Department of Energy will be holding hearings on the Complex 2030 Environmental Impact Statement in communities across the country this summer. NDE will email out the details when they become available.

COMPLEX 2030: The Costs and Consequences of the Plan to Build a New Generation of Nuclear Weapons

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Summary of Findings

The Bush administration's nuclear policy has been marked by dangerous inconsistencies. It has taken a strong rhetorical stand against the spread of nuclear weapons, which President Bush has described as "weapons of mass murder."[i] But in the mean time, the administration's Nuclear Posture Review calls for the development of new nuclear weapons.

This "do as I say, not as I do" approach to nuclear weapons has undermined U.S. efforts to curb nuclear proliferation. Beyond this central contradiction, the administration's approach to the issue has ranged from launching a preventive war against a country that did not have a nuclear weapons program (Iraq), to threatening a country that most experts agree is years away from developing them (Iran), to delaying a critical dialogue with a country believed to have the beginnings of a nuclear arsenal (North Korea). To its credit, the administration has recently come to agreement with North Korea on initial steps that could lead to the elimination of Pyongyang's nuclear arsenal.

The centerpiece of the administration's move towards developing a new generation of nuclear weapons is "Complex 2030," a multi-year plan that would build new or upgraded facilities at each of the National Nuclear Security Administration's eight nuclear weapons-related sites. The plan also calls for building a new nuclear weapon, the Reliable Replacement Warhead (RRW). While current plans call for developing the RRW without nuclear testing, this attitude could change if the program moves towards deployment. In addition, the RRW program will establish the infrastructure needed to develop new warheads with new capabilities in the future. As the Department of Energy notes in its own summary of the Complex 2030 plan, one of the major goals of the effort is to "improve the capability to design, develop, certify and complete production of new or adapted warheads in the event of new military requirements."[ii]

This report focuses on the economic and budgetary costs of the Complex 2030 plan, the interests that stand to benefit from it, and the domestic political debate that is likely to determine the future of this initiative.

Costs of the Complex 2030 Plan:

- The foundation of the plan for upgrading the nuclear weapons complex, the Reliable Replacement Warhead, is proposed for a threefold increase in the FY 2008 budget, from $27.4 million in 2007 to $88.7 million in 2008. Projected five-year NNSA funding for the RRW is $645.1 million. The Navy will spend at least an additional $80 million to adapt the RRW for use on Trident Submarine-Launched Ballistic Missiles (SLBMS).

- The Consolidated Plutonium Center (CPC), the most costly new facility in the Complex 2030 plan, is slated for $24.9 million the FY 2008 budget. Congress has eliminated funding for a similar project for each of the past two years. The CPC, which could cost $3 to $5 billion to complete, is slated to receive $282 million in the NNSA's five-year budget plan.

- The spending on the RRW and the CPC is only a down payment on the full costs of the Complex 2030 initiative. So far, the Department of Energy has given no cost estimate for the 2030 plan, nor does its current budget indicate which items are devoted to carrying it out, other than the RRW and the CPC. However, the Secretary of Energy's Advisory Board's (SEAB) Nuclear Weapons Infrastructure Task Force has estimated that a more thorough consolidation plan would cost $155 billion, while sustaining the complex as is could cost up to $175 billion between now and 2030. Since the SEAB plan involves more consolidation of facilities, Complex 2030 costs would most likely exceed the $155 billion figure. And the likely costs of building new facilities, modernizing old ones, and adapting the newly developed RRW to fit on existing delivery vehicles will almost certainly drive costs beyond the $175 billion estimate for sustaining the current complex.

- The NNSA has a history of major cost overruns on large technology projects. To cite just two examples, the cost of the NNSA's MOX facility – which is designed to produce a blend of plutonium and uranium that can be used to fuel nuclear reactors – has grown from $1 billion at the project's inception to $3.5 billion currently; and the ambitious National Ignition Facility (NIF) – a project whose goal is to use powerful lasers to simulate a thermonuclear explosion – has gone from the Department of Energy's (DOE) initial estimates of total project costs of $1.07 billion in 1996 to an official price tag today of $3.5 billion. The Natural Resources Defense Council put the price at closer to $5 billion for the construction itself, and as high as $8.4 billion to make the facility "ignition ready" by 2014. These cost overruns on major DOE/NNSA projects do not bode well for the claims of "cost savings" or "efficiencies" flowing from the Complex 2030 plan. A conservative estimate suggests that allowing for cost overruns, the full costs of Complex 2030 could easily reach $300 billion. That is a $125 billion increase over the estimated costs of maintaining the current weapons complex.

