching problems early has provided our local communities in Colorado with an additional sense of security in the work Kaiser-Hill is managing at RFETS. Our goal of a 2006 closure at Rocky Flats will be a difficult endeavor, and we hope the requirements of Price-Anderson will continue to assist our efforts to accomplish the closure safer, better, cheaper, and faster.

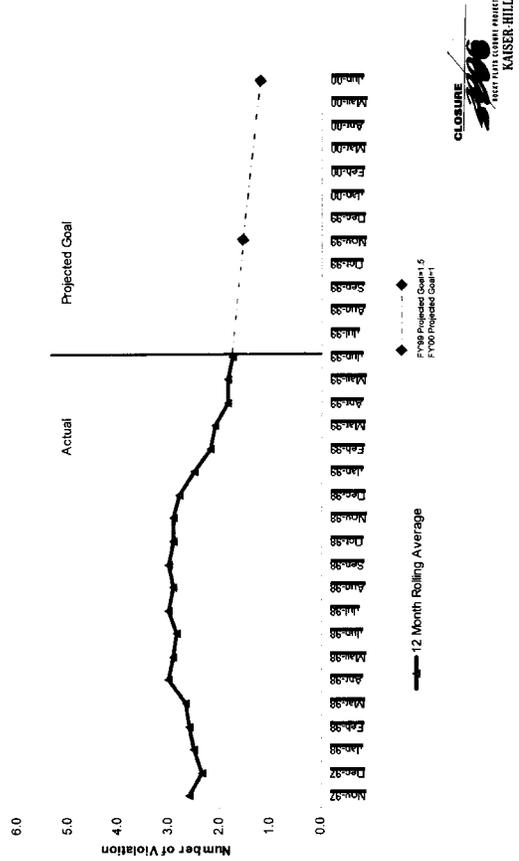
Figure 1
Total Recordable Case Rate



**Figure 2
Lost Workday Case Rate**



**Figure 4
Nuclear Licensing Infractions**



**Figure 5
Criticality Safety Infractions***

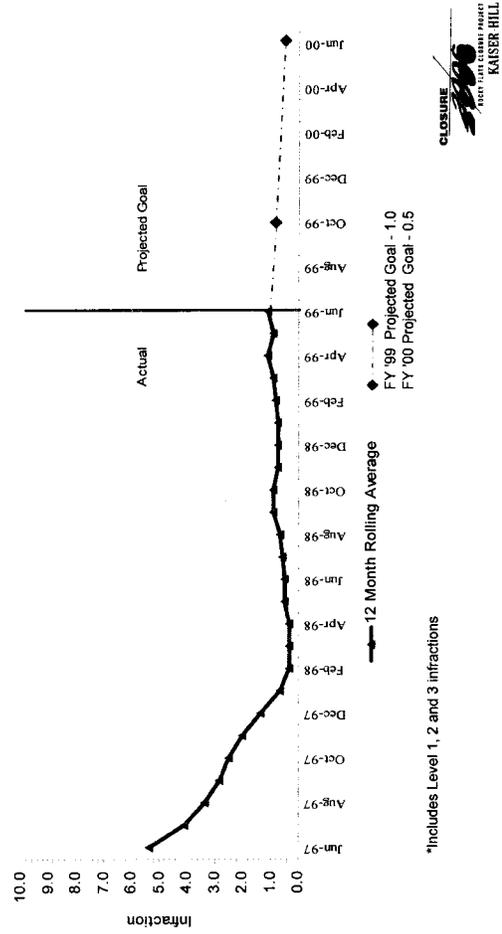
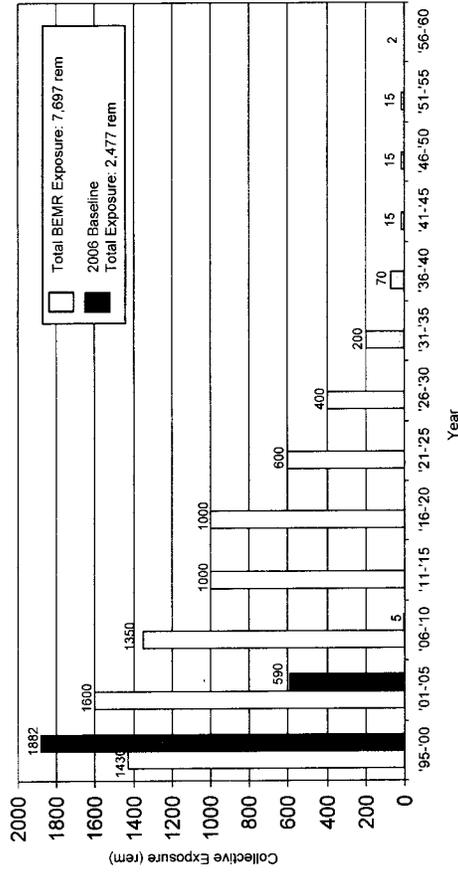


Figure 6
Accelerating Closure Drastically Reduces Worker Exposure



Mr. UPTON. Thank you. Mr. Hall.

TESTIMONY OF LINCOLN E. HALL

Mr. HALL. Thank you, Mr. Chairman and members of the subcommittee. I represent Lockheed Martin. We operate the Y-12 plant in East Tennessee, Oakridge National Lab—excuse me—in East Tennessee, Sandia National Lab in New Mexico which has an extension in California. Currently we operate the Idaho National Lab in Idaho. We have major subcontracts to Fluor Daniel at Hanford, we operate the tank farm and the retrieval there. And we also have a major subcontract with Bechtel in the Nevada test site.

As a corporation we work very diligently to define the requirements in such a way that verbatim compliance is a given in the work that we do. We fully applaud any attempt on the part of the Department to increase rigor and discipline in the implementation of the work and the work processes as they pertain to all of the DOE site, not just what would be classified as a nuclear facility.

Recently the DOE has in fact stepped up its Price-Anderson enforcement and oversight activity. I would like to applaud that because this—I am seeing evidence that this increased activity is having a significant and a very positive impact on our DOE sites. It is in fact contributing to and helping the create a compliance-based culture; it is improving DOE and contractor leadership toward achieving compliance; it is stressing senior management involvement in and participation in the line activities out in the field; and it is helping to create an environment of managing and corrective actions in a very timely manner. And we believe in and support these principles.

We would like to point out also though that those activities are largely driven by a multiple set of DOE orders that are in effect and are in fact incorporated in our contracts. On balance, I believe these orders are effective, we have experienced in our facilities few nuclear exposures and no fusel events in such form and quality that would threaten the public or workers or the environment.

We believe that the Price-Anderson enforcement and oversight has a specific mission to assure that operations of nuclear facilities meets the public law. And what is relevant in my discussion is what constitutes a nuclear facility as opposed to what constitutes all of the facilities on a DOE site.

Toward that end, contractors from the promulgative roles in 1994 and 1995 developed and they performed to develop implementation plans and they have subsequently operated to the implementation plans. Although there was no real specific guidance in terms of the standard of what constitutes a facility that is within Price-Anderson enforcement space, the DOE did provide provisions that would allow contractors to take a graded approach to their facilities and those facilities that fell within a category 1, 2, or 3 classification was defined under DOD MIL Standard 1027 where in fact put into the implementation plans and defined as and operated as a Price-Anderson enforcement facility.

Recently and as recent here in the beginning of the year, initiatives by DOE have been to expand the Price-Anderson enforcement provisions under the 10 CFR 831.20 quality assurance rule that in

my opinion would effectively expand enforcement activities over the entire site.

DOE already has at its disposal remedies that are substantially punitive such as zeroing out our fee, that has occurred. Putting these site-wide management issues into enforcement space, we believe, would be onerous. We believe that it would not be apparent to us that putting site-wide management issues into enforcement space would increase either the operating health or safety to our workers or to the public.

Thank you very much.

[The prepared statement of Lincoln E. Hall follows:]

PREPARED STATEMENT OF LINCOLN E. HALL, VICE PRESIDENT OPERATIONS, ENERGY AND ENVIRONMENT SECTOR, LOCKHEED MARTIN CORPORATION

Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to testify before you today on Worker Safety at DOE Nuclear Facilities with focus on a review of the department of Energy's enforcement of the Price-Anderson Act nuclear safety requirements. By way of background, I have been a businessman for 38 years, managing both commercial and government lines of business. I began my career with the Glenn L. Martin Company. I spent 30 years holding various positions in DOD Aerospace programs. In 1993, I assumed the Martin Marietta Corporation position of vice president of Environmental Management in Oak Ridge. In 1996, I became president of Lockheed Martin Hanford Corporation with responsibility for the Tank Waste Remediation System in Hanford, Washington. In January 1999, I assumed the position of vice president of Operations for the Lockheed Martin Energy and Environment Sector.

