



# Los Alamos Study Group

*Nuclear Disarmament • Environmental Protection • Social Justice • Economic Sustainability*

**[I would change a few (not many) of the suggestions below, were this letter written today.  
Greg Mello, August 11, 2008]**

May 13, 2008 by fax and email with hyperlinks

**Re: Part 1 of Suggestions for National Nuclear Security Administration (NNSA)  
Weapons Activities (WA) in the Energy and Water Development Appropriations  
Bill for Fiscal Year (FY) 2009**

Dear [members of Congress] –

Thank you for the opportunity to comment on this proposed legislation.

This letter is Part 1 of those comments. Part 2 will follow tomorrow.

I can answer your questions about these matters at any time. I also hope to be available in person in Washington in approximately one week.

I will do whatever I can to help the Subcommittee, so please don't hesitate to ask for additional documentation or analysis regarding particular issues of interest, all of which are presented here in a condensed and highly conclusory fashion.

This letter is organized as follows:

## **1. Introductory general remarks**

- a. The WA budget contains very substantial embedded waste, grandiosity, and hidden policy agendas.
- b. Layoffs without a safety net are unnecessary.
- c. NNSA's structural weaknesses relative to its contractors should be remedied, not worsened.
- d. It is important to act decisively this year.
- e. Issues related to the Comprehensive Test Ban Treaty (CTBT) should play no role in appropriations decisions.
- f. NNSA's sites must be cleaned up; cleanup can provide transition jobs and ancillary long-term benefits.
- g. The NNSA warhead complex should be downsized and consolidated in place.

## **2. Top priority suggestions for NNSA WA appropriations**

- a. Halt the Chemistry and Metallurgy Research Replacement (CMRR) Nuclear Facility (NF) at Los Alamos National Laboratory (LANL) and two closely allied projects. These projects derive most if not all their *raison d'être* from aggressive assumptions about new warhead production, which are not congressionally approved.
- b. Cut proposed plutonium warhead core ("pit") production funds heavily, as the Appropriations Committee and the House as a whole did last year, for the same reasons. Much of the several budget lines involved are oriented toward expansion.

- c. In addition to these, remove other new warhead design, testing, and production programs by cutting funding and by proscription, including but not limited to the Reliable Replacement Warhead (RRW). Cutting funding alone will not suffice to stop new-weapon design activities.
    - d. Prudently but steadfastly begin the process of downsizing NNSA programs, facilities, and contractor staff, cutting total WA appropriations by approximately 15% from FY2008 levels in unadjusted dollar terms.
  3. **Other specific suggestions for NNSA WA appropriations** (to follow tomorrow in Part 2)  
A total of \$1.1 – 1.2 billion in specific cuts from the request is recommended.
  4. **NNSA’s unanswered questions and absent analyses** (to follow)
  5. **Attachments (list at end of letter)**
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## 1. **Introductory general remarks**

### a. **The WA budget contains very substantial embedded waste, grandiosity, and hidden policy agendas.**

It is difficult to understand, let alone evaluate, each year’s NNSA nuclear weapons budget request. While purporting to be based on sound technical and management principles, each year’s request also is heavily based on politics and bureaucratic inertia. Dozens of projects and programs that have never been thoroughly vetted by competent, independent parties are carried forward from year to year, often in vague, ambiguous language.

NNSA’s senior managers are not able to provide clarity in this situation. NNSA spends less than 4% of its funds on its own operations and is accordingly heavily dependent upon contractors not just for specific information but also for the framework and even the culture in which that information is interpreted and passed on to this and other congressional committees. Contractors provide not just the answers for NNSA but most of the questions too. This has been going on for decades but it is worse today. This situation places a particularly heavy burden of diligence on external reviewers, including your Subcommittee.

The WA budget line contains considerable excess spending, especially if considered relative to the conservative mission of indefinitely maintaining a large, diverse, and robust nuclear deterrent.

Each of these words has been chosen very carefully. “Indefinitely” means that decisions regarding new, replacement warheads are not required for several decades. A smaller arsenal, or a less diverse arsenal, could be maintained indefinitely at even less cost.

