



Scoping Comments on the Future Bombplex

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Via email to Complex2030@nnsa.doe.gov

Dear Mr. Theodore A. Wyka,

Nuclear Watch New Mexico (NWNM) hereby submits these comments on the needed scope of analysis and consideration for the draft “Complex 2030 Supplemental Programmatic Environmental Impact Statement” (hereinafter “SPEIS”), as allowed for by the statutes of the National Environmental Policy Act.

“Let me make my position clear,” [Rep. David] Hobson [R.-OH] wrote in the letter to Energy Secretary Bodman. “If the department is not willing to conduct a thorough and objective analysis of all reform alternatives including the CNPC, and instead is determined to conduct an obviously prejudicial process aimed at ensuring the department’s preferred outcome, then I will not support funding for the Complex 2030 efforts, including the Reliable Replacement Warhead program.”¹

We share Rep. Hobson’s concerns that this SPEIS is “an obviously prejudicial process aimed at ensuring the department’s preferred outcome,” in large part because the National Nuclear Security Administration’s (NNSA’s) stated three alternatives, even the so-called No Action and Reduced Operations Alternatives, all expand nuclear weapons design and production. Moreover, there are continually shifting NNSA justifications for its purportedly needed Complex 2030, circumstantially evident of a prejudicial preferred outcome. If the first rationale doesn’t get Congressional and public buy in, then come up with another rationale to support the preferred outcome! As Groucho Marx said, “If you don’t like my principles, wait a minute, I got others!”

NNSA must seriously consider programmatic draw down in the draft SPEIS - - in a phrase “Clean Up, Don’t Build Up” - - because:

- 1) New evidence shows that U.S. nuclear weapons remain reliable for periods of time double that previously thought.
- 2) There is a critical need to strengthen the global nonproliferation regime, not undermine it through new nuclear weapons designs and expanding bomb production.
- 3) The Reliable Replacement Warhead program, the touted “enabler” for complex transformation, should be abandoned because it is not needed (re: #1 above), could imperil national security by substituting untested

¹ “Key legislators threaten funds for nuclear weapons overhaul, Bush administration abandoning effort to consolidate, they say,” James Sterngold, San Francisco Chronicle, January 14, 2007, <http://sfgate.com/cgi-bin/article.cgi?file=/c/a/2007/01/14/MNGRPNID5U1.DTL>

designs for the already extensively tested existing nuclear deterrence, and new designs are a provocatively negative example to the global nonproliferation regime.

What is needed is serious re-examination of whether present and future U.S. nuclear weapons policies are in the best interests of national and international security. We argue that NNSA's Complex 2030 proposal miserably fails that test. Somewhat surprising to us is that we appear to be increasingly less and less in a minority view. Federal government luminaries such as ex-Secretaries of State Kissinger and Schultz, ex-Secretary of Defense Perry, and ex-Chair of the Senate Armed Services Committee are now arguing forcibly that

Nuclear weapons today present tremendous dangers, but also an historic opportunity. U.S. leadership will be required to take the world to the next stage -- to a solid consensus for reversing reliance on nuclear weapons globally as a vital contribution to preventing their proliferation into potentially dangerous hands, and ultimately ending them as a threat to the world.

The Non-Proliferation Treaty (NPT) envisioned the end of all nuclear weapons. It provides (a) that states that did not possess nuclear weapons as of 1967 agree not to obtain them, and (b) that states that do possess them agree to divest themselves of these weapons over time. Every president of both parties since Richard Nixon has reaffirmed these treaty obligations, but non-nuclear weapon states have grown increasingly skeptical of the sincerity of the nuclear powers...

Achieving the goal of a world free of nuclear weapons will also require effective measures to impede or counter any nuclear-related conduct that is potentially threatening to the security of any state or peoples.

Reassertion of the vision of a world free of nuclear weapons and practical measures toward achieving that goal would be, and would be perceived as, a bold initiative consistent with America's moral heritage. The effort could have a profoundly positive impact on the security of future generations. Without the bold vision, the actions will not be perceived as fair or urgent. Without the actions, the vision will not be perceived as realistic or possible.²

Moreover, a former President has stated "rejecting or evading almost all nuclear arms control agreements negotiated during the past 50 years, the United States has now become the prime culprit in global nuclear proliferation."³

Using the above statements as a litmus test on the propriety of the NNSA's Complex 2030 proposal (appropriate, in our view), then the agency not only fails to, but seriously regresses in:

- 1) Reasserting America's moral heritage. The U.S. should lead in the eventual elimination of weapons of mass destruction, which definitely imperil national and international citizens' pursuit of "Life, Liberty, and the Pursuit of Happiness."
- 2) Profoundly and positively impacting the security of future generations.
- 3) Acting in a manner that will be internationally perceived as fair and urgent, when it in effect proposes the indefinite preservation of nuclear weapons, including new designs and expanded bomb production.
- 4) Aborting the possibility of a world free of nuclear weapons by virtue of implementing plans for new designs

² "A World Free of Nuclear Weapons," George Shultz, William Perry, Henry Kissinger and Sam Nunn, January 4, 2007, Wall Street Journal, Page A15, <http://online.wsj.com/article/SB116787515251566636.html>

³ "U.S. Today is "Prime Culprit" in Nuclear Proliferation, Carter Warns," December 22, 2006, <http://www.politicalaffairs.net/article/articleview/4589/1/228/>

and expanded bomb production, specifically contradicting the NPT's mandate to eventually disarm nuclear stockpiles.

5) Leading the world to the next stage.

In short, NNSA's Complex 2030 proposal is completely out of sync with "effective measures to impede or counter any nuclear-related conduct that is potentially threatening to the security of any state or peoples" (further examined in a comment section below). This is one of the particularly unique attributes of nuclear weapons, which is possession of nuclear weapons by any one country threatens all countries and societies. We think this should be a fundamental axiom of any future U.S. nuclear weapons complex - - in order to increase our own national security international nuclear weapons security must be enhanced - - the old "all boats rise with the tide" cliché. Clearly, NNSA's Complex 2030 proposal fails that test, and should be withdrawn and reformulated to conform to strongly enhancing the global nonproliferation regime under the NonProliferation Treaty.

- The U.S. should undergo fundamental review of its nuclear weapons policies such that they align with strengthening the global nonproliferation regime. We suggest that this would be an appropriate task for the National Academy of Sciences to undertake as an initial step in that fundamental review.
- We realize this will fall on deaf ears, but NNSA should withdraw its Complex 2030 proposal until that fundamental review is completed. [Further buttressed in the section below on the Nuclear Posture Review.]

The NonProliferation Treaty

The 1970 NonProliferation Treaty (NPT) obliged all nuclear weapons states signatories to Article VI, which states "Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament..." In 1996, the International Court of Justice ruled that the use or threat of use of nuclear weapons was illegal,⁴ except for extreme cases of dire national survival, and concrete steps toward disarmament were required. At the 2000 NPT Review Conference the nuclear weapons signatories pledged to 13 specific disarmament steps, which included an "unequivocal undertaking by the nuclear-weapons States to accomplish the total elimination of their nuclear arsenals leading to nuclear disarmament to which all states are committed under Article VI."

