The Regents of the University of California

COMMITTEE ON OVERSIGHT OF THE DEPARTMENT OF ENERGY LABORATORIES
September 22, 2004

The Committee on Oversight of the Department of Energy Laboratories met on the above date at UCSF–Laurel Heights, San Francisco.

Members present: Regents Blum, Dynes, Johnson, Marcus, Ornellas, Parsky, Pattiz, Preuss, Ruiz, and Wachter; and Advisory member Brunk

In attendance: Regents Anderson, Bustamante, Connerly, Hopkinson, Kozberg, Lansing, Lee, Novack, and Sayles, Regents-designate Juline, Rominger, and Rosenthal, Faculty Representative Blumenthal, Secretary Trivette, Associate Secretary Shaw, General Counsel Holst, Treasurer Russ, Provost Greenwood, Senior Vice Presidents Darling and Mullinix, Vice Presidents Broome, Drake, Foley, Gomes, and Gurtner, Chancellors Birgeneau, Bishop, Carnesale, Cicerone, Córdova, Fox, Tomlinson-Keasey, Vanderhoef, and Yang, Acting Chancellor Chemers, Laboratory Directors Nanos and Chu, and Recording Secretary Bryan

The meeting convened at11:10 a.m. with Committee Chair Preuss presiding.

1. **APPROVAL OF MINUTES OF PREVIOUS MEETING**

Upon motion duly made and seconded, the minutes of the meeting of July 15, 2004 were approved.

With the concurrence of the Committee, the order of the agenda was changed.

2. **DISCUSSION OF THE PROS AND CONS OF COMPETING FOR THE MANAGEMENT OF THE LOS ALAMOS NATIONAL LABORATORY AND LAWRENCE LIVERMORE NATIONAL LABORATORY**

A discussion concerning competing for the management of the Department of Energy laboratories was introduced by Faculty Representative Blumenthal, who recalled that the previous spring the UC faculty had engaged in a broad discussion of the issue. That debate included the presentation of five white papers prepared by the Academic Council Subcommittee on the National Laboratories. A series of forums had been organized on campuses where pro and con discussions took place so that faculty throughout the system could participate. The discussions culminated in a poll of University faculty, the outcome of which was discussed at the May 2004 Regents meeting.

Professor Blumenthal introduced two distinguished faculty members to present pro and con positions on the issue of whether the University should compete to retain

management of the Livermore and Los Alamos laboratories. The first, Mr. William Kastenberg, the Daniel M. Tellep Distinguished Professor of Engineering at UC Berkeley, is a member of the U.S. National Academy of Engineering and a fellow of the American Association for the Advancement of Science and the American Nuclear Society. He was awarded the Arthur Holly Compton Award of the American Nuclear Society for his contributions to engineering education and has won distinguished teaching awards from the American Society for Engineering Education and the Engineering Graduate Students Association at UCLA. His teaching and research interests are in the areas of risk assessment and risk management for complex technologies, nuclear reactor safety, environmental risk analysis, and the study of ethics and impact of technology on society.

Professor Kastenberg stated that his purpose was not to try to convince the Regents to come to any conclusion about competing for management of the two laboratories but rather was to share his own views regarding them. He reported that he had spent nearly his entire adult life as either a student or a faculty member at a University campus and had interacted closely with both laboratories, having had joint research projects with scientists and engineers there. His research has been funded by the laboratories, and he has served on external review committees at both of them. He has served on three scientific and technical review committees at Lawrence Livermore and chaired the External Review Committee for Environment, Health, and Safety at Los Alamos.

