

July 6, 2020

The Honorable Jim Inhofe  
Chairman  
Committee on Armed Services  
U.S. Senate  
Washington, DC 20510

The Honorable Adam Smith  
Chairman  
Committee on Armed Services  
U.S. House of Representatives  
Washington, DC 20510

The Honorable Jack Reed  
Ranking Member  
Committee on Armed Services  
U.S. Senate  
Washington, DC 20515

The Honorable Mac Thornberry  
Ranking Member  
Committee on Armed Services  
U.S. House of Representatives  
Washington, DC 20515

Dear Chairmen and Ranking Members:

As former Secretaries of Energy, we strongly supported nuclear science and technology to meet our national security and clean energy needs, and are deeply appreciative of the long-standing bipartisan support in Congress for the broad-based portfolio of Department of Energy (DOE) national nuclear programs. The DOE programs in nuclear science and technology, nuclear nonproliferation, naval nuclear propulsion, nuclear waste and environmental management and stewardship of our nuclear weapons stockpile comprise a comprehensive strategic element in the nation's national security posture.

As Congress moves forward toward enactment of the FY 2021 National Defense Authorization Act (NDAA), we want to provide our views on two major issues affecting the future of our national nuclear security posture: (1) potential new unnecessary restrictions on the ability of the Secretary of Energy to efficiently and effectively allocate resources within the national nuclear security program portfolio, and (2) the need to strengthen our civilian national nuclear science and technology capabilities as a critical enabler of our national nuclear security posture.

The first issue concerns proposals to restrict the authority of the Secretary of Energy in developing the DOE national security budget by giving special authority to non-Cabinet level officials in the Department of Defense (DOD) Nuclear Weapons Council (NWC). We believe this is misguided and would set a very bad precedent. It would also directly impact the budget for all DOE national nuclear security programs. A bipartisan group of former Secretaries and Deputy Secretaries wrote two years ago to the Chairs and Ranking Members of the Armed Services Committees on a similar issue, and we enclose a copy of that letter for your convenience.

- The DOE/NNSA clearly has the responsibility for maintaining a safe, secure and reliable nuclear weapons stockpile that meets military requirements. The Nuclear Weapons Council (NWC) is where these requirements are harmonized. As former Secretaries, we were fully briefed by National Nuclear Security Administration (NNSA) on the NWC discussions concerning DOE nuclear weapons deliverables. However, the NWC does not have visibility into other DOE nuclear security

responsibilities: nuclear nonproliferation; Navy nuclear propulsion; defense environmental cleanup and spent fuel management.

The nuclear nonproliferation programs, in particular, have been referred to as “defense by other means” and are critical to our security, especially in an age of terrorism. When the NWC looks at the DOE/NNSA budget solely through the lens of nuclear weapons requirements, it has understandably at times sought resource shifting between the relatively smaller nonproliferation budget to the larger weapons account. In a world of constrained resources, this may not represent the President’s or the Congress’s priorities, and it is important that the Secretaries of Energy and of Defense have independent voices.

In addition, the Secretary of Energy has the responsibility to budget for the Department’s mission requirements for the naval nuclear propulsion program and for the massive defense environmental cleanup. If the cleanup program does not meet certain legally enforceable milestones, state agreements could directly impact nuclear security operations.

The Secretary needs the flexibility to balance the needs and opportunities of all four core programs at any given time given the realities of budget constraints, fully taking into account the nuclear weapons advice and requirements from the NWC.

We would add that the Senate Committee on Armed Services might consider elevating its level of engagement in the Energy Secretary and Deputy Secretary confirmation process in order to probe more deeply his or her approach to the full spectrum of DOE nuclear security responsibilities.

- DOE has a science-based deterrence mission complementary to DOD’s operational responsibilities. DOE succeeds at this mission through innovative science and engineering, along with science-based weapons surveillance, carried out principally at the weapons labs Los Alamos, Livermore and Sandia and put into practice in the production complex, principally Pantex, Y12, Kansas City, Nevada and Savannah River. However, DOE’s nuclear security mission deeply engages other elements of the seventeen national lab system (e.g., Pacific Northwest, Oak Ridge, Argonne, Idaho, Savannah River) and the Navy nuclear reactor labs (Bettis, Knolls). Further, unclassified work at these and still other labs feed into the nuclear weapons toolkit, such as large-scale computation, machine learning and additive manufacturing. The NWC is not positioned to make tradeoffs in this space. It’s the job of the Secretary of Energy.
- The Secretary of Energy oversees the budget process for the entire DOE, including NNSA. Congress’s intent in assigning responsibility for the nuclear deterrent to the Atomic Energy Commission was to ensure a balance between resource allocation, military necessity and civilian control. Assignment of responsibility for the nuclear weapons stockpile budget to the NWC would disrupt this balance and diminish the Secretary’s ability to set policy priorities via the budget process.

- Finally, the scientific vitality of the weapons labs depends in no small measure on their being part of the broader DOE enterprise encompassing science, energy and environmental missions. Such work at the weapons labs provides critical access to a much broader talent pool than would be available with only a weapons focus. The Secretary has the responsibility to nurture and support the entire DOE innovation ecosystem for advancing all of DOE's core missions. Taking away flexibility for any of the major program elements diminishes his or her ability to do that and represents poor management practice.