Complex 2030's preferred expanded operations alternative of increased nuclear weapons research and production directly contradicts that Treaty obligation, especially given NNSA plans to increase nuclear weapons production, including new designs under the so-called Reliable Replacement Warhead Program. Any future U.S. nuclear weapons complex should comport with not only the NPT's mandate to disarm nuclear stockpiles, but also with the critical need for the U.S. to lead by example in ridding the world of weapons of mass destruction, of which nuclear weapons are unquestionably both the most militarily useful and the most destructive.

This conflict with the NPT is most graphically illustrated by the NNSA statement that a "continuous design/deployment cycle that exercises design and production capabilities"⁵ is contemplated for Complex 2030. In other words, there is no end date for the U.S.'s ongoing development and production of nuclear weapons. How

⁴ For a lengthy inventory of documented threats made by the U.S. to use nuclear weapons against other countries from the Korean to the first war in Iraq, see "U.S. nuclear threats: Then and now," Natural Resources Defense Council. Sept/Oct 2006 *Bulletin of Atomic Scientists*.

⁵ Complex 2030 Infrastructure Planning Scenario, NNSA, October 2006, p. 9.

does this comport with the NPT, and the urgent need for the U.S. to strengthen the global nonproliferation regime by example?

- The NNSA should propose and build a future nuclear weapons complex that comports with the NPT rather than conflicting with it. [For more, see the “Fourth Alternative” comment section below.]
- NNSA should withdraw its Complex 2030 proposal until fundamental review of U.S. nuclear weapons policies is completed. [Further buttressed in the section below on the Nuclear Posture Review.]

Shifting Justifications for Complex 2030

In 2002, while announcing the need for the now defunct Modern Pit Facility capable of production of up to 450 plutonium pits per year, a NNSA spokesman sated “We know that plutonium pits have a limited lifetime.” Without replacing the bombs, “we could wake up and find out half our stockpile gone to waste.”⁶ This remains relevant because NNSA’s Complex 2030 proposal revolves centrally around a new Consolidated Plutonium Center (CPC) with baseline production of 125 pits per year, plus R&D operations involving Security category I/II quantities of plutonium.

However, a study released in November 2006 by JASON, a group of eminent scientists consultant to the federal government, concluded that pits last double NNSA’s previous estimates of 45-60 years as follows:

“Most primary types [pits surrounded by high explosives] have credible minimum lifetimes in excess of 100 years as regards aging of plutonium; those with assessed minimum lifetimes of 100 years or less have clear mitigation paths that are proposed and/or being implemented.”⁷

At times NNSA appears intent on emphasizing that it is maintaining nuclear weapons that are nearing 40 years of age. However, the oldest weapons in the planned U.S. stockpile are now 28 years old.⁸ In combination with the pit lifetime studies, this leaves some seven decades for democratic discussion of rational nuclear weapons policies and stockpile reductions as per international treaties.

We suggest that not much has really changed. DOE knew in 1993 about the longevity of U.S. nuclear weapons:

“... although nuclear weapons age, they do not wear out; they last as long as the nuclear weapons community (DoD and DOE) desires. In fact, we can find no example of a nuclear weapons retirement where age was ever a major factor in the retirement decision.”⁹

In the reach for other justifications for Complex 2030, a spokesman for Senator Pete Domenici, always a staunch supporter of NNSA nuclear weapons programs in New Mexico, said “Regardless of the quality or safety of the plutonium, there will still be various other parts of the weapons program that will age and need to be dealt with.”¹⁰ Even this Complex 2030 Document Manager in his hearing presentation has stated “Neither plutonium lifetime nor pit lifetime equal weapon lifetime. A nuclear weapon relies on 1,000’s of parts and components...

⁶ NNSA spokesman Brian Wilkes, The Las Vegas Sun, September 27, 2002.

⁷ “Pit Lifetime,” JASON, November 20, 2006, http://www.nukewatch.org/facts/nwd/JASON_ReportPuAging.pdf

⁸ See “The Age of U.S. Nuclear Weapons” at <http://www.nukewatch.org/facts/nwd/WeaponsAge.pdf>, based on data from the 1995 “Stockpile Surveillance: Past and Future,” Miller, Immele and Hagengruber, Los Alamos, Sandia and Lawrence Livermore National Laboratories, August 7, 1995, p. 12.

⁹ Stockpile Life Study, Sandia National Laboratories, December 1993, (parens in original) http://www.nukewatch.org/facts/nwd/Sandia_93_StockpileLife.pdf

¹⁰ Matt Letourneau, Domenici spokesman, “Longer Lives Seen for Nukes,” John Arnold, Albuquerque Journal, November 30, 2006.

We must have a responsive infrastructure to support the stockpile because we know that stockpile repairs and replacements will be required.”¹¹

But these arguments were debunked years ago. “... the high explosive used in US weapons has been found to improve systematically with age in key measures of performance...”¹² Notably, the precursor to this Supplement stated in 1996 “Thus, over time [due to manufacturing data and subsequent lab tests], high confidence in the safety and reliability of nonnuclear components and subsystems can be established.”¹³ But DOE chooses to neglect simple nuts and bolts steps to ensure stockpile safety and reliability: “...as a result of the continuing backlog of surveillance tests, the Department lacks vital information about the reliability of the stockpile.”¹⁴

The Complex 2030 Document Manager stated in public scoping hearings that “neither plutonium lifetime nor pit lifetime equal weapon lifetime. A nuclear weapon relies on thousands of parts and components, and we must have a responsive infrastructure to support the stockpile because we know that the stockpile repairs and replacements will be required.” In contrast, the 1996 Stockpile Stewardship Management PEIS, from which this Complex 2030 supplemental PEIS is “tiered,” states “over time, due to manufacturing data and subsequent lab tests, high confidence in the safety and reliability of nonnuclear components and subsystems can be established.”

The head of the DOE Office of Transformation now claims that the complex must be transformed, whether or not new RRW designs are built. “George Allen, head of the NNSA’s Office of Transformation, suggested the proposal might move forward without the new bombs. Were going to have to have transformation of the complex whether we have the reliable replacement warhead or not, he said.”¹⁵ In contrast, DOE had previously and repeatedly testified to Congress that RRW is the “enabler” for transformation. In our view, justification for the future Bombplex is a moving target. Therefore, it is hard to discern if this Complex 2030 programmatic environmental impact statement is for support of the existing stockpile, for new-design nuclear weapons, or some combination thereof.

DOE has repeatedly claimed that Complex 2030 will save taxpayers money, without any supporting justification. The Government Accountability Office has quoted DOE as saying it estimates that transformation to Bombplex will cost \$150 billion, which does not include future cleanup or decommissioning, nor annual operating costs.

- Please explain what is the true need for new design nuclear weapons and production. Won’t national security be diminished through reliance on future untested nuclear weapons designs instead of the already extensively tested existing stockpile?
- Please describe any needed repairs or component replacements that the current complex is not able to accomplish.
- This SPEIS must analyze different sets of potential environmental impacts, that is a Complex 2030 sized for the existing stockpile, one for new designs, a combination thereof, and most importantly a radically reduced stockpile with no new designs simply because new designs are not needed and many of the existing nuclear weapons can and should be dismantled.

