Interim Report of the Congressional Advisory Panel on the Governance of the Nuclear Security Enterprise

Prepared Statements by the Co-Chairmen, Mr. Norman Augustine

and

Admiral Richard Mies, U.S. Navy (Retired)

Mr. Augustine:

Mr Chairman and Ranking Member Sessions, thank you for the opportunity to present the findings to date of the Congressional Advisory Panel on the Governance of the Nuclear Security Enterprise. As you know, Admiral Rich Mies and I serve as its co-chairmen.[1]

Congress tasked our panel to broadly examine the performance of the Nuclear Security Enterprise and to consider alternatives.

Let us state at the outset: The current viability of the U.S. nuclear deterrent is not in question. At the same time, the existing governance structures and practices are most certainly inefficient and in some instances ineffective, putting the entire enterprise at risk over the long term.

During the past five months, the panel has focused attention on the National Nuclear Security Administration (NNSA)—both headquarters and field, including the laboratories, production plants, and Nevada National Security Site. We have also examined the current situation from the perspective of the national leadership in the Legislative and Executive branches and from the perspective of customers of the NNSA in the Department of Defense, Department of State, the Intelligence Community, and the Department of Homeland Security. We have benchmarked NNSA against proven management approaches used by other high-performing, high-technology organizations both in the private sector and in government.

The panel's work has relied on our twelve members' decades of experience of a broad scope dealing with nuclear enterprise issues; we have reviewed thousands of pages of previous studies; we have

[1] The other Panel members are: Dr. Michael Anastasio, Admiral Kirkland Donald, U.S. Navy (ret.), Mr. T.J. Glauthier, The Honorable David Hobson, Dr. Gregory Jaczko, Dr. Franklin Miller, Dr. William Schneider, Jr., The Honorable John Spratt, Jr., The Honorable Ellen Tauscher, and The Honorable Heather Wilson.

conducted on-site visits to numerous installations; and we have benefitted from the views of dozens of expert witnesses. We appreciate the active engagement of our colleagues on the panel and the candor of those we have interviewed.

Today we will summarize our panel's findings on the current health of the NNSA and the root causes of its challenges. We are only now beginning to formulate the recommendations that we will provide in our final report.

Unfortunately, the unmistakable conclusion of our fact finding is that, as implemented, the "NNSA experiment" involving creation of a semi-autonomous organization has failed. The current DOE-NNSA structure has not established the effective operational system that Congress intended. This needs to be fixed as a matter of priority, and these fixes will not be simple or quick, and they need to recognize the systemic nature of the problem.

Despite the flaws, we have found examples of success in NNSA's endeavors. To date, Science-Based Stockpile Stewardship has succeeded in sustaining confidence in the U.S. nuclear deterrent. Unmatched technical innovation on the part of NNSA's scientists and engineers has produced dramatically increased understanding of the country's aging nuclear weapon stockpile. The labs and plants are providing solid support to non-proliferation efforts and unique expertise to the Intelligence Community. NNSA's Naval Reactors organization continues to provide world class performance in the development and support of the most advanced naval nuclear propulsion systems in the world.

But, NNSA as a whole continues to struggle to meet fundamental commitments. To the point: it has lost credibility and the trust of the national leadership and customers in DOD that it can deliver needed weapons and critical nuclear facilities on schedule and on budget. Simply stated, there is no plan for success with available resources. NNSA is on a trajectory towards crisis unless strong leadership arrests the current course and reorients its governance to better focus on mission priorities and deliverables.

At the root of the challenges are complacency and the loss of focus on the nuclear mission by the nation and its leadership following the end of the Cold War. Although the national leadership has provided strong policy statements and substantial sums of money to the enterprise, it is evident that follow-through has been insufficient. The Congress' current focus on the issue is a welcome development.

Over the decades this changed situation has translated into the absence of a widely accepted understanding of, and appreciation for, the role of nuclear weapons and nuclear technology in the 21st century, with the resultant well-documented and atrophied conditions of plans for the U.S. strategic deterrent's future—in DOD as well as in DOE. Within the Nuclear Enterprise this has been reflected as a lack of urgency and need for a compelling mission focus.

As earlier reviews have concluded, and this panel endorses: this is no time for complacency about the nuclear deterrent. America's deterrent forces remain of utmost importance; they provide the ultimate guarantee against major war and coercion. Further, our allies depend on these forces and capabilities for extended deterrence and could well pursue their own nuclear weapon capabilities if they perceive the U.S. commitment or competency to be weakening. Other countries carefully measure U.S. resolve and technological might in making their own decisions about proliferation and nuclear force sizing. U.S. leadership in nuclear science is something the country cannot afford to lose. The United States, along with its allies, are in a complex nuclear age; with several nuclear powers modernizing their arsenals, new nuclear technologies emerging, and potential new actors—as well as regional challenges—raising significant concerns. This would be a dangerous time to stumble.

Fundamental reform will be required to shape an enterprise that meets all of the nation's needs and rebuilds the essential infrastructure that is required. But while the technical work is rocket science, the management and cultural issues are not as complex—albeit, in the case of the latter, not easily rectified. What is needed is to issue clear plans and provide sufficient resources for success; assign and align responsibility, along with the necessary authority; and provide strong, accountable leadership and management at all levels to execute the mission. The panel believes such reform is possible, but it will demand determined and sustained high-level leadership.