In conclusion, we thank the U.S. Senate for seeking to uphold the Secretary of Energy's authority to govern the final submission of the entire DOE/NNSA annual budget request. However, we respectfully urge Congress to enact the NDAA for FY 2021 without new statutory provisions that would unnecessarily tie the Energy Secretary's hands in carrying out his/her responsibilities within the Administration and with Congress.

The second issue concerns the incorporation of the Nuclear Energy Leadership Act (NELA) into the NDAA. As a result of the efforts of a significant bipartisan group of Senators, the NELA appears headed for inclusion in the final Senate version of the NDAA. We recommend that the House do so as well. We support this initiative because rebuilding the American nuclear energy industry and domestic supply chain is important for national security as well as the environment. Nuclear power and a robust associated supply chain (equipment, services, people) are intimately connected with U.S. leadership in global nuclear nonproliferation policy and norms and with the nation's nuclear security capabilities.

- A strong domestic nuclear enterprise will be necessary to protect and advance U.S. national security equities as nuclear fuel cycles develop internationally in regions that historically have had little or no nuclear energy. This in turn depends on negotiating bilateral agreements for nonproliferation norms from a strong technology position.
- The U.S. nuclear Navy relies on a robust domestic nuclear energy supply chain. This supply chain includes a workforce trained in science and engineering, comprised of U.S. citizens who qualify for security clearances. Further, the Navy will eventually need new nuclear fuel supplies that can come only from a domestic uranium enrichment supply chain that does not currently exist.
- The nuclear weapons stockpile requires a constant source of tritium, provided by irradiating special fuel rods in power reactors. As with the Navy nuclear fuel requirements, the tritium must be supplied from U.S. origin reactors using domestically mined uranium that is enriched with U.S. technology. Once again, the needed supply chain is currently broken and will remain so until the United States reestablishes uranium enrichment capability using domestic-origin technology.

These issues have been well-documented in studies published by the Energy Futures Initiative and the Atlantic Council and reflected in the recent DOE nuclear energy strategy report. The conclusion, given the long times typically associated with deploying nuclear technology, is clear that we need to substantially expand our nuclear technology capabilities in this decade for national

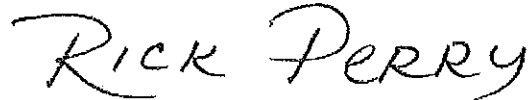
security purposes, as well as clean energy. Incorporating NELA into the FY2021 NDAA will be a step in the right direction.

Thank you for your attention to these matters. We would be happy to address these matters further upon request.

Sincerely,



Ernest J. Moniz  
13<sup>th</sup> Secretary of Energy



Rick Perry  
14<sup>th</sup> Secretary of Energy

Enclosure

July 13, 2018

The Honorable John McCain  
Chairman  
Senate Committee on Armed Services  
228 Russell Senate Office Building  
Washington, DC 20510

The Honorable Jack Reed  
Ranking Member  
Senate Committee on Armed Services 228  
Russell Senate Office Building Washington,  
DC 20510

The Honorable Mac Thornberry  
Chairman  
House Committee on Armed Services  
2120 Rayburn House Office Building  
Washington, DC 20515

The Honorable Adam Smith  
Ranking Member House Committee on  
Armed Services 2120 Rayburn House Office  
Building Washington, DC 20515

Dear Members of the NDAA Conference Committee:

As former leaders of the Department of Energy (DOE) and of the National Nuclear Security Administration (NNSA), we are writing to offer our views regarding Section 3111 in the Senate-passed National Defense Authorization Act (NDAA) for Fiscal Year 2019. Having provided leadership of DOE and NNSA following the formation of the NNSA in 2000, we are providing the conference committee leadership the product of our experience in managing the complex DOE/NNSA relationship, as directed under the NNSA Act.

Section 3111 of the Senate-passed bill would fundamentally alter the Secretary of Energy's relationship with the NNSA, stripping him or her of the authority to oversee and manage the Department's vital national security programs that assure the safety, security and effectiveness of the Nation's nuclear deterrent, decrease nuclear risk through nonproliferation programs, and provide critical nuclear propulsion for the Navy. This would leave the Secretary and the Deputy Secretary, who is the Department's statutory COO, with broad responsibility for the program but without the necessary tools to execute effective leadership and management of the NNSA.

The Senate-passed legislation restricts the Secretary from independently assessing the effectiveness of NNSA policies, requirements, performance, and compliance in vital areas that have an impact on national security and the protection of the public, reducing that assessment role to health and safety functions. The legislation also places restrictions on the Secretary's authority to set DOE-wide policy in critical areas, creating serious risks to the execution of its multiple national security missions.

As you are aware, DOE is responsible for the Nation's Science-based Stockpile Stewardship Program (SSBS), as well as for the implementation of global efforts to prevent and reverse WMD proliferation. This includes responsibilities for safeguards and security (for protection of nuclear weapons, special nuclear materials, and classified matter, including nuclear weapons-related Restricted Data), cyber security (for protection of both unclassified networks and classified National Security Systems), integrated safety management, emergency management (for protection of the nearby public and site workers from both radiological and hazardous material releases from site facilities and operations as well as hostile acts), and

counterintelligence threats.