¹¹ Mr. Ted Wyka, Complex 2030 Document Manager, Socorro, NM hearing, December 4, 2006.

¹² “Science-Based Stockpile Stewardship,” Dr. Raymond Jeanloz, December 2000, Physics Online.

¹³ Stockpile Stewardship and Management PEIS, DOE, 1996, Summary p. 19.

¹⁴ “Follow-up Audit on Stockpile Surveillance Testing,” DOE Inspector General, October 2006.

¹⁵ “Leaner lab draws criticism, New bombs, complex seen as a step toward perpetuating nuke arsenal,” Ian Hoffman, Inside Bay Area, 12/13/2006.

- Please analyze the impacts of diverting taxpayer dollars to new nuclear weapons facilities, instead of cleaning up the massive environmental damage caused by past research and production.
- What are the long-term public health and ecological effects of leaving radioactive and chemical contaminants that may pollute precious water resources, while new, unnecessary, and costly nuclear facilities are being built?
- DOE must provide a life cycle budget for Bombplex that includes construction, operation, decommissioning, and cleanup of the complex. This budget must also incorporate the cost of disposal of hazardous and radioactive materials.
- Please provide a rigorous cost analysis that verifies or not DOE's claim that Complex 2030 will save taxpayer dollars.
- Please explain in detail why the existing nuclear weapons complex is not cost-effective and cannot provide needed future infrastructure, thereby necessitating Complex 2030. What, if anything, needs to be changed in order make the existing complex more cost-effective? In particular, given the results of the plutonium pit lifetime study and the need to strengthen the global nonproliferation regime by solid example, why can't the existing nuclear weapons complex be radically downsized under a Responsible Curatorship Alternative?
- To date, DOE has spent ~\$90 billion on its Stockpile Stewardship Program, and at the same time claims that the Program is not failing. Why then is the Program not adequate for maintaining the stockpile? As a corollary, how can increased costs for Complex 2030 be justified?

So what exactly is the purpose of Complex 2030? Clearly it is not merely to maintain stockpile safety and reliability as claimed and constantly touted. In our opinion, if NNSA took that purpose truly to heart it would not be chronically behind in stockpile surveillance tests. That is one major factor in our fourth alternative proposed below.

A Fourth Alternative

The U.S. is flirting with the initiation of another nuclear arms race, the first since the end of the Cold War. "Complex 2030," better stated as "Bombplex," is the Department of Energy's plan to rebuild the nuclear weapons complex for continuing nuclear warhead production throughout the 21st century, including new designs.

The National Environmental Policy Act (NEPA) requires a hard look at reasonable alternatives to preferred federal proposals. The Bombplex process, as currently framed, offers a false choice between varying degrees of increased nuclear weapons production.

DOE's stated preference is to expand the production of plutonium pits, the triggers for modern thermonuclear weapons, to at least 125 per year. The so-called no-action and reduced operations alternatives both propose to expand pit production at the Los Alamos National Laboratory (LANL) to 80 pits per year, up from the currently sanctioned 20 pits annually. In its "Consolidated Plutonium Center" fact sheet DOE states "The Consolidated Plutonium Center (CPC) proposal addresses a critical gap in the credibility of the long-term nuclear deterrent of the United States, namely the lack of capability and associated capacity to manufacture plutonium pits to support the stockpile - a gap that resulted from shutdown of the Rocky Flats Plant in 1989."

DOE has failed to propose a fourth option, a "Responsible Curatorship Alternative" that conforms to both the U.S. Constitution and the international NonProliferation Treaty (NPT). Article VI of the U.S. Constitution mandates that "all treaties made, or which shall be made, under the Authority of the United States, shall be the

supreme Law of the Land.” NPT Article VI, effective since 1970, requires its signatories (including the U.S.) to “pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament...” Complex 2030 clearly does not move the U.S. in that required direction, but instead seeks to indefinitely postpone required disarmament.

The Congressional Research Service has noted that “NNSA questions if LEP [Life Extension Programs] can maintain them indefinitely on grounds that an accretion of minor changes introduced in replacement components will inevitably reduce confidence in warhead safety and reliability over the long term.”¹⁶ This is then used as justification for the Reliable Replacement Warhead Program.

To the contrary, we believe that the plutonium pit lifetime studies have demonstrated that nuclear weapons can be maintained indefinitely, in combination with a Stockpile Evaluation Program that should benefit from a higher level of prioritization. It has long been clear that the non-nuclear components can be rigorously tested outside of the weapons, and that unarmed nuclear weapons systems can be tested as a whole through high fidelity flight tests.

It is interesting to note that in 1999 JASON reported:

Ideally, the scale and time-table of remanufacturing should be determined by the scale and time-table of warhead deterioration revealed by stockpile surveillance. Until now, clear evidence of warhead deterioration has not been seen in the enduring stockpile, but the plans for remanufacturing still assume that deterioration is inevitable on the timescale of the old, arbitrarily defined [nuclear weapons] “design lives”...¹⁷

The results of the 2006 JASON “Pit Lifetimes” very strongly reinforce that observation. We believe that and other factors obviate the need for NNSA’s proposed level of production of 125 pits per year and the Reliable Replacement Warhead, with emphasis on the fact that the two are inextricably intertwined. Therefore, we propose the following:

- The currently sanctioned production level of 20 pits per year at LANL is sufficient for maintaining deterrence, especially given the pit lifetimes studies.
- Complying with the U.S. Constitution is inherently a reasonable alternative, and needs to be incorporated into all proposals concerning the future of the nuclear weapons complex. As a “Supreme Law of the Land,” progressive compliance with the NonProliferation Treaty should be the inherent aim and direction of the future U.S. nuclear weapons complex.
- DOE must analyze a Responsible Curatorship Alternative or the roughly equivalent that safely maintains the nuclear stockpile while it awaits eventual dismantlement under the NPT.
- DOE should analyze how a Responsible Curatorship Alternative would encourage non-signatory nuclear weapons states to join the nonproliferation regime under the NPT and thereby enhance global security.
- The Moscow Treaty signed by Presidents Bush and Putin in 2002 require Russia and the U.S. to reduce their stockpiles to 2,200 or under deployed strategic nuclear weapons by 2013. Apparent U.S. plans are to keep ~4,000 weapons in a “responsive reserve,” from which they could be withdrawn for future redeployment. Given the newly accepted lifetimes of plutonium pits and nonproliferation concerns, DOE must consider the irreversible dismantlement of those ~4,000 reserve weapons, which would dramatically lower security costs and the needed footprint and composition of the future nuclear weapons complex.

¹⁶ CRS RL33748, Nuclear Warheads: The Reliable Replacement Warhead Program and the Life Extension Program, Jonathan Medalia, December 13, 2006, Summary.

¹⁷ “Remanufacturing,” JASON, JSR-99-300, 1999, p. 8.

- DOE also must reconsider and analyze its purported need for new, untested designs under the so-called Reliable Replacement Warhead (RRW) Program and the claimed need for production of at least 125 plutonium pits per year.

Nuclear Warhead Dismantlements

We are not by nature and character just constant naysayers. There is one aspect of the Complex 2030 proposal that we can wholeheartedly embrace and encourage, which is a greatly accelerated rate of U.S. nuclear warhead dismantlements. We believe that would be good for both our country and the world at large.

