

Expanded Plutonium Pit Production

*Expensive, Unnecessary,
May Degrade National Security*

Presentation to Progressive Democrats of
America, Central NM Chapter

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New Nuclear Arms Race

- Ukraine Crisis – Putin orders “deterrence forces of the Russian army to a special mode of combat duty...”
Any intervening country could face “consequences they have never seen.”
- China, India, North Korea, Pakistan, Russia and UK all expanding nuclear stockpiles.
- China is building some 600 new hardened silos for intercontinental ballistic missiles.
- Russia and China will inevitably have major negative impact on Biden’s pending Nuclear Posture Review setting forth U.S. nuclear weapons policies.
(now indefinitely delayed)

New Nuclear Arms Race

- The U.S. still has 3,750 active nuclear weapons; dismantles only some 75 warheads a year.
- The U.S. is rebuilding existing nuclear weapons with new military capabilities; will produce new-design warheads as well.
- New production plants expected to be operational until at least 2075.
- New heavy bombers, submarines and ballistic and cruise missiles to deliver new nuclear warheads.

This second nuclear arms race is more dangerous than the first

- Bilateral “Mutually Assured Destruction” gone. Now nine nuclear weapons powers with competing interests; complexities that didn’t exist during the Cold War.
- Increased chance of regional nuclear wars, such as India and Pakistan.
- Sub-state actors such as Al Qaeda or ISIS could acquire nukes.
- U.S., Russia, China, India, Pakistan, Japan, South Korea, North Korea and Australia are all developing hypersonic weapons.
- Cyber attacks may not be deterrable and could cripple defenses and/or hijack command and control of nuclear weapons.
- Artificial intelligence could have unforeseen consequences in the command and control of nuclear weapons.

Deterrence?

Implementation of Obama's 2010 Nuclear Posture Review:

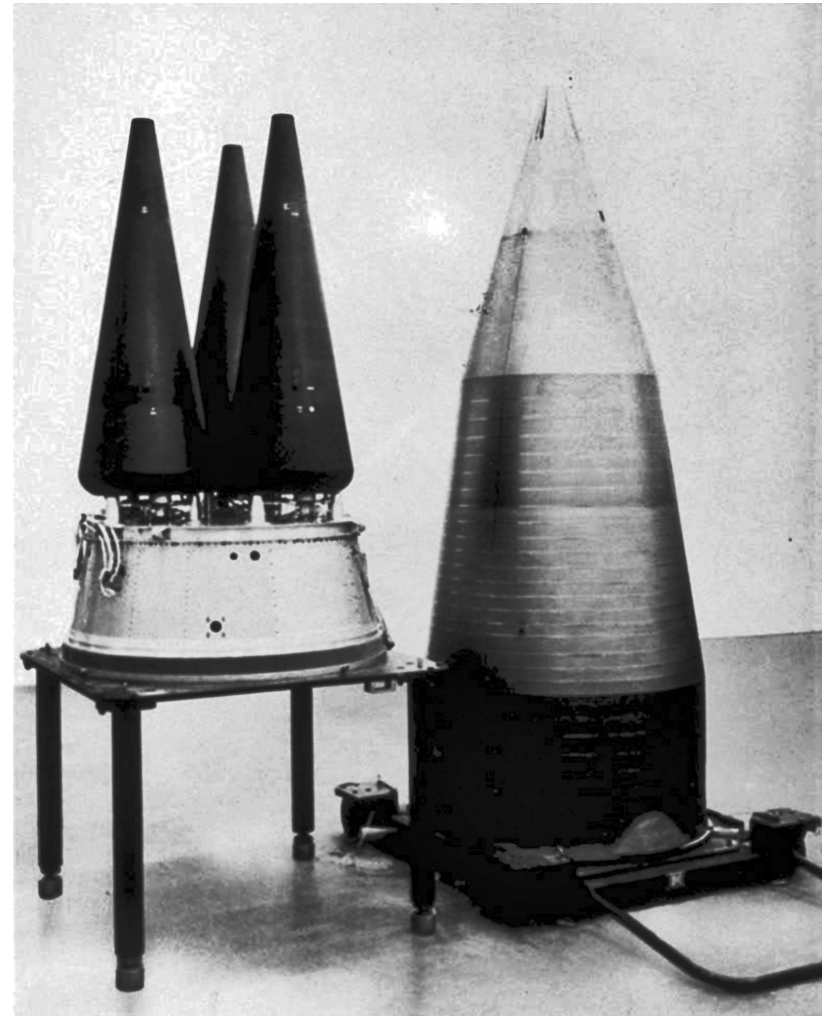
“The new guidance requires the United States to maintain significant counterforce capabilities against potential adversaries. The new guidance does not rely on a ‘counter-value’ or ‘minimum deterrence’ strategy.” Report on Nuclear Implementation Strategy of the United States, Department of Defense, June 2013