By eliminating the Secretary's authorities to supervise and oversee DOE's nuclear enterprise, Section 3111 would directly contradict the recommendations the Congressional Advisory Panel on the Governance of the Nuclear Security Enterprise (known as the Augustine-Mies Commission). That panel, which completed its congressionally-mandated work in November 2014, stressed the necessity for Cabinet-level leadership of DOE's national security missions, both within the Department and across the interagency. The panel recognized the imperative that the Secretary "own" the nuclear security mission and recommended reforming the underlying statutory authorities to *more fully integrate* the NNSA into DOE, while of course preserving the Administrator/Undersecretary's capacity to develop NNSA policy, work with DoD through the Nuclear Weapons Council, and assure program implementation.

The provisions of Section 3111 are detrimental to the authorities of the Secretary of Energy in relation to the Nation's vast nuclear security enterprise. In this context it is worthwhile to review the structure of that enterprise and the unique role that DOE plays in the broader national security architecture of the Federal government.

Effective deterrence requires that the President and his military leadership, as well as our allies and adversaries, have absolute confidence in the reliability of U.S. nuclear weapons and our ability to deliver them on target should the Commander in Chief ever reach the momentous decision that their use is needed. Today, the Secretaries of Defense and Energy provide Cabinet-level complementary and joint advice to the President on all aspects of nuclear security.

DoD has full operational responsibilities for making deterrence work, involving command and control (including the delivery of critical information on nuclear threats to the President in minutes), targeting, and warfighters' prompt delivery of weapons to their destinations under any conditions.

DOE has an entirely different science-based deterrence mission that most Americans do not know about, conducting the design, continuous monitoring, and complex "life extension" efforts that extend the viability of the nuclear weapons in our shrinking stockpile beyond their original anticipated expiration dates and presumably for many decades to come.

DOE succeeds at this mission through innovative science and engineering. SBSS is carried out principally at three DOE National Laboratories – Los Alamos, Livermore and Sandia in New Mexico and California – and at its operational sites in Texas, Tennessee, South Carolina, Nevada and Missouri. SBSS requires that the labs continually push the frontiers of large scale computational hardware and software (including work with industry on new architectures), of experimental capabilities that reach extremely high pressures and temperatures relevant to nuclear weapons performance, of incredibly fast imaging at nuclear explosive time scales, and more. Multidisciplinary teams, a core competency of DOE labs, are essential.

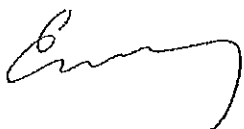
In addition to the three well known nuclear weapons labs, major contributions are made to the nuclear security mission by DOE science, energy and environmental national labs, as well as at the Naval Nuclear Reactors labs, including Pacific Northwest, Oak Ridge, Argonne, Idaho and

Savannah River, and Bettis and Knolls. For example, the leading computational and big data capabilities critical to modeling the stockpile are developed jointly by the DOE nuclear weapons and science programs. A number of the Science labs have leadership roles in nonproliferation. Furthermore, the weapons labs are themselves multi-mission labs centered on synergistic science and technology capability. Their scientific vitality depends on research they conduct outside the DOE nuclear security mission for the agency's science, energy and environmental programs and for other U.S. government agencies. Indeed, this research is often a gateway for recruiting top-notch scientists and engineers who go on to become key nuclear security contributors.

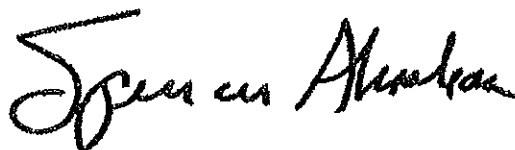
In sum, the DOE enterprise is a complex and dispersed ecosystem in which NNSA is situated. NNSA depends heavily on strong Secretarial enterprise-wide leadership to ensure that all DOE's assets, including the enterprise-wide national laboratory system, are available to support the "no fail" nuclear deterrence and proliferation prevention missions. Thus enterprise-wide oversight at the Secretarial level is essential to ensuring the strategic integration of all DOE capabilities to deliver on NNSA's responsibilities.

We strongly encourage the NDAA conference committee to reject the detrimental elements contained in Section 3111 so that the present and future Secretaries of Energy are able to fulfill their obligations to Congress, the American people, and our treaty allies, and to effectively lead and manage DOE's unparalleled national security assets.

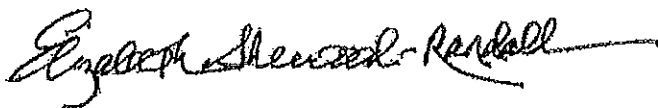
Sincerely,



The Honorable Ernest J. Moniz  
Former Secretary of Energy



The Honorable Spencer Abraham  
Former Secretary of Energy



The Honorable Elizabeth Sherwood-Randall  
Former Deputy Secretary of Energy



The Honorable Clay Sell  
Former Deputy Secretary of Energy