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Testimony

Before the
Strategic Forces Subcommittee
Committee on Armed Services
U.S. Senate

Witness Statement of the Nuclear Weapons Council

HON William LaPlante, Chairman
HON Heidi Shyu, Under Secretary of Defense for Research and Engineering
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HON John Plumb, Assistant Secretary of Defense for Space Policy

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Chairman King, Ranking Member Fischer, and distinguished members of the Subcommittee, thank you for giving the Members of the Nuclear Weapons Council (NWC) the opportunity to testify before you today. The NWC is a joint Department of Defense (DoD) and Department of Energy (DOE) National Nuclear Security Administration (NNSA) organization, codified in law by Title 10, United States Code Section 179, and established to facilitate cooperation and coordination and institute priorities between the two Departments regarding the management, sustainment, and modernization of the U.S. nuclear deterrent. Together, the Council is proud to represent extraordinary and highly skilled Soldiers, Sailors, Marines, Airmen, Guardians, Civilians, laboratory personnel, and contractors who are the core of the nuclear security enterprise. They are professional, mission-oriented, and innovative problem-solvers charged with ensuring our Nation sustains a safe, secure, reliable, and effective nuclear deterrent.

The U.S. nuclear stockpile remains the bedrock of our strategic deterrent. As the United States continues to advance nuclear modernization programs, the NWC sees an increasing need to collaborate to best manage risk. It is essential that the stockpile remains balanced, flexible, and adaptable to address emerging threats and to remain credible.

We are witnessing one of the largest shifts in global geostrategic power in recent memory, and the NWC – in support of the nuclear deterrence mission – has never been more important or relevant than it is today. The threat we face as a Nation is no longer a projection, it is here: China is modernizing its nuclear stockpile and strategic nuclear forces at a rapid pace while Russia's decades-long modernization program of their strategic deterrent forces is nearly complete. In addition, Russia's nuclear saber-rattling amid its unprovoked invasion of Ukraine underscores the nuclear risks that the United States, our allies, and our partners face amid an increasingly challenging security environment. As the United States faces these developments, the modernization of U.S. nuclear forces must continue to advance to ensure that no adversary engaged in increasingly assertive and aggressive actions believes that it can prevail through the use of nuclear coercion, the employment of nuclear weapons, or the employment of other strategic capabilities for any reason, under any circumstance.

NWC Organization

As mandated by Title 10, U.S. Code 179, the NWC manages and sets priorities for the nuclear weapons stockpile. Our membership includes the Under Secretary of Defense (USD) for

Acquisition and Sustainment (Chair), the DOE Under Secretary for Nuclear Security and Administrator of the National Nuclear Security Administration (NNSA), the USD for Policy, the USD for Research and Engineering, the Vice Chairman of the Joint Chiefs of Staff, and the Commander of U.S. Strategic Command. To ensure all equities within the nuclear security enterprise are represented, we receive consistent, valuable participation from other organizations including the Military Services, the DoD Comptroller, the DoD Office of Cost Assessment and Program Evaluation (CAPE) and NNSA Office of Cost Estimating and Program Evaluation (CEPE), the Office of Management and Budget (OMB) and the National Security Council (NSC). While the NWC is statutorily required to meet quarterly, for years we have elected to meet once a month at the executive-level. All NWC Principals believe that this pace appropriately reflects the amount of work to be done and the level of commitment to the nuclear deterrence mission at the highest levels of both Departments. A core tenet of the NWC's process is reaching consensus, and the pace of meetings supports this important principle.

To ensure that the NWC properly engages at all levels, we use subordinate committees and action groups to identify and analyze issues and provide detailed recommendations to the Council. The NWC Standing and Safety Committee (NWCSSC), co-chaired by the Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs and the Deputy Administrator for Defense Programs at DOE/NNSA, provides senior executive advice, assistance, information, analysis, and recommendations on issues for the Council's consideration. Additionally, DOE/NNSA details members of its staff to DoD and most importantly, a staff member to serve as the NWCSSC Executive Secretary, ensuring interagency representation and leadership at the staff-level. The NWC continually analyzes our current working relationships to ensure well-informed and empowered teams are preparing and providing recommendations to the NWC through a streamlined decision-making process. NWC issues are not only addressed when the Members and subcommittees meet, our mission is executed every day through this organizational structure and open collaborations between interagency partners.

NWC Focus on Stockpile Modernization and Its Challenges

The NWC recognizes the need for our future nuclear stockpile to be balanced, flexible, and adaptable to address emerging threats and to remain credible in a shifting security environment. Due to the age of our legacy weapons systems, maintenance and sustainment is

becoming increasing costly and ineffective at quickly and efficiently addressing the future security environment. As a result, the nuclear enterprise must balance priorities between the maintenance of legacy systems and the increasing investments in modernization. Through the annual assessment process, the NWC monitors and advises the Secretaries of Defense and Energy on all issues facing the aging stockpile. The NWC is committed to ensuring that U.S. nuclear weapon and delivery system modernization programs in both Departments are aligned, which will help in the identification and mitigation of risk across the modernization portfolio. There are currently four major nuclear weapons delivery system programs and five warhead programs simultaneously underway, and the NWC will continue to be intimately involved in their progress.