Having said that, we find the reason given by the now-Acting NNSA Administrator for increased dismantlements to be extremely cynical, which is to show that the U.S. is not initiating a new arms race through the Reliable Replacement Warhead Program. We have consistently argued that qualitative steps, and not just quantitative steps in the reduction of warhead numbers (which is pretty meaningless to begin with given the overkill factor in total megatonnage), toward nuclear disarmament is what are truly needed. Therefore, we recommend the following:

- Increased nuclear warhead dismantlement rates should be de-linked from the Complex 2030 proposal and the Reliable Replacement Warhead Program and proceed on their own merits.
- NNSA should consider and analyze the merits of increased dismantlement rates based on resulting lower security costs, lower stockpile maintenance costs, the lowered need for a supporting nuclear weapons complex, and the benefits of strengthening the global nonproliferation regime by solid example.
- Dismantlement rates should be based on the Moscow Treaty level of 2,200 or less deployed strategic weapons, coupled with the irreversible dismantlement of reserve nuclear weapons, now shown to be not needed because of the plutonium pit lifetime studies.
- NNSA programs should be prioritized to accelerate dismantlements. For example, work on Life Extension Programs is now crowding out the same Pantex facilities that should be dismantling excess U.S. nuclear weapons. Dismantlements should be given priority over those programs.
- Coincident, NNSA should prioritize the most safe, economical and proliferation-resistant method of final disposition of nuclear weapons-usable materials possible. We recommend special nuclear materials (SNM) immobilization, in contrast to provocation and proliferation-encouraging programs such as the reprocessing and reuse of weapons materials in commercial nuclear reactors. In any event, the final disposition of special nuclear materials must be an integral part in any discussion of a future nuclear weapons complex.

Plutonium Pit Production Levels of 20 Per Year at LANL Are Sufficient for Maintaining the Stockpile

The Los Alamos National Laboratory (LANL) is currently sanctioned to produce 20 plutonium pits per year. Pits are the atomic “triggers” for today’s nuclear weapons, and their production was formerly done at the notorious Rocky Flats Plant until operations ceased following a FBI raid investigating environmental crimes. NNSA has since struggled to establish “interim” production at the Lab, while at the same time proposing to build and operate a future “Modern Pit Facility” (MPF) capable of producing up to 450 pits per year at one of five candidate sites (including LANL). That proposal would have truly represented a return by the U.S. to industrial-scale nuclear bomb production, but fortunately MPF funding has been rejected by Congress for two consecutive years. Now with Complex 2030 NNSA proposes to build a Consolidated Plutonium Center (CPC) capable of at least 125 pits per year, plus handle all R&D operations involving Security Category I/II quantities of plutonium.

There are strong reasons why LANL's so-called "interim" production of 20 pits per year is sufficient to maintain the U.S. nuclear weapons stockpile. Some major ones are:

- 1) The pit lifetime studies have shown that pits have reliable lifetimes of a century or more. Nuclear weapons in the planned U.S. stockpile are less than 30 years old. Hence what is the need for a baseline capacity of 125 per year?
- 2) The real driver for expanded pit production is that NNSA wants new pits for the Reliable Replacement Warheads. As NNSA has stated to corporate competitors for the Livermore Lab management, its goals are to "Complete the consolidated plutonium center with a capacity to support 125 RRW war reserve pits per year by 2022. Upgrade PF-4 [the pit production facility at LANL] to support an interim production rate of 30 to 50 RRW war reserve pits/year by 2012."¹⁸ Related, a current NNSA proposal is to expand pit production at LANL to 50 certified pits per year. In combination, we conclude that expanded pit production is primarily about RRW pits for new nuclear weapons designs.
- 3) RRW is simply not needed, in fact dangerous to our ongoing national security, as we argued in a comment section above.

We repeat that production levels above 20 pits per year are not needed. But irrespective of what the future level may be, there are clear indications that there is growing Congressional resistance to building weapons-related plutonium facilities at sites other than LANL, primarily out of growing fiscal constraints. For example, in May 2006, the Congressional House Subcommittee for Energy and Water Development Appropriations cut Fiscal Year 2007 construction funding for the Chemistry and Metallurgy Research Replacement Project (CMRR) from the requested \$112,422,000 to \$12,422,000. CMRR is a new advanced plutonium facility now being built next to LANL's existing pit production facility. As the House Subcommittee put it, because of the transition to Complex 2030, "CMRR will serve its primary production support function for only eight years before it is made obsolete by the new [consolidated] plutonium facility... *The Committee finds this type of planning by the NNSA simply irrational.* It appears designed to maximize future budgets and the number of new facilities required... The Committee directs the Department [of Energy] to terminate the CMRR project and instead co-locate future production capacity and the radiological chemistry materials research work."

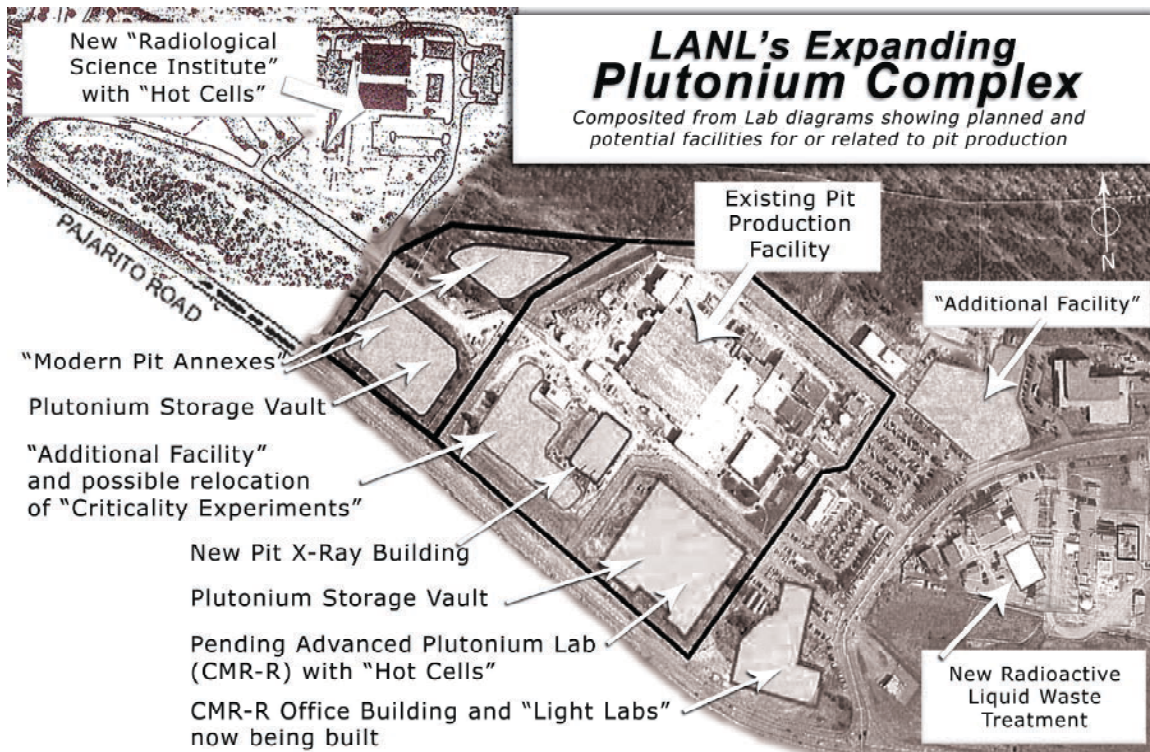
At the same time, in July 2006 the Senate Subcommittee for Energy and Water Development Appropriations, chaired by New Mexico's Pete Domenici (long an ardent supporter of LANL's nuclear weapons programs), fully funded the construction of CMRR. However, the Subcommittee expressed that it was "skeptical" that other new weapons-related plutonium storage and manufacturing facilities can be built anywhere other than at LANL in the foreseeable future.

