

Summary Minutes of the

U.S. Department of Energy (DOE)
Commission to Review the Effectiveness of the National Energy Laboratories
Public Meeting

Commission Members in Attendance: TJ Glauthier, Co-Chair; Jared Cohon, Co-Chair; Norman Augustine, Wanda Austin; Paul Fleury; Cherry Murray

Date and Time: 10:00 AM – 2:45 PM, December 15, 2014

Location: Institute for Defense Analysis, IDA Mark Center, Room 1301, 4850 Mark Center Drive, Alexandria, VA

Purpose: Meeting of the Commission to Review the Effectiveness of the DOE National Energy Laboratories

Presenters:

Speakers

Labs within the U.S. National Science and Technology Enterprise:
Patricia Falcone, Assistant Director for National Security and International Affairs, White House Office of Science and Technology Policy

Scientific Community Perspective:
Alan Leshner, CEO of the American Association for the Advancement of Science

Authors of Recent Publications about the DOE National Labs:
Nick Loris, Herbert and Joyce Fellow, The Heritage Foundation
Matthew Stepp, Senior Policy Analyst, The Information Technology & Innovation Foundation
Scott Andes, Senior Policy Analyst, Brookings Institution
Mark Muro, Senior Fellow and Policy Director, Metropolitan Policy Program, Brookings Institution

Industry Partners Panel:
John Howanitz, Bechtel Corporation
Ray Johnson, Senior Vice President and Chief Technology Officer, Lockheed Martin Corporation

Restructuring the DOE Laboratory Complex to Advance Clean Energy, Environmental Sustainability, and a Global Future without Nuclear Weapons:
Christopher Paine, Senior Policy Advisor, Nuclear Program, Natural Resources Defense Council

DOE Staff: Karen Gibson, Designated Federal Officer

IDA & STPI Staff: Mark Taylor; Susannah Howieson; Libby Turpen; Susan Clark-Sestak; Robert Mahoney; Martha Merrill; Julian Zhu

Meeting Summary

The Commission to Review the Effectiveness of the National Energy Laboratories (Commission) was convened for its fifth meeting at 10:00 AM on December 15, 2014. Commission Co-Chair Jared Cohon led the meeting. The meeting included two panels: (1) authors of recent reports about the DOE National Labs and (2) a national lab contractor panel. The report authors summarized their respective reports, highlighting concerns related to the relationship between DOE and the labs, research funding and strategy stove-piping, weak links between the labs and market, an inconsistent economic development mission, the difficulty small firms have in accessing labs, the labs' lack of regional engagement, and DOE and congressional micromanagement of the labs. The lab contractor representatives responded to questions posed by the commissioners related to lab management and the relationship with DOE. Additionally, Patricia Falcone spoke of the important role of the labs in the science and technology enterprise and Alan Leshner talked about the labs and their relationship with the scientific community. Christopher Paine presented his views on transforming the weapons complex. The next meeting will be held February 24 at the Hilton at Mark Center in VA.

Opening of Public Meeting

Co-Chair Jared Cohon opened the meeting and welcomed the commissioners, speakers, and observers.

DOE Labs within the U.S. National Science and Technology Enterprise

Patricia Falcone, Assistant Director for National Security and International Affairs, White House Office of Science and Technology Policy, highlighted two pieces of work that have informed OSTP thinking about the research enterprise: a President's Council of Advisors on Science and Technology (PCAST) study on the U.S. research enterprise and an American Academy of Arts and Sciences report on governance and policies of government engagement with S&T. She encouraged the Commission to highlight the vibrancy and connectivity of the relationship among universities, the Labs, and industry. She noted the national security issues that the Labs contribute to and the importance of the work the Labs do for the national security agencies. Falcone also described activities that OSTP is leading in preparation of a new national security strategy, recognizing the importance of science and technology in realizing national security goals, and a blueprint for action focusing on people, places, processes, and performance. She also noted the progress toward restoring trust and mutual support between federal government personnel and the labs, including the Secretary of Energy's newly established Lab Policy Council.

A Q&A session followed.

Scientific Community Perspective

Alan Leshner, CEO of the American Association for the Advancement of Science, noted that the labs provide platforms for collaboration. Most have good track records and have contributed significantly to science and technology. However, the general scientific community finds the processes opaque. Processes for review and selection of projects and evaluation of performances should be clearer. There is some fear that fundamental research will lose out to applied research and technology transfer. How priorities are made regarding facilities is unclear to the community. Regarding management, too much government control will stifle creativity. Recommendations going forward include: requirements for accountability, tightening up review and evaluation criteria and more transparency regarding how decisions are made, ensuring how lab priorities are aligned with DOE, and deciding how much translational research is or should be done.

A Q&A session followed.