It is not possible to exactly say what nuclear warhead mission(s) Congress has been funding. Some WA projects address the rational portions of their mission so inefficiently that they are mostly just wasted money. The National Ignition Facility (NIF) and the Atlas project, formerly at LANL and now at the Nevada Test Site (NTS) and more or less in mothballs, are two such projects; there are others.

Waste aside, the quest for an accomplished “first principles” nuclear design capability, i.e. the complex-wide capability to certify new nuclear weapons without nuclear explosive testing, is a part of today’s funded mission. It is the “long pole” in the stockpile stewardship tent. It is grandiose and doomed to fail.

On the production side (what used to be called “stockpile management”) the capability for “responsive,” i.e. breakout, weapons production is also part of the funded mission and can be seen in many budget lines and is also expressed as NNSA’s “Complex Transformation” vision. This quest is foundering on managerial and cost issues as well as popular opposition.

The problems in both of these grand missions run to the very bottom. All of us observe the symptoms – the political opposition in Congress, etc. – but at root the observed problems are symptoms of deeper mistakes, e.g. that nuclear weapons design can continue in a test ban regime, and there is adequate support of all kinds for renewed nuclear weapons production. Both of these missions, in all their variations, are based on wishful thinking and a lack of logical coherence. They perpetuate underlying contradictions, which are subsequently expressed in political and managerial problems. These traits are generally not noticed because of secrecy, the highly-technical nature of the field, its long traditions and its special language, and the groupthink that affects almost everybody.

If the most wasteful and controversial elements of NNSA’s overall WA mission were removed and that mission returned to the mainstream, centrist one of indefinitely maintaining a robust nuclear deterrent, WA programs and funding could be significantly downsized and decreased without delay.

We ourselves do not support this mission. At the Los Alamos Study Group, we emphasize that the U.S. has a legal obligation to complete the nuclear disarmament process. We believe this obligation is rooted in firm political and moral realities and perceptions that do not go away just because people choose to ignore them. They do so at our mutual peril.

Our own views notwithstanding, a conservative mission for NNSA would be far more managerially and politically supportable than the present approach, which continuously generates uncertainty of every kind and has accumulated a telltale record of management failures.

The way to fix these problems is not piecemeal but systemic. NNSA should do less, do only what is broadly supported by society (including its own workers), and do this more limited set of things better, with more management attention and safeguards. Also, NNSA and its contractors should be removed from interest-conflicted policy-making forums such as the Nuclear Weapons Council (NWC).

In other words NNSA cannot be fixed, no matter how much managerial reform and congressional oversight is attempted, unless its missions are also fixed and brought into alignment with society’s values, international commitments, fiscal and managerial realities, and unless some of NNSA’s institutional conflicts of interest are removed.

Since the current excess in WA funding is so great, and since the programs themselves are opaque, the exact extent of overfunding cannot be known. A bottom-up review is not available and is likely impossible in any case. Most potential reviewers both inside and outside government are so deeply vested in the status quo it would be difficult if not impossible, in such a review, to get beyond recitation of same half-truths we have today.

WA cuts in the range of 45% are possible and desirable if achieved over a period of three or more years. Removing this excess spending will provide many benefits in management, national security policy, and of course fiscal economy, and need not compromise the U.S. nuclear deterrent, so called, in the least. At least 15% of NNSA's budget is relatively pure waste from the perspective of virtually any nuclear posture. Roughly another 30% represents overreaching in stockpile stewardship and management in the service of aggressive nuclear policies, with all the attendant problems.

Irrespective of any new nuclear policy or posture, Congress would not err by cutting WA by 15% this year and studying the nature of subsequent years' cuts over the next two years, especially in the light of what may be an evolving nuclear posture. The FY2009 WA budget request would provide 5.1% growth over FY2008. The cuts we propose total roughly 20% of this year's request.

Given the vagueness, ambiguity, and cross-applicability of many budget lines, this cannot, in the first year, be an exact science. The actual bedrock topography of NNSA's necessary programs is not even visible to those directly involved, let alone to NNSA or external reviewers.

