

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; Charles Elachi; Wanda Austin; Paul Fleury; Cherry Murray (teleconference); Norm Augustine

Date and Time: 10:30 AM - 4:00 PM, September 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 National Energy Laboratories

DOE Staff: Senior Advisor, Dimitri Kusnezov; Acting Director for the Office of Science, Pat Dehmer; Deputy Administrator for Defense Nuclear Nonproliferation, NNSA, Anne Harrington; Assistant Deputy Administrator for Research Development, Test, and Evaluation, NNSA, Kathleen Alexander; Assistant Secretary of Office of Energy Efficiency and Renewable Energy, David Danielson; Assistant Secretary for Office of Nuclear Energy, Peter Lyons; Principal Deputy Assistant Secretary for Office of Fossil Energy, Christopher Smith; Designated Federal Officer, Karen Gibson; Deputy Director, Office of Secretarial Boards and Councils Matt Schaub

Prior Studies Authors: Elizabeth Turpen; Jonathan Breul; Al Kliman; Alan Shaw; Scott Weidman

IDA & STPI Staff: Susan Clark-Sestak; Christopher Clavin; Susannah Howieson; Katherine Gliwa; Martha Merrill; Rob Mahoney; Mark Taylor; Julian Zhu

Meeting Summary

This meeting was the second meeting of the Commission to Review the Effectiveness of the National Energy Laboratories (Commission). The Commission members heard opening remarks by Co-Chairs TJ Glauthier and Jared Cohon. The next agenda item was a panel discussion review of prior studies with the authors. Senior leaders from the DOE Offices of Science, Energy Efficiency and Renewable Energy, Nuclear Energy, Fossil Energy, and NNSA, presented on laboratory issues followed by an opportunity for public comment and adjournment. The next meeting will be held October 6, at the Institute for Defense Analysis in Alexandria, VA.

Welcome and Introduction

Commission Co-Chairs TJ Glauthier and Jared Cohon opened the meeting and indicated the Commission web address (<http://energy.gov/labcommission>) as a resource for downloading meeting minutes and presentation materials. They also provided contact information for the Commission (crenel@hq.doe.gov) and welcomed the submission of public commentary. They noted that Commission members will try to collectively visit each of the national energy labs over the course of the two phases of the Commission study.

Review of Prior Studies with Authors

Author, Elizabeth Turpen presented on the report *Leveraging Science for Security: A Strategy for the Nuclear Weapons Laboratories in the 21st Century*. She provided an overview of the study and listed the findings, recommendations, and thoughts on implementation. Recommendations in the report included the creation of the Agency for National Security Applications to oversee the weapons labs, or alternatively standardize WFO opportunities, to facilitate technology transfer to industry, and to reprioritize the NNSA science and technology programs.

Authors, Jonathan Breul and Al Kliman presented on the report *Positioning DOE's Labs for the Future: A Review of DOE's Management and Oversight of the National Laboratories*. They provided an overview of DOE's management model, deteriorating laboratory infrastructure, Congressional concerns, laboratory evaluations, systems based oversight, and the need for a DOE Chief Operating Officer. The final recommendation involved a decentralized laboratory management approach that engages more heavily with laboratory staff.

Authors, Alan Shaw and Scott Weidman presented on the report *Managing for High Quality Science and Engineering at the NNSA National Security Laboratories*. They provided an overview of the study and observed a loss of trust and a decline in partnership between NNSA and their labs, and excessive operational oversight. Although the quality of science and engineering remains high, concerns persist about decreasing opportunities to conduct needed experiments, difficulties maintaining smaller experimental facilities, deteriorating infrastructure, and the perception of burdensome oversight and regulations. Concerns specific to computing, modeling, and simulation include uncertainty about the future of high performance computing systems, core computer science areas, and difficulty in recruitment and retention of talent.

A Q&A panel discussion followed.

DOE Office Directors

Pat Dehmer, Acting Director for the Office of Science, presented an overview of the Office of Science laboratories. She reviewed the history and evolution of national energy labs, and pointed to the success of open-access scientific user facilities as a main driver of the transformation the labs have undergone. She discussed procedures for strategic planning, review, and evaluation with input from the National Labs; for execution of multi-lab projects; and for other activities for labs both individually and cooperatively. Dehmer further detailed budgetary processes, facility stewardship, and the process for competing projects.

Anne Harrington, Deputy Administrator for Defense Nuclear Nonproliferation, NNSA, and Kathleen Alexander, Assistant Deputy Administrator for Research Development, Test, and Evaluation, NNSA, presented an overview of NNSA laboratories. They provided a brief historical review before covering mission areas of eliminating, storing, and safe guarding the nuclear stockpile; nuclear detection; and nonproliferation. They noted a tension between the short-term and long-term deliverables. They discussed LDRD levels, work for others, noting the large WFO percentage that is leveraging unique capabilities, and the importance of partnership in the FFRDCs. They also spent some time discussing efforts underway to respond to previous study recommendations, including improving lab management and communication, and shortening processing times for approving WFO.

A Q&A session followed.

Energy and Environmental Management Laboratories

Chris Smith, Principal Deputy Assistant Secretary for Office of Fossil Energy, noted that the National Energy Technology Lab is the only government owned government operated (GOGO) lab. He provided an overview of the Office of Fossil Energy and listed major goals concerning unconventional oil and gas, offshore oil, methane hydrate, carbon dioxide capture and storage, advanced energy systems, and cross cutting research. He also covered the formation of the National Oil Spill Commission, multi-agency collaboration on the steering committee on unconventional oil and gas R&D, and the National Risk Assessment Partnership. FE oversees the National Energy Technology Laboratory.

Peter Lyons, Assistant Secretary for Office of Nuclear Energy, presented on the Office of Nuclear Energy's (NE) role in conducting research, development, and demonstration to reduce an array of risks, manage nuclear waste, and foster international and industry collaboration. He provided an overview of funding research and development for the National Laboratories, outlined the performance evaluation management plan, and listed a broad array of advanced test reactor user facilities. Lyons also covered involvement in Nuclear Energy University Programs, and the technical management of research and development awards. NE oversees Idaho National Laboratory.

David Danielson, Assistant Secretary of Office of Energy Efficiency and Renewable Energy, presented an overview of EERE's vision, mission, guiding principles, and goals as they relate to the DOE Strategic Plan. He discussed the pathway of investment at EERE from applied research, to development and demonstration, and through its focus on market barriers. He explained how EERE engages with National Laboratories as a strategic partner, and emphasized a commitment to larger multi-year, multi-lab projects. The National Laboratories partner extensively with industry and bring new technologies to market. Danielson also used grid modernization as an example of how the National Laboratories can be organized and aligned to focus on the challenges facing DOE. EERE oversees the National Renewable Energy Laboratory.

A Q&A session followed.

Public Comment

No public comment

Meeting adjourned at 4:00 PM.

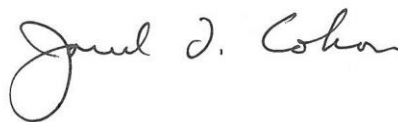
Respectfully Submitted:

Karen Gibson, Designated Federal Officer

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



TJ Glauthier
Co-Chair



Jared Cohon
Co-Chair