The Regents of the University of California

COMMITTEE ON OVERSIGHT OF THE DEPARTMENT OF ENERGY LABORATORIES
May 18, 2006

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, Juline, Marcus, Parsky, Pattiz, Preuss, Rominger, and Ruiz; Advisory member Oakley

In attendance: Regents Gould, Hopkinson, Island, Kozberg, Rosenthal, Schilling, and Wachter, Regents-designate Coombs, Ledesma, and Schreiner, Faculty Representative Brown, Secretary Trivette, General Counsel Holst, Acting Provost Hume, Senior Vice President Darling, Vice Presidents Broome, Foley, Gomes, and Hershman, Chancellors Birgeneau, Carnesale, Córdova, Fox, Tomlinson-Keasey, Vanderhoef, and Yang, Acting Laboratory Directors Kuckuck and Miller, University Auditor Reed, and Recording Secretary Bryan

The meeting convened at 12:30 p.m. with Committee Chair Pattiz presiding.

1. **APPROVAL OF MINUTES OF PREVIOUS MEETINGS**

Upon motion duly made and seconded, the minutes of the meetings of January 18 and Mach 15, 2006 were approved.

2. **STATUS OF COMPETITION AND OTHER MATTERS AT THE DEPARTMENT OF ENERGY LABORATORIES**

Vice President Foley began his presentation by reporting that, as anticipated, a draft Request for Proposal for management of the Lawrence Livermore National Laboratory was issued by the Department of Energy on May 9. The general approach in the Livermore RFP appears to be the same as it was for the RFP for the Los Alamos National Laboratory; science and research capabilities continue to be the most important selection criteria. A special purpose entity such as an LLC must be created independent of parent organizations to be the contractor. Employment guarantees and income security are offered to incumbent employees. The basic contract term is for 7 years, with an opportunity to earn additional contract years for a maximum of 20 years. The government intends to award the contract without negotiation. The Department of Energy/National Nuclear Security Agency source selection board has scheduled a pre-solicitation conference in Albuquerque on May 23. The University has scheduled meetings with potential bidders. There will be a bidders tour of the Livermore laboratory on May 31.

Mr. Foley reported that the draft RFP indicates that proposals will be due to the NNSA 60 days after the final RFP is issued and that a contractor will be selected "in the winter." The transition will commence on April 1, 2007, with full contract performance to begin on October 1, 2007. The current contract expires at the end of September 2007.

Turning to the Lawrence Berkeley National Laboratory, Mr. Foley reported that the one-year anniversary of the new UC/DOE management contract is approaching. The old contract is being closed out as the new one is being introduced. Special attention will be taken to remain on schedule with respect to the commitments that the University made as part of the accepted proposal. One such commitment is the formation of an oversight advisory board to monitor the quality of the science being done at the laboratory. The first meeting of that board, which is made up of distinguished leaders from the academic world and private business, has taken place.

Mr. Foley then turned to Los Alamos National Laboratory, reporting that the transition from University to Los Alamos National Security, LLC (LANS) management is near completion. At the same time, the University is continuing to meet its contract obligations and support the NNSA mission through the end of the contract period, May 31.

Mr. Foley mentioned a recent policy statement by the Secretary of Energy intended to change future practices in pensions, medical plans, and other benefits for the retirees of all DOE contractors. This policy is intended to conform DOE practices more closely to those of industry and the private sector and constrain future costs and liabilities for the DOE. This policy would require DOE contractors to use defined contribution plans for employees hired no later than March 1, 2007 and require new employees hired this summer to bear a higher proportion of medical costs or receive reduced medical coverage. The University is seeking clarification of this policy, and there has been some Congressional action to block any change.

Chairman Parsky commented that with respect to bidding for the Lawrence Livermore management contract, the Regents will need to assess the situation carefully before coming to a decision. He stressed that the quality of the people who would be involved in forming the bid package will be critical, and there must be a clearly defined mission going forward. The Regents must be presented with a clear justification for bidding and an indication of who will be involved in the bid team.

3. **LOS ALAMOS NATIONAL LABORATORY – CELEBRATING AN ERA WITH PRIDE AND HONOR**

Committee Chair Pattiz invited Acting Laboratory Director Kuckuck to discuss the history of the Los Alamos National Laboratory's years under the University's management.

Acting Laboratory Director Kuckuck recalled that it was an historic time for the University and the Los Alamos National Laboratory. The University has been the sole

manager of the Los Alamos laboratory for 63 years. The laboratory started with the Manhattan Project and has evolved to become one of the world's greatest multi-disciplinary science laboratories. On June 1, the new team of UC and its private sector partners will begin the new era. He believed that through the management of the Los Alamos laboratory, the University has created, developed, nurtured, and is now the custodian of a priceless national asset which is the model for scientific excellence, intellectual freedom, and integrity performed in the service of the nation.

Mr. Kuckuck discussed how the laboratory's mission has evolved. He noted that UC's contributions have transcended just science. He recalled that the University provided the leadership, management, and administrative framework for the Manhattan Project, uniting the best scientists from Europe and America. Fourteen current or future Nobel Prize winners participated, creating a successful project in 28 months. The project, which ended at the end of World War II, earned the University and the Los Alamos laboratory the Army-Navy "E" Award for excellence. Following that period, the laboratory's mission evolved on two parallel paths, one of which was to provide a nuclear deterrent for the United States in the Cold War. This brought entirely new science and technology and kept the momentum going. The other part of the mission was to support arms control objectives. The laboratory supported treaty negotiations in Geneva, providing the scientific basis for the agreements. Nuclear stockpiles were reduced dramatically, and the technical means for monitoring these agreements were developed, including satellite technologies and terrestrial monitoring for nuclear explosions and measuring their yield. UC and its laboratories provided the Cold War deterrent successfully and also the technical underpinning for the world's nuclear arms control treaties.

