



Los Alamos Study Group

Nuclear disarmament • Environmental, economic, and social resilience • Peace, not war

December 18, 2025

Re: "[Warren, Garamendi Press Energy Secretary on Mismanagement and Taxpayer Waste in Plutonium Pit Production Program](#)" ([TEXT OF LETTER](#))

Dear colleagues –

Senator Warren and Representative Garamendi have written, or had written for them, a [letter](#) about pit production, addressed to Energy Secretary Chris Wright.

While some parts of the letter are true enough, I am sorry to say that overall it is logically confused and omits key facts. It has a veneer of scholarship but that's all. There is almost no analysis in it. Its faux objectivity undermines what good might have come from parts of it.

Introduction and background

Perhaps the place to start is to note that the plutonium pit production program can be said to involve first, *the acquisition of reliable pit production capability* and second, *the use of that capability to make pits*. These are two very different things, and this letter does not distinguish them. This conceptual blurring is fundamental to why this letter is worse than useless.

The acquisition of reliable pit production capability is happening at two sites, the Los Alamos National Laboratory (LANL) and the Savannah River Site (SRS).

LANL also has, as far as is publicly known, also *made* one certified ("War Reserve," WR) pit. (LANL may, or may not, have subsequently made a few more but this has not been announced.)

At LANL, the *acquisition* of reliable pit production capability is scheduled to continue until at least the fourth quarter of FY2032, when the Los Alamos Plutonium Pit Production Project will reach Critical Decision 4 (CD-4), the end of project construction and equipment installation necessary to support the reliable production of at least 30 pits per year. Assuming all goes well, there will probably be some pit production at LANL between now and then. So both aspects of the pit program -- acquisition and production -- are happening at LANL, more or less simultaneously. There is considerable difficulty in this simultaneity.

This letter does not even acknowledge that acquisition of pit production capability at LANL is a work in progress, one that is very expensive, fraught with risk, and far from assured. We have discussed this most recently in these fully-referenced summaries and analyses and their included links:

- [Bulletin 366: Letter to Congress and the Administration re plutonium pit production in the pending defense authorization bill; pit reuse study; the scary journey to work at LANL](#), Sep 15, 2025
- [Gigantic Department of Energy program to make plutonium warhead cores \("pits"\) has overshot its budget and is being re-evaluated; NNSA has no analysis of alternatives supportive of its present pit plans. Los Alamos Study Group: it needs one](#), press release, Jul 12, 2025
- [Prepared remarks for a panel discussion at the National Press Club by Greg Mello, Los Alamos Study Group, 11/13/24](#) (lightly edited May 12, 2025)

Turning now to SRS, CD-4 for the Savannah River Plutonium Processing Facility (SRPPF) is slated to occur some time between FY2032 and FY2035 ([pp. 202ff](#)). After that, start-up and production ramp-up will take

at least three years and possibly more. According to NNSA, the earliest that the SRPPF could be producing pits reliably is 2035 ([NNSA Administrator Jill Hruby remarks at Strategic Weapons, 21st Century Symposium](#), Apr 18, 2024).

The acquisition process is largely described in Project Data Sheets (PDSs), with the very important caveat that program (operating) dollars are also being spent. At LANL, program dollars are the main portion of financial support for the acquisition of pit production capability ([Plutonium Pit Modernization Spending, Actual, Proposed, and Estimated, by Site and Fiscal Year](#), update, Sep 24, 2024).

The statutory pit *production* requirements are at [50 U.S. Code § 2538a](#):

Consistent with the requirements of the Secretary of Defense, the Secretary of Energy shall ensure that the nuclear security enterprise—

- 1) during 2021, begins production of qualification plutonium pits;
- 2) during 2024, produces not less than 10 war reserve plutonium pits;
- 3) during 2025, produces not less than 20 war reserve plutonium pits;
- 4) during 2026, produces not less than 30 war reserve plutonium pits; and
- 5) during 2030, produces not less than 80 war reserve plutonium pits.

The FY2024 and FY2025 requirements were not met (at LANL, obviously), and there is every indication that the FY2026 requirement will not be met (at LANL). As the letter to the Energy Secretary says, several officials have testified that the FY2030 requirement of at least 80 WR pits will not be met (again it is only LANL we are talking about).

So it is highly likely that *none* of these (LANL) goals will be met. *To the extent that the letter's critique of pit production schedules refers to production, it refers solely to LANL.*

The FY2026 National Defense Authorization Act (NDAA), which has passed both houses of Congress and is about to be signed, will add this language:

In carrying out subsection (a), the Secretary of Energy shall—

1. ensure that Los Alamos National Laboratory, Los Alamos, New Mexico, has *the capability* to reliably produce no fewer than 30 war reserve plutonium pits annually; and
2. ensure that the Savannah River Plutonium Processing Facility at the Savannah River Site, Aiken, South Carolina, has *the capability* to reliably produce no fewer than 50 war reserve plutonium pits annually.