INTRODUCTION

Lockheed Martin Corporation appreciates the opportunity to provide testimony to this Committee regarding DOE's enforcement of Price-Anderson Act nuclear safety requirements. This testimony represents the collective thinking of those Lockheed Martin Corporation operating entities in which we are pleased to hold contracts with the DOE. These include the Oak Ridge National Laboratory and the Y-12 plant in Tennessee, the Sandia National Laboratories in New Mexico and California, and the Idaho National Engineering and Environmental Laboratory. We also hold major subcontracts to Bechtel at the Nevada Test Site and to Fluor Daniel at the Hanford, Washington Site.

The Price-Anderson legislation and the DOE rules created for its implementation, and their enforcement, are very important parts of the safety management framework established by congress and DOE for nuclear facilities. DOE's Price-Anderson rules are consistent with established U.S. Industry and International safety standards. Other safety requirements for nuclear facilities are prescribed in DOE directives made applicable through contract terms. These requirements include federal occupational safety and environmental regulations as well as DOE orders. Contractors recognize their responsibility to effectively implement DOE's Price-Anderson rules and other requirements to assure compliant and safe operation. Implementation plans are submitted to and approved by DOE.

Lockheed Martin has placed great emphasis on rigorous compliance with the actions specified in these plans. We appreciate that requirements and standards must be succinct, unambiguous and implementable.

IMPORTANCE OF PRICE-ANDERSON TO SAFE OPERATION OF DOE FACILITIES

The Price-Anderson Act which was enacted in 1957 as an amendment to the 1954 Atomic Energy Act (AEA) Act established provisions under which financial protection is provided for public liability associated with a nuclear incident. DOE is required to include that indemnification provision in each of its contracts that involves the risk of a nuclear incident.

The Price-Anderson Amendments Act (PAAA) of 1988 made changes to the 1957 PAA, one of which established a system of civil penalties for indemnified DOE contractors, subcontractors and suppliers for violation of any rule, regulation, or order, related to nuclear safety.

This enforcement authority is a necessary and valuable tool for DOE to assure effective implementation of nuclear safety requirement by contractors, and Lockheed Martin fully supports DOE in this enforcement authority.

CONTRACTOR IMPLEMENTATION OF NUCLEAR SAFETY REQUIREMENTS

The DOE Price-Anderson nuclear safety requirements as published for comment were applicable to reactor and non-reactor nuclear facilities. There were several comments during the Public comment period on 10 CFR 830 stating that the term "nonreactor nuclear facility" was too vague. In the preamble to the final 10 CFR 830.120 Quality Assurance rule, the DOE disagreed with these comments because:

The proposed definition was intended to cover all situations (other than nuclear reactors) with the potential to cause radiological harm. The reference to the *graded approach* was included to take into account the differences that exist between facilities and, thus, to avoid a rigid application of nuclear safety requirements to divergent facilities and to encourage the taking of actions appropriate for particular facilities. [emphasis added]

Consequently, contractors prepared and submitted Implementation Plans to the 10 CFR 830.120 Quality Assurance rule in late fall 1994. These Implementation Plans are the basis used to determine compliance with the relevant nuclear safety requirements. Although the regulations did not provide guidance as to the required scope of the Implementation Plans, in September of 1994, the Director of the Office of Nuclear Safety Enforcement, Mr. Richard Black issued a memorandum recommending that:

The nuclear facility threshold for direct applicability of Part 830 shall be those facilities that are Category 3 and above per DOE-STD-1027.

In 1995, the DOE Office of the General Counsel issued Price-Anderson ruling 1995-1 concerning 10 CFR Parts 830 (Nuclear Safety Management) and 10 CFR 835 (Occupational Radiation Protection). The ruling defines a nonreactor nuclear facility under 830 to mean those activities or operations that involve radioactive and/or fissionable materials in such form and quantity that a nuclear hazard potentially exists to the employees or the general public. Incidental use and generating of radioactive materials in a facility operation (e.g., check and calibration sources, use of radioactive sources in research and experimental and analytical laboratory activities, electron microscopes, and x-ray machines) would not ordinarily require the facility to be included in this definition.

Thus, the initial contractor implementation plans submitted to DOE were constructed such that they were applicable to Category 1, 2, or 3 nuclear facilities as defined by DOE-STD-1027. After a series of reviews, the Implementation Plans were approved by DOE.

Through 1998, contractors annually submitted updated implementation plans that only addressed category 1, 2, and 3 nuclear facilities and these plans were subsequently approved by DOE.

CURRENT SITUATION

In the 1998 Annual Report by DOE's Office of Enforcement and Investigation, DOE stated in part:

Contractor organizations have *incorrectly assumed* that the Quality Assurance Rule (10 CFR 830.120) did not apply to a facility, area, or activity if it was classified as less than Hazard Category 3 under DOE Standard 1027-92 (Hazard Categorization and Accident Analysis Techniques for compliance with DOE Order 5480.23, Nuclear Safety Analysis Reports). Standard 1027 provides guidance for determining whether a facility, activity or area requires a SAR based on inventory. However, it does not provide a basis for exclusion from the provisions of 10 CFR 830.120. [emphasis added]

This DOE position was further formalized in a letter dated February 4, 1999 from the EH-10 division of DOE addressed to our Lockheed Martin Contractor Operating Presidents. The subject of the letter was "Request for Updated Implementation Plans for your Quality Assurance and Radiation Protection Programs." This letter, notes that the requested updates provided the contractors the opportunity "to correct inappropriate classification of what constitutes a nuclear facility under the Quality Assurance Rule."

In summary, we are currently in a period of transition and uncertainty that is based on the following:

- 1). We believe the Act(s) were clearly intended to address the contractors' management of nuclear and non-nuclear facilities that involve radioactive and fissionable material *in such form and quantity that a nuclear hazard potentially exists* to workers safety, the public, or the environment.

- 2). Contractors have responded to the requirements of the QA rule using DOE-STD-1027 as the guide for determining which facilities fall under the provisions of the QA rule. Implementation plans written, based on this interpretation, have been submitted to DOE. These have been approved by DOE and budgets constructed ac-

cordingly (although the DOE disagreed with the limitation of the rule in its preamble to the final rule, the DOE's application of the rule has been consistent with DOE-STD-1027 until now).

3) The DOE now wishes to modify application of the QA rule pursuant to the OGC ruling 1995-1 such that virtually the entirety of a DOE site would be subject to PAAA regulation under the QA rule with little correlation between the risk of a nuclear incident and the requirements.

DOE ENFORCEMENT OF PRICE-ANDERSON

It is clear in the DOE language that has been promulgated through its correspondence to its contractors, that verbatim compliance is expected, and if such compliance is lacking for those activities regulated under Price-Anderson then the contractors are subject to fines and penalties. We at Lockheed Martin expect to be held accountable for compliance. However, "verbatim compliance" can only be derived from "verbatim requirements." Implicit in the concept of "verbatim compliance" and "verbatim requirements" is the fundamental principle that regulations should provide precise and unambiguous clarity regarding the types of activities that are covered.

We believe Congress has exercised its fiduciary responsibility to the public to not only minimize the public's risk resulting from the management of nuclear and non-nuclear facilities, but to also minimize the cost to the public in carrying out this mandate. One sure way of minimizing costs is to minimize and streamline regulatory requirements such that compliance with these requirements can be straightforward and unambiguous. Currently, DOE facilities are operating under a multiple set of requirements—many of which are subject to interpretation.

For those facilities that are currently not covered by PAAA, we believe that DOE has put in place an effective oversight program, executed under its contract authority, for those contractors' health and safety activities. We therefore question the need for PAAA to be expanded to cover what could become all of these facilities that are under this oversight program. Although an expansion of Price-Anderson's space is likely to increase administrative cost, it is not apparent to us that such increased Price-Anderson expansion would measurably increase the operating health and safety to the workers and the public.

CONCLUSION

The full implications of expanding PAAA are not yet fully understood and are related to the actual results of the "graded approach" for each DOE facility. The term "graded approach" is interpretative and therefore subject to re-interpretation and therefore, runs counter to the concept of unambiguous requirements.

With regard to the DOE enforcement of Price-Anderson nuclear safety requirements, it has helped create a Compliance Based culture that is improving. We applaud the increased Price-Anderson support and attention to contractor leadership needed to achieve a total quality compliance culture in DOE's facilities.

Safety requirements established in DOE's directives are effective for facilities not currently in implementation plans for Price-Anderson rules. Broadened applicability of the rule is not necessary to assure safety.

Mr. Chairman, the Members of this Subcommittee, we look forward to working with you and the DOE to help protect this nation as we manage the nuclear and non-nuclear facilities under our control.

Thank you!