Professor Kastenberg noted that there were many questions to address concerning the possibility of a contract bid, but he believed that the crucial questions were whether the University should be in the business of making nuclear weapons and whether the management of the laboratories is consistent with the core mission of the University. It was his view that the University's mission is three-fold: education, research, and service to the public. He stated that thinking of Los Alamos and Livermore laboratories as doing nothing but making nuclear weapons was too narrow a viewpoint. The laboratories carry out a full range of research in the basic and natural sciences. They have distinct programs contributing to biotechnology, information technology, nano-technology, and nuclear technology. In the broader context, the knowledge generated at the laboratories is applied to a gamut of issues related to national security. In this context, that knowledge includes how to prevent, mitigate, and interdict the transfer of biological, chemical, and nuclear agents that make up weapons of mass destruction. He noted that many countries have aggressive nuclear weapons programs, and many others hope to develop them. Sub-national and terrorist groups are seeking fissionable materials with which to fashion nuclear weapons. The possibility of a dirty bomb looms with each discovery of unaccounted for radioactive material from hospitals, research laboratories, and other industrial facilities worldwide. Much of the research and development that is carried out at the UC-managed laboratories focuses on national security issues such as the detection of underground detonations of nuclear weapons, the detection and mitigation of any atmospheric dispersal of biological agents, and the detection and interdiction of the movement of special nuclear materials within cargo containers that might enter U.S. ports. He pointed out that these applied research programs contribute also to other

aspects of national security, including energy independence, environmental restoration, economic competitiveness, and an assured food supply.

Professor Kastenberg reported that his Nuclear Engineering Department at the Berkeley campus has eight faculty members, about 50 graduate students, and 50 undergraduate students. In the past three years, three of the faculty have taken advantage of the Lawrence Livermore National Laboratory faculty sabbatical program. Professor Ahn, an expert on high-level radioactive waste disposal, spent a year with researchers at Livermore developing proliferation-resistant fuel cycles for nuclear power plants and examining the disposition of excess weapons plutonium. Professor Prussin, an expert on radiation detection, is working on the issue of interrogating cargo containers for special nuclear materials, and Professor Morse, an expert on plasma physics, is working at the National Ignition Facility with application to inertial fusion. Eight graduate students are doing their Ph.D. research at the Livermore laboratory or are supported by its funds. All are making use of laboratory expertise, the sophisticated laboratory experiments, and the high-speed computers there. Twelve students have similar positions at the Berkeley laboratory. The UC Institute on Global Conflict and Cooperation, which is housed at the San Diego campus, along with the two national laboratories recently won a competitive NSF Integrative Graduate Education and Research Training program the subject matter of which is public policy and nuclear threats. The University won this prestigious award, which gives five-year, fully-paid fellowships to graduate students, only with the help of the two DOE laboratories. Professor Kastenberg reported that six of his department's Ph.D. students are participating as fellows and program associates. Further, Professor Kastenberg reported that 11 of its recent Ph.D. graduates have found research positions at the UC-managed laboratories, which affirms the view that the laboratories support the University's teaching and research missions. The laboratories help the University recruit the best students, and they fund them, provide laboratory and computing facilities unparalleled in the world, and provide jobs for them upon graduation.

Professor Kastenberg noted that his Nuclear Engineering Department is not unique in its relationship to the laboratories. At Livermore, 59 student employee graduate research fellows receive four-year, fully paid stipends and their tuition and fees; there are 200 students who are supported either directly or indirectly by the Livermore lab; and there are 300 UC faculty members who have joined collaborative projects with staff members at Livermore. Over the past 13 years, 2,000 publications jointly co-authored by staff at the Los Alamos laboratory and the campuses have appeared in peer review journals or were presented at international and national conferences. At both laboratories, the funds received by The Regents from overhead monies are used for laboratory-directed research programs, including projects that support 250 UC faculty. Los Alamos has entered into cooperative agreements with the campuses to fund research and support graduate students and faculty on various campuses in a host of areas central to the University's mission.

In closing, Professor Kastenberg commented that when considering national security, and given the broad range of scientific and technical research and the increasing degree of faculty and student involvement with the laboratories, it seemed to him that the

University's mission in terms of education, research, and service was well served. He acknowledged, however, that there are social and financial costs to the University in managing the laboratories. The University's reputation is at stake, given the events of the past two years. He believed the decision to continue University management cannot be based on any clear-cut cost benefit formula and should not be decided based on any socio-political ideology. He believed it would be up to each Regent to search his conscience and act in a way that is best for the University.

Faculty Representative Blumenthal then introduced Mr. Walter Kohn, Professor Emeritus at the Santa Barbara campus. Professor Kohn is a condensed matter theorist who has made seminal contributions to the understanding of the electronic structure of materials. Among his many honors are membership in the National Academy of Sciences and the American Academy of Arts and Sciences, 17 honorary doctorates, the National Medal of Science, the Niels Bohr UNESCO Gold Medal, and the Nobel Prize in chemistry. His extensive University service includes being the founding director of the UC Santa Barbara Institute for Theoretical Physics as well as the Chair of the UC San Diego division of the Academic Senate.