([FY2026 NDAA, Rules Committee Print 119-16](#), p. 1893, emphasis added)

Beyond this requirement for capability, there are to my knowledge no statutory requirements for pit production beyond 2030. There must be annual executive branch requirements, of course, for example in the annual stockpile memorandum. These will change as desired over the coming decade. They are in general classified.

What DOE and NNSA are primarily focused on, at this point, is the first element of the pit program, the acquisition of reliable pit production capability. That acquisition process will continue until at least FY2035 and possibly for years longer at SRPPF in particular. At LANL, 2032 is also not the end of the acquisition process needed for pit production, according to NNSA documents (see the CMRR PDS, [pp. 281, 289](#): acquisition under the PEI2 subproject through 3Q FY2034 needed to "complete personnel access infrastructure upgrades to enable reliable 24/7 operations for PF-4 in support of 30 PPY mission.")

The letter's big-picture problems

With this background, we can start reading the letter, which begins by saying,

In August, the Department of Energy (DOE) issued a memorandum launching a special study into NNSA's "leadership and management of the plutonium pit production mission." If properly conducted, this study should find that years of mismanagement have put billions of taxpayer dollars at risk with an unrealistic pit production schedule and goals.

The "pit production schedule and goals" we know about apply, up to now, only to LANL. SRPPF will not be making pits until well after FY2030. And those goals -- those LANL goals -- are demonstrably unrealistic.

That rush to produce pits has not just "put billions of taxpayer dollars at risk" but has actually *spent* those billions. But clearly, the letter is not talking about LANL, here as it shortly makes clear.

The letter continues:

Simultaneously, NNSA is waiting for a pit aging study by JASON that may call into question the wisdom of the current pit production program.

Again, what part of the current program "may" be questioned by this future pit aging study? The acquisition of a place or places to make pits, or the actual production?

Regarding the acquisition of pit production facilities, the [most recent JASON product on pit aging](#) says in conclusion:

Finally, we urge that pit manufacturing be re-established as expeditiously as possible in parallel with the focused program to understand Pu aging, to mitigate against potential risks posed by Pu aging on the stockpile. The reuse of aged pits in rebuilt primaries can address certain issues, but cannot change the aged pits themselves. A significant period of time will be required to recreate the facilities and expertise needed to manufacture Pu pits. Given the number and age distribution of weapons in the stockpile, it will then include some eighty-year-old pits, even under most favorable circumstances.

This conclusion is robust with respect to what is known *and what could be known* about pit aging.

Why? Because of the long delays, risk, and uncertainty involved in the facility acquisition process. It takes a long time to build a new facility and ramp up operations in it -- roughly 20 years in all, assuming all goes well (say: 15 years construction plus 5 years ramp-up; see [Independent Assmt of the Plutonium Strategy of the NNSA](#), IDA, for DoD, Mar 2019 and the time to ramp up estimated in the pit production [Analysis of Alternatives](#) [AoA] and the [Engineering Assessment](#)). But seldom does all go well.

It is one thing to argue about when to make pits and how many to make, and at what rate, which would imply the scale of the capability required. That discussion would involve pit aging, performance margins, stockpile size, infrastructure reliability and endurance, continuity of expertise, and other managerial issues involved with Life Extension Programs (LEPs) and policies concerning new warheads. That discussion and analysis is however almost completely absent from this letter and its footnotes and from the referenced report by the Union of Concerned Scientists (UCS). UCS never did that analysis.

It is quite another to argue that the data and experience at hand allow us to conclude that it is not necessary *even to prepare* an enduring and adequate pit production facility, namely SRPPF, which could not even in the best case produce ANY pits for another decade.

Having such an enduring facility with demonstrated capability, it is certainly a valid question as to how many pits it should make, ten or more years from now. We all hope that few pits will be needed or wanted.

What would happen should SRPPF be paused, and what are the alternatives?

Should that enduring, adequate facility, the SRPPF, be paused for much more than one or two paychecks, the design and construction teams will disburse, and the project will be effectively killed. It would take a long time -- years -- to reassemble the right people to restart the project, if that were possible at all. Many would have permanently retired, Tacit knowledge and experience would be lost. Meanwhile, the designs and equipment specified and purchased will become obsolete very quickly, the supply chains will have changed, and the design will need to be substantially done over. Incompatibilities will mount between project elements.

So any sort of "pause" is really just a euphemism for killing SRPPF. That is what this letter proposes and what it should say. Failing to say that in a straightforward way should alarm audiences.

In fact there is no actual technical analysis in this letter arguing that SRPPF or should be "paused," i.e. killed. That is the breathtaking part of this. "More studies" are urged as the reason to pause a project which is proceeding apace, on which roughly \$6 billion has already been spent -- or more than \$7 billion by the end of this fiscal year. The lack of "best practices" estimates and an integrated master schedule is indeed regrettable at BOTH sites, but the unique nature of the work and its many uncertainties make those products difficult to produce far in advance of the work itself. At LANL, a life-cycle cost is impossible to produce without a clear estimate of the production longevity of PF-4.