NNSA issued a draft LANL Site-Wide Environmental Impact Statement (DSWEIS) in July 2006. One of its reference documents showed an aerial photograph of LANL's plutonium complex at Technical Area (TA)-55, upon which was superimposed speculative "Modern Pit Annexes" and "Additional Facility Sites" contiguous to the existing pit production facility. Taken together, their aggregated floor space seems to exceed that of the existing facility. Moreover, the Radiological Sciences Institute, the single biggest construction proposed in the DSWEIS (up to 13 new buildings), could also directly add plutonium pit production in the future. First, the Institute will be primarily located at TA-48, contiguous to TA-55. It will reportedly have a Security Category I/II vault for special nuclear materials and underground tunnels so that aboveground transport of SNM on roads can be avoided. It is not stated where the tunnels would lead to, but we assume they could lead to the plutonium pit production facility. The Institute is planned to have machining capabilities. In short, the DSWEIS seems

¹⁸ Complex 2030, A Preferred Infrastructure Planning Scenario for the Nuclear Weapons Complex, NNSA view-graphs, May 2006, slide 17.

intent on creating a facility infrastructure that could enable future plutonium pit production levels even above that of the 50 certified pits per year contemplated in the DSWEIS. Our ultimate point here is that, while we do not condone it, the future LANL weapons-related plutonium infrastructure should be more than sufficient to meet the needs of maintaining the U.S. nuclear stockpile at 20 pits per year or more, as this map helps to

indicate:



- Pit lifetime studies show that pits last a century, hence productions levels of 125 per year are not necessary and should be abandoned.
- The true driver for NNSA's desired level of 125 pits per year is RRW, which should be abandoned, thereby obviating the need for expanded plutonium pit production levels.
- Federal fiscal constraints and Congressional concerns may well limit future plutonium pit production levels and the construction of nuclear weapons-related facilities other than at LANL, therefore NNSA should proposed a revised nuclear weapons complex that incorporates dramatically lowered production levels at LANL and forget about other potential pit production sites.
- In keeping with the need to strengthen the global nonproliferation regime under the NPT, NNSA should produce new plutonium pits only on as needed basis to ensure stockpile safety and reliability, a level that we suspect approaches zero. In that vein, NNSA should consult with both JASON and the National Academy of Sciences as to what those future needed levels might be.

Complex 2030 Environment, Safety and Health Impacts

Complex 2030 will likely involve the decontamination and decommissioning (D&D) of many existing contaminated facilities. Inevitably, large volumes of radioactive and hazardous wastes will be shipped and dumped in a number of sites across the country.

- Please include the environmental impacts of the D&D of all possible buildings.
- Please consider the alternative of storing all waste on-site.

- For all of the alternatives, the SPEIS must describe the volumes and types of radioactive and hazardous waste, how and where that waste will be stored and disposed, and the costs and impacts of such storage and disposal.
- The environmental impact of increased waste going to private waste disposal facilities must be analyzed. Despite the fact that wastes may end up in a private waste facility, those facilities still need environmental impact statements for the communities living near private disposal facilities.
- The full cost of D&D of existing facilities, the cost of designing, constructing, operating, decontaminating, and decommissioning all the facilities in Bombplex 2030 must be fully analyzed and the costs described in the draft SPEIS. In the words of the SPEIS' Notice of Intent, how these costs are "economically sustainable" must be fully described and evaluated.
- Please describe the health and environmental impacts of the existing complex as well as the proposed new complex.
- Please project cleanup costs of Complex 2030.

“Supplemental” in this NEPA Process

We question whether this programmatic NEPA process on the future of the nuclear weapons complex is appropriate as a “Supplement” to the 1996 Stockpile Stewardship and Management Programmatic Environmental Impact Statement (PEIS). First we note that a decade has already gone by since the last PEIS, and this is before there is even a draft Complex 2030 SPEIS. Additionally, DOE NEPA Implementing Regulations are clear that new Site-Wide Environmental Impact Statements are required every 10 years for complex, multi-mission DOE sites. It strikes us that sweeping proposals such as Complex 2030, which after all has to be built upon NNSA’s complex and multi-mission sites, should also be a new PEIS since more than 10 years has gone by. We can understand and did not dispute why the draft NEPA analysis for the now defunct Modern Pit Facility was issued as a supplement since the subject at hand was essentially limited to plutonium pit production. However, the Complex 2030 proposal clearly far transcends that more narrow issue since it involves transformation of the Complex as a whole. We strongly argue that NNSA should issue the Complex 2030 draft as a new PEIS. Failing that, NNSA should fully explain why a supplement remains defensible.

- The draft Complex 2030 should be issued as a new programmatic environmental impact statement.
- Because of its likely size and complexity, the public comment period for the draft should far exceed the minimum requirement of 45 days. We request at least 120 days.
- Upon the release of the draft, DOE should make cited reference documents immediately available on the Internet.

The Kansas City Plant

The October 19, 2006 Complex 2030 Notice of Intent states:

While the Complex 2030 planning scenario proposes to consolidate further non-nuclear production activities performed at the Kansas City Plant, this proposal will be evaluated in a separate NEPA analysis, as was done in the 1990s. NNSA believes that it is appropriate to separate the analyses of the transformation of non-nuclear production from the SEIS because decisions regarding those activities would neither significantly affect nor be affected by decisions regarding the transformation of nuclear production activities.

We believe the last sentence to be false. We have already argued that important aspects of the Complex 2030

proposal are happening now, not sometime in the hazy future, such as the Reliable Replacement Warhead (RRW). We have already documented how NNSA plans to build up to 50 RRWs by 2012 (or at least their plutonium pits) and 125 by 2030. To say that a decision like that would not affect operations at the Kansas City Plant (KCP) defies belief. Moreover, we assert that operations at KCP clearly impact the rest of the Complex given that the vast majority of components in a nuclear weapon are non-nuclear, while at the same time NNSA is intent on producing a fourth generation of nuclear weapons.

The magnitude of operations supporting the entire U.S. nuclear weapons enterprise is made clear in the following quotes: “The scope of operations at the Kansas City Plant includes manufacturing and/or procuring a multitude of nonnuclear electrical, electronic, electro-mechanical, mechanical, plastic, and metal components for nuclear weapons... [A]n average of 5,000 weapon packages are shipped monthly.”¹⁹ “The non-nuclear components we produce comprise 85 percent of the parts manufactured within the nuclear weapons complex, as well as 85 percent of the components that constitute a nuclear weapon.”²⁰ At the time [July 2005], Caroline Bibb, president of the Honeywell Corp. subsidiary that operates the Kansas City Plant for DOE, said *the plant was experiencing its heaviest workload in 20 years and was projecting that the pace would continue until 2015.*²¹ [All emphases added.]