Professor Kohn presented his views concerning the University's management of the Department of Energy laboratories. He suggested areas to which the University should turn its attention rather than continuing to focus to any degree on the weapons industry. He believed that there were much more appropriate activities that would benefit from the University's qualifications and heightened involvement.

The first of the activities cited by Professor Kohn was ensuring the full participation of underrepresented students. He noted that within six years, 71 percent of the K to 12 student population of California will be non-white. Because of the State's unprecedented budgetary problems, financial support for helping these students enter the University and succeed within its environment has been reduced by 70 percent from its high point. It will be a challenge for the University to maintain and enhance its efforts without increasing its financial demands. Among his specific suggestions, he urged that faculty and graduate students become more involved in meeting this challenge, that the University create a peer-reviewed journal or serial publication dealing with the educational challenges of the changing demographics of the state, and that the Regents, administration, and faculty form a coalition to approach major foundations for financial support for this effort. He believed that such endeavors would have an enormous impact on the future of California and could serve as role models for the rest of the nation.

Professor Kohn observed that California is entering a challenging, if not threatening, phase in the intertwined areas of energy and climate. Cheap oil and gas production has begun to flatten out; coal is plentiful and cheap but highly polluting; nuclear energy is expensive and also offers worrisome opportunities to terrorists; wind power is clean but decades away from being competitive and the total amount of potentially available wind energy would provide only a small fraction of the energy needed; solar energy is clean, safe, and plentiful but is also far from being competitive. By 2050, the population in

developing countries is expected to rise by about 3 billion, a factor of two, while that of the developed world will stay fairly flat. If nothing is done, total world consumption of energy could be about three times greater than it is today and would be entirely unmanageable with today's available sources. The consequence would be rampant global warming. To address this danger, the rise in world population must be slowed, worldwide per capita consumption must be kept substantially below the current U.S. rate, and new, nonpolluting energy sources must be developed. Professor Kohn believed that the University could contribute to the effort to overcome these challenges by showing the way toward raising the level of education of women in underdeveloped countries and through its extensive research in energy conservation and clean energy.

Professor Kohn reported that an extensive study by the National Academy of Sciences, with the participation of four scientists from the Berkeley campus, the Lawrence Berkeley National Laboratory, and the Scripps Institution recently projected an alarming rise in California's summer temperature of between four and 15 degrees by the end of the century, with dramatic consequences for sea levels, health, water resources, and agriculture. He noted that, following the evaluation of his science advisor, British Prime Minister Blair had declared that climate change is the most severe problem the world is facing. He is embarking on an international scientific and diplomatic effort to persuade the U.S. and Russia to acknowledge and address the catastrophic consequences of severe climate change. Mr. Kohn believed that national scientists, political scientists, and economists of the University and the Lawrence Berkeley and Lawrence Livermore laboratories can and should play a leadership role in an international effort to combat the threat. He noted that this is particularly important in that other suggested energy proposals appear illusory: for example, aggressive drilling in the arctic refuge would postpone the world crisis by only a few years; hydrogen as a source of energy could be helpful only if it could be produced cheaply, cleanly, and without requiring more energy than can be extracted from it; and the promise of fusion as a commercial energy source remains speculative.

Professor Kohn concluded his remarks by noting that for over five decades the University has declared that it will manage nuclear weapons work as a public service only if asked to do so by the federal government. Actively bidding for the contracts to do so would seem contradictory to this stance. He was hopeful that the University would change its course in the light of radically changed circumstances.

Committee Chair Preuss commented that, while the Regents are trustees who must do what is best for the University, in this case they must also do what is best for the country. He asked Professor Kastenberg whether it would be better for the country if the University continued its management of the DOE laboratories. Mr. Kastenberg responded that the possibility exists of having a large corporation run the laboratories. He was uncomfortable with having the business industrial community in charge of such a strategic function. Another possibility could be management by the federal government, which could subject the laboratories to more political pressure than they are exposed to already. He believed that the institutions in the country in which the public

has the most confidence are universities. Given the University's prestige and experience, it would seem a very appropriate management choice for this public service. He noted that through the Cold War, the University was the center of a weapons complex that conducted research on and developed nuclear weapons. He agreed with Professor Kohn that it would be best if the laboratories could turn their focus away from the weapons industry and toward other pursuits.

