

The Regents of the University of California

**COMMITTEE ON OVERSIGHT OF THE  
DEPARTMENT OF ENERGY LABORATORIES**

September 14, 2011

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 Blum, De La Peña, Marcus, Pattiz, Ruiz, and Varner; Ex officio members Gould, Lansing, and Yudof; Advisory members Powell and Rubenstein

In attendance: Regents Crane, Hallett, Island, Johnson, Kieffer, Makarechian, Mireles, Newsom, Pelliccioni, Reiss, Schilling, Wachter, and Zettel, Regent-designate Stein, Faculty Representative Anderson, Secretary and Chief of Staff Kelman, Associate Secretary Shaw, General Counsel Robinson, Chief Investment Officer Berggren, Chief Compliance and Audit Officer Vacca, Provost Pitts, Executive Vice President Brostrom, Chief Financial Officer Taylor, Senior Vice Presidents Dooley and Stobo, Vice Presidents Beckwith, Darling, Duckett, Lenz, and Sakaki, Chancellors Birgeneau, Block, Desmond-Hellmann, Drake, Fox, Katehi, Leland, White, and Yang, and Recording Secretary McCarthy

The meeting convened at 10:30 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 July 13, 2011 were approved.

2. **UPDATE ON THE DEPARTMENT OF ENERGY LABORATORIES**

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

Committee Chair Pattiz reported that the search for a new director of the Lawrence Livermore National Laboratory (LLNL) is progressing well and he anticipated that a successor would be brought to the Regents soon. Current LLNL Director George Miller had hoped to step down on October 1st, but has agreed to stay on until the new director is in place.

Committee Chair Pattiz introduced Director Miller, who has served at LLNL for 40 years in increasingly responsible positions, culminating with his appointment as Director in 2006. Mr. Miller led the successful transition to the new management structure as a limited liability company, under which UC is fully responsible for all science at the

Laboratory. Committee Chair Pattiz noted that the position of Laboratory Director requires a person with a unique blend of scientific and technological acumen, along with management experience and leadership qualities.

Mr. Miller thanked the Board for the privilege and honor of serving UC for nearly 40 years. He complimented Laboratory employees for their talent and dedication in working on the country's most difficult scientific challenges. He stated that LLNL is a product of the University, with the mission of applying the best science and technology to deliver innovative solutions to the nation's hardest problems, often using multi-disciplinary teams.

In the area of public policy, Mr. Miller noted that one of the Laboratory's roles is to provide the government with objective technical advice on which policy decisions can be based, for instance in supplying technical options on which President Obama could base his nuclear policy. Each day, LLNL moves closer to making nuclear fusion available for both defense and energy purposes. Mr. Miller cited examples of LLNL's far-ranging research, in such diverse areas as devices that would restore some sight to the blind, new methods of cancer therapy, ordnance for troops in Afghanistan, and energy delivery systems in California. The Laboratory continues to embody the University's culture of public service, research, and education.

Mr. Miller commented on the future of the Laboratory. He noted that the United States is currently involved in multiple global wars simultaneously, has a need to develop a sustainable energy policy balancing energy needs with environmental protection, and faces global economic competition. The science and technology available at LLNL must be harnessed to take on these challenges. He predicted that the Laboratory's responsibility to ensure the safety and effectiveness of the nation's nuclear weapons would continue for many years.

Mr. Miller also emphasized the Laboratory's crucial role in educating students to be technologically literate in skills necessary to take on national challenges. Talent should not be wasted by bureaucratic inefficiencies and risk-averse oversight. The continued active involvement of the University in LLNL is of critical importance.

Regent Blum asked how cuts in the Department of Energy's budget would affect LLNL and for Mr. Miller's assessment of the Laboratory's management partnership. Mr. Miller replied that the cuts to science and technology funding facing the country are a matter of serious concern, and have narrowed the scope of the Laboratory's investment in science and technology. He noted that such a reduced scope carries risk, since the nation's future scientific needs cannot always be predicted.

