

**Congress of the United States**  
**House of Representatives**  
**Washington, DC 20515**

March 21, 2017

The Honorable Gene Dodaro  
Comptroller General of the United States  
U.S. Government Accountability Office  
441 G Street, NW  
Washington, DC 20548

Dear Mr. Dodaro,

The United States is in the midst of a long-term effort to modernize its nuclear weapons enterprise. We are concerned about the cost and executability of ambitious and expensive plans to modernize nuclear weapons, particularly plans to produce new nuclear weapons.

Already, without factoring plans for new nuclear warheads, the next decade represents a particularly challenging period for the National Nuclear Security Administration (NNSA)'s nuclear modernization efforts, as the agency plans to simultaneously execute at least four life-extension programs (LEP) along with major construction projects. Pursuant to its "3+2" strategy NNSA plans to extend the life of the stockpile but also to produce new nuclear warheads known as "interoperable warheads" (IWs). The IWs would have a common nuclear explosive package and common or adaptable nonnuclear components and would be mated with two air-delivered warheads or bombs. The first IW (IW-1) warhead would replace two systems: the Air Force's intercontinental ballistic missile-based W78 warheads and the Navy's submarine-launched ballistic missile W88 warheads.

At a time of rising costs and increasing demands in many of NNSA's ongoing modernization efforts, which will require steep increases in out-year funding levels to support these efforts, we have continuing concerns about the affordability and need for the IW-1. We are concerned there is a lack of detailed analysis or clear need for this program, including continuing uncertainty about the reason for developing and producing a new warhead and the funding costs that could detract from key programs needed to sustain the rest of the nuclear enterprise.

NNSA completed initial feasibility, assessment, and planning studies for the IW-1 in FY2014, with the goal of a first production unit of the new weapon in fiscal year 2025; however, in fiscal year 2015, NNSA deferred this date to fiscal year 2030. Since that time, NNSA has continued planning activities for IW-1, though it remains unclear how much funding has been used to date to conduct these activities and sustain the capabilities. The total costs of the IW-1 range from

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\$12 billion to \$19 billion, according to the *Fiscal Year 2017 Stockpile Stewardship and Management Plan*. In addition, the IW-1 program likely would require NNSA to sustain larger plutonium and uranium capabilities to support production of the new warhead, costing several billions of dollars more.

We also have questions about whether the initial requirements and capabilities planned for IW-1 are well justified — particularly in light of recent improvements made to the W88 warhead — or whether there are alternative weapon refurbishment options that could cost less and be performed more quickly to meet military requirement for US nuclear forces. Moreover, the justification for the IW-1 has varied from a military requirement to a potential way to exercise design and production skills at the nuclear weapon laboratories.

Given GAO's extensive prior and ongoing work evaluating other nuclear weapon LEPs, we request that GAO conduct a similar evaluation of the IW-1 program, including but not limited to examining:

- (1) The underlying requirements for IW-1 and the planned capabilities for the new warhead, and how those compare to the W78 and W88 requirements and capabilities.
- (2) The extent to which NNSA has analyzed alternatives to the IW-1 program, such as refurbishing the W78 warhead and/or more limited upgrades to the W88 warhead, including the costs associated with each option.
- (3) The implications that IW-1 and alternative approaches to IW-1 could have on NNSA's plans for modernizing its infrastructure, R&D capabilities, and other operations, particularly whether pursuing alternatives to IW-1 could result in potential downstream cost savings in NNSA's nuclear security enterprise.
- (4) The implications that IW-1 and alternative approaches to IW-1 could have on certification requirements and the need to resume nuclear testing.

We request that GAO begin this work as soon as possible. Please coordinate this work with Ms. Leonor Tomero and Ms. Taunja Berquam on our committees' staff.

Thank you for your attention to this matter.



Adam Smith  
Ranking Member  
House Armed Services Committee

Sincerely,



Marcy Kaptur  
Ranking Member  
Energy & Water Development Subcommittee  
House Appropriations Committee