Mr. UPTON. Thank you, Mr. Hall.

Mr. Van Ness, I noticed in your testimony you said a number of things. You were obviously concerned about the University of California's reputation and you wanted to do—you're right, you had a commitment to performing well and yet as I look at some of the comments particularly with regard to some of the fines this past year, 1998, I see these things.

I see a nuclear facility appraisal conducted by LLNL identified significant and potentially widespread problems with workers not adhering to nuclear safety procedures.

I see that five workers were contaminated with radioactivity at building 513 during waste processing activities that were in fact the radioactivity alarm in the building had been turned off.

I see that Lawrence Livermore was fined \$160,000 of one of those phantom penalties for unnecessarily exposing the workers to radioactivity and DOE noted numerous failures by University of California to implement the established protection requirements and quality controls.

I see that DOE issued a criticality safety appraisal that identified significant problems with building 332.

I see that DOE found multiple and reoccurring failures to follow criticality safety requirements in that same building May through December 1997. I see that another \$155,000 phantom penalty was waived because of inadequate oversight in assessment over the criticality safety program over a number of years.

I saw a fire and explosion in the chemistry and metallurgy research facility in 1996. I saw an enforcement letter that went out, but it refused to penalize Los Alamos correcting work planning and work control programs. I saw Los Alamos refuse to implement radiation protection requirements that they had agreed to in July and September 1997, and multiple failures were identified at the same case for including failure to ensure systems prevent release of contamination. And I saw that the DOE found or fined Los Alamos \$112,000 for nuclear safety violations but, again, in fact that penalty was waived in September 1998.

And I see this letter that you—I think you were here to see the Dr. Lappa letter, and it was referred to by a number of members on this panel, and I listened to Dr. Michaels at the end when he testified in response to a question from Mr. Burr where he said that simply alone the fines merely alone won't improve the safety performance and it was of a great concern. When I look at all these different violations, when I listen to your report, your testimony, and I see that a number of—most of these, I think—the penalties were waived, what is it that we can do to in fact make sure that your testimony is accurate?

Is your concern about the reputation and workers and what is it that DOE can do and the Congress can do to make sure that these types of violations don't happen again?

Mr. VAN NESS. Well, we have taken strong corrective actions in response to each of those failures. We regarded them as extremely serious. We regret that they happened, and we have taken actions to ensure accountability with the individuals who failed to follow appropriate procedures.

I do want to say that those violations are serious and have our direct attention and have been aggressively responded to. They do not characterize the overall safety performance at those laboratories. When you look at things like radiation exposure to workers, we are far below the a ALARA goals at each of our laboratories. When we look at public exposures we are far below the NESHAP goals, the National Emission Standards for Hazardous Air Pollution, and when you look at occupational illness and injury rates, we have shown a significant improvement at each of these laboratories and in fact are moving toward benchmark best in class levels.

We are working hard to improve safety at each of our laboratories. We have not reached the point where obviously we can avoid the kinds of incidents that happened. We are trying to limit that.

Mr. UPTON. Would you say that the case involving Mr. Lappa is an aberration?

Mr. VAN NESS. Yes, I—actually I believe that to be the case. Mr. Lappa's case is one where he was a member of a team reviewing one of the Livermore events that resulted in a notice of violation. He had an opinion with regard to whether there was some deliberate activity on the part of some of the workers that was not concurred in by all of the members of the team. He refused to sign the report which did not indicate his belief that there had been some deliberate activity, and subsequently felt that he was retaliated against for taking that position.

He did file a complaint with the Department of Energy and the Department of Labor. The Department of Labor took jurisdiction and there was a review made and in the course of those deliberations there was a settlement reached with Mr. Lappa and since then he has again indicated that he feels there has been retaliation and has filed suit in a State court. That matter is now approaching litigation.

Mr. UPTON. Mr. Whitfield?

Mr. WHITFIELD. Mr. Chairman, I'm going to allow Mr. Burr to take my time because he has another appointment and then I'll ask questions after he finishes.

Mr. BURR. I thank my colleague.

Mr. Sussman, let me ask you, does the University of Chicago have to compete for the contract for the Argonne Labs?

Mr. SUSSMAN. The University of Chicago in the current renewal of the contract did not compete. The department determined—

Mr. BURR. Have they ever?

Mr. SUSSMAN. No. The answer is no.

Mr. BURR. Under the contract that you're currently under, and I haven't had an opportunity to read it, is there—are there performance fees?

Mr. SUSSMAN. Yes, sir.

Mr. BURR. And are those performance fees at risk if you don't get an adequate rating—

Mr. SUSSMAN. Yes, sir.

Mr. BURR. [continuing] from the Department of Energy?

Mr. SUSSMAN. Yes, sir.

Mr. BURR. The State of Illinois has regulatory authority over the University of Chicago as it relates to the NRC license and clearly has the ability of civil fines; am I correct?

Mr. SUSSMAN. Yes, sir.

Mr. BURR. Have they ever exercised that?

Mr. SUSSMAN. I have a list—in terms of the University now—

Mr. BURR. Correct.

Mr. SUSSMAN. [continuing] or in terms of Argonne, I'm sorry?

Mr. BURR. In terms of the University.

Mr. SUSSMAN. I am not as I sit here aware of that, sir.

Mr. BURR. What are the trustees of the University's position as it relates to the State's ability to institute civil fines on you?

Mr. SUSSMAN. In terms of the activities conducted on the University campus there are very minimal nuclear activities on the campus and they are part of the basic and overall research—

Mr. BURR. But they have—the State has authority over civil fines; am I correct?

Mr. SUSSMAN. Yes, sir. Yes, sir.

Mr. BURR. Okay. So the trustees don't hold the same concern that the State might fine you for the limited amount of—

Mr. SUSSMAN. If the question—if I understand the question correctly, sir, if the question is regarding the assets of the University and concern, it is part of the cost reviewed of doing the academic and research business of the University.

If the question is whether the trustees have the same reputational concerns that I expressed in my testimony, my answer would be, yes, they would have those reputational concerns.

Mr. BURR. Let me ask you, you expressed your concern with finance being extended to nonprofit entities.

Mr. SUSSMAN. Yes.

Mr. BURR. Yet you said there has to be some structure, we need—we need to fulfill our safety obligations?

Mr. SUSSMAN. Yes, sir.

Mr. BURR. Let me ask you, if we modified Price-Anderson to extend it but to suggest that the Department of Energy has the ability to place civil fines not to exceed the performance fees of the contract, what would be the University of Chicago's position?

Mr. SUSSMAN. As I indicated, Mr. Burr, in my testimony, the University at present has its entire performance fee at risk by virtue of the Department. And that if that performance fee was at risk as a result of Price-Anderson liability as against the Department, that would be, in my judgment, a pretty similar situation.

Mr. BURR. So you see—

Mr. SUSSMAN. As long as, if I might add, sir, as long as we're not subject to double penalties. In other words, Price-Anderson and the Department of Energy—

Mr. BURR. You know the Federal Government well?

Mr. SUSSMAN. We have experience with it, as you do, sir.

Mr. BURR. Mr. Van Ness, let me ask you a similar question. Would the University of California be supportive of a modified Price-Anderson where civil fines could be placed by the Department of Energy not to exceed the amount of the performance fee?

Mr. VAN NESS. I believe we could work with that situation.

Mr. BURR. Has the University of California ever had to compete for the Los Alamos or the Lawrence Livermore contracts?

Mr. VAN NESS. No, it has not.

Mr. BURR. Did you negotiate the latest contracts?

Mr. VAN NESS. Yes, I did.

Mr. BURR. You did?

Mr. UPTON. You might just pull that mic a little bit closer.

Mr. BURR. Let me ask you, Mr. Van Ness, does the University of California have a policy that limits or prohibits certain types of communication with Congress by its employees?

Mr. VAN NESS. Not that I'm aware of, no, sir.

Mr. BURR. Mr. Lappa stated in his letter that—in the last paragraph—“that I regret that my civil suit complicates my communications with your staff. UC policy strictly prohibits certain types of communication with Congress and my attorneys therefore have instructed me to proceed cautiously in that regard.” You're not aware

of anything at the University of California that would have led his attorneys to make that caveat to his letter?

Mr. VAN NESS. No, I'm not.

Mr. BURR. With the Chair's indulgence, I would ask for 2 additional minutes?

Mr. UPTON. Go ahead.

Mr. BURR. Let me ask you what the procedure is at the University of California for handling a safety complaint?

Mr. VAN NESS. The safety complaints would be—depending on what area it's in, it may or may not include the involvement of the Price-Anderson Act coordinator, but certainly the folks in the environmental, safety, and health organization at the laboratory would investigate that question or that allegation. And depending on circumstances personnel from my staff might be involved in that—

Mr. BURR. Was your staff involved in any way, shape, or form in the concerns raised by Mr. Lappa?