Finally, we note that broad NNSA budget categories under “Total Weapons Activities” are applied to KCP just like they would be at the other sites. We argue that NNSA makes an artificial distinction between nuclear and non-nuclear component production, when clearly the two are not only inextricably linked but are given additional emphasis in NNSA’s search for a more “responsive infrastructure.” Two more points show how completely integrated KCP is to the complex as a whole: 1) 10% of its work force resides in New Mexico at or near our two nuclear weapons labs; and 2) LANL and KCP were chosen by NNSA as “pilot programs” to give greater contractor self-oversight as a model to the rest of the complex (a grave mistake, we believe, especially in LANL’s case). In short, KCP should be fully considered in the Complex 2030 SPEIS.

Added to this is the fact that NNSA is apparently intent on relocating KCP to an entirely new location and facility, as shown in the following quotes: “Honeywell said Wednesday that it planned to reduce its work force and locate to a smaller, more efficient facility in the area by 2012. Those changes would be in response to the goal of the National Nuclear Security Administration to create a smaller and safer nuclear weapons stockpile by 2030.”²² NNSA itself states

Implement a plan in 2007 that will reduce square footage of non-nuclear production at the Kansas City Plant to approximately one third of the current size through outsourcing and construction of a *new facility by 2012* implementing modern manufacturing concepts.²³ [All emphases added.]

Thus NNSA is not representing the true costs and scale of Complex 2030 transformation by excluding KCP from this SPEIS, an omission made more egregious by virtue of a new facility(ies) being involved. To repeat, KCP should be included. Having said that, where and what is the status of the “separate NEPA analysis” that the Complex 2030 Notice of Intent cites for KCP?

¹⁹ DOE November 2000 contract with Honeywell, recently extended to December 2010.

²⁰ David Douglass, President, Honeywell Federal Manufacturing & Technology before the House Armed Services Committee Procurement Subcommittee, June 12, 2002.

²¹ “Honeywell gets extension, will move KC plant,” Kansas City Business Journal, July 20, 2006.

²² “Honeywell to downsize and relocate,” Randolph Heaster, The Kansas City Star, July 20, 2006.

²³ “Complex 2030, Infrastructure Planning Scenario, NNSA, October 2006, p. 20.

The Waste Isolation Pilot Plant

The Waste Isolation Pilot Program (WIPP) is not depicted in NNSA maps of the functional nuclear weapons complex. WIPP is an essential component because that is where radioactive transuranic (TRU) nuclear weapons research and production wastes are dumped. Between now and 2030, there is nowhere else for TRU wastes to be disposed of. However, WIPP is currently scheduled to close around 2030, and all subsequent TRU waste has no declared path for disposal.

- After WIPP is closed, where are the TRU wastes to be disposed from the “continuous design/deployment cycle that exercises design and production capabilities”²⁴ contemplated under Complex 2030?
- What other WIPPs or extensions of WIPP are being considered for Complex 2030?
- WIPP or WIPP substitutes and TRU waste final disposition need to be considered and analyzed in the draft Complex 2030 document.

Intentional Destructive Acts

In a recent Federal 9th District decision on “San Luis Obispo Mothers for Peace v. Nuclear Regulatory Commission” a court found that the Nuclear Regulatory Commission erred in determining that the National Environmental Policy Act does not require the agency to consider the potential impacts of terrorist attacks at nuclear facilities. The NRC had denied Mothers for Peace its attempts to introduce terrorism as a concern under NEPA for four reasons: (1) terrorist attacks were considered too speculative; (2) the risk of terrorist attacks can’t be determined, rendering analysis meaningless; (3) NEPA does not require “worst-case” analyses; and (4) NEPA’s public process is not an appropriate forum for security issues.

In response, the Court determined that the possibility of terrorist attacks is not so “remote and highly speculative” and that their probability need not be precisely quantifiable in order for its potential environmental impacts to be considered. The Court also found that NEPA does require analysis of potential catastrophes, even if their probability is low. Finally, the Court held that “[t]here is no support for the use of security concerns as an excuse from NEPA’s requirements” and that allowing a “security exemption” from NEPA would be inconsistent with the Act’s purpose to ensure that the public can contribute to the body of information being considered by the agency.

Along with co-plaintiff Tri-Valley CAREs of Livermore, CA we used the Mothers for Peace decision in our appeal against an adverse decision in our suit against a NNSA biolab at the Lawrence Livermore National Laboratory. Similarly, the 9th Circuit appeal panel ruled in our favor that NNSA must consider “Intentional Destructive Acts” in the NEPA process for that biolab. Reportedly, NNSA is doing so in a pending environmental impact statement for a biolab at LANL. In addition, DOE has issued department-wide interim guidance that “Intentional Destructive Acts” (which includes not only terrorism but also sabotage such as by disgruntled workers) must be included in NEPA processes.²⁵

- The Complex 2030 draft document must fully consider and analyze Intentional Destructive Acts.
- The full inventories of “Materials at Risk” must be part of those calculations. For example, for the Livermore biolab only pathogenic materials in process were considered in risk calculations, and not the total resident inventory, which was an order of magnitude higher in quantity (the later not revealed by NNSA and discovered only through our use of the Freedom of Information Act).
- Integral to calculations involving Intentional Destructive Acts are Design Basis Threats (DBTs) used by

²⁴ Complex 2030 Infrastructure Planning Scenario, NNSA, October 2006, p .9.

²⁵ Available at http://www.eh.doe.gov/nepa/tools/terrorism--interim_Nepa_guidance.pdf

NNSA for security purposes and to prevent or guard against potential threats. Implementation of DBTs is also costing significant sums of taxpayers' money. DBTs should be discussed in the draft Complex 2030 document and summarized for specific facilities to the extent possible without compromising security. However, this should not be taken as *carte blanche* to categorically ignore discussion of DBTs, as we don't see how credible discussion of Intentional Destructive Acts can take place without that discussion.

Specific Comments on NNSA's Complex 2030 Facts Sheets

Located at <http://www.complex2030peis.com/project.html>

Nuclear Watch New Mexico (NWNM) hereby submits these specific comments on NNSA's "Facts Sheets" for the draft "Complex 2030 Supplemental Programmatic Environmental Impact Statement" (hereinafter "SPEIS"). The titles of the individual fact sheets are noted in bold, and quotes from them are in italics. Our bulleted comments, recommendations, and questions follow. We found it necessary to comment on these fact sheets, given the paucity of information in the NNSA's Complex 2030 Notice of Intent.

Category I/II Special Nuclear Material Consolidation

NNSA seeks to reduce security costs and increase safety through SNM consolidation opportunities.

