

Minutes of the Thirty First Plenary Meeting
of the
Secretary of Energy Advisory Board

May 8, 2002

Diplomat Room
Ritz-Carlton Pentagon City
Arlington, Virginia.

Chairman McPherson

Chairman McPherson convened the thirty-first meeting of the Secretary of Energy Advisory Board (SEAB) on May 8, 2002 at the Ritz–Carlton Pentagon City Hotel in Arlington, Virginia at 1:00 p.m. After a brief welcome, Chairman McPherson introduced Secretary Abraham.

Secretary Abraham

Secretary Abraham thanked all the members for their service. He singled out Chairman McPherson, the continuing members, and former chairman Andrew Athy specifically for their service. He began his speech with a brief overview of the mission of the Department, the need for focus on the Department's mission, and its importance to national security. Secretary Abraham then addressed the SEAB and its two principal functions: (1) to work on specific projects to advise the Secretary; and, (2) to provide advice on the broad mission of the Department, working with Dr. Craig Reed, Executive Director of the SEAB. Secretary Abraham indicated that he wanted SEAB to serve as a two-way street in terms of information sharing.

Secretary Abraham reviewed some of the challenges and priorities of his first year in service at the Department of Energy. He discussed the new budget, enhanced nuclear non-proliferation efforts (including the impact of the SEAB's Baker-Cutler Report on these efforts), fluctuation in power prices, blackouts in California, producing the National Energy Plan, and the recent passage of the House and Senate energy bills. He talked about the newly revised environmental management schedule that has substantially reduced the cost and timeframe of clean up activities. The Secretary discussed progress on the Yucca Mountain Project and the pending vote in the House of Representatives. Finally, Secretary Abraham announced the release of the National Transmission Grid Study, the production of which was a key recommendation of the National Energy Plan. The report examined the benefits of establishing a national electricity transmission grid, identified transmission bottlenecks, and proposed measures to eliminate them. He highlighted some of the report's conclusions, including the need for prompt action in order to avoid blackouts similar to those experienced in California last year. He noted

that opening the transmission grid to competition has resulted in generation efficiencies as well as reduced consumer costs.

The Secretary moved on to address two specific areas where he believes that the SEAB can play a vital role in advising him and the Department of Energy. The first is to evaluate the science priorities at DOE. Are the DOE science programs structured correctly, focused, and geared toward fulfilling the Department's mission? If they are not, what is needed to get them on the right track? The second area is to lead an intensive examination of energy-using sectors in the U.S. economy. He expressed interest in arranging a set of forums that bring in the leaders of different industry sectors to discuss how their energy needs are changing and their future requirements.

The Secretary also urged the Laboratory Operation Board to continue working towards its goal of improving the efficiency of the labs as outlined in the President's Management Agenda.

Secretary Abraham then thanked the members again and excused himself.

Chairman McPherson thanked the Secretary and introduced Dr. Reed.

Dr. Craig Reed

SEAB Executive Director Craig Reed explained some of the details of the administration of the Board and his role as the Designated Federal Official for the meeting.

Member introductions

Chairman McPherson asked the members to briefly introduce and identify themselves before introducing Dr. Marburger.

Dr. John Marburger Science Advisor to the President and Director of the Office of Science and Technology Policy

Dr. Marburger summarized the status of science funding throughout the federal government, with specific focus on DOE. He highlighted the President's belief that science is critically important for national security, long-term competitiveness, and continued improvement in the quality of life of all Americans. He stated that the Department of Energy is the principal supporter of physical sciences, with 38 percent of federal funding. He pointed out some of the most significant achievements of the DOE laboratories, beginning with the Manhattan Project, and continuing through the Cold War, to most recent accomplishments in astronomy. He focused on the changing mission of the national laboratories over the last decade as their missions have changed dramatically with the end of the Cold War. He indicated that these changes are not yet completed. Dr. Marburger discussed the rapid advances made in information technology and computing that have led to a new domain of complexity. He finished by examining

the four main policy challenges facing DOE: (1) to maintain the research and development infrastructure; (2) to prioritize the numerous new and promising opportunities; (3) to develop strategies to apply the new knowledge to vital issues; and (4) to manage the entire complex in a global context, with other nations working on similar issues and in some cases moving more quickly than we are.

Chairman McPherson thanked Dr. Marburger and introduced General Gordon.

