The Regents of the University of California

COMMITTEE ON OVERSIGHT OF THE DEPARTMENT OF ENERGY LABORATORIES

March 25, 2010

The Committee on Oversight of the Department of Energy Laboratories met on the above date at UCSF–Mission Bay Community Center, San Francisco.

Members present: Regents Kieffer, Pattiz, Reiss, Ruiz, Stovitz, and Varner; Ex officio

members Blum, Gould, and Yudof; Advisory member Simmons

In attendance: Regents Bernal, De La Peña, Island, Lansing, Makarechian, Nunn

Gorman, Schilling, and Wachter, Regents-designate Cheng, DeFreece, and Hime, Faculty Representative Powell, Secretary and Chief of Staff Griffiths, Associate Secretary Shaw, General Counsel Robinson, Chief Investment Officer Berggren, Chief Compliance and Audit Officer Vacca, Interim Provost Pitts, Executive Vice Presidents Brostrom, Darling, and Taylor, Senior Vice Presidents Dooley and Stobo, Vice Presidents Beckwith, Duckett, and Lenz, Chancellors Birgeneau, Block, Blumenthal, Desmond-Hellmann, Drake, Fox, Kang, Katehi, White, and Yang,

Laboratory Director Alivisatos, and Recording Secretary Harms

The meeting convened at 11:00 a.m. with Committee Chair Pattiz presiding.

1. APPROVAL OF MINUTES OF PREVIOUS MEETING

Upon motion duly made and seconded, the minutes of the meeting of January 20, 2010 were approved.

2. UPDATE ON THE DEPARTMENT OF ENERGY LABORATORIES

Committee Chair Pattiz informed the Regents that Lawrence Berkeley National Laboratory (LBNL) Director Alivisatos would update them about activities at the Laboratory. Committee Chair Pattiz noted that it is important for the Regents to be aware of what LBNL is doing outside of its national security mission. Committee Chair Pattiz explained that he would update the Regents regarding Lawrence Livermore National Laboratory (LLNL) and Los Alamos National Laboratory (LANL) before Mr. Alivisatos made his presentation.

Committee Chair Pattiz remarked that the Obama administration and Congress are in the midst of formulating national policy regarding the nation's nuclear deterrent negotiations with Russia. He noted that the media have reported that the United States and Russia have reached agreement and will sign a new Strategic Arms Reduction Treaty (START) that will follow upon previous treaties and will significantly reduce the stockpile of nuclear weapons in both America and Russia. The directors of LANL and LLNL played a

key role in developing the Treaty by determining probable and appropriate initial outcomes.

Committee Chair Pattiz observed that the Obama administration and Congress are acutely aware of the central role that the Laboratories play in fulfilling U.S. commitments. In fact, Vice President Biden had recently written an editorial in the Wall Street Journal in which he described the crucial role of the Laboratories. Committee Chair Pattiz informed the Regents that the Laboratories' boards of governors very recently met with Laboratory sponsors from the U.S. Department of Energy (DOE) and the U.S. Department of Defense (DOD) to discuss the role of the Laboratories in supporting the U.S. government's commitments and responsibilities. Committee Chair Pattiz likewise met with the DOE's Under Secretary for Science and Under Secretary for Nuclear Security, and with the DOD's Deputy Assistant to the Secretary of Defense for Nuclear Matters. At that meeting, they discussed scientific and national security strategies as well as the status of current and proposed work at the Laboratories. Committee Chair Pattiz noted that President Obama's fiscal 2011 budget request includes a 13.4 percent increase in funding for DOE's national security Laboratories through the National Nuclear Security Administration (NNSA). Committee Chair Pattiz observed that, considering the trying economic times, this increase demonstrates the administration's belief in the need to put the national security enterprise on a sustainable track. He noted that Vice President Biden recently had remarked that over the last decade, the nation's nuclear complex and experts had been neglected and underfunded.

Committee Chair Pattiz reminded the Regents that Director Alivisatos was appointed in November to replace former Director Steven Chu, who left the position to become U.S. Secretary of Energy. Committee Chair Pattiz reported that Secretary Chu maintains a clear and unquestioned commitment to the Laboratories, and will be a highly-informed advocate for their research capabilities.

Laboratory Director Alivisatos remarked that this era marks an extraordinary moment in the history of the Laboratory. He reminded the Regents that LBNL is very deeply integrated with UC: over 200 UC Berkeley faculty have strong research affiliations with the Laboratory, as do 14 faculty from UC Davis, and 12 from UCSF. He observed that many faculty find that their research is greatly enlivened by their interactions with the unique facilities and capabilities at the Laboratory. Director Alivisatos reminded the Regents that LBNL was started in 1931 by E.O. Lawrence subsequent to his invention of the cyclotron. Mr. Lawrence required a larger space to house the cyclotrons, a need that ultimately resulted in the creation of the first National Laboratory. Since that time, said Director Alivisatos, LBNL has cultivated a very distinguished history, with 11 employees winning the Nobel Prize, and many winning the National Medal of Science. Furthermore, three percent of the National Academy of Sciences members are affiliated with the Laboratory.

Director Alivisatos informed the Regents that LBNL does no classified research, but works to address problems ranging from cosmology and astrophysics to cancer. It is currently engaged in one of the most important, most difficult, and most extensive

initiatives that it has ever tackled. The Carbon Cycle 2.0 initiative is intended to provide the scientific and technical underpinnings necessary to allow the country to address problems of carbon dioxide emissions and global warming on a large scale. LBNL has brought all of its science teams together on the project, including an extremely strong team in energy analysis, and is building its efforts in climate modeling. In addition, it is exploring every aspect of the carbon cycle problem, including combustion, carbon capture and sequestration, biofuels research, and artificial photosynthesis.