Cuts of less than 10% from FY2008 will allow too many programs to continue that later will be seen as waste and continue too many projects that collectively act to constrain and undermine future policy choices. Cuts of greater than 20% are likely to cause chaos and political backlash. Some political backlash must be expected from any sound decisions in this situation, however.

Obviously a dollar cut of 15% across the complex will not decrease prime contractor workforces by 15%. Many of those dollars are for procurement. Many will target construction projects. Some cuts will affect subcontractors. While all jobs are important, nuclear weapons and infrastructure policy should not be driven by considerations of job stability.

**b. Layoffs without a safety net are unnecessary.**

At the same time, layoffs without compensating opportunities would be unnecessary, especially given the age distribution of workers in the warhead complex, if the Department of Energy and Congress enacted sound policies to provide those opportunities.

It sounds like a cliché but it isn't: the nation needs these people, both the PhD's and what some have called the "PhDo's" – the skilled technicians and craft workers who do much of the enabling work at the labs and plants. Congress should provide WA funds for carefully-crafted, fair employee buy-outs and for community-based transition programs.

The U.S. needs to move public and private funds, people, attention, and skills of all kinds into renewable energy and energy conservation missions in our society on an emergency basis to respond to the energy and climate crisis now upon us. The nature of national security has changed, and WA must make way, which it could do without affecting the stability of the stockpile, the size and nature of which can be decided in other forums. Buy employees out or offer them another job creating a sustainable society. Many people – *enough* people, if attrition is included, to avoid layoffs – will take those jobs, which true national and economic security requires us to create on an emergency basis.

Those new jobs should not be at the weapons labs or plants.

**c. NNSA's structural weaknesses relative to its contractors should be remedied, not worsened.**

NNSA is too dependent upon its prime contractors. These in turn are too dependent on their numerous subcontractors, who are inherently less accountable and offer less stability to employees. NNSA's federal funding and staffing should grow at contractor expense, and that subcontracting from its prime contractors should be better regulated and decreased. Proposals for complex-wide contract integration go in exactly the wrong direction. The U.S. has gone much too far toward a totally-privatized nuclear weapons enterprise.

**d. It is important to act decisively this year.**

It is important to set a downward direction for WA funding this year, before a new administration takes office. A Democratic administration, should one be elected, may not propose or support WA budget cuts. If a Republican administration is elected it may fight cuts proposed by (a Democratic) Congress.

On the other hand, program and project cuts, if made this year, may be difficult for even a Republican administration to undo. That would be a desirable fight, if one were even necessary. The first step is to break the sense of entitlement currently enjoyed by many NNSA programs.

To the extent that nuclear weapons spending is supported by pork-barrel concerns – a significant extent, especially at the labs – it is a particularly pernicious form of pork-barrel spending that has serious negative international consequences. There is disagreement about the optimum level of nuclear weapons investment, but everybody knows pork-barrel concerns play a part in it and therefore the current level is higher than it would be without those influences. Whatever the optimum level may be, spending higher than that decreases national security.

No sort of “retirement present” should influence U.S. nuclear weapons policy. Unfortunately we do hear of this sort of thing, more often in connection with Senator Domenici than with Representative Hobson but the principle is the same.

It is critical to understand that building infrastructure, especially production infrastructure, constrains future policy choices. There is little point in pretending a bottom-up review of nuclear policies and postures is possible if Congress funds construction of production plants whose only actual purpose is to make new varieties of nuclear weapons in large quantities. That is the default course of action expressed in this year's budget request.

**e. Issues related to the Comprehensive Test Ban Treaty (CTBT) should play no role in appropriations decisions.**

There is no circumstance under which the U.S. would conduct a nuclear test, regardless of the status of CTBT ratification. Such a test would be deeply contrary to U.S. interests and nearly all parties germane to such a decision know that. While NNSA and Congress pretend to hold open the possibility of testing, world opinion and formal state commitments have already decided the question. Of 192 states in the world, 178 have signed the CTBT and 144 have ratified it. The consequences of a U.S. discussion of conducting a nuclear test would be immediate, heavy, widely-perceived domestically (with attendant potential electoral impacts), and far-reaching. Actually conducting a test would brand the U.S. a “nuclear outlaw,” with even worse consequences.