Authors of Recent Publications about the DOE National Labs

Nick Loris, Herbert and Joyce Fellow, The Heritage Foundation and Matthew Stepp, Senior Policy Analyst, The Information Technology & Innovation Foundation, presented the 2014 report, *Turning the Page: Re-imagining the National Labs for the 21st Century Innovation Economy*. The report put forth recommendations regarding federally-funded research, oversight of the labs, minimizing barriers to moving research to market, use of taxpayer resources, and using market forces to help bring efficiency to the lab system. The aim of the report was to improve effectiveness and efficiency, and not to turn labs into a business. Broad issues addressed in the report included the relationship between DOE and the labs, how research funding and strategy limit flexibility, and the weak links between the labs and market. Policy goals in the report included getting the most value from the science and technology coming out of the labs, connecting the work in the labs to private-sector investment and the marketplace, and making lab research more nimble and accessible.

Scott Andes, Senior Policy Analyst, Brookings Institution, Mark Muro, Senior Fellow and Policy Director, Metropolitan Policy Program, Brookings Institution, and Matthew Stepp, Senior Policy Analyst, The Information Technology & Innovation Foundation presented the December 2014 report, *Going Local: Connecting the National Labs to their Regions for Innovation and Growth*. They noted that innovation is a crucial focus of regional networks and that the national labs are well positioned to serve as unique focal points in these regional clusters. The report found, however, that the regional context is underexploited and there are opportunities for bigger regional impact to advance national missions through regional economies. Concerns raised in the report included an inconsistent economic development mission for DOE, the difficulty small firms have in accessing the labs, the labs' lack of engagement with regional industry clusters, and DOE and congressional micromanagement that restricts labs' regional engagement. The report provided several strategies for supporting lab regional engagement.

A Q&A session followed.

Industry Partners Panel

In response to questions posed by commissioners, the panelists shared the following insights:

John Howanitz, Bechtel Corporation, explained how labs benefit from corporate skills and systems. The contractors often work with the lab director to tailor corporate systems to fit the mission of the labs. Howanitz stressed that contractors are not trying to drive costs up to gain profit. Customers are not happy with higher costs so it is in the interest of the contractors to keep costs down. They are going through a transition now aimed at clear expectations that are objective-focused rather than transactional. This new model is focused on mission, objectives, and deliverables, and improving communications. He noted that customers are often attracted to an LLC with multiple owners for the added depth and expertise. Howanitz does not see duplication among the labs. The corporate perspective is that the sites in the nuclear security area, at the detail level are complementary and not duplicative. Transition to a PEMP that is more mission delivery focused with better communication would help improve the relationship between contractors and DOE and ensure contractors understand expectations and direction.

Ray Johnson, Senior Vice President and Chief Technology Officer, Lockheed Martin Corporation, noted that as labs take on larger program challenges, they gain advantage from the corporate experience. Regarding the relationship between DOE headquarters and the labs, Johnson noted that metrics

generally fall more into the governance side and he would like to see more metrics measured on the mission side. Both are important. More communication is important and meetings between the NNSA administrator and the Chairman of the Board of the Corporation as well as the lab directors will help to ensure everyone is on the same page. Strategic Partnership Projects, formerly WFO, SPP is managed through early and frequent communication with customers to ensure awareness of what the labs capabilities are. SPP is important for the maintenance of skills and Sandia employees who do work outside are aligned to mission. Johnson agreed that it is a good idea for DOE to undertake periodic review to see how capabilities are being maintained.

Both speakers noted that a contractor's reputation is a significant motivation for contractor accountability. They also cited exceptional service in the national interest as a benefit to the corporations from managing the national labs, and a commitment to solve difficult global security problems. Both also agreed that instead of transactional management, the contractors should get performance evaluations at the end of the year.

Restructuring the DOE Laboratory Complex to Advance Clean Energy, Environmental Sustainability, and a Global Future without Nuclear Weapons

Christopher Paine, Senior Policy Advisor, Nuclear Program, Natural Resources Defense Council, spoke on his own behalf stating that the nuclear weapons side of DOE is too large and mostly irrelevant to the Department's central mission of supplying the country with environmentally sustainable and economically viable clean energy technologies. He stressed the need for DOE's laboratory system to reorient itself from nuclear arms and the pursuit of fusion energy to focus on stabilizing the global climate. He described a number of specific recommendations for transforming the weapons complex and laid out a number of issues for consideration by the Commission related to the Commission's charge.

A Q&A session followed.

Public Comment

No members of the public requested the opportunity to comment

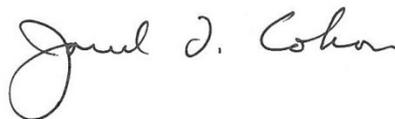
Meeting adjourned at 2:45 PM.

Respectfully Submitted:
Karen Gibson, Designated Federal Officer

I hereby certify that these minutes of the December 15, 2014 Lab Commission meeting are true and correct to the best of my knowledge.



TJ Glauthier
Co-Chair



Jared Cohon
Co-Chair