nuclear watch new mexico

Backgrounder For Public Comment:
Plutonium Pit Production at LANL

The Department of Energy's semi-autonomous nuclear weapons agency, the National Nuclear Security Administration (NNSA), wants to "transform" its nuclear weapons complex. **As the single most key activity of resumed nuclear weapons production, NNSA has selected Los Alamos as its permanent site for plutonium pit manufacturing**. Pits, also called "triggers," are the fissile (i.e., capable of nuclear criticality) cores that initiate the incredible destructiveness of modern H-bombs. They are also WMDs in their own right, as the destruction of Nagasaki in WWII showed.

Los Alamos developed and tested the world's first plutonium pits and produced them for the escalating Cold War stockpile until 1952 when the Rocky Flats Plant near Denver began industrial-scale production, at times in the 1,000's per year. Much of the radioactive contamination in LANL's canyons, which drain to the Rio Grande, is from that early production. **But Los Alamos has always had near continuous production capability, and commonly tested its new pits for new nuclear weapons at the Nevada Test Site.**

In 1989 a FBI raid investigating environmental crimes at Rocky Flats brought Cold War pit production to an end. DOE then sought "interim" production of up to 50 pits per year at LANL (later revised to 20 because of the Lab's chronic problems). NNSA was created in 2000, primarily to solve security problems, which nevertheless continued, most prominently at LANL. But the agency quickly pushed for a "Modern Pit Facility" at one of five candidate sites (including Los Alamos), capable of 450 pits per year. Prompted by citizen activism, Congress rejected it. NNSA followed with a "Consolidated Plutonium Center" for 125 pits per year, also rejected. In its latest plan, NNSA has now turned to expanding LANL's existing plutonium complex for 50 to 80 pits per year, or possibly more with multiple work shifts.

There Is No Need for Expanded Plutonium Pit Production

Expanded production, and even LANL's currently sanctioned rate of 20 pits per year, is unnecessary, expensive, environmentally risky, and provocative when we tell other countries they can't have nuclear weapons.

Rocky Flats was producing pits for the W88, a sub-launched missile warhead 30 times more powerful than the Nagasaki bomb, when the Plant was abruptly shut down. DOE's first argument for reestablishing production was that it had no spare W88 pits to tear down in annual checkups for possible defects. However, only one pit per weapon type is destructively analyzed every year. Despite that, last year LANL produced ten W88 pits for prompt shipment to the Pantex Plant near Amarillo, TX, the site of final nuclear weapons assembly. The Moscow Treaty requires that deployed nuclear weapons be slashed to 2,200 or under by 2013. **Why can't the number of deployed W88s -- estimated in the mid-300's -- be reduced, thereby making spare pits available for annual "stockpile stewardship" analysis? Why manufacture them at all?**

LANL plans to re-develop pit manufacturing capability for most other nuclear weapons in the planned future stockpile (up to 6 different nuclear weapons "systems"). As to these other pit types, **the Pantex Plant is specifically authorized to "reuse" up to 350 existing pits per year. Although this is not widely known, it effectively renders moot any need to produce any pits for other than the W88** (which we don't need anyway). As it is, Pantex already stores at least 12,000 existing pits, and the Plant itself boasts that **pit "reuse" is far less expensive and environmentally damaging than new pit production.**

The real reason NNSA wants expanded pit production is for new nuclear weapons designs, the so-called Reliable Replacement Warheads (RRWs). LANL planned to go into production of up to 50 RRW pits per year

551 West Cordova Road #808 Santa Fe, New Mexico 87505 505.989.7342
info@nukewatch.org www.nukewatch.org

by 2012, but in another victory for citizen activism Congress rejected all funding for RRW. Therefore, even by NNSA's own terms, there is no need for the 50 to 80 pits production rate that it is still pushing for. That is except, of course, that expanded pit production is still all about producing new nuclear weapons, which NNSA has not given up on.

As an overarching issue, at Nuclear Watch's request Senator Jeff Bingaman successfully introduced legislation that required independent expert review of the projected length of plutonium pit lifetimes. **Whereas NNSA had previously accepted that pits lasted 45 to 60 years, in November 2006 those experts concluded they last a century or more, without specifying any end date**. **This seriously undermined NNSA's argument for both new-design weapons and expanded pit production.** Since the oldest pits in the planned stockpile are now 30 years old, why produce new pits, especially when existing ones can be "reused"?

Expanded Production Is Premature Before Required Review of Nuclear Weapons Policies

NNSA has repeatedly stated that complex "transformation," in particular expanded pit production, is driven by President Bush's 2001 "Nuclear Posture Review" (NPR). However, Congress has specifically required the incoming president to prepare a new Review, saying, "it should be used as a basis for establishing future United States arms control objectives and negotiating positions." The same law also requires a bi-partisan commission to recommend by this December the number of weapons really needed and the related appropriate size and composition of the nuclear weapons complex. The House Armed Services Committee specifically noted that following Bush's 2001 NPR "there is an urgent need for a debate over the role of nuclear weapons in U.S. strategic posture." In short, **it makes no sense for complex transformation, including expanded pit production, to proceed now before a new Nuclear Posture Review, and NNSA's "transformation" proposal should be withdrawn until then.** Instead, it is pushing hard before the Bush clock runs out.

LANL's Expanding Plutonium Complex

To accomplish its goal of producing 50 to 80 pits per year, LANL plans to:

- **Increase actual production space within its existing pit production facility** through upgrades, wholesale replacement of gloveboxes and transfer elsewhere of some non-weapons activities; and
- **Build a new, adjacent plutonium facility called the Chemistry and Metallurgy Research Replacement Project** (CMRR).

When NNSA first sought funding for **CMRR** in FY 2004 it had a construction price tag of $655 million. The agency's current funding request now acknowledges it **will cost over $2 billion, not including additional expansion** that is likely given LANL's recent designation as the permanent pit production center. Costs for upgrading the existing pit production facility are as yet unknown.

There are many added costs other than construction, such as the planned transfer of the Lawrence Livermore Lab's plutonium from California to CMRR (the new facility will have a vault for up to six tons of plutonium and highly enriched uranium). When completed as currently scheduled in eight years, the annual cost for operating facilities at LANL's expanded plutonium complex, for which CMRR is the keystone, will be $240 million per year. Separately designated pit production costs are approximately the same. Annual security costs will be $45 million. **In sum, the total costs for LANL's plutonium pit production will be over a half-billion dollars per year, and this does not include huge construction and upgrade costs.**

Expanded pit production mission could cause the Lab to split up, as one NNSA study recommends that pit production "be transferred to an industrial organization from the laboratory as soon as practical." **Sadly, as it becomes more and more a bomb factory, expanded production could block Los Alamos from much needed mission diversification and potential job growth while addressing today's national security threats, such as nonproliferation, energy independence and global warming.**

*Send your public comments to **complextransformation@nnsa.doe.gov** by April 10!*
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