

The Regents of the University of California

NATIONAL LABORATORIES SUBCOMMITTEE

September 26, 2018

The National Laboratories Subcommittee met on the above date at the Luskin Conference Center, Los Angeles campus.

Members present: Regents Morimoto, Napolitano, Ortiz Oakley, Tauscher, and Zettel; Advisory Member May; Chancellor Block

In attendance: Regents Butler, Estolano, and Kieffer, Staff Advisor Klimow, Secretary and Chief of Staff Shaw, General Counsel Robinson, Senior Vice President Gulbranson, Vice Presidents Brown and Budil, and Recording Secretary McCarthy

The meeting convened at 4:10 p.m. with Subcommittee Chair Tauscher presiding.

1. APPROVAL OF MINUTES OF PREVIOUS MEETING

Upon motion duly made and seconded, the minutes of the meeting of July 18, 2018 were approved.

2. NATIONAL LABORATORIES UPDATE

[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.]

Vice President Budil said updates on the National Laboratories had been provided in the meeting materials. The Subcommittee would hear more about the transition at Los Alamos National Laboratory. She thanked Subcommittee Chair Tauscher and Regent Zettel for visiting Lawrence Berkeley National Laboratory.

3. UPDATE ON TRIAD NATIONAL SECURITY, LLC

[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.]

Vice President Budil said it was her honor to introduce Thomas Mason, Director-Designate of Los Alamos National Laboratory (LANL) and the President of Triad National Security LLC (Triad), UC's new LANL operating entity. Mr. Mason joined LANL from UC's partner Battelle Memorial Institute (Battelle), where he was briefly Senior Vice President for Global Laboratory Operations, with responsibility for governance and strategy across Battelle's six National Laboratories. Ms. Budil reminded the Subcommittee that Battelle and UC have a longstanding relationship, since Battelle also partners with UC on the Lawrence Livermore National Security LLC. Before joining Battelle, Mr. Mason served

for ten years as Director of Oak Ridge National Laboratory, after a distinguished career there as a research scientist. He has a Ph.D. in experimental condensed-matter physics. Mr. Mason played an integral role in developing the approach to the Triad proposal for management of LANL.

Mr. Mason provided an update on the transition taking place at LANL since July. He thanked the Regents for the support they provided to the Triad proposal. He recalled that competition for management of LANL began formally in July 2017 when the draft solicitation was released. However, the informal process began long before that. Much work went into assembling the Triad team and drafting the proposal. In five weeks, Triad would reach the end of that effort when it formally takes over responsibility for LANL.

The Triad team is an LLC comprised of three members: Battelle, the Texas A&M University system, and the University of California. An important attribute of Triad is that the three members share a common purpose and have constituted Triad as a nonprofit, public service-minded organization, free from commercial interests, and plan to work together seamlessly on the governance process. Mr. Mason forecasted that this common purpose would contribute to Triad's future success.

Mr. Mason described Triad's governance structure. Its board would have two members from each LLC member; Regent Tauscher would be the board chair. Triad's integrated subcontractors, who bring particular expertise relevant to managing LANL, Fluor Corporation and Huntington Ingalls Industries, have one member each on the Triad board. The board had its first meeting and was very engaged in preparing to take over the management contract.

The June contract award announcement followed a period of time during which unsuccessful teams were debriefed and had an opportunity to protest. There were no protests on the procurement, which Mr. Mason believed reflected the fact that the process was well run and professional. The transition period began in the beginning of July and Triad had begun the work of transitioning the large LANL enterprise from one contractor to another. Currently, five weeks from the beginning of the Triad contract, Triad had just sent out 10,200 job offers. All of the LANL staff must be hired as Triad employees. This would end some of the uncertainty for Laboratory staff around the transition and would allow Triad to populate the new organization. During October, much work would be done to enable Triad to certify readiness to proceed.

Mr. Mason displayed a chart of LANL's organizational structure, with some changes from the LANL's prior structure. He highlighted the need to balance change in needed areas with continuity in areas in which the Laboratory had performed well. There were some areas that had contributed to prior operational problems that contributed to the contract's being rebid. A strong team would be ready to start in November. The board and its committees are fully engaged with the requisite members of the leadership team to ensure readiness.

Mr. Mason looked ahead to the period following the November 1 commencement of the new contract. The Laboratory leadership must establish the robust, reliable operation of the high-hazard, mission-specific facilities critical to the nation's security and build confidence in the LANL's ability to contribute to the Department of Energy and National Nuclear Security Administration missions. Triad would continue LANL's outstanding performance in the underlying science and technology that support national security missions. In the important area of high-performance computing, modeling and simulation is used as a component of certifying the stockpile in the absence of testing. Mr. Mason saw as equally important the need to plan and build the case for future investments in experimental capabilities that would complement that computational power. Computer simulations must be supported by real experimental data.