That is why we have thousands of weapons for nuclear warfighting rather than the few hundred needed for deterrence-only.

In turn, that is why we have expanded plutonium pit production. It is to maintain nuclear warfighting capabilities.

\$1.7 Trillion “Modernization”

- New ICBMs, heavy stealth bombers, cruise missiles and submarines
- Rebuilt warheads with new military capabilities and completely new-design nuclear weapons.
- Perpetual cycle of “Life Extension Programs.” In short, it’s nuclear weapons forever!



Status of some U.S. nuclear warheads

- 100 kiloton W76-1 warhead now hard-target killer with new arming, fuzing and firing set.
- Low-yield W76-2 recently deployed on subs.
- 450 kiloton W88 to be refreshed with new explosives and arming, fuzing and firing set.
- Variable yield B61-12, world's first nuclear "smart" bomb, just entered production.
- W80-4 Long-Range Stand-Off cruise missile warhead begins production in 2025. Perfect first-strike weapon.

New Production Plants

- New Kansas City Plant now producing more than 100,000 nonnuclear components each year. KCP factory space increased by 50% through leases.
- New Uranium Processing Facility at the Y-12 Plant near Oak Ridge, TN. Its components put the “H” in H-bomb.
- Around \$15 billion in direct and indirect upgrades for plutonium infrastructure at LANL.
- Plutonium pit facility at the Savannah River Site will total \$20 billion (new WTC cost \$4 billion).