The changes the panel will recommend undoubtedly will be difficult to implement regardless of where the enterprise is located within the government's structure, since the fundamental problems are cultural more than organizational. Organizational change, while not unimportant, is only a small portion—the easy portion—of the revisions that must be made. Previous efforts to reform and previous studies calling for action have largely failed due to lack of leadership follow-through, a lack of accountability for enacting change, and, we might add, the lack of effective, sustained top-level demand for change from the national leadership.

The Department of Energy by itself would be challenged to oversee the radical steps that will be needed. Success is imaginable only with the strong and active engagement of a knowledgeable Secretary, supported by the White House and Congress, and a structure that removes impediments and that aligns to mission priority. The panel believes the enterprise today benefits immensely from the political leadership of an engaged Secretary of Energy and the strong science and engineering of the national laboratory system.

Each successive administration since that of President Eisenhower has reaffirmed the need to sustain a credible nuclear deterrent that is safe, secure and reliable. But sustained national commitment and focus on the entirety of the mission and the enterprise charged with its execution has been lacking since the end of the Cold War, as evidenced by the condition in which the enterprise finds itself today. DOE and the NNSA have failed to act with a sense of urgency at obvious signs of decline in key areas. Five systemic disorders have taken root that we found to be at the heart of the problem. With your permission, Admiral Mies will briefly outline those issues.

Thank you.

Admiral Richard Mies:

Mr Chairman and Ranking Member Sessions, let me add my thanks as well for being here today. My remarks are intended to provide some specifics on the panel's findings within the context of my Co-Chair's overall characterization of the health surrounding the Enterprise.

Our panel has identified five *systemic disorders* which result from the fundamental causes outlined in Norm Augustine's preceding testimony. The causes and the disorders are inseparable. Most, if not all, of these disorders can be traced back to national complacency—the lack of a compelling national narrative and a widely accepted understanding—regarding the role of the U.S. nuclear deterrent in this century.

Today I would like to offer a synopsis of our panel's key findings, specifically focusing on the five systemic disorders we have identified.

First, a loss of sustained national leadership focus. Since the end of the Cold War, the United States has experienced significant erosion in its abilities to sustain nuclear deterrent capabilities for the long term. The atrophy of these capabilities has been well documented in numerous reports over the past decade. The fundamental underlying cause of this erosion has been a lack of attention to nuclear weapon issues by senior leadership—both civilian and military—across both past and present Administrations and Congresses. This lack of attention has resulted in public confusion, Congressional distrust, and a serious erosion of advocacy, expertise, and proficiency in the sustainment of these capabilities. Absent strong national leadership, NNSA, as well as the whole Nuclear Security Enterprise, has been allowed to "muddle through." First and foremost, we must consolidate and focus national-level support.

Second, a flawed DOE/NNSA governance model. The current NNSA governance model of semi-autonomy is fundamentally flawed. NNSA has not established effective leadership, policy, culture, or integrated decision making. Indeed, the design and implementation of NNSA governance has led to numerous redundancies, confused authorities, and weakened accountability.

Third, a lack of sound management principles and practices. NNSA, and the associated policy-setting and oversight organizations within DOE, reflect few of the characteristics of successful

organizations. An entrenched, risk-averse bureaucracy lacks a shared vision for, and a unified commitment to mission accomplishment and hence they do not act as a team. Both DOE and NNSA lack clearly defined and disciplined exercise of roles, responsibilities, authorities, and accountability aligned to NNSA's mission deliverables. Too many people can stop mission essential work for a host of reasons and those who are responsible for getting the work done often find their decisions ignored or overturned. Chains of command are not well defined and resources are micromanaged. Personnel management and career development programs, issue resolution processes, and deliverable aligned budgets are deficient. Shortfalls in project management and cost-estimating are well-documented and acute.

Fourth, a dysfunctional relationship between the NNSA federal workforce and their management and operations (M&O) partners. The trusted partnership that historically existed between the laboratories and DOE/NNSA headquarters has eroded over the past two decades to an arm's length, customer-to-contractor adversarial relationship, leading to a significant loss in the benefits of the federally funded research and development centers—the FFRDC model. The *trust* factor essential to this model—and underscored by a recent National Academy of Science study[2]—results from unclear accountability for risk, a fee structure and contract approach that invites detailed transactional compliance-based oversight rather than a more strategic approach with performance-based standards. Additionally, excessive, fragmented budget and reporting lines also confound effective and efficient programmatic management and further erode any sense of trust. Furthermore there is no enterprise-wide approach within NNSA. While there are examples where the relationship has improved, such as at the Kansas City Plant, overall this government-M&O *partnership* remains highly inefficient and in many cases, severely fractured.

Fifth and finally, a lack of close collaboration with selected customers. The issues the panel has identified are mainly with the Department of Defense weapons customers. This is, at once, a cultural and communications divide. There is no affordable, executable joint DOD-DOE vision, plan, or program for the future of nuclear weapons capabilities. There is a lack of effective joint planning and budget coordination, because of a fundamental lack of mechanisms to ensure requisite collaboration and consensus to address core mission requirements. As a consequence DOD customers lack trust in NNSA's

[2] Charles Shank and C. Kumar Patel, et al., *Managing for High Quality Science and Engineering at the NNSA National Security Laboratories* (The National Academies Press, 2013).

ability to modernize facilities and execute warhead life extension programs. Although other customers appear to be satisfied, here, too, a more strategic approach could strengthen capabilities and the services provided.

In conclusion, lasting reform requires aggressive action and sustained implementation in all five of these areas. But, national leadership engagement is really the common theme. Improvement is possible, but it will demand strong leadership and proactive implementation of the panel's recommendations by the President, the Congress, and an engaged Secretary of Energy.

Thank you for your time and we look forward to your questions.