



## Still Fighting the Cold War: No Mission for Nuclear Bunker Busters in the 21<sup>st</sup> Century

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### **Think twice before expanding the role of nuclear weapons**

Convinced that we require a broader range of nuclear options to ensure a credible deterrence threat, the National Nuclear Security Administration (NNSA) has begun studying the creation of a Robust Nuclear Earth Penetrator (RNEP), a nuclear bomb that would slam into the ground and detonate a few meters below the earth's surface. Proponents claim that the weapon is needed to attack deeply buried and hardened targets, but RNEP is worthless as a surgically precise tool, and of highly dubious value as a nuclear deterrent. There is currently \$22 million budgeted over the next two years for RNEP, but budget documents show that RNEP would cost \$500 million over five years once it moved past the research phase.<sup>i</sup> Faced with these costs, it is time to reconsider whether this Cold War weapon has any place in today's national security environment.

While a nuclear bunker buster will inflict more damage than a conventional bunker buster, it is, by NNSA administrator Linton Brooks's own admission, impossible to design a nuclear earth penetrator that will not cause significant collateral damage<sup>ii</sup>. Moreover, studies are underway to determine whether or not conventional bunker busters can be used more effectively to increase the damage dealt to targets. The threat of extensive collateral damage from any RNEP strike and the diminishing destructive advantages RNEP holds over conventional bunker busters make its use unthinkable and its development increasingly unnecessary.

### **What would RNEP be used for?**

There is a serious and irrefutable problem with RNEP: because fallout from the weapon cannot be contained, it is no more a surgically precise tool than any other nuclear weapon in our arsenal. Much ink has been spilled explaining the physics behind this reality, but all that is needed is the admission of NNSA Administrator Linton Brooks, who responded to an inquiry into whether or not fallout from the weapon could be contained with this: "nothing in our proposal for the Earth Penetrator ... was ever intended to suggest that you can contain fallout. You can't. I have no idea how you would do that." When Senator Feinstein (D-CA), who asked the original question, then stated, "You're going to have tremendous radioactivity," Linton Brooks replied, "Yes Ma'am."<sup>iii</sup>

His statement was not an isolated incident or a slip of the tongue. In a March, 2005 House hearing, Brooks stuck by his earlier assertion: "I really must apologize for my lack of precision if we in the administration have suggested that it was possible to have a bomb that penetrated far enough to trap all fallout. I don't believe that -- I don't believe the laws of physics will ever let that be true." Brooks dramatically concluded that "This is a nuclear weapon that is going to be hugely destructive and destructive over a large area. No sane person would use a weapon like that lightly."<sup>iv</sup>

This underlying reality of the nuclear bunker buster calls the entire project into question. Collateral damage on the scale of a nuclear weapon, including the associated irradiation

of surrounding land and the effects on the nearby population, removes RNEP entirely from the realm of surgically precise weapons and turns it into just another nuclear weapon, with all the effects that make nuclear weapon use inconceivable. Given our massive arsenal of existing nuclear weapons that perform the exact same function, it doesn't appear that RNEP will bring any new deterrent effect to the table.

RNEP supporters also point to the potential for RNEP to destroy chemical or biological agents stored in underground bunkers as a justification for study of the weapon. While the blistering temperatures resulting from the explosion of a nuclear weapon are hot enough to vaporize or liquefy rock and could destroy chemical agents, the explosion of a nuclear weapon buried under many feet of soil, rock or reinforced concrete would vaporize only a very small cavity of surrounding material before the remaining heat and steam found its way into the atmosphere. Most of the radiation and heat would not penetrate much farther than a few meters around the explosion.<sup>v</sup> Thus, the only way RNEP could reasonably be expected to vaporize chemical and biological agents would be if it were right next to them.

### **A high price to pay**

Proponents of RNEP are quick to point out that current funding for RNEP is entirely devoted to research. This is useful to make it sound benign, but research, like any other federal program, should get no special protection from the axe. Moreover, if approved for production by Congress, RNEP's costs will inflate rapidly. In its five-year outyear budget for RNEP published in 2004, the NNSA asked for \$484 million for RNEP, simply to carry it through the science and technology portion of development.<sup>vi</sup> Costs for operational design and construction are unknown.

The Robust Nuclear Earth Penetrator is just a small part of the NNSA's plans for reestablishing Cold War nuclear weapons capabilities. In the prosecution of the War on Terror, National Security is a significant funding priority, but it's hard to believe that nuclear weapons will play a significant role in combating terrorist sleeper cells. Nonetheless, the President has resurrected RNEP to the tune of \$22 million over two years after funding was stripped by Congress.<sup>vii</sup> In light of RNEP's serious shortcomings, Congress should insist on terminating this program.

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<sup>i</sup> Department of Energy. FY 2005 DOE Budget Request to Congress. Washington: Department of Energy, February 2, 2004.

<sup>ii</sup> Testimony of Linton Brooks, Administrator of the National Nuclear Security Agency. *Hearing on the National Nuclear Security Agency budget before the Senate subcommittee on energy and water*, 108<sup>th</sup> Cong. 2. March 23, 2003.

<sup>iii</sup> Ibid.

<sup>iv</sup> Testimony of Linton Brooks, Administrator of the National Nuclear Security Agency. *Hearing on the the fiscal year 2006 budget request from the Department of Energy on atomic energy defense activities before the Strategic Forces Subcommittee of the House Armed Services Committee*, 109<sup>th</sup> Cong. 1. March 2, 2005.

<sup>v</sup> Nelson, Robert. "Nuclear Bunker Busters, Mini-Nukes, and the US Nuclear Stockpile." *Physics Today*. November, 2003.

<sup>vi</sup> Department of Energy. FY 2005 DOE Budget Request to Congress. Washington: Department of Energy, February 2, 2004.

<sup>vii</sup> Department of Energy. FY 2006 DOE Budget Request to Congress. Washington: Department of Energy, February 7, 2004.