LANL Central Mission

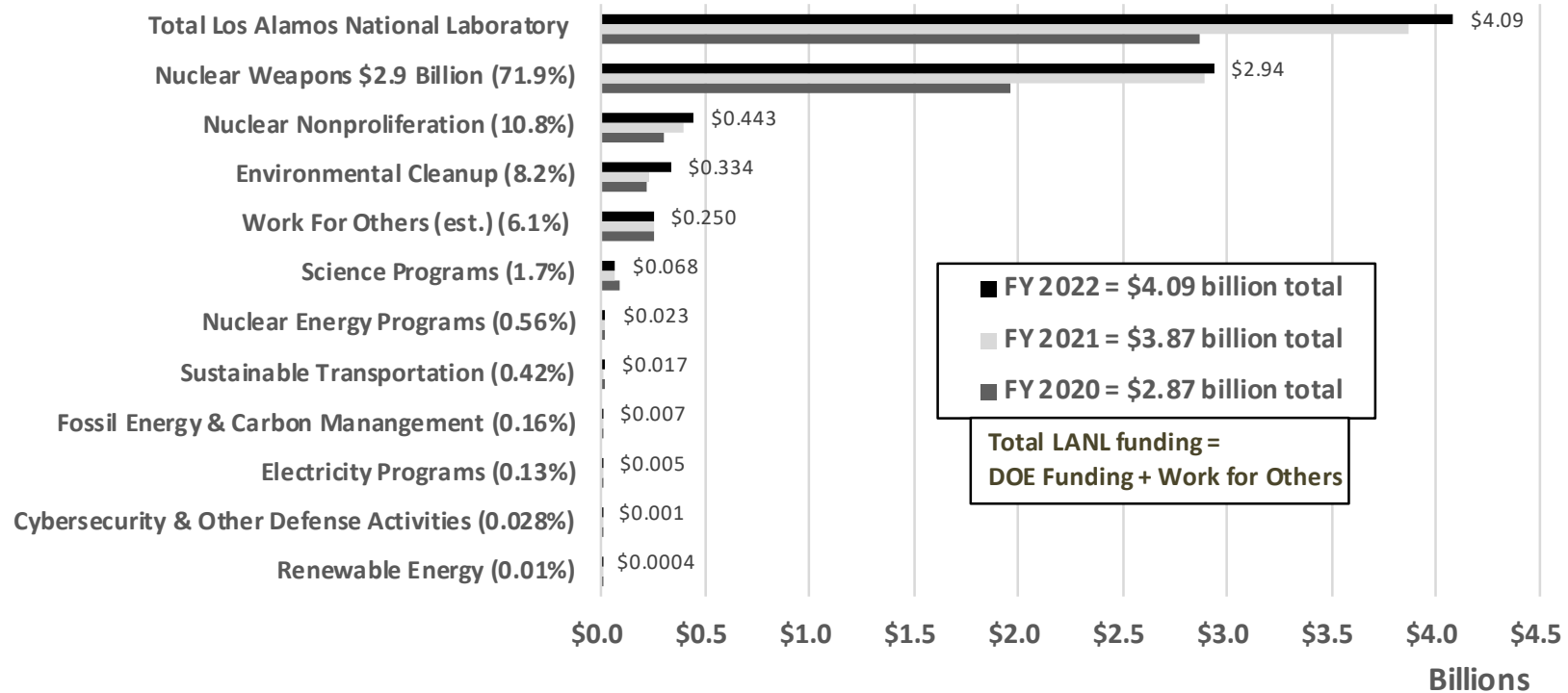
Central Mission of Los Alamos National Laboratory



Los Alamos National Laboratory

FY 2022 Congressional Budget Request

(In billions of dollars)



Notes: Percentages are the ratio of funding to LANL's total FY 2022 budget. "Work For Others" is for other than the Department of Energy (e.g., Depts. of Defense and Homeland Security, the FBI, CIA, etc.) and based on past years is estimated at \$250 million annually. "Nuclear Weapons Activities" is funded by DOE's semi-autonomous National Nuclear Security Administration. Thirty-nine percent of NNSA's nation-wide \$15.5 billion nuclear weapons research and production budget for FY 2022 will be spent in New Mexico alone.

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What is a plutonium pit?