Regent Blum requested clarification from Professor Kohn. While he embraced the notion of enabling the laboratories to focus their research on energy and global warming, he noted there are not resources being used there that could be freed up to do so if weapons-directed research were to cease. If the University severed its ties with the Los Alamos laboratory, for instance, it would lose the benefits gained from having several hundred UC professors associated with laboratory projects. As long as management of the laboratories continues to involve work with nuclear weapons, he would prefer that the University rather than another entity be in charge. He asked Mr. Kohn how dropping the laboratories would help with the issues of energy and global warming and whether he could disclose what sort of work will be involved in the newest weapons program. Mr. Kohn observed that one issue of concern was whether a decision not to disengage from the Los Alamos laboratory would damage the University's management relationship with the Lawrence Berkeley laboratory. He recalled that when the management of the laboratories had been discussed in prior years, former President Gardner, in answer to that question, had responded that if the University did not bid for the Livermore and Los Alamos contracts it would probably lose the Berkeley laboratory contract, which had dismayed the faculty. President Gardner subsequently retracted his statement. Mr. Kohn recalled that the laboratories not only had never supported a test ban, they had actively objected to it. Although a test ban is in effect, no treaty exists to support it. He noted, concerning his previous comments about other pressing areas, that much of the University's support is due to the fact that people realize how much it has contributed to the betterment of California in areas such as agriculture. He believed that it was not parochial for the University to be concerned with such efforts, as he viewed California as a bellwether for the rest of the country. He believed that the laboratory directors should take it upon themselves to inform President Bush about the importance of joining Prime Minister Blair and other leaders who are putting the issue of global warming at the forefront of their concerns.

Regent Connerly believed the question was still pending as to what was better for the country. The response that there should be better social programs rather than more and better nuclear weapons and that the University's activities should mirror the changing demographics of California seemed to him not to be exchangeable with the question of whether the University should bid for the laboratory contracts. He was hopeful that as the management issue continues to be considered by the Regents, more specific information would be offered that would provide them with more direction as to whether the contracts should be bid for and if not, why not. Professor Kohn responded that he had been referring only to the opportunity costs. He believed that the laboratories consume the time and effort of the University administration that should be spent on other matters.

Regent Anderson believed that as the discussion of this issue continues, other relevant questions will emerge. She wondered whether work goes on at the laboratories that is against international laws and whether having the University manage the laboratories could preclude its being held accountable concerning some of the types of regulations that would restrict a for-profit company.

Regent Pattiz suggested that, with global warming having become a greater threat than terrorism and nuclear weapons interdiction being more important that creating a new generation of nuclear weapons, there could be an opportunity for the University to apply its full weight and prestige to an effort to advocating a change of direction for the work that it conducts at the DOE laboratories.

Regent Lee was of the opinion that in the likelihood that entities other than the University will do a better job of managing the laboratories, they should be invited to try, because a job of such importance should be undertaken only by those best able to handle it. He emphasized that this country is free because it remains strong. He believed that the Regents will need to make their decision based on what is best for the country.

President Dynes thanked Professors Kastenberg and Kohn for presenting logical and intelligent viewpoints.

[For speakers' comments, refer to the September 22, 2004 minutes of the Committee of the Whole.]

3. **ANNUAL REPORT OF THE UC PRESIDENT'S COUNCIL**

Mr. William Friend, Chair of the UC President's Council on the National Laboratories, presented the 11th Annual Report of the Council. The Council is appointed by the President to advise him on all matters having to do with the management and operation of the Lawrence Berkeley National Laboratory, the Lawrence Livermore National Laboratory, and the Los Alamos National Laboratory. President Dynes has noted that the Council has been very helpful to him on matters related to the management and operation of the three laboratories. The Council has twenty members who come from academic institutions, private research organizations, private industry, government, and military service and are considered experts in their fields.

Mr. Friend began his remarks by referring to the previous discussion about the University's management of the DOE laboratories. He reported that the most important research in the country concerning climate change was taking place at the Lawrence Livermore National Laboratory and that all the laboratories conduct significant research on bioterrorism and other issues which have little to do with nuclear weapons.