Mr. VAN NESS. I believe we had discussions with the laboratory on the essence of the allegations.

Mr. BURR. Are you aware of any investigation that the laboratory took on based upon the claims that Mr. Lappa made?

Mr. VAN NESS. I'm not directly aware, but I do believe that was the case.

Mr. BURR. Would you share with this committee in writing what procedures in fact took place at your directive or based upon the procedures in place at the University of California relative to his complaint?

Mr. VAN NESS. Yes.

Mr. BURR. Let me ask you if you believe that the University of California is bound to adhere to DOE zero tolerance policy on employees that are whistle-blowers?

Mr. VAN NESS. Yes, I do.

Mr. BURR. You believe that any contractor is bound to that policy?

Mr. VAN NESS. Yes, I do.

Mr. BURR. Okay. Let me ask you just a couple more questions relative to the contracts. To your knowledge has the University of California in the last 5 years received anything below a good rating for safety or security?

Mr. VAN NESS. Not in the contract ratings. We have received below good in reviews made by headquarters review teams.

Mr. BURR. Does the headquarters review teams affect your performance fee?

Mr. VAN NESS. It can.

Mr. BURR. Does it?

Mr. VAN NESS. It is taken into account, yes.

Mr. BURR. Has the University of California ever been cited for security violations?

Mr. VAN NESS. Well, we've had security lapses.

Mr. BURR. Have you ever been penalized based upon your performance fee for lapses in security?

Mr. VAN NESS. We have not been penalized. We have not achieved incentive fees that would have been available to us had our performance been of higher—at a higher standard in that area.

Mr. BURR. Do you know what that rating was that you received that affected your performance?

Mr. VAN NESS. I believe it was good.

Mr. BURR. Based upon the contract, anything that received a good rating, the DOE would be unable to cut your performance fee?

Mr. VAN NESS. That's correct.

Mr. BURR. So the likelihood is that you did not have your performance fee cut based upon security violations?

Mr. VAN NESS. No, we did not have it cut. As I said, what we didn't have was we didn't get any additional dollars because we did not perform at a high enough standard.

Mr. BURR. So does that pertain to the million dollars additional fee in the contract that was awarded for exemplary—

Mr. VAN NESS. Yes.

Mr. BURR. [continuing] performance?

Mr. VAN NESS. Yes.

Mr. BURR. But the standard \$4.9 million, if I'm correct, of performance fees that there was an annual evaluation on, there was never a reduction in that based upon security lapses?

Mr. VAN NESS. That's correct.

Mr. BURR. And to your knowledge, in the last 5 years the University of California has never received anything lower than a good rating on security; am I correct?

Mr. VAN NESS. In contract ratings that is correct.

Mr. BURR. Thanks. Mr. Chairman, I thank you for your indulgence and for the indulgence of my colleagues and would yield back.

Mr. UPTON. I have a slow watch.

Mr. Whitfield?

Mr. WHITFIELD. Thank you, Mr. Chairman.

Mr. Miller, Dr. Michaels testified that the Department intended to finish the promulgation of three additional nuclear safety rules by the end of the year and originally there were going to be nine additional rules. Do you have any thoughts on their intentions to do three rules instead of nine?

Mr. MILLER. Well, Mr. Whitfield, the number of rules probably is less important than the content of them. DOE as was earlier discussed has a number of orders which govern areas which include training and certification, unreviewed safety questions, conduct of operations, radiation protection of the public and the environment, technical safety requirements, maintenance management, and defect identification. If all of those matters were consolidated into one rule, that would be fine; if they want to do separate rules for each of those areas, that would be fine. But it's very important particularly where this is a system which relies on contractor self-identification of deficiencies and reporting through a computer system that all of these areas be tracked and self-reported so that there is some signaling and a red flag that goes up when there's a problem.

If you don't have a rule for each of these areas, no red flag goes up, there's no Price-Anderson investigation. And so from our point of view, we think that Dr. Michaels, depending on what he meant by three rules may be either was or was not sufficient, but in our view everything that was initially contemplated needs to be there.

We do not agree that the quality assurance rule is a sufficiently broad catch-all rule because it is too vague.

Mr. WHITFIELD. But if he does cover these areas that you mentioned in a very clear way, then you really do not have any problem on his approach?

Mr. MILLER. His approach would be fine as long as he actually gets it done by January of 2000. As I probably said earlier, we are a little bit troubled that we've waited 11 years and I don't know at this rate would we get two more rules in another 11 years? And I guess I would just encourage you all to think about perhaps holding the Department's feet to the fire on that.

Mr. WHITFIELD. Okay. Thank you.

Mr. CARD, it's my understanding that the Price-Anderson Act indemnifies DOE contractors for all legal liability even in the case of gross negligence or willful conduct. And in reading your testimony, and I think that your company should certainly be commended because evidently originally Rocky Flats was supposed to be completed in 2060 at a cost of \$37 billion and you all are thinking you can do it by 2006 for \$7 billion, so that's a considerable difference. But in your testimony you say, "another significant contract matter is Kaiser-Hill's liability for problems at the site. In essence Kaiser-Hill has the full responsibility for anything that goes wrong, we have unlimited liability for fines and penalties incurred for the site, we have liability for claims from third parties for any lost or damaged property at Rocky Flats." Why are you liable under your contract where evidently other DOE contractors have an indemnification from the Department?

Mr. CARD. Okay. Well, there's two kinds there. First of all, we don't have any contract limits on our liabilities. If there's protection outside of our contract Price-Anderson is one case. In exchange for the hammer you get the protection. So that exists outside of our contract. But our contract was the first contract that included all of the elements of contract reform, and one of those was to remove, before you would get fined, and I don't know if this occurs in other DOE contracts or not, and you would simply pass the bill on the DOE for that. And I think this committee and others had problems with that. Our contract has no pass the bill along. So anything that we get fined for or we lose judgments on, we're responsible for it just like we would be for a commercial customer. So it's really no different than that.

Mr. WHITFIELD. I see.

Mr. CARD. I think it would be the same as a supplier for a commercial nuclear facility that gets some of the benefits of Price-Anderson but are subject to NRC regulation in exchange for that.

Mr. WHITFIELD. Okay. Thank you, Mr. Chairman.

Mr. UPTON. Thank you.

Have all of you been able to look at this report? I know it just sort of came out this week. Have you all had a chance to look at it?

[Chorus of yeas.]

Mr. UPTON. I have a question as it relates to the nine requirements. This is a report that DOE indicated they do by October 1. The nine requirements that are proposed, but rules have not been issued in this. I look in scanning and go very briefly through these

safety analysis report, unreviewed safety questions, defect identification reporting, conduct of operations at DOE nuclear facilities, technical safety requirements which establish in documents that the facility's operating limits and other requirements are in place, training and certification, ensuring that employees whose performance is vital to the safe operation of DOE nuclear facilities are trained to conduct duties in a safe and effective manner, maintenance management, radiation protection, et cetera.

Are there any of these that you currently are not doing now at your facilities? I mean, Mr. Card?

Mr. CARD. I'll just respond the that, we have—those are well incorporated in our contract. They contain full enforcement provisions otherwise, and I can't think of a single case where we've had any issue with those that aren't also Price-Anderson issues. In fact, we have included the list and it's, by the way, publicly on our web site all of our NTS filings. So, Rocky Flats, I am bothered a bit because I have a lot of respect for Mr. Miller why we seem to have a difference here and it may be the types of sites, because our site is a full nuclear site. There is no question what's in or out at Rocky Flats. And perhaps that's the basis why we have a different opinion than others.

Mr. UPTON. Mr. Hall, do you have any comment on these nine?

Mr. HALL. I was just looking at the list to make sure that—

Mr. UPTON. I mean, I would imagine—

Mr. HALL. [continuing] if my statement is accurate.

Mr. UPTON. [continuing] as I look at all of these, it seems like most companies, universities would already have something in place already in all these nine, am I not correct?

Mr. HALL. In each of our sites where we have either a radiological facility or any categorization of a nuclear facility, each and every one of these requirements are an integral part of what we do.

Mr. UPTON. Mr. Sussman?

Mr. SUSSMAN. You know, I have not looked at this list, but I would concur with the answer that it is part of our general activities. We do take a very broad view under the quality assurance of what is covered and what our responsibilities are. So as I look at the list very quickly, Mr. Chairman, it appears to be covered.

Mr. UPTON. Mr. Van Ness, the same?

Mr. VAN NESS. The same.

Mr. UPTON. Mr. Miller?

Mr. MILLER. Well, I don't have—

Mr. UPTON. I know, you don't have your own, maybe you don't want one.