Mr. Kuckuck recalled that the current mission at the Los Alamos laboratory is to ensure the safety, security, and reliability of this reduced nuclear stockpile without nuclear testing. The program is called Science-Based Stockpile Stewardship, named so by the fact that without testing the assurance of the stockpile is based solely on scientific understanding. The University continues to provide the best scientists possible for this mission. The Los Alamos laboratory is responsible for two-thirds of the weapons in the nation's stockpile and 90 percent of those that are on active alert.

Mr. Kuckuck reported that a fast-growing mission of the laboratory is providing the technology and capability to underpin counter-terrorism efforts and respond to natural disasters. Much of the technology and computer modeling capabilities that were developed for the weapons program are being used in counter-terrorism work. The laboratory fields various emergency response capabilities. It flies ASPECT, an aircraft with imaging chemical spectroscopy capability that can disclose toxic or chemical plumes that are invisible to the eye, image them, and send the information to emergency response personnel. This capability is used also to identify biological incidents. These activities are engaged in continually at events such as the Olympics and the Superbowl. The laboratory's work with respect to tracking and modeling fallout from nuclear testing developed into climate modeling. Satellite sensors for monitoring nuclear test treaties led to space research and weather sensors. Studies in the biological effects of radiation after World War II led to bioscience activities such as the National Human Genome Project.

The laboratory maintains influenza and HIV databases and continues various biological computational modeling activities to address important problems. It has just completed the world's largest biological simulation, using one of the weapons computers, in an attempt to determine how ribosomes generate proteins. Analysis of the results may lead to the identification of antibiotic targets for the development of vaccines. The laboratory also models other types of practical information for the country. It is in the process of pre-modeling every major city along a seaboard to provide to Homeland Security a play book for responding to natural disasters. The laboratory has modeled the Asian flu, creating a synthetic population that maps the demographics of the U.S. population.

Mr. Kuckuck discussed the laboratory's contributions to the nation beyond science. He recalled that, beginning with the Cyclotron at the Lawrence Berkeley laboratory, to the Manhattan Project at Los Alamos, then to stand-alone disciplinary laboratories, the University has developed a model for the DOE's national laboratory system. The University endowed these laboratories with credibility in science, access to the world-class science community, the highest quality of peer review, and the ability to attract and retain the best and brightest scientists who think in terms of lifetime careers at these laboratories. It also has created the paradigm for how universities and not for profit institutions provide public service to the nation – the no gain, no loss financial model; the government-owned, contractor-operated concept; intellectual freedom for scientific pursuit; and intellectual integrity. The University has endowed these laboratories with the ability to advise the government unencumbered by any motive other than national interest.

Mr. Kuckuck continued that there are many other important things the University has done at Los Alamos. It has extended its education mission in northern New Mexico in a way that is of critical importance for renewing scientific talent for that area, that laboratory, and the country. There are student programs, post doctoral programs, math and science programs for K-12, and joint institutes with various UC and New Mexico campuses. A study program brings 1,400 students to the laboratory every summer. Outreach programs reached over 10,000 students, teachers, and others in 2005. A Los Alamos Foundation was created in the late 1990s which has given $2.8 million in charitable funds to K-12 and has provided 350 scholarships to northern New Mexico students. The University gives nonresident tuition to a number of qualified students from the area. The foundation is endowed with $50 million that is managed by the University. Also, the laboratory has institutes with the San Diego, Santa Barbara, Davis, and Santa Cruz campuses. In summary, the University's education mission is carried out at Los Alamos at a magnitude that does not exist in any other laboratory in the country.

Mr. Kuckuck reported that the transition to the new management structure is going well. The laboratory has met all of its programmatic objectives this past year. The science programs are healthy and employee morale has rebounded. Most employees have opted to transfer to the new management team.

Mr. Kuckuck concluded his remarks by emphasizing that the University has created a national asset and empowered it with such strong values of scientific excellence,

intellectual freedom, integrity, and national service. As this new era begins, it is incumbent upon the University to be vigilant and assure that those values are preserved.

Committee Chair Pattiz, Chairman Parsky, and President Dynes thanked Acting Laboratory Director Kuckuck for his service during the transition.

Faculty Representative Oakley alerted the Regents that in order to preserve the values of the past 63 years, it will be necessary to confront some fundamental questions about the extent to which a UC partner LLC is an arm of the University. The faculty, through their special committee on the national laboratories, are concerned about the role UC faculty will play in a laboratory managed by a UC-partnered consortium. Mr. Foley acknowledged the faculty's concern. He reported that there has been no final resolution but that the issue is being addressed by the board of governors. Regent Juline believed the same question applied to the Regents' relationship with LANS.

Regent Rominger noted that the government may seek to establish an important biological level four containment laboratory on the west coast, possibly at the Lawrence Livermore laboratory. Vice President Foley responded that the facility in question will be the successor to Plum Island on the east coast. So far there has been merely a solicitation for expressions of interest. The University is following the developments with relation to the facility.

Regent Hopkinson noted that the presentation expressed a depth and breadth of activities at the laboratory that is often forgotten.

The meeting adjourned at 1:17 p.m.

Attest:

Secretary