Mr. Miller stated that the management partnership has worked well in many areas, but could be improved in some others. One underlying issue of great concern is the significant erosion of the partnership between the Laboratories and the federal government. He recounted that the Laboratories were developed as Federally Funded Research and Development Centers (FFRDCs) during World War II because the federal

government realized it did not have the scientific talent to solve some of the problems it faced. Mr. Miller stated that one his highest priorities has been to reestablish the partnership between the federal government and LLNL. He particularly complimented LLNL Vice President Edward Moses, Principal Associate Director of the National Ignition Facility and Photon Science Directorate on his work toward solving the nation's energy challenges.

Committee Chair Pattiz commented that an important requirement of the new management structure was that the University partner with a private-sector company in order to bid the contract. He stated that the University must maintain its involvement with the Laboratories, since the LLC structure mandating involvement of private contractors can lead to the erosion of the relationship between the Laboratory and the government. Mr. Miller concurred that the Laboratory's role of providing technical information to the government with the highest degree of integrity is paramount and would be impossible without the involvement of the University.

Regent Kieffer asked for a clarification of what was meant by the erosion of the Laboratory's relationship with the federal government. Mr. Miller replied that historically the Laboratories were viewed as partners and the government actively solicited their advice on the technical implications of policy decisions. The Laboratories would often give technical advice about the best way to implement a government policy. Mr. Miller cited the example of his advice to a Congressional committee that it was premature to deploy the Strategic Defense Initiative, even though that advice might have cost the Laboratory funding. He saw his role as a representative of the University to give accurate, unbiased, scientific advice. Private contractors, on the other hand, follow their customer's orders with the goal of earning profits.

Regent Kieffer asked what factors are contributing to this erosion of the relationship between the Laboratories and the federal government. Mr. Miller answered that there is an inexorable movement toward treating the LLC as a contractor. He noted that, under the LLC, the Laboratory is managed by the private contractor, but the science is provided by the Laboratory in its capacity as a research and development center whose employees are FFRDC employees, not contractor's employees.

Vice President Darling added that, during World War II, President Franklin Roosevelt decided to have critical scientists continue to work in their academic institutions, rather than hire them as federal civil service employees. All subsequent U.S. science funding has been based on this principle; however, the government has moved toward federalizing this work, having scientific decisions made by program managers in Washington, D.C., rather than by Laboratory scientists. Mr. Darling noted that Secretary of Energy Steven Chu, former Lawrence Berkeley National Laboratory (LBNL) director, has worked to reverse this trend.

Committee Chair Pattiz stated that the involvement of the University in the Laboratories is crucial for the long-term integrity of their projects. Mr. Darling recalled that Vannevar Bush's report to President Roosevelt at the end of World War II challenged the federal

government to create the National Institutes of Health, the National Science Foundation, and the National Oceanographic and Atmospheric Administration from which UC receives more funding than any other entity in the nation, because of the quality of its faculty and graduate students.

Regent Newsom congratulated the Laboratory leadership and asked what the State and regional governments could do to assist their work. Mr. Miller agreed that this is an important issue and noted the development of the Livermore Valley Open Campus, a collaboration among LLNL, the neighboring Sandia National Laboratory, and the federal government. The campus leverages the tremendous scientific resources of the Laboratories, for example with a High Performance Computing Innovation Center, where LLNL can interact with California's public utilities, major California industries, and small businesses. High performance computing enabled the Department of Defense to develop a piece of ordnance for use in the field in Afghanistan in only ten months, instead of the typical five to six years. Mr. Miller reported much local interest in furthering these kinds of relationships to export Laboratory technology and approaches to complex problems; he hoped his successor would continue the Open Campus' development.

Regent Pattiz congratulated Mr. Miller for his work at the Laboratory. Chairman Lansing stated that Secretary and Chief of Staff Kelman would schedule Regents' visits to the Laboratories around future meetings.

The meeting adjourned at 11:10 a.m.

Attest:

Secretary and Chief of Staff