Mr. MILLER. But at this point right now, our concern is that when there is noncompliance events with this, there is no trigger for the contractor to self-identify and report this. There is no enforcement capacity and what it does is it sort of gets, and there's no site representatives onsite which could be able to, quote "tap people on the shoulder" and say, you have untrained people operating at facility X, how come, and what are you doing to fix it?

Mr. UPTON. Has DOE contacted you at all in terms of the best way that you all may think that they might want to approach these nine, as whether they incorporated it as two rules or three, or four,

or whatever it might be? Has there been any interaction between DOE and your group?

Mr. HALL. DOE has not approached us with the question of what would be our reaction to incorporating these under Price-Anderson enforcement space. However, each and every one of these requirements are integral to our contracts, flow down to us from the orders and are very enforceable. The authority that is given to the field office manager to approve a safety authorization basis under which we can do work and the precision under which we address an unreviewed safety question is very strictly enforced on all of our sites. So each and every one of these are applicable to the site.

With regard to self-identification, a great deal of emphasis has been given by us and I believe every contractor that we know of to flow safety down such that each and every worker feels responsible for the identification of any safety issue and we are encouraging each and every worker to, under no circumstances proceed with work if you perceive or believe or know that there's a safety issue associated with it. Furthermore, each and every worker has the authority to stop work if they perceive that there is a problem. Each and every one of those self-identified occurrences as they do occur are in fact reported into the DOE reporting system. Each and every one of them is in fact screened as to whether or not it screens into Price-Anderson enforcement space and therefore is reported into the NTS or not.

Mr. UPTON. Thank you. Thank you.

Anybody else want to comment?

Mr. CARD. Yes, I just want to clarify for the committee that our reticence to endorse all of these new rules has nothing to do with liability. We believe there would be zero effect on exposure—liability exposure for us by adopting them.

It costs us up to \$2 million per rule to change all of our procedures simply to change the name and other things in there. So—and then retrain the people on minor differences in it so that we don't have a slip up. So our main concern is the administrative cost of making the change from the DOE order to the rule. If the rule is rewritten to simplify the procedure, then it would be a benefit and we would support it.

Mr. UPTON. I know that—I think Mr. Stupak was intending to come back, but I would ask that all members may have a chance perhaps to respond with written questions and I'll take a moment to recognize Mr. Strickland with a question if he—

[Pause.]

Mr. STRICKLAND. Thank you, sir. Let me catch my breath.

I understand that there have been comments here that the fines and loss of performance fees do not order contractor misconduct. I think Mr. Miller, did you make such a statement?

Mr. MILLER. Yes. Yes, Mr. Strickland.

Mr. STRICKLAND. And you said that only persistent accountability actions can change the culture. And I was wondering if you could explain to me what you had perceived those actions to be or what they should be?

Mr. MILLER. Thank you, Mr. Strickland. In our view we have encountered what we would view to be substantially—substantial noncompliance over protracted periods of time within certain DOE

facilities. Let me give an example. In your home State of Ohio, at the Miamisburg facility we have had a situation where workers have endured almost a decade of questionable radiation protection.

We have had bioassay samples sitting on shelves for 3 years, over half of which came back hot. We have had workers who have had their dosages of plutonium undercounted and so they don't know how hot they are or whether they should even be sent back into a hot area again.

We have had workers who were pressured not to use respirators because they were criticized for being excessively conservative and in effect slowing down the work process.

We have had situations, as we've heard here in the panel today, and at facilities where we represent workers where radiation monitors are turned off. Perhaps under the mistaken notion that the hazards were not as real or didn't merit further investigation.

We have had two extended work stand downs at the Miamisburg facility which cost the Government a good sum simply because no radiation work could proceed forward during those protracted stand downs. And so in that particular circumstance, as we have seen there and elsewhere, we are concerned that award fees—reducing award fees have not had a beneficial effect in improving contractor performance. We had over \$400,000 reduction to that contractor, but problems continued to persist.

At the Idaho National Engineering labs, just if I may point out, we had a major fatality there where—shall we say—inadequate work planning took place, and that was in a site where we had extensive incentive fee provisions written into the contract. The reality is there is no substitute for close policing of the work because there are contradictory incentive fees that DOE has set up. They have said work faster, work faster, we need to get out of these sites quicker.

Mr. Card is under tremendous pressure at Rocky Flats to get out by 2006 and he's taking tremendous efforts to get there. But with all of those pressures incentive on one side, on the other side there were also incentivizing contractors to operate more safely. The problem is that they often wind up in competition with each other.

Mr. STRICKLAND. So if I take the implications of your statement as I perceive them to be, you're saying that human beings are being injured and perhaps even losing their lives because of inappropriate pressures being placed upon contractors to get work done more quickly? Is that a fair—

Mr. MILLER. Well, I would say that those pressures exist. I would also say that the Department, in fairness, has only requested \$600,000 per year in its budget request for the Price-Anderson program. It has five people to enforce nuclear safety at 2,000 facilities nationwide, and we believe that the Department needs to step up to the plate with a more staffed program. I don't believe we've ever had a Price-Anderson investigator come to the Portsmouth gaseous diffusion plant, and, yet, we know of substantial problems at that facility including inadequate monitoring of neutron exposures to the workers at that facility.

So our view is that we need a more beefed up program, and frankly we think the Department should allocate its resources accordingly and we would appreciate some leadership, I guess, from

the Department in coming forward with somebody more than— with something more than five people to police an entire nationwide nuclear complex.

Mr. STRICKLAND. So when you say “persistent accountability actions” those actions would be possible in your judgment if there were greater resources available?

Mr. MILLER. That’s correct, Mr. Strickland.

Mr. STRICKLAND. Thank you, Mr. Miller.

Thank you, Mr. Chairman.

Mr. UPTON. Thank you. Appreciate your testimony. It will certainly help us in the days ahead, and we are now excused.

[Whereupon, at 1:23 p.m., the hearing was adjourned.]

[Additional material submitted for the record follows:]

RESPONSES FOR THE RECORD OF DAVID M. MICHAELS, ASSISTANT SECRETARY FOR ENVIRONMENT, SAFETY AND HEALTH, DEPARTMENT OF ENERGY

QUESTIONS FROM THE HOUSE COMMITTEE ON COMMERCE

Question 1: In your written testimony, you note that field office coordinators serve a critical role in the enforcement program, but, “we’ve found this arrangement to be working better at some sites than in others, depending on the commitment of the individual field office management.” In this regard, please identify which three offices need to place greater emphasis on enforcement. Please also identify what specific steps you will take to address these gaps.

Answer 1: The success of the nuclear safety enforcement program depends on contractors taking a positive and proactive approach that identifies and resolves problems, negative trends and precursor events *before* a serious event occurs. In the several years that the program has been in operation, we have worked closely with field offices to encourage such a proactive approach. Examples of the criteria we would use to defining a successful field office would include the following:

- The Field Office Coordinator is qualified and knowledgeable of enforcement policy and process, has a good general knowledge of nuclear safety requirements, and has a demonstrated supportive senior management.
- The Field office is proactive and has a questioning attitude regarding issues and their significance, and uses enforcement as an integral part of the sites’ overall safety management program.
- The Field Office demonstrates knowledge of thresholds for reporting regarding programmatic issues, negative trends, precursor events and repetitive violations
- The Field Office performs objective evaluations of the safety significance of violations.
- The Field Office Coordinator and site management routinely engage in open and candid communication with the Office of Enforcement & Investigation.
- The Field Office supports and participates in investigations, reviews, and inquiries related to potential noncompliances and PAAA program weaknesses.
- The Field Office encourages rigorous determination of underlying causes and comprehensive corrective actions by their contractor, and perform timely confirmation of corrective action completion and verification of effectiveness. Few violations are disclosed by events, with most being identified through contractor self-assessment or DOE oversight.

Based on these criteria, we are working with several sites that we believe could further improve their role in the enforcement process through a more proactive approach, including DOE Oakland, DOE Chicago and DOE Savannah River. At the same time, sites such as DOE Richland, DOE Rocky Flats and DOE Idaho have generally taken a more proactive approach to the regulatory enforcement process.

We are undertaking several steps to improve the overall effectiveness of the field offices in the enforcement program. First, I am communicating directly to the field office managers those attributes that are necessary to improve their integration into the program. Second, the Office of Enforcement is also increasing the number of site visits to those sites that have been less proactive. Finally, the Office of Enforcement has initiated discussions with the Office of Oversight to increase their role in the regulatory arena with a particular focus on those sites that need to be more actively engaged in the enforcement program.

QUESTION FROM REPRESENTATIVE UPTON

Question 2: In your written testimony, you note that non-profit contractors would require an increase in base, incentive, and award fees if they were subject to civil penalties for nuclear safety violations. For each of your major site management contracts with non-profit educational institutions, what portion of the base, incentive, and /or award fees are associated with the risk of civil penalty pursuant to the Resource Conservation and Recovery Act?