How long would it take to start over with SRPPF or a facility like it, and where could that happen? We have already said it would likely take 20 years for an SRPPF "do-over," i.e. until the 2045-2050 timeframe, plus however long the "pause" lasted. There is really no justification for a pause of less than 5 years, let's say, which would push operation of the new facility to the 2050-2055 timeframe. Even if we pretend that we know the service life of pits will all be 100 years, the requirement to field warheads with an assured pit service life of at least 20 if not 30 years would drive the required production rate quite high for the small production window left.

And where would LANL's 50-year-old PF-4 be, in that scenario? It would be pushing a century of operation. The most recent document we have been able to get concerning the working lifetime of PF-4 has nothing to say about using PF-4 after the early 2040s ([Risks for Sustainment of PF-4 at LANL, Report to Congress](#), Nov 2020). Even now, NNSA has chosen to not upgrade PF-4's ventilation system to safety class (DNFSB, [Review of the Los Alamos Plutonium Facility Documented Safety Analysis](#), October 10, 2025).

The answer to "where" a future SRPPF substitute could be built, after the extensive research conducted in 2017 in the AoA, is: *right where the SRPPF is now.*

Any future SRPPF substitute would also be much more expensive going forward than SRPPF is today.

Could a new facility be built at LANL, on the narrow mesa at TA-55? With difficulty, perhaps. *But at this point it would take longer, and cost more, than SRPPF's future costs.* The last time NNSA tried that -- the CMRR-NF -- the facility was basically found to be infeasible. The site is too seismic, and the mesa too narrow (for details see https://lasg.org/CMRR/open_page.htm).

SRPPF is really the only decent option available to NNSA for a pit facility, at the only decent site. And the only rational approach to acquiring that capability is to continue with the two thousand or so people working on the project right now. Once disbursed, those people or their talented replacements will be very hard to reassemble.

Mothballing the SRPPF facility and then trying start it up five or ten years later makes zero sense. Starting a brand-new project somewhere else makes even less sense.

Finally

Are there problems at SRPPF? Yes, but no more so than at LANL. Has management been imperfect? Yes, but much less I would say, than at LANL. SRPPF is not just the least dirty shirt in the laundry basket, it is the only shirt.

This letter's failure to analyze issues objectively and realistically make its conclusions absurd.

If the U.S. wants to retain nuclear weapons, the U.S. needs an a) enduring and b) adequate pit production facility, full stop.

Even if we knew right now that the U.S. was going to reduce its arsenal to a small fraction of its present one -- something we at the Los Alamos Study Group strongly desire -- we would still be facing the problem of the advanced age and unknown capacity and working lifetime of PF-4.

The 50-year-old LANL facility, which as noted lacks safety class ventilation, was designed for R&D, is currently housing more than ten times the number of staff members it was originally designed for, and it is also home for a half-dozen other important missions. It is not enduring and is not adequate to replace the pits in the present stockpile or any other stockpile which could be reasonably foreseen at this time. The working life of this facility is likely far less than the working life of the pits in the stockpile. A new JASON study will not change that.

The letter offers no factual references or analysis showing that the LANL facility is either a) enduring or b) adequate.

Yes, NNSA's two-site pit production strategy makes little sense. We agree with that as we have often explained (for example see [Prepared remarks for a panel discussion at the National Press Club by Greg Mello, Los Alamos Study Group, 11/13/24](#) (lightly edited May 12, 2025)). What NNSA is doing is pouring money and talent into a temporary stop-gap facility at LANL, a site with really tremendous problems -- even lacking adequate access by workers -- while also building a permanent, adequate facility at SRS, the output of which can be adjusted up or down as required.

When all is said and done, the LANL capability will cost just as much as the SRS capability to acquire, as NNSA and GAO analyses and budget requests show ([Current & historical cost estimates for reconstituting plutonium pit production, details](#), Aug 29, 2025). That is in part because the LANL facility has already had to go to 24/7 work to acquire, it is hoped, a reliable 30 pit per year capability by the end of FY2032. As far as we can tell, there are already about 4,000 full-time-equivalent people working on this, not counting contractors. This high staffing level -- approximately twice that of SRPPF -- and lower capacity make the average post-acquisition cost of pits at LANL much more than at SRPPF, by approximately a factor of 4 (twice the cost for half the capacity).

The uncertainty about pit aging, which the letter emphasizes, is almost irrelevant to the decisions at hand, which have to do with facility acquisition -- with being ready to make pits when they are said to be needed one, two, three, or four decades from now. The longer the interval prior to replacement, the greater the impetus to have a new pit facility that will last until then, and beyond.

Sincerely,

Greg Mello