Of the 44 “Annex 2” states required for CTBT entry into force, 41 have signed and 35 have ratified. Entry into force is important internationally, but not important to the question of whether the U.S. would ever conduct a nuclear test.

This political fact has significant implications for NNSA programs and spending.

There is a complementary technical certainty which needs to be accepted and supported, not doubted and undermined. There is not now, and need never be, any technical uncertainty whatsoever regarding the reliability of U.S. warheads. Uncertainty could arise in the future, but only as a result of inappropriate decisions and actions. There is more than ample data available today to know this. The fact that some won't accept this doesn't necessarily matter. That is true of all significant findings and decisions. NNSA and Congress cannot remain comfortably agnostic or noncommittal about future stockpile certification. The annual certification process and its significance need to be changed.

This technical fact also has significant implications for NNSA programs and spending.

This fortunate state of knowledge is the product of billions of dollars in Department of Energy (DOE) and NNSA projects and programs, many of which can now be wound down toward a maintenance level. DOE and NNSA have accomplished much of what the country paid them to do in the "science-based stockpile stewardship" program. It does not need to be continued at its present scale – which, as discussed above, is inflated by the aspiration to design and certify new nuclear weapons without testing and of course by the usual pork-barrel and contractor self-interest considerations.

Those DOE/NNSA accomplishments, and the confidence all parties can have today about the reliability of the stockpile, are fragile and perishable. While the facts won't change, as political opportunities they will not necessarily survive endless dithering about whether they should be accepted or not. It is in the nature of science to produce far more questions than answers. If Congress does not act to clarify what are relevant answers, i.e. what the questions ought to be, the science-based stockpile stewardship program will define the questions and the answers. The former comprise a potentially infinite set, far outstripping both the latter and Congress' ability to understand and act decisively upon either. In effect, Congress will have handed the reins to a handful of contractors.

Political efforts toward CTBT ratification and entry into force are not technically germane to certifying the U.S. nuclear arsenal or to the NNSA programs which do so. If they are *politically* germane, it is because they are allowed to be. No "deals" regarding nuclear testing, CTBT ratification, stockpile stewardship, and nuclear weapons manufacturing are necessary – or appropriate. Among other problems they have had the highly unfortunate effect to date of conflating a political tactic with technical requirements. They have resulted in lasting disempowerment and confusion – and CTBT ratification is nowhere in sight.

CTBT ratification is unlikely to be an active issue until 2010 at the earliest, assuming (in the best case for the CTBT), a Democrat is elected to the White House. In other words, CTBT ratification is a distant dream. It need not distract us.

Some experienced congressional observers have remarked that for CTBT ratification to move forward, international "quid pro quos" would be necessary. Most likely these will be not forthcoming. Conversely, they might involve diplomatic agreements – say, involving the use of military force – that some Democrats and CTBT supporters would not support. In this way (and in many others), one could make a "deal" for CTBT ratification, only to discover that it was only a down payment, and nothing close to the full cost was visible at the time.

CTBT ratification is simply much less important than is often thought. In any case the fastest way to achieve it is to stand firm against any and all concessions supposedly required to obtain it while at the same time cutting the nuclear weapons programs that undermine the treaty today.

**f. NNSA's sites must be cleaned up; cleanup can provide transition jobs and ancillary long-term benefits.**

It is important to proceed with dismantlement and environmental cleanup promptly and fully for a host of reasons. Funds to do so may not be available in the future, and costs are rising; the U.S. government has a moral obligation to do so; and the jobs involved could provide important “bridging” employment in places where needed WA declines could cause layoffs (e.g. LANL, Y-12).

Furthermore, the priority given to cleanup affects institutional culture, future economic development possibilities, local political identities and commitments, and nuclear weapons policy nationally. Cleanup is often popular with a diverse set of political actors who disagree on almost everything else.