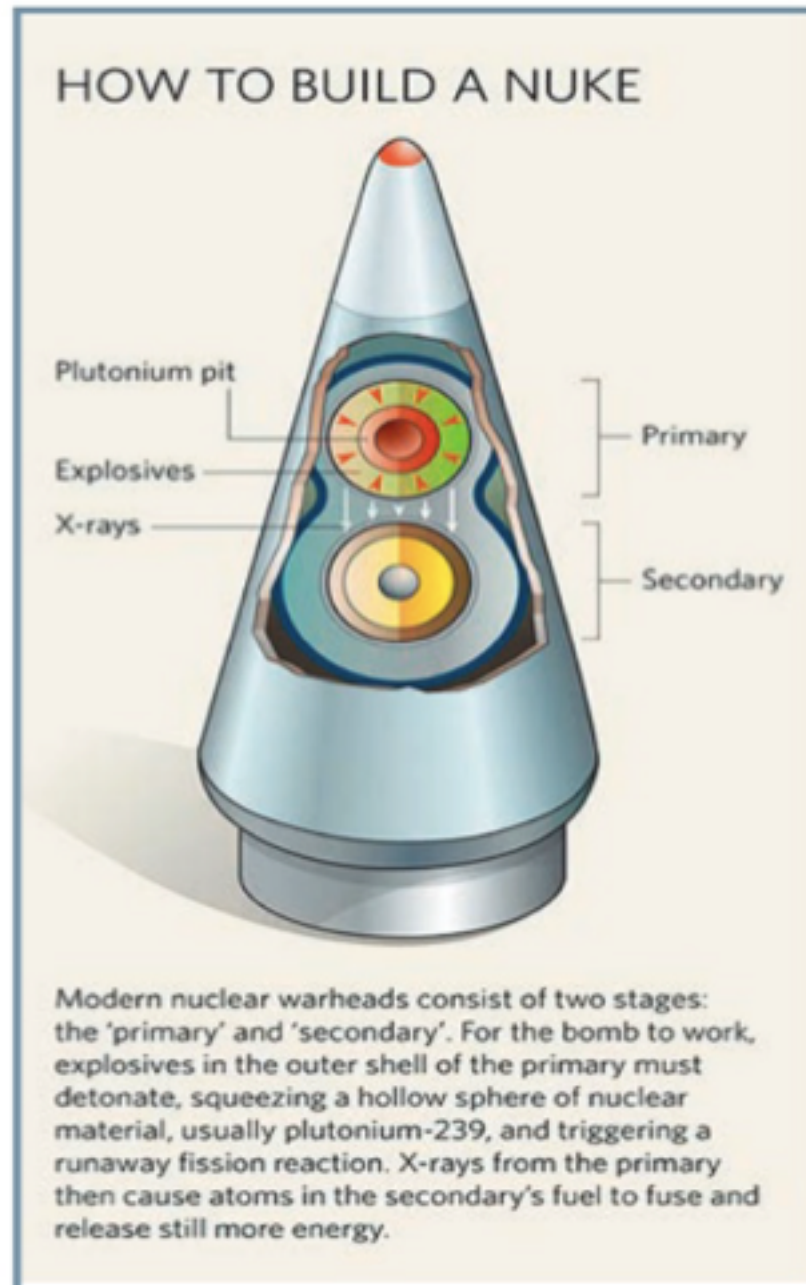


image credit: Nature

Expanded Plutonium Pit Production Is Unnecessary

- No production is scheduled to maintain the safety & reliability of *existing* nuclear stockpile.
- At least 15,000 existing pits at the Pantex Plant near Amarillo, TX.
- 2006 independent study concluded pits last at least a century. Livermore Lab: Pu >150 years.
- New “W87-like” pits, possibly raising reliability issues, thereby degrading national security and/or prompting resumed testing.

National Nuclear Security Administration Plans

- Energy Dept on Government Accountability Office's "High Risk List" for 27 consecutive years.
- 30 or more pits per year at LANL by 2030.
- 50 or more pits per year at the Savannah River Site (SRS) in South Carolina by 2030 (now delayed).
- Total \$43B over 30 years (estimates always low).
- Chronic nuclear safety infractions at LANL.
- 7 billion taxpayer dollars already lost at failed MOX facility at SRS. New estimate to "repurpose" to pit production doubled to \$11 billion.

Expanded Plutonium Pit Production = More Radioactive Wastes

- Pit production at LANL and the Savannah River Site = 57,550 cubic meters over 50 years.
- That is 53% of projected available capacity at the Waste Isolation Pilot Plant in southern NM.
- New pit production radioactive wastes would be given priority over cleanup.

Source: <https://www.energy.gov/sites/prod/files/2020/01/f70/final-supplement-analysis-eis-0236-s4-sa-02-complex-transformation-12-2019.pdf>, p. 65

What Activists Have Done

- NNSA tried 4 times through National Environmental Policy Act (NEPA) to expand plutonium pit production. We beat them each time.
- In 2019 we won a SRS environmental impact statement, but a nation-wide “programmatic” EIS (PEIS) is required:
 - To raise production from 20 pits per year to 80+.
 - Because a second site (SRS) is now involved.
- On June 29, 2021 NukeWatch NM, SRS Watch and Tri-Valley CAREs filed lawsuit for PEIS.
- NNSA filed Motion to Dismiss. Awaiting court decision.

