

## The U.S. Nuclear Weapons Complex



The Department of Energy's (DOE's) nuclear weapons design and production complex consists of eight sites. The National Nuclear Security Administration (NNSA), which runs the weapons complex, is planning to build three new facilities that will significantly expand U.S. warhead production capacity. The centerpieces of NNSA's plans are the Chemistry and Metallurgy Research Replacement - Nuclear Facility (CMRR-NF) at the Los Alamos National Laboratory in New Mexico, for expanding production of plutonium pits or primaries, and the Uranium Processing Facility (UPF) at the Y12 Plant in Oak Ridge, Tennessee for the production of the secondaries. If built, these facilities would increase U.S. nuclear weapons production capacity from twenty pits to up to 125 new weapons per year. The third facility is a new Kansas City Plant (KCP) financed by private funders. The KCP manufactures the non-nuclear components in warheads. Once built, DOE would lease back the plant in a financing scheme that obligates the federal government to pay \$1.2 billion over the next twenty years, outside of full Congressional oversight or approval. This new infrastructure would enable future administrations to quickly ramp up production if a decision were made to do so.

### *Cost is Billions and Rising*

According to a Government Accountability Office (GAO) report released in January 2010, DOE does not have a consistent policy to establish standards for estimating the cost of projects. In the same report, GAO said it does not consider cost estimates for the UPF to be credible, well documented, accurate, or comprehensive. The estimated cost for the UPF is \$3.5 billion and climbing, with final costs still unknown. The final cost for the entire CMRR facility is also unknown, with estimates increased from \$660 million in 2004 to \$4.5 billion.

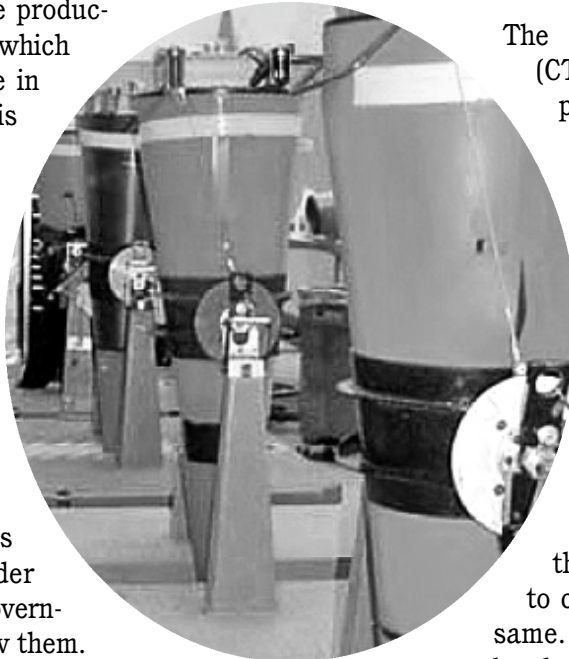
### *Life Extension Programs and Refurbished Warheads*

Since 1996, Life Extension Programs (LEPs) have performed upgrades on several warhead designs. Under the current schedule, the number of Life Extended warheads will approach 2,000 sometime in 2016. That will exceed the number of deployed warheads permitted under the New START Treaty (1,675), undermining the argument that new production facilities are needed. Since none of these proposed facilities will come on-line before 2016, major capital investments are not justified.

### **Recommendations**

- Stop funding for expanded nuclear weapons production capacity, specifically the CMRR-Nuclear Facility, the Uranium Processing Facility and new Kansas City Plant, thus saving up to \$6 billion.
- Delete funding for the B61 Life Extension Program feasibility study until any future role in Europe is determined.
- Bar Life Extension Programs from introducing new military characteristics.
- Increase funding for dismantlement consistent with mandated reductions in the stockpile.
- Close the Nevada Test Site in consultation with the Western Shoshone Nation.

The Obama budget request proposes to increase funding seven-fold for a B61 LEP feasibility study from \$32.5 million in FY 2010 to \$251.6 million in FY 2011. It proposes examining the consolidation of four previous modifications of the B61 bomb into one new modification. These changes would extend operational life and enhance “surety,” prevention of unauthorized weapon use. But they may also involve modifications to plutonium pits (a possible future production role for the CMRR-NF), which could seriously erode confidence in reliability. In the extreme, this could lead to a resumption of full-scale testing. A new fuse for the B61 (a possible future production role for the new Kansas City Plant) will also be considered. That also could lead to new military characteristics. All warheads refurbished in LEPs are fitted with new secondaries (a possible future production role for the UPF). In addition, the role of B61 warheads deployed in Europe is now under scrutiny by NATO after several governments asked the U.S. to withdraw them.



### ***The Principle of Irreversibility***

The Obama Administration is recommitting the U.S. to its international treaty obligations by taking concrete steps to strengthen non-proliferation agreements and reduce the threat of nuclear weapons. Expanding nuclear weapons design and production capabilities at the same time will inevitably undermine U.S. ability to lead on nonproliferation issues.

A key Nuclear Non-Proliferation Treaty (NPT) commitment made in 2000 and reaffirmed in a 2009 United Nations resolution is to the “principle of irreversibility ... to nuclear disarmament, nuclear and other related arms control and reduction measures.” Irreversibility means dismantling warheads to the extent that they cannot possibly remain in either active or reserve stockpiles, and to dispose of bomb making materials so that they can no longer be used. Irreversibility creates stability and predictability toward further reductions and eventual elimination of nuclear arsenals. Ironically, the FY 2011 budget request seeks to cut dismantlement funding

from \$96.1 million in FY 2010 to \$58 million for the coming year. Other countries are likely to see funding for new production facilities and less money for dismantlement as contrary to irreversibility commitments.

### ***Significant Modification to Warheads Undermines Intent of Comprehensive Test Ban Treaty***

The Comprehensive Test Ban Treaty (CTBT) recognizes that one of the purposes of a nuclear testing ban is to halt “the development and qualitative improvement of nuclear weapons” and “to end the development of advanced new types of nuclear weapons.” The U.S. has been able to maintain a safe, secure, and reliable nuclear stockpile through existing weapons programs without designing, producing, and testing new designs since the end of the Cold War. Ratifying the CTBT would strengthen efforts to convince other countries to do the same. If the United States builds new warheads with new military characteristics, other countries will have little incentive to freeze their own warhead modernization programs. That could discourage new countries from joining the CTBT and lead current signatories to lose confidence in it.

### ***Weapons Production Puts Communities at Risk***

In 1989, while investigating environmental crimes, the FBI raided the Rocky Flats Plant near Denver, effectively ending full-scale plutonium pit manufacturing in the U.S. Twenty years later, after relocating pit production to Los Alamos, NNSA is still incapable of handling nuclear weapons production in a completely safe manner. The Defense Nuclear Facilities Safety Board recently cited the Los Alamos National Laboratory because of concerns about the potential for large seismically induced plutonium fires that could release fatal doses offsite. In Missouri, NNSA plans to begin operations in 2014 in a new Kansas City Plant without a firm commitment to clean up PCB and industrial solvent contamination around the old facility, located at the confluence of two rivers.