**g. The NNSA warhead complex should be downsized and consolidated in place.**

I hope to provide you with a detailed white paper in this subject in the near future. In the meantime the following points may be helpful.

Appropriators can assist so-called “complex transformation” efforts by helping NNSA downsize and consolidate in place while also removing some of the waste and grandiosity from NNSA's programs.

Assuming the U.S. retains a nuclear arsenal, NNSA has already consolidated to the optimum number of geographic sites for the foreseeable future. The frontiers of weapons policy reform, fiscal probity, and sound management, are, unlike in the decade of the 1990s, not associated with closing particular sites but rather with consolidating and closing facilities and programs at each site, accompanied by dismantling excess facilities, by environmental cleanup, and by diminishing WA program expectations overall and in specific cases.

Much of this needed transformation is insensitive to a wide range of possible choices regarding nuclear posture and is largely independent of the size and composition of the nuclear arsenal, *provided*

- a) the arsenal is composed entirely of existing warheads and bombs maintained through life-extension projects, and
- b) little or no “responsive” (i.e. surge or “breakout”) capacity is provided.

The failure of the Bush Administration to incorporate these two assumptions is the principal source of controversy in the current approach and also the reason it is unnecessarily expensive to implement – far more expensive than NNSA has fully admitted.

The heavy cost of NNSA's preferred complex alternative relative to a more conservative infrastructure plan is largely masked by the embedded aggressive elements in NNSA's current program, implicit and explicit, that are discussed in general terms above.

Just last week I reviewed the November 2007 Institute for Defense Analyses (IDA) study, “Economic Analysis of National Nuclear Security Administration (NNSA) Modernization Alternatives,” written for the Department of Defense's (DoD's) Cost Analysis and Improvement

Group (CAIG), which I am told was released to the public last month. The IDA report, which concerned itself with sites and missions involving nuclear materials, appears largely sound to my eyes, given its terms of reference and the assumptions noted. It does not support consolidation of any sites which use nuclear materials.

One of these assumptions was a pit production capacity of 125 pits/year with the ability to surge to 200 pits/year. LANL is the best place to conduct pit production *operations*, just as IDA says, but there is no need to actually produce pits, let alone to provide for additional capacity. There are many reasons to do neither.

The Kansas City Plant (KCP) was not addressed by the IDA but the general principles of the IDA analysis apply. I have reviewed dozens of documents concerning the future of KCP – everything, as far as I know, publicly available – and agree with the conclusion of NNSA and its contractor Science Applications International Corporation (SAIC) that financial and program considerations rule out moving KCP outside the Kansas City area, where KCP's trained, skilled, and committed workforce now resides. The supposed issues regarding leased generic manufacturing facilities are not at all convincing. Our organization is an experienced and successful National Environmental Policy Act (NEPA) litigator, and the issues raised regarding NEPA compliance appear weak as well.

As the IDA notes, very few skilled workers will move to another location. Prior experience with the consolidation of non-nuclear manufacturing (including neutron generator production, about which our organization has received first-hand accounts) suggests that a hiatus of at least 5 years if not longer would likely result from an attempt to move KCP to another state. Attempting to move KCP could easily cause a major political setback in efforts to enact a less aggressive nuclear weapons policy.

Time has not allowed my colleagues and I to fully penetrate the questions of whether a new facility for KCP is actually needed to maintain the stockpile and if so whether the proposed leased facility would be truly cost-effective. Experience has taught us not to take claims of this nature at face value. What is more, seven years ago I heard the president of Honeywell's KCP subsidiary, Karen Clegg, say the plant had no outstanding infrastructure problems, in so many words. NNSA's perceived need for *responsive* infrastructure, as opposed to *adequate* infrastructure, must be carefully parsed and interpreted in light of a possible future policy of modest life extension programs (LEPs), as opposed to a wide-ranging RRW + LEP + surge manufacturing scenario.

