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May 24, 2011

The Honorable Joseph R. Biden, Jr.  
Vice President  
1600 Pennsylvania Avenue, N.W.  
Washington, D.C. 20500

Dear Mr. Vice President,

I am aware of your support for the FY10 reprogramming to support the B61 bomb life-extension program to ensure the reliability of the weapon well into the future.

Recently, however, a review of the B61 life-extension program (LEP) by the Government Accountability Office (report GAO-11-387) has questioned elements of the planning and whether timelines and scope are realistic.

I want to bring to your attention an issue raised by the GAO report that has not received much attention but which could have serious consequences for the President's nuclear policy and arms control agenda.

According to the GAO report, the product of the B61 LEP, known as the B61-12, will be equipped with a new guidance tail kit that is "designed to increase accuracy" of the bomb. This will enable the B61-12 to use the lower-yield B61-4 nuclear explosive package to achieve the same effect as the high-yield B61-7 and hold the same targets at risk.

The increased accuracy raises some serious issues for U.S. nuclear policy and the President's agenda:

First, increasing the accuracy (the tail kit will presumably have GPS) will significantly increase the targeting capability of NATO's nuclear posture, which currently does not have the targeting capability of the B61-7 or the accuracy of the B61-12. Add to that the introduction of the semi-stealthy F-35, and NATO's nuclear posture appears to be scheduled for a significant

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enhancement. Deployment of the B61-12 with increased targeting capabilities in Europe could seriously complicate efforts to engage Russia on limitations on non-strategic nuclear weapons by further deepening Russian suspicion about NATO intentions.

Second, adding precision to the lower-yield options that the B61-12 will inherit from the B61-4 nuclear explosive package reopens issues from the 1990s about precision low-yield weapons; it reinvents many of the PLYWD (precision low-yield weapon design) characteristics, a project that in 1993 led to the Spratt-Furse amendment prohibiting development of warheads with less than 5 kt yield. The B61-12 will have several selective low yields down to as little as 0.3 kt. By combining the low-yield options with precision guidance, the Air Force and NNSA are essentially recreating the PLYWD weapon, albeit without a controversial decision to build a low-yield precision weapon.

Combining precision and low yield will allow planners to drastically reduce radioactive fallout from a nuclear strike. Warplanners and adversaries might see such nuclear weapons as more useable allowing some targets that previously would not have been attacked because of too much collateral damage to be attacked anyway. This could lead to a broadening of the nuclear bomber mission, open new facilities to nuclear targeting, reinvigorate a planning culture that sees nuclear weapons as just another tool in the toolbox, and potentially lower the nuclear threshold in a conflict.

Improving the targeting capabilities of the B61 appears to undercut the administration's pledge to reduce the role of nuclear weapons, and directly contradicts the statement in the Nuclear Posture Review that "Life Extension Programs...will not...provide for new military capabilities."

I urge you to look into this issue and ensure that the B61 LEP does not undercut the President's nuclear policy and arms control agenda. There are several steps that could be taken:

First, the administration and Congress need to define and publicly clarify what constitutes "new capabilities" in the LEP programs. More than \$213 billion are planned for nuclear modernizations in the next decade, and it's hard to believe that will not include any "new capabilities." Current LEPs descriptions indicate that the National Nuclear Security Administration and the military intends to take full advantage of the uncertainty by increasing the targeting capabilities of the nuclear weapons: it is already happening with the W76 LEP, which is being deployed on submarines with increased targeting capability; it is scheduled to happen with the B61 LEP as I have described above; and it appears to be planned for the W78 LEP as well.

Second, the administration should also direct that the portion of the B61-12s that are earmarked for NATO be deployed without the new guidance tail kit but retain the accuracy of the existing weapons currently deployed in Europe.

Third, the administration's ongoing nuclear targeting review should narrow the role of nuclear weapons to prevent that numerical reductions become a justification for increasing

the capabilities of the remaining weapons. The new guidance must depart from the “warfighting” mentality that still colors nuclear war planning and is so vividly illustrated by the precision low-yield options offered by the B61-12.

I very much appreciate your attention to these issues and I am prepared to meet with you or your staff to discuss these matters further.

Sincerely,

Hans M. Kristensen  
Director, Nuclear Information Project