Mr. Friend reported that he represented a team of more than 70 professionals who serve on the Council and its panels and who had requested that he convey their views on laboratory management related to the decision on whether to compete or how best to

compete for the management of all three laboratories. While the Council and its panels have been engaged in reviewing activities at all three laboratories, at the forefront of the Council's activity in the past months has been the Los Alamos laboratory, where their focus has been on advising the Office of the President and the laboratory on processes and systems to strengthen safety and security and to return the laboratory to full operation efficiently and effectively. They are also working to enhance programmatic and scientific performance at all three laboratories. He recalled that in August three of the Council's panels met at the laboratory after it had been shut down temporarily, following a series of security breaches. The members had suggested measures for operating while the classified network at the laboratory is being expanded and enhancements are being made to cyber-security, and they had discussed the processes for restarting work. The panel members concluded that restarting the laboratory must be founded in the confidence that all the vulnerabilities have been assessed thoroughly.

Mr. Friend recalled that because of his concern about the impact of the laboratory shut down on the research community there, President Dynes had commissioned an ad hoc advisory group of senior Council members who interviewed laboratory employees. While the advisory group was concerned about the evident low morale, it was pleased by some of the efforts being made by the Los Alamos administration, particularly the new Chief Science Officer. Mr. Friend reported that the National Security Panel, which monitors the weapons programs at the Los Alamos and Livermore laboratories, will meet at Los Alamos in October to focus on the critical programs that relate to stockpile stewardship. The Science and Technology Panel met in August to conduct its annual performance review of the programmatic work at the Livermore and Los Alamos laboratories. Its members found the laboratories' work to range from good to outstanding. They noted particularly the enhanced workload sharing and cooperation between the two. The Panel will meet in December at the Lawrence Berkeley laboratory to observe the program that is being developed under the leadership of the new director, Mr. Stephen Chu.

Mr. Friend then focused on the topics the Regents will face with respect to the competition to manage the three laboratories. He noted that all of the comments and recommendations of the Council are conditioned on the understanding that the terms of the Requests for Proposals are acceptable. The Council is fully supportive of competing for management of the Lawrence Berkeley National Laboratory. It is fully supportive also of competing for the Livermore and Los Alamos contracts, but with the addition of an industrial partner that would provide operational strength where necessary and bring some discipline to the operation. The Council is unanimous in the view that continued University management of the laboratories is critical to their national security mission. Despite the negative publicity, the University's 60 years of laboratory management have led to great accomplishments. He referred to a recent report of the National Research Council, which stated that the scientific programs at Livermore and Los Alamos were widely regarded in the community as world class. Further, the Council felt strongly that the continued scientific excellence and productivity of the two laboratories are critical to the nation's nuclear deterrent capability and its scientific leadership. He emphasized that

thousands of brilliant scientists and engineers, who drive research and development, are very loyal concerning their identity with the University. They believe that the University as their employer was in many if not most cases instrumental in their decision to hire on. While there are many issues to be addressed, the members of the Council believe that the University should be proud of its performance at the laboratories.

Mr. Friend reported that the Council had been engaged in discussions with the Office of the President regarding the issues inherent in any decision that the Regents might make to compete for the contracts for the DOE laboratories. It reiterated that it is the position of the Council that the University's continued management of the laboratories is in the best interest of the nation, and, assuming the Requests for Proposals have acceptable terms, the Council is fully supportive of the University's competing for these contracts. The Council believes that the support of the Regents is critical to the thousands of laboratory employees who consider their affiliation with the University of California as their employer to be of great importance. These people are the heart of the laboratories and the engine that drives the superb research and development activities that have been the hallmark of the University's laboratories and the pride of the University.

President Dynes commented that the Department of Energy had recently announced the winners of the annual E. O. Lawrence Award. Of the seven winners, six are associated with the University or the DOE laboratories it manages.

Regent Connerly acknowledged that there were compelling reasons to continue managing the laboratories. He advocated viewing that management as, first and foremost, a service to the nation.

Regent Kozberg asked whether the preoccupation with security and process was inhibiting important scientific research. Mr. Friend recalled that the laboratories have a good history when it comes both to science and security, despite the recent breaches. He did not think there was a conflict between top-notch science and efficient security, which he viewed as a question of discipline.