Answer 2: We cannot quantify the portion of fees attributable to RCRA penalty risks. Based on a survey of the Department's Operations offices, the responders indicated that the cost risks associated with civil penalties under RCRA normally were not specifically addressed as part of the fee negotiations.

QUESTION FROM REPRESENTATIVE UPTON

Question 3: For each of DOE's major contracts with non-profit educational institutions, please explain how performance-based contracting has been used for improved safety performance. For each contract, please list each safety-related objective, and the total fees tied to each objective for fiscal years 1996-1999. Please also provide the total fee earned for each safety related objective for fiscal years 1996-1998.

Answer 3: One of the underlying reasons for the Department's Contract Reform Initiative was to deal more effectively with environmental, health, and safety (ES&H) issues. This was accomplished through the use of a number of interrelated contract mechanisms:

- (a) a new ES&H clause, which requires the contractor to develop and implement an integrated safety management system;
- (b) a revised directives system clause that provides for the implementation of new ES&H standards as appropriate during the term of the contract;
- (c) performance objectives related to ES&H matters; and
- (d) a conditional payment of fee provision which permits DOE to withhold some or all of an otherwise earned fee for safety and health infractions;

These mechanisms have strengthened contractor accountability for ES&H performance by requiring the integration of ES&H into business systems and work management processes. They also delineate basic safety system requirements for all DOE operating contractors in order to help ensure work is conducted safely. One of the key features is that the contractor must submit documentation of its ES&H management system for DOE for review and approval, and the contractor is contractually bound to operate in the manner described.

Submitted for the record is a detailed response to this question for each DOE management and operating contract with an educational institution. (The information follows:)

SPECIFIC MANAGEMENT AND OPERATING CONTRACTS WITH EDUCATIONAL INSTITUTIONS

UNIVERSITY OF CHICAGO at Argonne National Laboratory: Fees are not tied directly to specific ES&H objectives; however, performance-based contracting that considers ES&H objectives is one reason for improved safety performance.

For 1996, the maximum performance fee was \$4.7 million, of which \$4.2 million was earned. The earned fee was based upon a combination of approximately equal weightings of science/technology and operations. ES&H was evaluated within the operations area as one of several functional areas, but specific weights were not assigned. The safety related performance measures for the 1996 contract were: contractor to improve environmental quality; contractor to provide safe work environment; contractor to maintain continuous improvement; contractor to protect environment, public and workers.

For 1997, the maximum performance fee was \$4.7 million, of which \$4.2 million was earned. The fee was earned based upon a combination of equal weights for the science/technology area and operations. Within operations, ES&H was 16%, or 8% of the total value. The safety related performance measures for the 1997 contract year were: contractor to provide safe work environment and contractor to maintain continuous improvement

For 1998, the maximum performance fee available was \$3.5 million of which the University earned \$3.425 million. Of the \$3.425 million, \$3 million was earned for an overall excellent rating. Additional fee was earned for outstanding ratings in science/technology and projects and infrastructure. ES&H was rated as excellent. The safety related performance measures for the 1998 contract year were: contractor to provide safe work environment; contractor to implement ISM; and contractor to maintain continuous improvement.

For 1999, the same method is being employed as was used in 1998. The safety related performance measures for the 1999 contract year were: contractor to provide safe work environment; contractor to implement ISM; and contractor to protect the environment.

BROOKHAVEN SCIENCES ASSOCIATES at Brookhaven National Laboratory: Fees are not directly tied to specific ES&H objectives; however, performance-based contracting that considers ES&H objectives is one reason for improved safety performance.

For 1996, there was a fixed fee of \$3.8 million paid to Associated Universities, Inc. (AUI), the predecessor contractor for management and operation of BNL. This fee was not tied directly to any performance activity. The safety related performance measures for the 1996 contract were: contractor to improve environmental quality; contractor to provide safe work environment; contractor to maintain continuous improvement; contractor to protect environment, public and workers. Due to poor ES&H practices by AUI and the disintegration of public trust in the laboratory, the AUI contract was terminated and a competitive solicitation was issued to select a successor contractor to operate BNL.

During 1997 a new contractor was being competitively selected. The existing contract with AUI did not contain any specific performance measures. A fixed fee for 1997 of \$4.1 million was negotiated. In addition, a \$1.7 million fixed fee was negotiated with AUI for a portion of FY98 to cover the last period of AUI involvement at BNL.

For the balance of 1998, Brookhaven Science Associates (BSA) was selected to operate and manage BNL. The company received a fixed fee of \$3.574 million. The only areas in which performance measures were established were ES&H (30%), science (50%), and community involvement (20%). The performance measures did not have direct fee amounts associated with them. The safety related performance measures for the 1998 contract year were: contractor to develop safe work environment and contractor to implement ISM.

For 1999, a maximum performance fee of \$7.0 million was negotiated with ES&H weighted 15% of the total, science and technology weighted 60%, communications and trust weighted 10%, and environmental stewardship weighted 15%. The final determination of fee will be in FY00. The safety related performance measures for the 1999 contract year were: contractor to perform in ES&H compliant manner; contractor to implement ES&H management systems; and contractor to designate quality managers and leaders.

IOWA STATE UNIVERSITY at Ames Laboratory: Fees are not tied to specific ES&H objectives. However, for 1997 a total fee of \$60,000 was available for all contract activity subject to performance based fees (50% was allocated to non-science activity and 50% to science activity). ES&H measures represented 20% of the fee associated with non-science activities (amounting to 10% of the total available). The contractor earned \$54,000 of the \$60,000 available, \$24,000 for non-science activities and \$30,000 for science activities. Safety related performance measures were: contractor to acknowledge employee concerns within two business days of receipt; contractor to allow time to address employees' concerns; and contractor to minimize reportable injury/illness rate and lost workday case rate.

For 1998 a total fee of \$75,000 was available for all contract activity (20% was allocated to non-science activity and 80% was allocated to science activity). ES&H measures represented 60% of the fee associated with non-science activity (amounting to 12% of the total available). The contractor earned \$70,000 of the \$75,000 available, \$10,000 for non-science activities and \$60,000 for science activities. Safety related performance measures were: contractor to conduct activity reviews of laboratory work; contractor to conduct activity review of all work involving lasers, x-rays, radiological materials, hot work, working in confined space, or activities involving Facility Services Group operating machinery and not previously subjected to an activity review during 1998 contract year; contractor to prevent fatalities, injuries, incidents of illness, exposures and releases (in excess of established limits); contractor to minimize total recordable case rate and lost workday case rate; and contractor to achieve the waste minimization/pollution prevention goals delineated in the Ames Laboratory Pollution Prevention Program Plan.

For 1999 a total fee of \$100,000 was available for all contract activity (40% is allocated to non-science activity and 60% is allocated to science activity). ES&H measures represented 62.5% of the fee associated with non-science activity (amounting to 25% of the total available). The fee determination for this year has not yet been made. Safety related performance measures were: contractor to implement agreed to corrective actions to address ISMS gaps; contractor to notify Ames Group that laboratory is ready for Phase I and Phase H Verification Review; contractor will apply activity review process to all research and support activities not reviewed in

1998 contract year; contractor to minimize total recordable case rate and lost workday case rate; and contractor to achieve the waste minimization/pollution prevention goals delineated in the Ames Laboratory Pollution Prevention Program Plan.

PRINCETON UNIVERSITY at Princeton Plasma Physics Laboratory: Princeton University received a \$10,000 fixed fee for contract years 1997, 1998, and 1999. As a result, fees are not tied to specific ES&H objectives; however, performance-based contracting that considers ES&H objectives is one reason for improved safety performance. There were no safety related performance measures for the 1996 contract year because the contract had not been converted to a performance-based management contract.

The safety related performance measures for the 1997 contract were: contractor to maintain environmental quality and contractor to provide safe working environment.

The safety related performance measures for the 1998 contract were: contractor to provide safe working environment; contractor to measure environmental performance; and contractor to implement ISM.

The safety related performance measures for the 1999 contract were: contractor to provide safe working environment; contractor to measure environmental performance; and contractor to implement ISM.

UNIVERSITIES RESEARCH ASSOCIATES at Fermi National Accelerator Laboratory: Universities Research Associates received a fixed fee. As a result, fees are not tied to specific ES&H objectives; however, performance-based contracting that considers ES&H objectives is one reason for improved safety performance. There were no safety related performance measures for the 1996 contract year since the contract had not been converted to a performance-based management contract.

For 1997, URA received a fixed fee of \$3.2 million. ES&H related performance measures for the 1997 contract year were: empowerment and training of workers, institution of a work related injury reduction program, minimization of wastes and promotion of recycling.