NEPA requires analysis of environmental and safety impacts

- Heavy contamination from pit production at both the Rocky Flats Plant and Los Alamos Lab.
- Incomplete cleanup at Rocky Flats. DOE plans to “cap and cover” some 900,000 cubic yards of radioactive and toxic wastes at LANL.
- Pit production will inevitably add to contamination, radioactive wastes and plutonium inventory at LANL and SRS.
- Chronic, unresolved nuclear safety problems at both Rocky Flats and LANL. How safe is SRS?

A New LANL Site-Wide Environmental Impact Statement Is Also Needed

- National Environmental Policy Act regulations require that DOE evaluate a site-wide environmental impact statement at least every five years through a “Supplement Analysis.” (10 CFR §1021.330 DOE NEPA Implementing Procedures)
- DOE prepared a Supplement Analysis in 2018 that excluded plutonium pit production and a 2020 Supplement Analysis that was pit production-specific.
- Both Supplement Analyses concluded that a new Site-Wide Environmental Impact Statement (SWEIS) for the Los Alamos National Laboratory (LANL) was not necessary.

These two NNSA decisions were wrong because the last LANL Site Wide EIS was in 2008. Much has changed:

- The extent of serious groundwater contamination is better known but still not definitive.
- There are new planned massive radioactive tritium releases.
- Calculated potential radioactive doses by the Defense Nuclear Facilities Safety Board orders of magnitude above DOE calculated doses.
- Planned expanded plutonium pit production with billions in construction, chronic nuclear safety problems and increased radioactive waste production with an uncertain path of disposal.
- Another major wildfire coupled with a new DOE Inspector General report that LANL is behind on wildfire prevention.

Site-Wide EISs good for Lab and public

- In response to public comment DOE included wildfire analysis in 1999 SWEIS and undertook wildfire mitigation.
- The 2000 Cerro Grande Fire burned within half-mile of Area G with some 40,000 barrels of plutonium-contaminated wastes. Catastrophic had those drums burst with respirable plutonium across northern New Mexico.
- Even LANL recognized value: “When the Cerro Grande Fire swept down from the mountains this spring, these extra defensive steps, taken in response to the public comments, paid for themselves many times over.” LANL Office of Community Relations, September 2000, [https://hwbdocuments.env.nm.gov/Los Alamos National Labs/General/13435.pdf](https://hwbdocuments.env.nm.gov/Los%20Alamos%20National%20Labs/General/13435.pdf)

Growing Momentum for a LANL SWEIS

- The City of Santa Fe has passed a resolution calling for a new LANL SWEIS.

<https://nukewatch.org/newsite/wp-content/uploads/2021/02/Santa-Fe-City-LANL-SWEIS-Resolution-2021.pdf>

- The County of Santa Fe has passed a resolution calling for a new LANL SWEIS.

https://www.santafecountynm.gov/documents/ordinances/Resolution_2021-011-p0001_-_p0005.pdf

- The Buckman Direct Diversion Project Board has passed a resolution calling for a new LANL SWEIS.

What You Can Do

- Ukraine crisis is also opportunity to argue for global nuclear disarmament, not more nuclear weapons. Public interest is up ten-fold.
- Critical to mobilize constituent pressure on Congress, especially New Mexico & Heinrich.
- Demand comprehensive cleanup and expanded nonproliferation programs, not more bombs.
- Gear up for mid-term elections. The outcome will be critical for many reasons, including nuclear weapons.

What You Can Do

- Don't neglect the mundane, LTE's, op-eds, etc.
- Pressure the NM congressional delegation to support a new LANL Site-Wide EIS.
- Sign on to anticipated letter demanding a LANL Site-Wide EIS.
- Engage in NEPA processes for nation-wide programmatic EIS and LANL Site-Wide EIS.
- Support local efforts to support ban treaty. For example, ABQ City Council on March 21.

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