- Please evaluate SNM consolidation without transformation of the whole complex. It does not follow that consolidation and downsizing of the complex is dependant on NNSA's 2030 proposal.
- Will this SNM consolidation require new buildings?
- Please provide existing square footages and proposed square footages for all existing facilities, proposed new facilities, and facilities that are proposed to be eliminated. Please note that the 1996 Stockpile Stewardship Management PEIS (SSM PEIS), from which this Complex 2030 supplemental PEIS is "tiered," provides plenty of precedence for giving estimated square footages of proposed buildings.
- SNM consolidation may increase the activity at some sites. Please analyze the environmental impacts of increased activities at these sites.
- Environmental, socioeconomic, demolition, and transportation impacts at all sites must be evaluated. A baseline of each of these factors at each site must be provided.
- Related transportation issues should be analyzed. Please explain the possible environmental impacts of using these transportation routes should there be accidents or terrorist incidents.
- What are the legacy environmental impacts at each site? What will the cumulative effects be?
- Please provide a detailed cost-benefit analysis of all the different alternatives. Include a current breakdown of all current costs of all SNM activities. Include an estimated breakout of all costs of SNM consolidation without transformation of the whole complex. Also, include the estimated costs of SNM consolidation included as a part of Complex 2030. Please note that the SSM PEIS ROD provides plenty of precedence for giving estimated costs of proposed buildings at different locations. Please include the costs, in detail, of not consolidating for a baseline.
- Please analyze the environmental impacts of any D&D at any site that may occur, due to moving or removing the SNM.
- Please provide a detailed analysis of the expected increased safety that will occur.
- As a baseline, please include the potential impacts of maintaining the current level of security and safety.
- Please include the impacts of merely upgrading the current level of security and safety. Please explain why ongoing transfers of special nuclear materials, such as that from the Los Alamos National Laboratory (LANL) to the Nevada Test Site and from the Lawrence Livermore National Laboratory to LANL, will not unduly prejudice decisions yet to be made under the Complex 2030 SPEIS.
- Please explain why an EIS or an EA was not needed to move the SNM from LLNL to LANL.

The Savannah River Site does not store SNM associated with weapons activities, but does store and process Category I/II quantities of SNM associated with other Department of Energy (DOE) activities.

- Please clarify if the SRS SNM is included in the consolidation. Is SNM consolidation aimed at both weapons-related SNM and non-weapons-related SNM at any other sites?

NNSA intends to remove Category I/II SNM from Lawrence Livermore National Laboratory by the end of 2014. By 2022, the Los Alamos National Laboratory is not expected to operate facilities containing Category I/II quantities of SNM associated with the weapons program.

- Please explain the rationale and safety implications of moving this SNM twice. If this SPEIS chooses a CPC, why not just move LLNL's SNM directly to the chosen CPC site?
- Will the facilities containing Category I/II quantities of SNM at Los Alamos be operated by some management entity other than LANL?

Consolidated Plutonium Center

The Consolidated Plutonium Center (CPC) proposal addresses a critical gap in the credibility of the long-term nuclear deterrent of the United States, namely the lack of capability and associated capacity to manufacture plutonium pits to support the stockpile - a gap that resulted from shutdown of the Rocky Flats Plant in 1989.

- Please explain the actual size of this gap. Exactly how many pits, by year, constitute this gap?
- Please analyze all other options to fill this gap, including getting by with less pits.
- In whose mind does this credibility gap exist?
- How long is "long-term"?
- Why is currently sanctioned production of 20 pits per year at LANL not sufficient for maintaining deterrence, especially given newly projected pit lifetimes of ~100 years.
- Assuming limited pit production capacity at LANL, what is the actual latest date that the nuclear deterrent will need increased pit production at the CPC?
- Please describe exactly how the CPC will enhance deterrence, given that resumed industrial-scale nuclear weapons production could encourage other countries to follow the U.S.'s example.
- What is the absolute last date that the nuclear deterrent can last without a new plutonium pit?

A CPC would also increase the security of plutonium operations by consolidating all activities involving quantities of plutonium requiring expensive security into one location.

- Please explain, in detail, the insecurity of current plutonium operations.
- Please explain, in detail, the need for increased security.
- Please provide a detailed cost-benefit study of upgrading security at current facilities vs. the cost of security at the CPC.
- Please explain, in detail, how putting all of NNSA's plutonium eggs into one basket will increase security. If all the plutonium operations are in one place, won't this CPC need to be absolutely secure? Can NNSA guarantee absolute security? If something happens to the CPC, all plutonium operations will be affected, unlike if plutonium operations were spread around at several sites.

A CPC would have the flexibility to manufacture various pit types as required to support and enhance the security of the stockpile, and would have a baseline capacity of 125 pits per year.

- Please be consistent with the use of the word "security." Are the various pit types protecting the stockpile from terrorists?
- Please explain exactly why the "security" of the stockpile needs to be enhanced and why having the flexibility to manufacture various pit types does this?
- Please define "baseline capacity."

- The LANL SWEIS proposed a capacity of 80 pits per year with the hopes of producing 50 certified pits per year. Does a baseline capacity of 125 pits per year at the CPC mean that NNSA hopes to get 78 certified pits per year out of the CPC? What is the ratio of pits produced to certified pits expected to be the CPC? Is this ratio expected to be different for different pit types? How is this ratio estimated?
- Or, does a baseline capacity of 125 pits mean that the CPC will need to produce 200 pits, given rejects, in order to produce 125 certified pits?
- If three out of every eight pits produced were to be rejected, this will affect the waste streams. Explain the effects.
- If three out of every eight pits do not meet specifications, does this mean that there are tight margins for these pits? Are there different margins expected for different pits? Please explain.
- For comparison, please state the ratio of pits produced to certified pits for each pit type produced at Rocky Flats.

The annual operating costs are estimated in the range of \$200 to \$300 million per [missing]

- Please complete this sentence. We can only assume that the cost range is \$200 to \$300 million per pit per year. What would be the annual operating cost of upgrading existing facilities for the alleged increased need in pit production? Please provide the estimated annual operating costs for each year and provide the number of pits produced each year. What is the estimated annual operating cost per pit per year?
- Please explain how the annual operating costs of the CPC were estimated.
- What is the estimated construction cost of the CPC? Please note that the construction costs of all the facilities proposed in the original SSM PEIS were given. For example, the total capital costs for construction of the National Ignition Facility (NIF) at LLNL were estimated to be approximately \$1.1 billion (Section 1.B.2.1).
- Is this construction cost different at different locations?
- Wouldn't the annual operating costs be different at different locations? Please explain.
- What is the proposed square footage of the CPC? Please note that the proposed size of proposed facilities has been given before. The MPF EIS, in Table 3.1.2.4-1, gave the comparative dimensions, in square meters, of the proposed facilities for each of the three different MPF capacities. The original SSM EIS-0236 stated the proposed size of all the proposed facilities. For example, the square footage of the Advanced Radiation Source (X-1) and Jupiter Facility was given as about 4,645 m² (Section 3.3.4.3).
- Wouldn't the annual operating costs be different for different sized buildings?

The baseline CPC development schedule is:

Issued Notice of Intent (NOI) on October 19, 2006 that lists sites under consideration, starting the decision process. This NOI also formally cancels the earlier MPF project.

- Because the MPF SEIS has been cancelled, it should not be referenced in the draft Complex 2030 SPEIS.

Approve Mission Need (CD-0) for CPC in 2008.