**General John Gordon
Under Secretary for Nuclear Security and Administrator of the National Nuclear Security Administration**

General Gordon explained the history behind the formation of the two-year-old National Nuclear Security Administration (NNSA), and described its structure and mission. He noted that the end of the Cold War led to some loss of mission focus, as well as inattention and budget cuts for the labs and production plants. He noted that the Wen Ho Lee case and subsequent lack of confidence expressed by Congress, the public, and the media led to the reorganization. General Gordon mentioned that his first priority was to stabilize the structure in the field and define the mission. Second, he said they have worked to build a more modern, streamlined organizational structure. General Gordon discussed two initiatives to increase efficiency and effectiveness. The first was to eliminate some of the mid-level managers to better streamline operations. The second was to review contract restrictions placed on the NNSA's labs and plants. General Gordon then addressed some of the ongoing program challenges that NNSA inherited, including the over-budget National Ignition Facility, and Los Alamos, that noted that both have been brought under tighter control and are moving forward with better progress. He stated that rebuilding and maintaining the NNSA's infrastructure also is a major concern. He briefly discussed the reenergized nonproliferation work going on with Russia. General Gordon also talked about DOE's contribution to Homeland Defense.

General Gordon took several questions from different members of the Board.

Chairman McPherson thanked General Gordon and introduced Dr. Orbach.

**Dr. Raymond Orbach
Proposed SEAB Task Force on the Future of Science Programs at the Department of Energy**

Dr. Orbach talked about the newly proposed SEAB Task Force on the Future of Science Programs at the Department of Energy. The scope and objective of the Task Force is to provide appraisals and recommendations to the Secretary of Energy regarding the content and structure of all the science programs at DOE. He discussed the role of science in the federal government, DOE, and the Office of Science. He discussed six principal duties of the task force: (1) to provide policy recommendations on future directions and scientific research that will enable the Department to meet its future mission objectives; (2) to focus the science activities most effectively on meeting the most critical goals; (3) to

make recommendations on science program investment strategies, including the mathematical, physical, and biological sciences; (4) to identify a pathway for coordination and cooperation of scientific activities within DOE as well as those outside DOE; (5) to devise ways to communicate the merits of DOE's basic research to key decision makers; and, (6) to find a mechanism for evaluating the effectiveness of science programs. Dr. Orbach closed with a few notes on the administration of the Task Force, identified Dr. Jeffrey Salmon as the Staff Director for the Task Force, and thanked the members. He took several questions from members. The Board then approved the formation of the SEAB Task Force on the Future of Science Programs at the Department of Energy.

Chairman McPherson introduced Mr. Martin.

Hon. William Martin
Proposed Industry Sector Summit Initiative Task Force

Mr. Martin began a brief discussion on the scope of the newly proposed Industry Sector Summit Initiative Task Force after acknowledging that he had been asked by Dr. Reed to chair the task force. He talked briefly about his previous experiences engaging industry positively on energy issues. He expressed his hope that this Task Force can engage in a national dialogue with industry leaders around the country. The members discussed the initiative briefly and asked several questions. The Board then approved the formation of the Industry Sector Summit Initiative Task Force.

Chairman McPherson introduced Dr. Savitz

Dr. Maxine Savitz
Report of the Laboratory Operations Board

Dr. Savitz presented a letter report from the Laboratory Operation Board (LOB) to the SEAB for approval. Dr. Savitz outlined six best practices recommended for consideration within the report. She also discussed the work plan for the LOB for the coming year and encouraged any interested SEAB members to attend its meetings that are scheduled to take place in the coming year. The three areas of interest identified by the LOB include: continuing to look at best practices across the DOE lab complex; reviewing DOE policies and practices regarding technology partnering; and, looking at lab-directed research and development funding. Dr. Savitz concluded with a few comments about the importance of good public relations in promoting the important work of the national laboratories. The members asked questions and discussed some of the issues raised by Dr. Savitz and the LOB report. The Board approved the letter report and continued attention by the LOB on this issue.

Public Comments

There were no requests to make any public comments on any of the issues raised during the prior presentation or discussions.

Board Member Comments

Chairman McPherson then asked each member to briefly relay his or her thoughts on energy policy to be conveyed to the Secretary.

Mr. Milbauer noted that real energy prices over the last one hundred years are very flat with the exception of the oil embargo of the early 1970's. He highlighted the self-correcting nature of markets. He suggested that DOE needs to anticipate periods of short-term dislocation rather than assume there is an enormous problem.

Governor Miller expressed his appreciation for being included in the SEAB as an opposition voice. He stated his adamant opposition to the Secretary's conclusion, opinion, and the entire process with regards to the Yucca Mountain Project.