Mr. Friend confirmed for Regent Anderson that all five of the Council's panels had contributed to the annual report and noted that it and the minutes of Council and panel meetings were readily available.

4. **STATUS OF COMPETITION AND OTHER MATTERS AT THE DOE LABORATORIES**

Vice President Foley provided the latest information regarding planning and anticipated schedules for competition for the management of the Lawrence Berkeley, Lawrence Livermore, and Los Alamos National Laboratories and regarding the security and safety incidents at Los Alamos. He thanked President Dynes and Chairman Parsky for their recent trip to the Los Alamos National Laboratory, where they met with laboratory employees.

Mr. Foley discussed the status of the three contract competitions. He reported that the University expects to receive a draft Request for Proposals for Lawrence Berkeley laboratory within a few weeks, although it may not be until January that a draft RFP is presented for the Los Alamos laboratory. The Lawrence Livermore competition will follow the competition for Los Alamos. He noted that because the Lawrence Berkeley contract expires in January 2005, the process may be delayed or extended. The contract for Los Alamos expires in September 2005, as does the one for Livermore, but they may be extended for two years without any change in provisions. He recalled that the possibility of having an industrial partner had been discussed at previous meetings. Lockheed Martin, which was considering forming such a partnership in the bid for the Los Alamos contract, decided to concentrate instead on its core businesses and declined to dedicate finances or personnel to making any bid for the contract. Talks continue with other potential partners that could add strength to the University's bid.

Before turning to Director Nanos for an update on security matters, Mr. Foley observed that it is important that the employees of the University and the laboratories continue to demonstrate accountability in everything they do. He believed that the disciplinary actions that were taken by Director Nanos at the Los Alamos laboratory had been proportionate and appropriate to the circumstances. The safety incident investigation has been completed. The University and the laboratory have concluded internal reviews of the security incidents and are awaiting verification of their findings by a third-party source. He reported that the stand-down at Los Alamos was not due entirely to specific incidents but rather was in response to ongoing safety concerns. The suspension of operations was to assure that any gaps in past training will be corrected. He believed that much valuable information will have been gathered about the laboratory as a result of having gone through the stand-down.

Mr. Foley noted that, despite recent problems at the Los Alamos laboratory, science and technology continue to be of the highest order. He noted that the University responded to the circumstances at Los Alamos independent of the response of its director. Mr. Foley recalled that he had appointed a three-member panel of experts to review and evaluate the laboratory actions to strengthen security practices. He noted also that President Dynes had appointed an ad hoc committee to the President's Council on the National Laboratories to which Mr. Friend had referred in his annual report. The Council's Laboratory Security, Environmental Safety and Health, and Project Management are also evaluating security measures at the laboratory. A six-person team from the Lawrence Livermore laboratory was assigned to use the expertise gained through experiences at that laboratory concerning matters such as handling CREM to counsel the Los Alamos laboratory administration. Finally, Mr. Foley reported that a Special Assistant for Security, although appointed by Director Nanos, reports directly to him.

Director Nanos remarked that part of his decision to shut down the Los Alamos laboratory was based on the fact that problems had emerged that involved not just aging infrastructure and overburdened systems but also behavior issues leading to safety incidents that appeared to be correlated. Willful behavior in some areas seemed to be

leading to willful behavior in other areas. He believed that the shut down would allow for an examination of all areas of the laboratory to assess risk and the formulation of an action plan in the near term that would be added to the list of long-term goals for bringing the laboratory up to the highest standards in all respects. He reported that the laboratory had been divided into three areas of risk. Office and light laboratory work was categorized as risk level 1; risk level 2 was medium laboratory work and classified operations; risk level 3 was removable classified media plus the most complex nuclear and other hazardous operations. Through this process, a list was maintained of those activities that, if stopped, had the potential to cause damage or greater lack of safety or could put national security at risk. He reported that he had approved for restart all level 1 activity and half of level 2. Restarting level 3 activity was anticipated within the following week. He noted that the DOE is fully informed about the process for restarting the laboratory. The laboratory has done a full and complete job of identifying the issues and reviewing the risks from the standpoint of the physical plant and the procedures for operating it, and in terms of the training and mentoring of the people who are operating the plant. He believed this was an investment in the institution that was necessary in order to move it toward conducting acceptable operations. The majority of the laboratory will be restarted by October 1. He emphasized the importance of following up by turning the information that has been gathered into action plans, of getting support from the DOE, and of establishing a system in the laboratory for continuing to focus on safety issues.