If, in the future, an entire site were to be closed, by far the best candidate would be LLNL. I personally do not believe the quality of science at LANL is as good as at LLNL, especially in the computational sciences. This is at root a function of geography and cannot be changed by mere management reform. I therefore reluctantly cannot advise closure of LLNL for now, though it could and should be substantially downsized, eventually to about 20-40% of its present (WA-funded) size.

A great hue and cry will be raised on the general theme that declining budgets will destroy science at LLNL, but the majority of the science now being pursued under WA funding at LLNL (and LANL) is not very helpful to WA's proper, limited objectives. Some of it is not helpful at all.



Obviously, Category I/II (security and safety categories, respectively) nuclear materials should be removed from LLNL as soon as practicable. All protestations aside, LLNL cannot be secured against attack. I also question whether NNSA fully understands the seismic hazard at LLNL, in the operational sense that prudently incorporates management, fiscal, and safety risks. NNSA's budgetary exposure to seismic hazard at LLNL may be significant, at NIF and in other ways.

Equally obviously, Site 300 should be closed, the cleanup should be intensified, and the site should be transitioned to other, higher uses.

The Device Assembly Facility (DAF) at the Nevada Test Site (NTS) is and will remain a valuable storage facility. The burden of proof necessary to justify continued operation of the criticality facilities now resident there lies with NNSA. As NNSA's programs and budgets are downsized, NNSA may jettison less-valuable activities and DAF's criticality facilities may be some of them. The underground facilities and experiments at U1a are in a similar category. In short, NTS is a short- and mid-term candidate for significant downsizing but not closure in the administrative sense.

It would be highly unwise to augment DAF missions with dismantlement, which would willy-nilly create a new assembly, not just disassembly, plant and a political constituency for same. Mere numerical dismantlement is a low *desideratum* compared to preventing new facilities and programs, the ultimate purpose and fate of which are not in the control of this or any congress or administration.

I do not understand the Y-12 site in enough detail to offer a learned opinion. On its face NNSA's plan to shrink the site's functions to a 15-acre footprint appears appropriate. It should be followed by implementation of the proposed integrated site dismantlement and cleanup plan, which will allow workers to transition from the K-25 site cleanup as the latter is completed.

The Highly-Enriched Uranium Facility (HEUMF) is mostly completed, but the a) need, b) proposed scale, and c) timing of the Uranium Processing Facility (UPF) should all elicit great doubt. Firmly rejecting new weapons development and the expansion of pit production capacity (i.e. the CMRR and related projects at LANL's Technical Area 55) may eventually help clarify this situation for all concerned.

The only new construction proposed in NNSA's transformation plan which is not already well underway, and which appears to our eyes fully justified, is the proposed underground nuclear weapons and pit storage facility at Pantex.

LANL also should be greatly downsized over time to about 40% of its present (WA-funded) size and much closer to its Cold War scale. TA-55's plutonium facilities are important resources and they should be made safer, but not be expanded. LANL has a great deal of work to do in making those facilities safer and in solving the site's most basic waste management problems.

LANL's overall environmental performance is still very poor, which reflects inverted priorities on the part of NNSA and its site contractor. LANL still disposes of large quantities of nuclear waste in shallow unlined trenches at a highly unsuitable site. The future of LANL's environmental cleanup is also highly doubtful at this point.

LANL's supercomputing facilities should be clearly subordinate to LLNL's, which LANL should also use.

No Advanced Hydrotest Facility (AHF) is remotely necessary either at LANL or NTS; LLNL weapons stewards should use the Dual-Axis Radiographic Hydrotest (DARHT) facility to the extent any is actually needed, which is much less than claimed.

As noted elsewhere, funding of the CMRR NF should be halted and funding for the Special Facility Equipment (SFE) for the CMRR Radiological, Office, and Utility Building (RLUOB), i.e. the RLUOB portion of “Phase B”, continued at a low level (\$15 M) for another year, during which the purposes of the RLUOB can and should be re-examined in the light of CMRR NF and RRW cancellation.

The proposed leased weapons science facility at LANL (“MaRIE”) is neither necessary nor affordable. LANL has a surfeit of facilities and a new one won’t make the science better. It would increase overhead relative to a government-owned facility in the post-construction years.