DOE/NNSA's warhead programs have reached some significant milestones since the last time the Council testified before this body. The first production unit of the W88 Alteration 370 was completed in July 2021, extending the life of the W88 through its planned retirement in the 2040s. The B61-12 achieved first production in November 2021, further assuring allies we value our extended deterrence commitment. The W80-4 cruise missile warhead, which will be mated to the modernized Long-Range Standoff (LRSO) weapon, is expected to enter the production engineering phase of development in FY 2023. NNSA and the NWC are reevaluating the schedule for the first production unit of W80-4, but NNSA does not anticipate it will affect the initial operating capability date for LRSO. The W87-1, the first warhead modernization truly driving the full production enterprise since the end of the Cold War, is on track to enter its engineering development phase in time to begin replacing the W78 on alert in 2030. Finally, the W93 just entered its feasibility study phase, furthering opportunities for both the United States and the United Kingdom to responsibly address challenges within their legacy nuclear forces. Although production delays have impacted our ability to meet key program milestones, the close coordination between DOE/NNSA and DoD on all of these programs indicates the tangible progress that both Departments have made through the NWC to sustain and modernize the stockpile and to provide deterrence capabilities for decades to come. However, without predictable, sustained and timely funding of the DoD and NNSA budgets, this close coordination is not enough to overcome the challenges we face in sustaining and modernizing the stockpile.

Nuclear Security Enterprise Production Capabilities and Capacities

The United States has not embarked on the production of nuclear weapons at-scale in over 30 years and will not be fully postured to do so until the middle of the next decade. The nuclear security enterprise must continue revitalizing efforts aimed at establishing resilience and responsiveness in the weapons production complex and defense industrial base through investments in science and engineering capabilities, technology innovation, and infrastructure, as well as enterprise intellectual capital. These efforts are required to maintain the nuclear stockpile, without underground nuclear explosive testing, and improve the safety, security, reliability, and effectiveness of the deterrent into the future. Ensuring the supply chain is flexible, resilient, and secure will eliminate single-point failures and enable DOE/NNSA to manufacture nuclear weapons with the speed and in the quantities required to address evolving threats. Both Departments will seek opportunities to accelerate the joint acquisition process for nuclear weapons and evaluate the tradeoffs that they entail during the annual program and budgeting cycles.

DOE/NNSA is currently working to reconstitute key production capabilities to deliver the critical components needed to modernize the stockpile, including weapon primaries, secondaries, and non-nuclear components, to meet the NWC's stockpile requirements. The NWC remains committed to NNSA's two-site strategy for plutonium pit production and recognizes the accomplishment of meeting two key milestones in FY 2021: the approval of Critical Decision (CD)-1 packages for major capital acquisition projects that underpin the two-site strategy for pit production, the Los Alamos Plutonium Pit Production Program (LAP4) and the Savannah River Plutonium Processing Facility (SRPPF). NNSA has informed the Congress and the DoD that meeting the DoD requirement for 80 pits per year (PPY) by 2030 is unachievable. Re-establishing war reserve pit production at the required rate of 80 PPY as close as technically and programmatically feasible to 2030 is essential to executing the stockpile modernization Program of Record and maintaining the credibility of the Nation's strategic deterrent force. NNSA is continuously working to mitigate the impacts associated with the inability to produce 80 pits per year by 2030. We are working to assess the operational impacts we are accepting as a result of this delay while still actively exploring options to accelerate schedule and to deliver on DoD's needed capabilities. DOE/NNSA assesses the equipment installation and facility construction needed to produce the additional 50 war reserve pits per year from SRPPF is achievable in the 2032–2035 timeframe and is committed to identifying an implementation path to produce 80 pits

per year as close to 2030 as possible. Pit production is just one of many critical capabilities needed to ensure the Nation retains a viable and robust nuclear security enterprise.

Today, key production capabilities and needed capacities are at great risk in large part due to infrastructure challenges. In late 2021, the NWC agreed to pursue a deeper understanding of the issues associated with production capability and capacity across the nuclear security enterprise and continues to gather data and evaluate scenarios regarding key decision points. The NWC continues to fully support ongoing life extension and modernization programs to deliver on critical needs for the U.S. deterrent.

2022 Nuclear Posture Review

The Under Secretary of Defense for Policy led the 2022 Nuclear Posture Review (NPR). The Department of Defense transmitted the classified 2022 National Defense Strategy (NDS) to Congress on March 28, integrated in the NDS was the 2022 NPR and 2022 Missile Defense Review (MDR), in support of the President's FY 2023 Budget which was fully informed by these policy documents. In keeping with the Secretary's vision of integrated deterrence, the NPR and MDR are nested under the NDS. The NPR takes a balanced approach to strategic stability in the 21st century—evincing a commitment to a safe, secure, and effective nuclear deterrent and strong and credible extended deterrence, while simultaneously taking steps to reduce the role of nuclear weapons in our strategy through nuclear nonproliferation, nuclear risk reduction, nuclear arms control, and nuclear counterterrorism and counterproliferation. Nuclear weapons will continue to provide unique deterrence effects that no other element of U.S. military power can replace. Amidst the current security environment, the NWC will continue to support investments in modernized nuclear forces that are responsive to the threats we face, to deter aggression, and preserve the security of the United States, our allies, and our partners.

Conclusion

We cannot overstate the significance of the present moment for nuclear modernization. Successful, on-time execution of the Program of Record, and commitment to the development and funding of modernization programs will ensure no potential adversary ever believes it can carry out a strategic attack on the United States or our allies for any reason, under any circumstances, without risking devastating consequences. We thank this Committee for its

longstanding, bipartisan support for our nuclear deterrent mission and for the professionals across the nuclear security enterprise. We look forward to your questions.