Director Nanos concluded his remarks by noting that disciplinary actions had been taken against employees who had been involved in safety and security incidents. The terminations and downgrading of positions were based on the performance of individual employees and had no bearing on the broader investigation that is ongoing. He reported that the response of the community at the laboratory and externally was supportive and the actions had been viewed as fair and equitable.

Regent Preuss asked Director Nanos whether he believed the resources that had been expended would prevent the University from finding itself in another reactive mode in response to new problems. Director Nanos responded that there was documented evidence of the degree to which operations at Los Alamos had been examined and that measured decisions had been made as to what would be corrected. He believed those actions had put the laboratory in a good position in the near term. The telling factor will be whether the list of requirements needed to sustain safe operations in the long-term will be funded. Extending the network to reduce CREM will take effect in the short term. There will be 19 CREM libraries, most of which will be in vaults under strict control. Those kinds of investments are being made in the near term. The long-term question is whether the investment stream will be there to produce the continued changes that will be needed to bring the institution up to standard. Some types of activity may require hard negotiation. Determinations may be required as to whether the University can continue to operate in an area that is drifting out of the prudent zone because of inadequate funding. The University may be faced with a period of negotiation as to what the ultimate footprint of activity will be at Los Alamos and whether it can be supported

properly. Regent Preuss suggested that if the Director determined that the laboratory was acting at a level that he considered less than safe, the Regents should be informed.

President Dynes reported on Chairman Parsky's and his visit to the Los Alamos laboratory in early August. Their goal was to speak with the Director, leadership team, scientific community, administrative staff, and the on-site head of DOE oversight. He reported that they were briefed in detail on the security and safety incidents. They concurred with the decisions that had been made and the process for moving forward. One of his concerns continues to be the viability of scientific efforts on the Los Alamos site. In that regard, they answered questions from about 700 staff in a town forum that was broadcast throughout the laboratory. Laboratory employees made it clear that they had respect for the University and wanted it to remain as laboratory manager, but they wondered why there was not more of a University presence there. They had been apprised of the steps that Director Nanos intended to make and agreed with them. The University is fully committed to restoring the nation's confidence in the Los Alamos laboratory independent of any decision about competing for the management contract.

Regent Parsky commented that it was important for the employees to have a sense of the sentiments of the Regents. Although they are all proud of the quality of the research that is done, he believed it was important that everyone associated with the laboratory understand the seriousness of the recent security and safety issues. As previously noted, there is a need for a change in the culture, especially concerning issues of security, in order for the Regents to be confident that work should proceed. Although the positive 60-year record of wonderful research and good security has been noted, he emphasized that the lapses that occurred were so serious from the Regents' standpoint that unless they are confident that they have been corrected it will be difficult to proceed to bid for the contract. He emphasized also that the involvement of the Department of Energy in this process is an important element. Each step that the University takes in returning the laboratory to full operation needs to be concurred in by the DOE. When the RFP is out and the University considers bidding, the Regents will want to feel comfortable that the DOE, which is holding the University to a certain standard, has concurred in each step of the process. He acknowledged that progress is being made, but he stressed the importance of assuring the Regents that the University will be ready to bid confidently for the management contract.

Regent Hopkinson commented that, although the decisions that have been made in recent weeks have been tough, they have been correct. They communicate to the people at the laboratory that what has happened is unacceptable and that a new course has been established. She was cautiously optimistic about the outcome but stressed that the vigilance must continue.

Regent Preuss commented that the Regents should receive regular updates about the progression of the corrective plan for the Los Alamos laboratory so that they will be well prepared to make decisions about competing for the management contract.

Regent Marcus noted that while the University is marching toward excellence in administrative controls in certain areas, care must be taken not to undermine its commitment to the world-class, cutting-edge science and research that continue to be conducted at the laboratory.

The Committee adjourned at 1:20 p.m.

Attest:

Secretary