For 1998 URA received a fixed fee of \$2.75 million. The safety related performance measures for the 1998 contract year were: contractor to provide safe working environment; contractor to minimize waste and promote recycling; and contractor to implement ISM.

For 1999, URA received a fixed fee of \$2.88 million. The safety related performance measures for the 1999 contract year were: contractor to provide safe working environment; contractor to minimize waste and promote recycling; and contractor to implement ISM.

UNIVERSITY OF CALIFORNIA at Los Alamos National Laboratory: There was no fee arrangement for FY93-FY97. During that period a management allowance of \$14 million was paid to the University of California for operation of LANL, LLNL, and LLBL.

For the period FY98-02, there is an annual program performance fee range of \$4.9 million to \$8 million, the target being \$7 million. Fee amounts in excess of the \$7 million target would be earned for exceptional performance in science and technology as well as ten operational and administrative areas, one of which is environment, health, and safety (ES&H). For FY98 the University earned \$7.65 million as a program performance fee. During that period, its ES&H rating was "good." None of the \$650,000 exceptional performance fee resulted from ES&H performance.

UNIVERSITY OF CALIFORNIA at Lawrence Livermore National Laboratory: There was no fee arrangement for FY93-FY97. During that period a management allowance of \$14 million was paid to the University of California for operation of LANL, LLNL, and LLBL.

For the period FY98-02, there is a maximum annual performance-based fee of \$6.4 million. The fee consists of an "at risk" amount and an amount for exceptional performance. The fee is allocated for science and technology and ten operational and administrative areas, one of which is environment, health, and safety (ES&H). For FY98 the University earned \$6.162 million as a program performance fee. During that period, its ES&H rating was "good." None of the exceptional performance fee resulted from ES&H performance.

UNIVERSITY OF CALIFORNIA at Lawrence Berkeley National Laboratory: There was no fee arrangement for FY93-FY97. During that period a management allowance of \$14 million was paid to the University of California for operation of LANL, LLNL, and LLBL.

For the period FY98-02, there is a maximum annual performance-based fee of \$1.6 million. The fee consists of an "at risk" amount and an amount for exceptional performance. The fee is allocated for science and technology and nine operational and administrative areas, one of which is environment, health, and safety (ES&H). For FY98 the University earned \$1.484 million as a program performance fee. Dur-

ing that period, its ES&H rating was "excellent," giving rise to the award of \$3,889 in exceptional performance fee attributable to ES&H performance.

OAK RIDGE RESEARCH ASSOCIATED UNIVERSITIES at Oak Ridge National Laboratory: For fiscal years 1996-1999, there were no specific safety-related objectives with fees tied to those objectives; however, safety performance, along with other facets of performance, was considered and evaluated in the determination of final fee amounts

BATTELLE MEMORIAL INSTITUTE at Pacific Northwest Laboratory: Fees are generally not directly tied to specific ES&H objectives.

For 1996, of the total \$13,800,000 available fee, \$2,000,000 was available for safety-related objectives and conduct of operations. The total earned fee for 1996 for safety related objectives and conduct of operations was \$1,300,000.

For 1997, the laboratory received a fixed fee of \$6,000,000 with no assignment to specific critical outcome or objective.

For 1998, the laboratory received a fixed fee of \$5,600,000 with no assignment to specific critical outcome or objective.

For 1999, the laboratory's total available performance fee is \$7,100,000, of which approximately \$280,000 is directly associated with ES&H performance measures.

STANFORD UNIVERSITY at Stanford Linear Accelerator Center: Stanford University is paid no fee for the period of FY87 to FY02. The contractor's ES&H performance is evaluated against established performance measures.

SOUTHWEST UNIVERSITIES RESEARCH ASSOCIATES at Thomas Jefferson National Accelerator Facility: Environmental, Health, and Safety is one of seven major categories of performance measures in this contract. Fee is not tied directly to performance.

The contractor was paid a fixed management fee of \$2.2 million for contract year 1996.

The contractor was paid a fixed management fee of \$1.9 million for contract year 1997.

The contractor was paid a fixed management fee of \$1.8 million for contract year 1998.

The contractor will be paid a fixed management fee of \$1.9 million for contract year 1999.

QUESTION FROM REPRESENTATIVE UPTON

Question 4: For each of DOE's major non-profit educational institution contractors that have received an enforcement letter or notice of violation from the Office of Enforcement, please describe what base, incentive or award fee was reduced or eliminated as a result of the enforcement action.

Answer 4: The information follows:

UNIVERSITY OF CHICAGO at Argonne National Laboratory: Has occasionally received enforcement letters; however, fees have not been affected. The contract provides DOE with the ability to withhold some or all of the fee, should a significant ES&H event occur.

BROOKHAVEN SCIENCES ASSOCIATES at Brookhaven National Laboratory: Has occasionally received notices of violation. One event, under the site's previous contractor Associated Universities, led to a reduction in fee and ultimately to the termination of the contract. The new contract provides DOE with the ability to withhold some or all of the fee, should a significant ES&H event occur.

IOWA STATE UNIVERSITY at Ames Laboratory: Has not received such letters or notices. The contract provides DOE with the ability to withhold some or all of the fee, should a significant ES&H event occur.

PRINCETON UNIVERSITY at Princeton Plasma Physics Laboratory: Has not received such letters or notices. The contract provides DOE with the ability to withhold some or all of the fee, should a significant ES&H event occur.

UNIVERSITIES RESEARCH ASSOCIATES at Fermi National Accelerator Laboratory: Has not received such letters or notices. The contract provides DOE with the ability to withhold some or all of the fee, should a significant ES&H event occur.

UNIVERSITY OF CALIFORNIA at Los Alamos National Laboratory: The FY98 Annual Appraisal Report for LANL noted that it received 5 EPA "notices of exceedances" for National Pollutant Discharge Elimination System parameter requirements and three Resource Conservation Recovery Act compliance orders from the State of New Mexico. The fee paid is a culmination of all performance under the contract. The ES&H rating was "Good" for contract year 1998, and the overall fee paid considered this incident.

UNIVERSITY OF CALIFORNIA at Lawrence Livermore National Laboratory: On March 9, 1998, a DOE Notice of Violation was issued for a HEPA filter shredding accident which had occurred in July of 1997. The incident was addressed in the 1997 Annual Appraisal Report and rating. There was no fee arrangement in effect at that time.

On September 17, 1998, a DOE Final Notice of Violation was issued for exceeding administrative mass control in Building 332. This incident was addressed in the 1998 Annual Appraisal Report and rating. The fee paid is a culmination of all performance under the contract. The ES&H rating was "Good" for contract year 1998, and the overall fee paid considered this incident.

UNIVERSITY OF CALIFORNIA at Lawrence Berkeley National Laboratory: One enforcement letter was issued in 1998 for the spread of beryllium in the 88-inch cyclotron. This incident will be reflected in the 1999 Annual Appraisal Report and rating and should affect the program performance fee for ES&H performance.

OAK RIDGE RESEARCH ASSOCIATED UNIVERSITIES at Oak Ridge National Laboratory: The contractor has not received any enforcement letters or notices of violations. A significant event in ES&H or other performance areas could result in a reduction of the fee pool available.

BATTELLE MEMORIAL INSTITUTE at Pacific Northwest Laboratory: One enforcement action was issued in 1996 for collectively significant related occurrences in the Building 325 laboratory vacuum system. The action resulted in a Preliminary Notice of Violation, but no Final Notice of Violation was ever issued. No reduction of fee resulted from the Preliminary Notice of Violation. The contract provides DOE with the ability to withhold some or all of the fee, should a significant ES&H event occur.

STANFORD UNIVERSITY at Stanford Linear Accelerator Center: Stanford University has not received any enforcement letters or notices of violation. Such incidents would be addressed in the Annual Appraisal Report. There is no fee in this contract.

SOUTHWEST UNIVERSITIES RESEARCH ASSOCIATES at Thomas Jefferson National Accelerator Facility: The contractor has received no such letters or notices. The current contract provides DOE with the ability to lower the contractor's year end performance evaluation rating should such letters or notices be issued. The follow-on contract, which will be effective on October 1, 1999, provides the Department the ability to withhold some or all of the fee should a significant ES&H event occur, in addition to lowering the contractor's year end performance evaluation rating.

QUESTION FROM REPRESENTATIVE UPTON

Estimate of Lost Productivity from Nuclear Safety Violations

Question 5: Please list and estimate the total direct-and indirect-cost overruns that have resulted from stop work orders and/or facility stand downs that have occurred due to nuclear safety violations at DOE facilities managed by the University of California.