Mr. Mason emphasized that LANL has to recruit and retain the very best talent to support the Laboratory's growing programs. LANL was currently hiring at a rate of 1,000 annually, half from normal staff turnover and half from Laboratory growth. It was crucial that LANL remain attractive to the best scientific talent, as the problems LANL must address were ever more challenging.

President Napolitano asked about Triad's relationship with its surrounding communities in northern New Mexico. Mr. Mason reported that he had met with many local leaders. LANL is critical to the local economy and is by far the area's largest employer offering excellent, well-paying jobs with good benefits. The community has understandable concern about LANL's environmental impact, which would continue to be a focus of Laboratory efforts and communication. Overall, Mr. Mason felt community support for LANL was strong.

Mr. Mason expressed his view that the biggest challenge the Laboratory faced was in hiring. About 25 percent of LANL's staff are Ph.D. scientists and engineers, who are recruited nationally. The other 75 percent of staff span the full spectrum of skills and are recruited more regionally in an area without a huge population. The Laboratory would work with local educational institutions to make sure there were training programs in areas of need at the appropriate skill levels.

Regent Ortiz Oakley asked how lessons learned from the LANS partnership were being used to improve Laboratory operations, and how Mr. Mason saw LANL contributing to UC's ability to educate its students. Mr. Mason commented that a big factor in the way the Triad team was put together and structured was a diagnosis of the successes and challenges of the prior management LLC. A major improvement was the shared principles of the members of Triad. Battelle was established as a nonprofit organization for the deployment of science and technology for the benefit of mankind, very compatible with the mission of a land grant university system. Organizationally, there are no guaranteed positions assigned to particular entities within the new structure. Positions have been filled on a "best athlete" model. In the past there had been barriers within the Laboratory created by the structure of the corporate parent; these frustrated communications and working effectively across a large organization. The new structure was intentionally designed to encourage functioning as a team rather than to prioritize corporate allegiances.

Mr. Mason commented that LANL would help UC serve its mission as a land grant public University through the Laboratory's service to the nation. The interchange between LANL and UC in research would enhance both UC's research and educational missions. Mr. Mason foresaw using the University's capabilities to address LANL's workforce challenges, while LANL could provide employment opportunities for UC graduates.

Regent Zettel asked what portion of the LANL staff would be new hires. Mr. Mason said the contract required LANL to offer incumbent employees the right of first refusal on their jobs, except for a very small number of senior management. The bulk of the LANL staff would have the same job with the same salary and largely the same benefits as they did under the prior contract. There would be a few changes as a result of the new organizational structure and growth. Based on preliminary data, Mr. Mason estimated that acceptance of job offers was at the level anticipated. Some staff closely associated with a former corporate partner were offered to be rehired at the jobs, but would choose to move on to another assignment with that company, as one would expect. Some other staff took the opportunity to retire, but overall attrition did not appear to be significant in the transition.

Faculty Advisor May asked about research opportunities LANL would offer UC faculty, graduate students, and undergraduates. He confirmed that the Academic Senate would work with LANL on joint faculty appointments. Mr. Mason commented that UC had traditionally devoted a portion of its management fee to a research program targeted at areas that would connect LANL with UC campuses. Mr. Mason expressed his willingness to work with UC to ensure that those funds are used in ways that would build bridges to the mutual benefit of UC and LANL. The prior summer LANL had hosted 1,200 undergraduate interns. Mr. Mason expressed his desire to improve procedures for creating joint faculty appointments.

Regent Morimoto asked what areas of LANL Mr. Mason intended to augment. Mr. Mason responded that the area of high-performance computing and data analytics would expand. An initial assessment of LANL projects indicated a need to accomplish capital projects, which would require skilled tradesmen.

Student Advisor Huang asked if Mr. Mason anticipated increasing research opportunities for UC undergraduates. Mr. Mason cited LANL's summer intern program, but noted the challenge of finding sufficient student housing. He also suggested increasing UC students' awareness of LANL research opportunities.

Ms. Budil commented that she recently completed her tour of all UC campuses with the purposes of gaining an understanding of campus research priorities in areas that might be salient for partnerships with the National Laboratories, and engaging with the campuses about ways to accomplish such partnerships more easily and how her office could facilitate such partnerships. She envisioned joint faculty appointments, and utilizing the unique subject matter expertise at the National Laboratories to provide curriculum and content at UC. She was encouraged by the great enthusiasm across UC for building such partnerships.

Subcommittee Chair Tauscher commented on the University's good fortune in obtaining the services of Mr. Mason to lead the team at LANL. She noted the very positive reaction of LANL staff when the contract was awarded to the Triad partnership that included UC.

The meeting adjourned at 4:45 p.m.

Attest:

Secretary and Chief of Staff