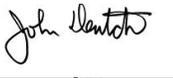


## SECRETARY OF ENERGY ADVISORY BOARD

MEMORANDUM FOR: SECRETARY OF ENERGY

FROM: John Deutch   
Chair, Secretary of Energy Advisory Board (SEAB)

CC: Deputy Secretary of Energy and SEAB Members

DATE: February 17, 2015

SUBJECT: SEAB comments on the Report of the Congressional Advisory Panel on the Governance of the Nuclear Security Enterprise

You requested that your Secretary of Energy Advisory Board review the recent *Report of the Congressional Advisory Panel on the Governance of the Nuclear Security Enterprise* (Augustine-Mies Panel) and give you its opinion about how the department should respond to the advisory panel's recommendations.<sup>1</sup> This letter report, prepared by six members and approved by the board, transmits our views.<sup>2</sup>

Congress established the Augustine-Mies Panel and charged it to address the many concerns that have existed for some time about impediments to the NNSA performing its vital national security mission of maintaining the nuclear weapons stockpile, advancing U.S. nonproliferation policies and programs, and supporting the nuclear navy. The concerns are wide-ranging and include cost and performance of the weapons program, maintaining the morale and quality of the technical staff, avoiding cost overruns of major projects, and reducing program management and direction from NNSA that encourages risk avoidance, excessive control, and inadequate attention to program outcomes.

The Augustine-Mies Panel was directed to examine alternative models that would enable

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<sup>1</sup> *A New Foundation for the Nuclear Enterprise*, Report of the Congressional Advisory Panel on the Governance of the Nuclear Security Enterprise, co-chaired by the Honorable Norman Augustine and Admiral Richard Mies, USN (Ret.), November, 2014.

<sup>2</sup> The six SEAB members are: Brent Scowcroft, Chair SEAB Nuclear Security Subcommittee, Al Carnesale, John Deutch, Steven Koonin, Richard Meserve, and Ellen Tauscher.

transformation and dramatic improvement in the DOE/NNSA enterprise. The Panel considered four different models: (a) maintaining the current somewhat ambiguous quasi-independent status of the NNSA within DOE, (b) recreating the NNSA as an independent agency, (c) transferring responsibility for the NNSA to the Department of Defense, and (d) moving from a separately organized NNSA within DOE to a new Office of Nuclear Security, ONS, integrated into a DOE that is led by a cabinet secretary who is committed to and knowledgeable about nuclear security issues. The Director of ONS would be given substantial authority and responsibility for implementing the department's nuclear security program.

The Augustine-Mies Panel recommends the last option: integrating a new ONS into DOE with an obligation that DOE leadership, the secretary and deputy secretary, have knowledge and commitment to the nuclear security responsibilities of the department.

The members of SEAB, many of whom have deep experience with DOD and DOE, unanimously and strongly agree with the Augustine-Mies Panel that a new ONS should be integrated into DOE and that the leadership of DOE should have knowledge of, and commitment to, the nuclear security responsibilities of the department. SEAB stresses that the consequence of taking no action risks continuing deterioration of DOE's ability to fulfill its national security mission and the morale throughout the complex. We urge you to encourage the administration and Congress, vigorously and vocally, both publicly and within the DOE/NNSA community, to endorse the Panel's constructive approach and implement the needed legislative change to the DOE Organization Act.

SEAB believes you demonstrate that there are individuals who can provide the kind of secretarial leadership that is needed to make *A New Foundation for the Nuclear Enterprise* a success, and your example was not insignificant in bringing the Panel to its organizational recommendations.

The Panel helpfully proposes in Appendix C of their report changes to the language in the 2000 statutory amendment establishing the NNSA in the 1977 DOE Authorization Act.

SEAB believes that these changes are directionally correct; however balance with the energy mission should not be forgotten. Several of the Panel's suggestions are intended to underscore the importance of national security, especially the nuclear weapons program, in the department missions. Suggestions such as changing the name of the department, requiring both the Armed Services and Energy and Natural Resources Committees to confirm the Secretary and Deputy Secretary, establishing qualifications of the president's nominees for these positions, and extending the term of the Director of ONS are sure to provoke considerable debate. We did not discuss the pros and cons of these suggestions but are prepared to do so if you believe it would be useful to have SEAB's opinion.

The Augustine-Mies Panel does a thorough job of identifying changes that are needed to bring their vision of a *New Nuclear Enterprise* into a reality. The Panel presents a daunting list of 65 recommendations organized into five broad categories. Those with senior government management experience (and many members of the Panel have such experience) will recognize that the phrases in these recommendations such as "The Secretary should..." or "the Director of ONS should..." do not indicate an immediate way forward to implementation. It will take more than a few years to achieve the result the Augustine-Mies Panel seeks. The Panel lists 15 useful indicators of progress in the desired realignment and suggests a follow-on evaluation in two years; SEAB suggests you might consider establishing a process to report semi-annually to Congress on the progress made in implementing the recommendations.