Answer 5: In the last two years, there have been a total of five stand downs at the Los Alamos National Laboratory (LANL) and the Lawrence Livermore National Laboratory (LLNL). The "cost overrun" estimates provided below reflect estimates of the "cost" of lost productivity (the amount spent during the stand down that otherwise could have been spent on operations).

- Chemistry and Metallurgy Research (CMR) Facility at LANL—From September 1997 to April 1998, normal operations at the CMR facility were suspended due to a series of recurring problems with work control, work authorization, and safety issues. The CMR facility is the only laboratory facility with full capability for performing analytical chemistry and materials science for special nuclear materials—plutonium and highly enriched uranium—in support of the Department's nuclear programs. The estimated cost was \$9 million.
- Technical Area 18 (TA-18) Facility at LANL—From August 1998 to April 1999, the TA-18 Facility, which handles special nuclear materials and is involved in nuclear detection development, criticality safety experiments and other nuclear related functions, was placed in a stand down following a criticality safety infraction. The estimated cost in lost productivity was \$6 million.
- Los Alamos Neutron Science Center (LANSCE) experimental facility at LANL—From February 1999 to June 30, 1999, Technical Area 53 was placed in stand-down mode by the facility landlord in response to several relatively minor safety incidents. These incidents were not nuclear safety violations and there were no injuries to workers or the public. A few of these incidents involved very low levels of radioactive contamination. The objectives of the stand down were to re-

view the conduct of operations at the facility, train staff, demonstrate management commitment to safety and preclude further and possibly more serious incidents. The estimated cost in lost productivity is \$6 million. Extensive training and procedure reviews were conducted during the shutdown.

Building 332 at LLNL—From July 1997 to April 1999, Building 332, a plutonium processing facility, was placed in a stand-down mode in order to address the cause of a series of safety incidences and then upgrade the facility to meet the new DOE Integrated Safety Management standards. This action was precipitated by a plutonium glovebox procedural error relating to criticality safety. The facility went through an extended resumption plan that was monitored by the DOE and the Defense Nuclear Facility Safety Board. The facility has resumed operations with significantly improved conduct of operations and is about to undergo a Integrated Safety Management verification. The estimated cost in lost productivity was \$2.7 million.

- Building 513 at LLNL—From July 1997 to October 1997, Building 513, a mixed waste processing facility, was placed in a stand-down mode as the result of an accident involving the uptake of curium while shredding high efficiency particulate air filters prior to disposal. The shredder process area involved in the incident is being decommissioned. All other activities in the facility were resumed, however. The estimated cost in lost productivity was \$2 million.

Question 6: In response to questions at the hearing, Mr. Keith Christopher indicated that his staff made several unsuccessful information requests to the Department of Labor (DOL) regarding their investigation and June 29, 1998 finding of retaliation taken by the University of California against Mr. David Lappa at Lawrence Livermore. Why is the Office of Enforcement unable to obtain this information in a timely manner?

Answer 6: On or about October 1, 1998, the Office of Enforcement contacted DOL and requested a copy of its decision in the Lappa discrimination case. DOL provided the document in a timely manner. The Office of Enforcement reviewed this document and determined that it would be necessary to obtain any investigative reports prepared by DOL to legally support any Notice of Violation that the Department was to issue to LLNL. Therefore, Enforcement staff made several telephone requests for the report, followed by a formal written request to DOL dated March 19, 1999. DOL has recently indicated that the documents cannot be made available because the Department of Energy does not have a Memorandum of Understanding with the Department of Labor to facilitate access to such information.

Question 7: When was the Office of Enforcement made aware of the allegation that UC had retaliated against Mr. Lappa?

Answer 7: In January 1998, the Office of Enforcement learned of reports in newspaper articles that David Lappa, an employee at LLNL, had raised nuclear safety concerns to his employer pertaining to plutonium operations. According to the articles, Mr. Lappa filed a formal complaint with another office in the Department alleging that LLNL retaliated against him for raising these concerns.

In response to these newspaper articles, the Office of Enforcement contacted Mr. Lappa, and asked him to cooperate with enforcement office personnel in exploring the underlying nuclear safety concerns that ultimately led to his complaint of reprisal. Mr. Lappa agreed and on February 19, 1998, he provided sworn testimony to the Office of Enforcement staff regarding the technical aspects of his nuclear safety concerns.

Question 8: Did the Office of Enforcement interview Mr. David Lappa in the course of its investigation into criticality safety infractions in building 332 at Lawrence Livermore? If so, did Mr. Lappa identify alleged acts of retaliation taken against him by UC? Please provide the committee with a transcript of any interview.

Answer 8: On February 19, 1998, the Office of Enforcement took sworn testimony from Mr. David Lappa concerning criticality safety infractions at building 332 at Lawrence Livermore. Mr. Lappa testified that when he made his concerns regarding the plutonium facility known, he began to experience intimidation, coercive, discriminatory and retaliatory treatment from his management.

Section 5.3.3, General Guidelines for Processing Whistleblower Complaints Involving Nuclear Safety Issues, of the Operational Procedures for Enforcement, provides for the following:

- Without regard to the status of any related whistleblower reprisal complaint, the Director will conduct all necessary investigations and take appropriate enforcement action with respect to the underlying nuclear safety concern(s). In that regard... review of the underlying nuclear safety concern(s) would not include review of the reprisal aspect of a case.

- ...the director will await the completion of the IG investigation of the whistleblower complaint. Additionally, DOE would wait for the results of any subsequent adjudication by the Office of Hearings and Appeal, before deciding whether to initiate PAAA enforcement action against a contractor for alleged acts of reprisal against contractor employees in violation of the Part 708 Whistleblower Rule.

Since Mr. Lappa testified that he was working with the IG in resolving the reprisal aspect of his concerns, in accordance with the above procedures, the Office of Enforcement did not pursue a line of questioning with Mr. Lappa regarding specific acts of retaliation that would provide a sufficient informational basis to investigate these allegations.

Question 9: What is the appropriate or required administrative response by DOE or the Office of Enforcement when it learns of potential acts of retaliation?

Answer 9: In general, the Office of Enforcement has the discretionary authority to issue a Notice of Violation and civil penalties to a DOE contractor who is determined to have retaliated against a contractor employee for raising a nuclear safety concern. In cases involving non-profit contractors, the DOE is authorized to issue a Notice of Violation, as appropriate, but not civil penalties. When a finding of retaliation is made by either DOE or the Department of Labor, the Office of Enforcement evaluates the evidence gathered by decision making body in order to develop sufficient factual information to determine whether a Notice of Violation and civil penalties can be issued. The purpose for issuing such an enforcement action is to deter retaliatory action by the contractor that would have a chilling effect on the willingness of other employees to openly and freely express safety concerns without fear of retaliation. In the Lappa case, such information has been requested from the Department of Labor.

QUESTION FROM HOUSE COMMERCE SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

Question 10: In Mr. Lappa's case, what is the appropriate or required administrative response by DOE once DOL had concluded the retaliation had occurred?

Answer 10: In March 1999, Secretary Richardson issued a policy statement on "Safety Accountability and Performance." In this directive, he said that "there must be open communication between management and employees and a zero tolerance policy for reprisals against those who raise safety concerns. Free and open expression of employee concerns is essential to safe and efficient accomplishment of the Department's missions."

The Secretary relies on DOE line and program management to enforce this policy. Our office has worked with DOE field offices and contractors on an ongoing basis for more than ten years to develop the tools to prevent retaliation of any type. We have generally been successful. When there are cases where retaliation has been determined to have occurred, Secretary Richardson counts on his line managers to take appropriate actions. DOE's contract with the University of California prohibits the University from retaliating against employees for whistleblowing. Accordingly, the University's fee evaluation plan will be reviewed to determine whether the fee can be reduced in response to a finding of employee retaliation.

Separately, through the enforcement process of 10 CFR Part 820, DOE has the discretionary authority to issue a Notice of Violation, when appropriate, to a contractor who is determined to have retaliated against a contractor employee for raising a nuclear safety concern. In the case of Mr. Lappa, the Department of Labor issued an opinion that Mr. Lappa was subject to reprisal. DOE is awaiting information from the Department of Labor to determine whether there is a sufficient basis upon which to issue a Notice of Violation.

Question 11: Now that DOE is aware DOL concluded that Mr. Lappa suffered retaliation, what is DOE doing to rectify this specific case and ensure that similar acts of retaliation are not repeated at DOE facilities operated by the University of California?

Answer 11: Secretary Richardson has indicated directly to his line management that he will hold them personally accountable for failure to implement the "zero tolerance" policy for retaliation against whistleblowers. As indicated, in its contract with DOE, the University of California is prohibited from retaliating against employees for whistleblowing. Accordingly, the University's fee evaluation plan will be reviewed to determine whether the fee can be reduced in response to a finding of employee retaliation.