Director Alivisatos stated that Secretary Chu is now setting the research agenda for energy in the United States, and has generated a list that is astonishing in its breadth and requirements. He observed that in order for LBNL to succeed in addressing the Secretary's agenda, it will have to come together in an unprecedented way and become much more self-critical and exacting in its efforts. He noted that societal needs in energy and environment are challenging the Laboratory to rise to a new level.

Despite these new initiatives, said the Director, LBNL is not forgetting its roots in basic science. For more than 20 years, the Laboratory has been the home of the Advanced Light Source synchrotron, which is the nation's premiere facility for low-energy x-rays (often called "soft x-rays"). Soft x-rays are used for obtaining information about biological and environmental specimens by more than 2000 individuals around the world every year. Today, explained Director Alivisatos, there is an evolution away from the synchrotron light source to one which uses free electron lasers (FELs). For years, LBNL has been advocating the use of FELs to the DOE. The FEL x-ray system would enable the Laboratory to do important research; because the pulse of the free electron laser is faster than the time an electron takes to move across an atom, it would be possible to image the motions of electrons inside atoms and molecules. This information would provide a new range of knowledge for scientists who are interested in topics ranging from chemistry to condensed matter physics.

The Director remarked that the Laboratory has been successfully growing. Despite the current economic crisis, LBNL just received some additional funding, resulting in a budget of approximately \$720 million. Furthermore, the nation has called on the Laboratories to perform new research in the energy and environment sector, and as a consequence, has increased their budgets enormously. In addition to its base budget, LBNL received a total of \$264 million in American Recovery and Reinvestment Act funds. Director Alivisatos reviewed a list of the many projects currently taking place at the Laboratory and noted it was a very intense and exciting period to be coordinating the LBNL activities.

Director Alivisatos called the attention of the Regents to the Laboratory's near-term problem of insufficient space. LBNL is having difficulty finding adequate space to house its work, and in the short term must take action to renew its infrastructure. In addition, it is evaluating the possibility of establishing a second campus somewhere in the East Bay.

Committee Chair Pattiz remarked that the work undertaken by LBNL is paramount to many areas crucial to the future of the country. As one of the crown jewels of the

University, it needs the support of the Regents. He reminded the Board that in April he will lead a small group of Regents on a tour of LBNL. Director Alivisatos noted that Regent Stovitz had recently toured LBNL. Regent Stovitz strongly recommended a visit to the Laboratories and explained the exciting and interesting elements of his tour.

3. AUTHORIZATION TO APPROVE AND EXECUTE MODIFICATION TO THE DEPARTMENT OF ENERGY CONTRACT FOR THE LAWRENCE BERKELEY NATIONAL LABORATORY AS A RESULT OF CHANGES TO THE FEDERAL ACQUISITION REGULATION AND THE DEPARTMENT OF ENERGY ACQUISITION REGULATION

The President recommended that he be authorized to execute a modification to the provisions of Lawrence Berkeley National Laboratory (LBNL) contract DE-AC02-05CH11231 in order to incorporate clause updates and two clause deletions.

Deleted Clauses:

- Clause I.72 DEAR 952.224-70 Paperwork Reduction Act (APR 1994)
- Clause I.117 FAR 52.222-39 Notification Of Employee Rights Concerning Payment Of Union Dues Or Fees (DEC 2004)

Clauses updated as a result of technical and administrative changes:

- Clause I.50 FAR 52.244-6 Subcontracts For Commercial Items (DEC 2009)
- Clause I.66 DEAR 952.209-72 Organizational Conflicts Of Interest (AUG 2009) (ALTERNATE I) (AUG 2009)
- Clause I.69 DEAR 952.215-70 *Key Personnel* (DEC 2000)
- Clause I.73B DEAR 952.247-70 Foreign Travel (AUG 2009)
- Clause I.75 DEAR 952.251-70 Contractor Employee Travel Discounts (AUG 2009)
- Clause I.76 DEAR 970.5203-1 *Management Controls* (JUN 2007) (DEVIATION)
- Clause I.83 DEAR 970.5215-3 Conditional Payment Of Fee, Profit, And Other Incentives Facility Management Contracts (AUG 2009)
 (ALTERNATE I) (AUG 2009)
- Clause I.98 DEAR 970.5228-1 *Insurance--Litigation And Claims* (AUG 2009) (DEVIATION)
- Clause I.103 DEAR 970.5232-3 Accounts, Records, And Inspection (AUG 2009)
- Clause I.112 DEAR 970.5242-1 *Penalties For Unallowable Costs* (AUG 2009)
- Clause I.114 DEAR 970.5244-1 *Contractor Purchasing System* (AUG 2009)
- Clause I.125 DEAR 952.235-71 Research Misconduct (JUL 2005)

Clause updated as a result of the final rule implementing Section 3(b) of the Trafficking Victims Protection Reauthorization Act (TVPRA) of 2003 (Combating Trafficking In Persons):

• Clause I.118 – FAR 52.222-50 *Combating Trafficking In Persons* (FEB 2009)

[Background material was mailed to Regents in advance of the meeting, and copies are on file in the Office of the Secretary and Chief of Staff.]

Executive Vice President Darling stated that the item had been reviewed by the Office of the General Counsel and the Laboratory Management Office and been determined to have no adverse consequences operationally, financially, or legally for the University.

Upon motion duly made and seconded, the Committee approved the President's recommendation and voted to present it to the Board.

The meeting adjourned at 11:20 a.m.

Attest:

Secretary and Chief of Staff