SEAB wishes to offer remarks on five issues that the board believes deserve your special attention.

- The DOD is the main customer for DOE's weapons technology and products. The Nuclear Weapons Council is the principal mechanism for harmonizing requirements and resources that define an executable five-year plan. The Panel identifies current weakness in this mechanism, but stops short of recommending a high-level, DOD executive who has experience and expertise in the weapons complex to support the Council and to manage the DOD's role in the day-to-day matters between the two

agencies. If the principal customer and the supplier of defense programs are not in agreement about requirements and resources, it is inevitable that differences will be resolved by less qualified individuals and result in adoption of a less sound program with unsatisfactory cost and performance outcomes.

- The Panel gives a thorough and telling account of the breakdown in the working relationship between the NNSA and its M&O contractors. It is basically a story of a change from a mission and outcome driven FFRDC orientation to an excessive transactional, cost minimization, and risk avoidance orientation. But in our view the Panel falls short in suggesting convincing, concrete steps that will reestablish the credibility and trust between the government and the M&O contractors.

The Panel recommends a shift from reliance on award fees to fair fixed fees with contract renewal and extension as the main mechanism to reward or penalize contractor performance. SEAB agrees that too much reliance has been placed on the award fee as a performance incentive tool but doubts the change recommended by the Panel is sufficient to reestablish an FFRDC relationship.

The SEAB National Laboratory Task Force believes that in addition, more attention needs to be placed on restoring clarity and non-overlapping responsibility and accountability for programmatic, functional, and financial activities among the various stakeholders: NNSA headquarters, field sites, M&O contractors, and laboratory management. In short, there is no sure formula for reestablishing an effective and collaborative working relationship, but as the Panel's report makes clear, doing so remains a key objective.

- The Panel makes many important suggestions about improving operations at the laboratories and planning for necessary infrastructure modernization and renewal. While the Panel acknowledges the importance of human capital in one of its recommendations, SEAB believes that substantially more attention should be paid to improving the morale and creative atmosphere at the weapons laboratories and the

production facilities.<sup>3</sup> The tension that has existed between the NNSA and M&O contractors is corrosive to maintaining the technical excellence that is the essential underpinning of the laboratory capability. Finding and keeping the most talented employees is the responsibility of every part of the management chain, especially the laboratory leadership. The Panel recognizes the importance of the Laboratory Directed Research & Development (LDRD) program for this purpose and endorses a funding level no less than 6%; SEAB agrees.

- SEAB believes there is significant opportunity for greater programmatic connections between the NNSA and the other DOE science/energy national laboratories that would further the integration objective advanced by the Augustine-Mies panel. Areas where increased collaboration has promise are high performance computing, nuclear physics, fusion, and materials science.
- The unique skills of the nuclear security laboratories are important to other agencies: including the Department of Defense, the Department of State, the Department of Homeland Security, and the Intelligence Community. This work for others, WFO, is growing at the labs and presents management challenges: the non-DOE agencies pay for a portion of the project cost, but not as a general matter the investment necessary to maintain the intellectual and physical infrastructure of the laboratories; a need to assure that the work does not interfere with the fulfillment of the labs weapons mission; and confirmation that the work is consistent with the laboratory's mission. Non-DOE customers object to the cost, the complex and long approval process, and delays in completion of the work.

Congress clearly intends that the laboratories contribute to a broad range of national security missions and provide assistance to the non-DOE agencies. The Mission Executive Council (MEC) was launched by agreement among the principals of the affected agencies to facilitate coordination among the group so that the laboratories

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<sup>3</sup> The Panel Recommendation 12.3 is: “**The Director should ensure that the strategy and plan identify investments in the needed skills in the workforce.** There needs to be an analysis of the level and skill mix of the workforce necessary to meet future requirements, and an assessment of the steps required to recruit and retain them.”

could serve this broader mission. The Panel notes that the MEC has not been fully effective to date and makes recommendations to improve its functioning. While DOE shoulders the central responsibility for assuring the health of the laboratories, their management and funding, we agree that the Secretary of Energy and the Director of the ONS should revitalize the MEC as a means for improving coordination among the agencies. The aim should be to assure that the agencies are aware of the special capabilities of the labs and that the laboratories are aware of the emerging challenges confronting the agencies. We understand that the National Academies have prepared a report for NNSA that explores these issues more fully.

SEAB strongly supports the Augustine-Mies report and we stand ready to receive further tasking from you to assist the department in this important realignment process.