

The Regents of the University of California

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

July 23, 2015

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

Members present: Regents Davis, De La Peña, Kieffer, Newsom, Reiss, and Zettel; Ex officio members Lozano, Napolitano and Varner; Advisory member Gilly

In attendance: Regents Elliott, Gorman, Gould, Island, Lansing, Makarechian, Ortiz Oakley, Oved, Pérez, Ruiz, Sherman, and Torlakson, Regent-designate Brody, Faculty Representative Hare, Secretary and Chief of Staff Shaw, General Counsel Robinson, Chief Compliance and Audit Officer Vacca, Executive Vice President and Chief Operating Officer Nava, Executive Vice President Stobo, Senior Vice President Henderson, Vice Presidents Duckett and Sakaki, Chancellors Block, Dirks, Hawgood, Katehi, Khosla, and Wilcox, and Recording Secretary McCarthy

The meeting convened at 8:55 a.m. with Committee Vice Chair De La Peña presiding.

1. APPROVAL OF MINUTES OF PREVIOUS MEETING

Upon motion duly made and seconded, the minutes of the meeting of May 21, 2015 were approved.

2. UPDATE ON THE DEPARTMENT OF ENERGY LABORATORIES

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

Committee Vice Chair De La Peña provided an update on the search led by Vice President Budil for a director of the Lawrence Berkeley National Laboratory (LBNL). The search committee met on June 30 at LBNL and heard from LBNL Director Alivisatos, senior Office of Science leadership from the Department of Energy (DOE) headquarters and the Site Office, and five LBNL employee focus groups selected to represent the various interests across the Laboratory on qualities and characteristics that should be considered in the selection of the next director. A screening task force chaired by UC Berkeley Chancellor Emeritus Birgeneau has been convened to assist the search committee. Members include representatives from across the Laboratory's scientific disciplines and operations, various UC campuses, other universities, and Los Alamos (LANL) and Lawrence Livermore National Laboratories (LLNL).

LBNL is a crown jewel within the DOE National Laboratory complex. The position will attract many highly qualified individuals and the Laboratory expects to have a very broad and diverse candidate pool that will result in the selection of a stellar individual as its next director.

Committee Vice Chair De La Peña introduced Associate Vice President David McCallen to provide an update on the National Laboratories. Mr. McCallen observed that LBNL was currently conducting a search for its eighth director in its 85-year history and had an outstanding pool of candidates. The Laboratory hoped to have a new director by the end of the year. LBNL recently received a performance-based five-year contract extension from the DOE to continue the UC operation of the Laboratory until 2020. This extension was based on careful consideration of LBNL's operations and scientific accomplishments. The contract is structured so that LBNL could earn an additional five-year extension beyond 2020, which the Laboratory expects to achieve, continuing an extremely important relationship for the University and the nation.

A groundbreaking ceremony was held for a new unclassified supercomputer facility at LLNL. In the last 50 years, LLNL, LBNL, and LANL have been at the cutting edge of high-performance computing. In fact, since the late 1990s, they have framed and defined the fast-moving field of massively parallel high-performance computing. Important developments are underway at all three Laboratories that will keep them in the forefront. At LANL, the Trinity computer is under production and development; Trinity will have a sustained peak performance of 40 petaflops, increasing the computational capability of LANL by a factor of five to eight. LBNL is looking forward to the October opening of its new Computational Research and Theory Facility, built specifically to develop the infrastructure around high-performance computing. Its new computer called Cori would come online in 2016. There are currently 5,000 external users doing open unclassified science at the LBNL Office of Science Laboratory each year. At LLNL, the Sierra computer, in collaboration with IBM, would come online in 2017. Sierra will approach 100 petaflop performance and would have architecture that allows data to be moved very fast in large bits, at 17 petabytes per second. For a total investment of slightly more than \$400 million, these computers would keep the UC-affiliated Laboratories at the cutting edge of high-performance computing. These computing capabilities enable a number of missions at the Laboratories, such as global climate research, energy research, carbon sequestration, and LLNL's and LANL's national security missions. The computers have been strong links between the Laboratories and the campuses, whose researchers come to use the unique facilities. Mr. McCallen cited the example of research on seismic behavior using the power of supercomputers.

Mr. McCallen updated the Regents on negotiations involving the event at the Waste Isolation Pilot Plant (WIPP) in New Mexico, where a barrel in an underground repository of material from LANL ruptured and released nuclear materials. There has been a final resolution and disposition. On April 30, a General Principles of Agreement was executed by the New Mexico Environment Department, the DOE, Los Alamos National Security, LLC (LANSL), and the WIPP contractor, framing a three-step process for resolving all remaining liabilities. The DOE and the State of New Mexico were currently working on

the details, defining supplemental environmental projects that DOE would likely support. LANS would have no additional liabilities beyond the fee reduction incurred in 2014.

Mr. McCallen noted that a few electrical safety incidents had occurred at the Laboratories in the past eight to 12 months. On May 3, a LANL employee sustained significant burns as a result of an electrical arc flash during routine maintenance. LANL had employed an Accident Investigation Board to look into the incident and the Board had just released an extensive report. LANL had already begun to implement corrective actions. The Laboratories are initiating a comprehensive look at best practices. Electrical safety is particularly challenging.

The meeting adjourned at 9:10 a.m.

Attest:

Secretary and Chief of Staff