Ms. Pfothauer concurred with Mr. Milbauer's comments and expressed enthusiasm for the Industry Sector Summit Initiative Task Force.

Dr. Richter pointed to the need for new energy technology to power world growth in the coming years. He said that the world cannot tolerate uncontrolled burning of coal without serious effects for future generations.

Dr. Savitz emphasized the Department's continuing role in technological research and development with a view of the long-term needs of both supply and efficiency.

Ms. Toretta expressed some concern about the health of the energy infrastructure. She also hoped that the SEAB could be both a balanced and productive tool for Secretary Abraham. She agreed that better public relations were needed by the energy industry.

Mr. Wagoner talked about the need for better integration and cooperation of government agencies and regulating. He observed that other nations' policies are more focused on a single solution to fuel economy. He noted that, with a more focused solution, and with industry and government support, both consumers and the environment would benefit.

Mr. West pointed to the need for DOE, in conjunction with other agencies, to establish guidelines for permitting of liquefied natural gas facilities in the United States. He pointed to the possibility for small consumers to manage their energy costs more efficiently in the same way large consumers do, by bundling the costs and easing the cost of volatility.

Dr. Wu mentioned the good work that the DOE labs are engaged in but noted that there are often complications in working with them. She encouraged the labs to work to become more transparent.

Mr. Yzaguirre pointed to the National Petroleum Council study that was known as "The Cheney Study," as a valuable resource for the board members.

Mr. Alford noted the Department of Energy's poor performance in engaging and working with small business. He points to this as a long running failure of the DOE and offered to make some suggestions in writing to the Secretary in the future.

Mr. Athy suggested that the Secretary put emphasis on a set of top priorities within the DOE. He also recommended giving some consideration to changing the name of the Department to the "Department of Energy and Science." This would better reflect the role of the Department of Energy and its capabilities.

Mr. Becker encouraged greater research in technology to help keep American industry strong.

During Mr. Becker's comments, Secretary Abraham rejoined the group and the discussion continued.

Ms. Carde expressed concern that the accelerated cleanup schedule for environmental management might be at odds with the cleanups being done correctly. The Secretary responded with his assessment of the cost savings and stated DOE's commitment to both safety and proper management. Ms. Carde also suggested that the Secretary consider reconvening the SEAB's Openness Advisory Committee to oversee the post-9/11 move towards greater classification of information.

Mr. Hoffa mentioned the Enron collapse and linked its alleged market manipulation to deregulation. He stressed the need for monitoring and regulation. He stressed the need for affordable energy for average Americans on fixed incomes.

Dr. Irani noted that the real price of gasoline is still at very low levels historically. He pointed to the depletion of new domestic oil resources and recommended the Department look at prices that would be required to bring other domestic resources, like shale oil, into production.

Mr. Kuhn expressed his optimism that SEAB could build a great deal of consensus about what needs to be done in energy efficiency and energy in the future. He commended the Secretary for the Transmission Grid Study.

Ms. Kwok hoped she could continue to assist the Department with personnel issues and diversity within the Department and the labs. She also inquired about what the Secretary's priorities will be regarding recommendations that were made in the Racial Profiling Task Force report.

Dr. Lederman expressed support for the Department of Energy's science programs and the important work that they do. He also encouraged SEAB members to visit some of the national laboratories to see some of the work they do. Dr. Lederman raised the need for better outreach to K through 12 students.

Dr. Maidique recommended that Dr. Maxine Savitz consider Ed Robbins as a good resource on managing technology innovation. He also recommended consideration of changing the name of the Department to include the word “Technology” or “Science.”

Mr. Martin stressed the national importance of the DOE and its varied mission. He also supported Dr. Lederman’s remarks about the importance of K through 12 education and outreach. He advised the Secretary that using the Strategic Petroleum Reserve in a time of war could alleviate other associated problems with the economy, and that it could have possibly averted a recession in 1991 had it been employed.

Mr. McClure talked about his experience in fighting for positive change in government agencies and between agencies and he expressed his hope that the Board would be able to affect some meaningful changes.

Mr. Meyer talked about global warming and the goal of affecting the long-term concentration of greenhouse gasses. He recommended that the Department—or possibly the Board—look at different concentration levels and what we may want to achieve. Mr. Meyer noted that in the past, other countries have been quicker to take our technology or to build out our technology investments and take them to market, as has been the case with wind energy in Denmark and Germany.

Conclusion

Secretary Abraham reflected on the events of the day and the Board's comments, then thanked the members for their participation. Chairman McPherson adjourned the meeting at 5:50 p.m.