Misplaced Budget Priorities

- According to its own budget figures, the NNSA spends over nine times as much on "Atomic Energy Defense Activities" – a category that includes nuclear weapons, naval nuclear reactors, and environmental cleanup at military nuclear facilities – as it does on nuclear arms reductions and non-proliferation.[iii]

- Similarly, spending on nuclear weapons research, development and maintenance in the Department of Energy budget far outpaces the levels of energy and funding devoted to the development of alternative energy sources, a critical need in a period when fears of global warming are on the rise. The DOE's proposed budget for "Energy Supply and Conservation" – which includes non-nuclear, non-fossil fuel forms of energy – is only $1.2 billion for FY 2008, just over one-thirteenth of expenditures on "Atomic Energy Defense Activities," and one-fifth of expenditures on nuclear weapons activities.

Contractors Cash In

- Eight nuclear weapons contractors and two universities split $11 billion in contracts from the Department of Energy in FY 2005, the most recent year for which full data is available. This represented 50% of all DOE contracts for that fiscal year. These contractors– Battelle, the Bechtel Group, CH2M Hill, Honeywell, Lockheed Martin, McDermott (parent company of BWX Technologies), SAIC and the Washington Group International, along with the University of California and the University of Tennessee-- are the most likely beneficiaries of the Complex 2030 project.

- Contractors receiving over $1 billion in nuclear weapons awards in FY 2005 included the University of California, $3.2 billion for running the Los Alamos (New Mexico) and Lawrence Livermore (Northern California) nuclear weapons laboratories; Lockheed Martin, $2.3 billion to run Sandia National Laboratory, a nuclear weapons engineering and development lab based in New Mexico; Washington Group International, $1.3 billion for running the Savannah River Plant in South Carolina; and the Bechtel Group, $1 billion for work at the Oak Ridge National Laboratories (Tennessee) and the Nevada Test Site. These figures do not include contracts for $776.1 million for a partnership between Bechtel and BWX Technologies to run the Y-12 plant at Oak Ridge National Laboratories in Tennessee; or a $347.8 million contract for a partnership between Bechtel and the SAIC Corporation to run the Nevada Test Site.

- Eight major nuclear weapons contractors spent $22.4 million in political donations from 1998 to 2006 to influence members of Congress. These same firms spent $15.3 million on lobbying in 2006 alone. Some of these expenditures have failed to exert influence over lawmakers' decisions on the upgrade of nuclear warheads and facilities, as members who have received significant contributions have still expressed extreme skepticism over the Complex 2030 plan.

Should the Complex 2030 Plan Move Forward?

In addition to the costs involved, the Complex 2030 has disturbing policy implications. Under the Nuclear Nonproliferation Treaty (NPT) the United States has committed itself to eliminate its nuclear arsenal within a definite time frame. The Complex 2030 plan implies that the United States will maintain its nuclear arsenal for decades to come. These plans in turn reduce U.S. credibility in attempting to persuade nations like Iran and North Korea to curb or roll back their nuclear weapons programs.

Complex 2030 is by no means a "done deal." There are a wide range of views on the program in Congress, from unqualified support to energetic criticism. The budget battle over this project will be one of the most important activities of the Congress in the run-up to the 2008 presidential elections.

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[i] "State of the Union Message to Congress and the Nation," *New York Times*, January 21, 2004.
[ii] Office of Defense Programs, National Nuclear Security Administration, U.S. Department of Energy, "Complex 2030: An Infrastructure Planning Scenario for a Nuclear Weapons Complex Able to Meet the Threats of the 21st Century," DOE/NA-0013, October 23, 2006, p.5.
[iii] Christopher E. Paine, Weaponeers of Waste: A Critical Look at the Bush Administration's Energy Department's Nuclear Weapons Complex and the First Decade of Science Based Stockpile Stewardship, Natural Resource Defense Council, April 2004.