

Summary Minutes of the

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

<u>Commission Members in Attendance:</u>	TJ Glauthier, Co-Chair; Jared Cohon, Co-Chair; Susan Hockfield; Charles Elachi; Wanda Austin; Paul Fleury; Cherry Murray; Norm Augustine (by phone)
<u>Date and Time:</u>	10:30 AM - 4:00 PM, July 18, 2014
<u>Location:</u>	Department of Energy, Forrestal Building, 1000 Independence Avenue, SW, Washington, DC 20585
<u>Purpose:</u>	Meeting of the Commission to Review the Effectiveness of the National Energy Laboratories
<u>National Labs Staff:</u>	Paul Alivisatos, Director, Lawrence Berkeley National Laboratory; Charles McMillan, Director, Los Alamos National Laboratory; Dan Arvizu, Director, National Renewable Energy Laboratory; Terry Michalske, Director, Savannah River National Laboratory
<u>Appropriations Staff:</u>	Douglas Clapp, Senate Appropriations Majority Clerk; Leland Cogliani, Senate Majority Professional Staff; Taunja Berquam, House Appropriations Minority Clerk
<u>DOE Staff:</u>	Secretary Ernest Moniz; Senior Advisor Dimitri Kusnezov; Designated Federal Officer, Karen Gibson; Corey Williams-Allen; Matt Schaub
<u>IDA & STIPI Staff:</u>	Mark Taylor; Mark Lewis; Katherine Gliwa; Melanie Sineath; Martha Merrill; Julian Zhu

Meeting Summary

This meeting was the inaugural meeting of the Commission to Review the Effectiveness of the National Energy Laboratories (Commission). The Commission members heard opening remarks by Secretary Moniz and Co-Chairs TJ Glauthier and Jared Cohon. The next agenda item was the charge from the joint Appropriations Staff – Subcommittee on Energy and Water Development to the Commission. Dimitri Kusnezov briefed the Commission on the DOE National Laboratory System. Commission members also received a briefing on relevant past and current studies on the National Laboratories from Mark Taylor followed by commentary from the Executive Committee of the National Laboratory Directors Council (NLDC).

Opening of Public Meeting

Secretary Moniz opened the meeting noting that the work of the Commission and of the Secretary of Energy Advisory Board (SEAB) should be complementary. He stated that DOE is fundamentally a science

and technology organization with a major role in serving the national science and technology enterprise. DOE has important missions and unique capacity to serve other agencies and their missions. His introductory remarks highlighted the two phases of activities in the Commission Charter. Phase one will focus on reviewing DOE National Lab strategic priorities, missions, unique capabilities, size, support of other agencies, collaboration with universities and industry, and Lab Directed Research and Development (LDRD) in the context of these issues. Phase two will focus on reviewing National Lab management, overhead, potential opportunities for realignment and consolidation, oversight by DOE, and LDRD, including whether the current percentage is appropriate.

Joint Appropriations Staff Presentation

Douglas Clapp opened the discussion and asked the Commission to review and be able to explain the role and functions of the National Laboratories; overhead costs versus research and development; the need for the current number of labs; whether some of the smaller labs should be organized under cooperative agreements; whether there are opportunities for consolidation; why Argonne and Fermi Labs are under separate contracts; and what the process is in determining how big investments are decided.

Tanuja Berquam asked the Commission to explore different models for National Laboratory management, including a process for improvement; how attrition, consolidation of labs might be used; current overhead rates and the potential for a uniform accounting system; DOE's risk management in terms of infrastructure and short- and long-term needs, e.g. pensions; and appropriate levels of LDRD including methods for tracking, managing, and justifying expenses.

Leland Cogliani noted the issue of high overhead costs which are diverting from DOE missions. He asked the Commission to examine the labs' core missions and consider what the right mix is of single-purpose and multi-purpose labs and the number of labs; what benefits there are to having Ames, Princeton, and SLAC contracted as National Labs instead of cooperative agreements; whether the current M&O model is useful and relevant; and if there are opportunities to consolidate multiple contracts and reduce overhead costs. He asked the commissioners to reimagine what the National Lab system would look like today, if rebuilt for modern needs.

A Q&A period followed.

Presentation on the National Lab System

Dimitri Kusnezov, Senior Advisor to the Secretary, gave an overview of the "DOE Strategic Plan, 2014-2018" and an explanation of terms and history of DOE National Labs and the GOCO model. He highlighted the labs' deep and unique expertise beyond what is available in the private sector, the benefit to the enterprise from the availability of facility use, and the benefit of peer review in laboratory networks. He noted that the labs are institutions of higher learning and training and have deep interdisciplinary expertise.

Introduction to Current and Prior Studies

Mark Taylor gave a preliminary overview of 4 current studies, and 4 out of more than 55 studies published within the last 20 years on the National Labs. Current studies include those by NAS I, NASII, SEAB task force on National Labs, and the Augustine/Mies Report. Past studies overviewed include the Galvin Report of 1995, OIG Report of 2011, NRC NNSA Study of 2013, and the NAPA Report of 2013.

NLDC Presentations

Paul Alivisatos reported on improvements Lab Directors are seeking to implement. Changes include increasing their talent pool through diversification, family friendly policies, and career planning; extending peer review, further developing lab networks, and seeking operational synergies. He also compiled R&D needs solved uniquely by National Labs, including the reduction of funds needed by private investment, development of low carbon energy portfolios, grid modernization, and developments in nuclear, fossil fuels, and photovoltaics.

Charles McMillan provided context on the societal impacts of shifting from weapons production to stockpile stewardship, which prompted a surge in new capabilities in computing and diagnostics. He noted that global demilitarization efforts draw from lab training capabilities and rapid response capabilities. He also differentiated the responsibilities of the security labs and noted how they peer review each other's classified work.

Dan Arvizu noted that DOE as a whole is highly personality-dependent: management issues and strategic priorities change with time and with different Secretaries. He outlined how the labs, specifically with their basic science capacities, have played a big role in improving U.S. energy security in areas such as nuclear security, fossil energy, shale and natural gas; and new technology derived directly from investments made in DOE labs.

Terry Michalske listed further niche specialization, noting that the government has an obligation to deal with the legacy waste problem. He noted that the labs have developed the world's most complete set of models for environmental risks of advanced oil and natural gas operations expansions. He also highlighted the importance of lab networks when forming emergency response teams and the importance of LDRD funding to human capital.

Public Comment

No public comment

Meeting adjourned at 4:00 PM.

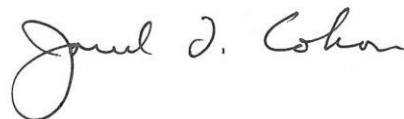
Respectfully Submitted:

Karen Gibson, Designated Federal Officer

I hereby certify that these minutes of the July 18, 2014, CRENEL meeting are true and correct to the best of my knowledge.



TJ Glauthier
Co-Chair



Jared Cohon
Co-Chair