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The Honorable James N. Mattis Secretary of Defense 1000 Defense Pentagon Washington, D.C. 20301-1000

The Honorable J. Richard Perry Secretary of Energy 1000 Independence Avenue SW Washington, D.C. 20585

Dear Secretary Mattis and Secretary Perry,

We write to express our concern regarding the future of the plutonium program at the National Nuclear Security Administration (NNSA). The ability to produce plutonium pits for nuclear warheads and conduct plutonium research is crucial to maintaining a modernized and effective nuclear deterrent. We are alarmed to hear that NNSA is pursuing courses of action that will almost certainly produce long-term delays in the recapitalization of plutonium infrastructure.

Sustained pit production levels are required to support life extension programs, surveil legacy pits, and provide the flexibility to respond to geopolitical developments. Pit production goals were laid out by the Nuclear Weapons Council in 2008. Section 2438(a) of title 50, U.S.C., further establishes pit production milestones in statute: By 2027, NNSA is required by law to demonstrate the capability to produce 80 war reserve plutonium pits per year.

Since the closure of the Rocky Flats facility in 1989, the entire U.S. pit production capability has been based at Los Alamos National Laboratory in a few buildings. Some, such as the Chemistry Metallurgy Research (CMR) Facility, are aging, and others, such as building PF-4, are too small to support all the plutonium work required. The need to recapitalize NNSA's plutonium infrastructure was identified in the 1990s, but the first major effort, the replacement of the CMR Facility, was cancelled before the design was completed because of the ballooning costs associated with housing all plutonium work within one "big box" building.

In 2013, the DOD Cost Analysis and Program Evaluation (CAPE) Office and the NNSA proposed an alternative approach known as the "modular strategy"—building several smaller facilities with varied security and safety measures as requirements dictate to lower costs. Indeed, after the failure of the first design for the Y-12 Uranium Processing Facility, its subsequent redesign was based on this strategy. The Congress endorsed the modular strategy in section 3117 of the National Defense Authorization Act for Fiscal Year 2014 as a requirement for the replacement of the cancelled CMR Replacement project, which was based on a "big box" approach. We ask that you review this legislative language. It is based not only on the sound analysis carried out by CAPE after the failure of the CMR Replacement project, but also on

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multiple earlier costly failures of similar "big box" designs, such as the 2004 Modern Pit Facility.

NNSA began an analysis of alternatives (AoA) on plutonium facilities more than two years ago, and has repeatedly assured the committee that it would be complete by the end of the summer of 2017. We were deeply frustrated to learn recently that not only will the AoA be further delayed, but that NNSA is considering alternatives that include relocating plutonium operations to facilities at other laboratories or constructing the same "big box" project at Los Alamos that was cancelled for good reasons the first time. We are concerned that NNSA is underestimating the cost and difficulty of relocating the unique and specialized skills required for plutonium handling to another location.

The AoA is rehashing decisions that have already been made, and is putting the long-term plutonium capabilities of the United States at serious risk. The delay in choosing an alternative, compounded with the delays inevitable if the NNSA should choose an alternative requiring relocation to another laboratory or construction of a "big box" facility, will make it nearly impossible for NNSA to meet the statutory pit production requirements.

We urge you to work together, and through the Nuclear Weapons Council, to help the NNSA make a timely decision on this issue that results in the prompt construction of the facilities the United States needs to maintain an effective nuclear deterrent for the foreseeable future.

Thank you for your continued service to our Nation.

Sincerely,

Jack Reed

Ranking Member

John McCain

Chairman