## **2. Top priority suggestions for NNSA WA appropriations**

- a. Halt the Chemistry and Metallurgy Research Replacement (CMRR) Nuclear Facility (NF) at Los Alamos National Laboratory (LANL) and three closely allied projects. These projects derive most if not all their *raison d’etre* from aggressive assumptions about new warhead production, which are not congressionally approved.**

Besides the CMRR NF, the other two projects that should be halted are the Nuclear Materials Safeguards and Security Upgrades (NMSSUP), the Pit Radiography Facility, and the TA-55 Reinvestment Project (TRP). I believe the first two are pit production expansion projects *sensu stricta*. The third appears to be, in part, an open-ended long-term vehicle for modifications of building PF-4 that lacks both an estimated budget and a project scope.

Essentially the sole purpose of the CMRR NF is to assist with the development and production of pits for the RRW or other new-design warheads.

The NF has experienced more than four-fold cost inflation prior to completion of Preliminary Design (Critical Decision 2) and is now the flagship, if that is the right term, of at least a \$2.8 billion construction package at LANL, if associated decommissioning and demolition (D&D) costs (exceeding \$400 M) are included.

Other information regarding the CMRR is provided in the attachments. More will be provided.

- b. Cut proposed plutonium warhead core (“pit”) production funds heavily, as the Appropriations Committee and the House as a whole did last year, for the same reasons. Much of the several budget lines involved are oriented toward expansion.**

Placing pit production on “warm standby” would save billions of dollars and provide substantial diplomatic, safety, managerial, and environmental benefits without compromising the reliability of the U.S. arsenal. Pressing on with an expanding pit production program risks fiascoes in these same areas. “Producing” pits via the dismantlement process is relatively instant (in fact, underway), has far more capacity, costs nothing, has no technical risk, provides fully-certified pits (without process waivers) of the precise kinds needed for stockpile systems, has no environmental impact, and has outstanding nonproliferation benefits. Existing pit manufacturing

facilities at Los Alamos National Laboratory (LANL) can be operated in a warm standby mode, which will also have a variety of significant management, safety, and cost benefits.

I will send more information on this important topic.

- c. **In addition to these, remove other new warhead design, testing, and production programs by cutting funding and by proscription, including but not limited to the Reliable Replacement Warhead (RRW). Cutting funding alone will not suffice to stop new-weapon design activities.**

The RRW can never meet congressional objectives, as noted in an attachment. As retired Sandia Vice President Bob Peurifoy notes, it is the worst of both worlds, offering much higher costs and risks with much lower confidence than stockpile maintenance via LEPs. I hope it is dead in the water. It has little political or technical viability and its reintroduction by NNSA should be taken as an important measure of NNSA's technical and management objectivity.

It is possible the RRW has been reintroduced as a bargaining chip. I believe that if the matter were debated in public, NNSA and the White House would drop the RRW like a hot potato and therefore suggest that no concessions whatsoever are necessary to kill it.

- d. **Prudently but steadfastly begin the process of downsizing NNSA programs, facilities, and contractor staff, cutting total WA appropriations by approximately 15% from FY2008 levels in unadjusted dollar terms.**

The reasons for this are discussed above in general terms, and will be discussed in Part 3 in more specific terms.

**Part 3 will follow tomorrow and Part 4, afterward.**

My wife and colleague Trish Williams-Mello helped extensively with this letter; I hope you will be able to meet her some time.

Sincerely,

Greg Mello, Executive Director

Attachments to Part 1

1. [“The U.S. nuclear weapons complex: Pushing for a new production capability,”](#)*The Bulletin Online*, 03/21/08.
2. [“Build Warhead Factories Now, Worry about Weapons Policy Later – Will Congress Take Back the Reins?”](#), 02/12/08.
3. [“Last Bush nuclear weapons budget seeks end-run on weapons programs, ignores congressional direction”](#), 02/04/08.
4. [“The Reliable Replacement Warhead \(RRW\) Program Can't Meet Congressional Objectives,”](#) (pdf), 04/16/07.

cc: [others]