- The mission need for the CPC should be analyzed in this draft Complex 2030 SPEIS. The Complex 2030 SPEIS must analyze the purpose and need of the CPC. Will the Mission Need (CD-0) for the CPC be approved before the ROD, which, if so, would appear to be prejudicial? Please explain the rationale for the order of the baseline CPC schedule.

Issue programmatic Record of Decision (ROD) in 2008 following completion of the Complex 2030 Supplemental Programmatic Environmental Impact Statement. If a decision is made to proceed with the CPC, the ROD will also select the host CPC site.

- It is unclear if the decision to proceed with the CPC will be made in the ROD. Will the decision to proceed with the CPC be made in the ROD? The Complex 2030 SPEIS must analyze the purpose and need of the CPC.
- If a decision is made not to proceed with the CPC, will the earlier MPF project be revived?
- Please list any other scenarios that might cause the MPF project to be revived.

Complete conceptual design report and approve system requirements and alternatives (CD-1) approximately 18 months after CD-0.

- What is the proposed total square footage of the CPC? The proposed square footage of the CPC must be given in this SPEIS.

Complete site-specific environmental impact statement evaluations to support specific location and impact mitigation strategies for the selected host site during 2008-2010.

- Site-specific EIS evaluations and impact mitigation strategies for all potential CPC sites must be completed in this draft Complex 2030 SPEIS. How can NNSA select a site for the CPC without knowing all the possible environmental impacts for all the prospective sites?
- What will the decision of the specific location of the CPC be based on? Right now, it seems like they will be based on an imaginary center. Will the environmental impacts also be imaginary? Is NNSA saying, "Trust us, we can know all the environmental impacts at several locations for a center that we haven't designed yet?"
- Environmental impacts and mitigation strategies at each potential CPC site will affect the cost of placing the CPC at a particular site. Without knowing all the possible environmental impacts and the needed impact mitigation for all the prospective sites, NNSA cannot possibly know the relative costs of placing the CPC at any site.
- Please include the detailed costs and the environmental impacts of all D&D of all buildings at all sites that will be associated with a new CPC.
- The socioeconomic impacts of locating a CPC at different sites will be different. Please analyze the socioeconomic impacts of locating a CPC at all the proposed sites.

Complete CPC preliminary design and approved cost and schedule baseline (CD-2) approximately 2 years after CD-1.

- What is the estimated cost of the CPC? Will the cost of the CPC be different at each of the proposed sites? What is the cost of the CPC at each of the proposed sites? How can NNSA know that it is making the most efficient choice without pricing the cost of the CPC at each of the proposed locations?

Complete final design and approve start of construction (CD-3) approximately 2 years after CD-2.

- Is the CPC a "design-build" project? If so, please justify why.
- If the CPC is not design-build, please explain why.

Approve start of operations (CD-4) approximately 6.5 years after CD-3. Full-scale production by the end of 2022.

- A yet-to-be-designed center would be built at an unknown site. How can NNSA possibly know how long it will take to build the CPC? Will the CPC take longer to build at one proposed site or another? At which site could the CPC be built the fastest? At which site will the CPC cause the most environmental impacts? At which site will the greatest environmental mitigation measures be needed?

Environmental Test Facilities (ETFs)

The first alternative is the No Action Alternative, which equates to the status quo. Under the Transformation Alternative and Reduced Operations Alternative, NNSA will evaluate downsizing in-place and/or eliminating specific activities at the sites performing Environmental Testing; and identify unneeded, redundant capabilities for elimination, and the possible consolidation of Environmental Testing to fewer sites.

- DOE must analyze a Responsible Curatorship Alternative that safely maintains the nuclear stockpile while it awaits eventual dismantlement under the NPT.
- Please evaluate downsizing in-place and/or eliminating specific activities at the sites performing Environmental Testing without transformation of the whole complex.
- Will this downsizing or eliminating of specific Environmental Testing Facilities require new buildings?
- Please provide existing square footages and proposed square footages for all existing facilities, proposed new facilities, and facilities that are proposed to be eliminated. Please note that the 1996 Stockpile Stewardship Management PEIS (SSM PEIS), from which this Complex 2030 supplemental PEIS is “tiered,” provides plenty of precedence for giving estimated square footages of proposed buildings.
- Downsizing or eliminating of some Environmental Testing sites may increase the activity at other sites. Please analyze the environmental impacts of increased activities at these sites.
- Environmental, socioeconomic, demolition, and transportation impacts at all sites must be evaluated. A baseline of each of these factors at each site must be provided.
- What are the legacy environmental impacts at each site? What will the cumulative effects be?
- Is downsizing or elimination of specific Environmental Testing Facilities required to make room for the CPC at any site? Will downsizing or elimination of specific Environmental Testing Facilities have any effect on the location selection of a CPC or vice versa?
- Please provide a detailed cost-benefit analysis of all the different alternatives. Include a current breakdown of all current costs at all Environmental Testing Facilities. Include an estimated breakout of all costs of downsizing in-place and/or eliminating specific activities at the sites performing Environmental Testing without transformation of the whole complex. Also, please include the estimated costs of downsizing in-place and/or eliminating specific activities at the sites performing Environmental Testing included as a part of Complex 2030. Please note that the SSM PEIS provides plenty of precedence for giving estimated costs of proposed buildings at different locations.

Flight Test Program

Three alternatives are expected to be evaluated in the Complex 2030 Supplemental PEIS as possible locations where the JFTP [Joint Flight Test Program] could be accomplished: the White Sands Missile Range (WSMR) in New Mexico, the Nevada Test Site (NTS), and upgrades to the TTR. Specific locations are being evaluated to assure that the required geological conditions exist to successfully support all flight-testing requirements.

- Please evaluate relocating the JFTP without transformation of the whole complex.
- What are the required geological conditions needed to successfully support all flight-testing requirements?
- How many flight tests are conducted annually? Will this number be reduced with any of the alternatives?
- Environmental, socioeconomic, demolition, and transportation impacts at all sites must be evaluated. A baseline of each of these factors at each site must be provided.
- Will the selection of a location for the Flight Test Program have any effect on the location selection of a CPC, or vice versa?
- What are the legacy environmental impacts at each site? What will the cumulative effects be?
- Please provide a detailed cost-benefit analysis of all the different alternatives. Include a current breakdown of all current costs of the current Flight Test Program. Include an estimated breakout of all costs of relocating the JFTP without transformation of the whole complex. Also, include the estimated costs of relocating the JFTP included as a part of Complex 2030.

High Explosives Research and Development

The first alternative is the No Action Alternative, which would maintain the status quo. Under the Transformation Alternative and Reduced Operations Alternative, NNSA will evaluate downsizing in-place and/or eliminating specific activities at the four sites performing HE R&D; and identify unneeded, redundant capabilities for elimination, and the possible consolidation of HE R&D to fewer sites.

- DOE must analyze a Responsible Curatorship Alternative that safely maintains the nuclear stockpile while it awaits eventual dismantlement under the NPT.
- Please evaluate downsizing in-place and/or eliminating specific activities at the sites performing HE R&D without transformation of the whole complex.
- Will any alternative reduce the number of HE R&D experiments?
- Downsizing or eliminating of some HE R&D sites may increase the activity at other sites. Please analyze the environmental impacts of increased activities at these sites.
- Will this downsizing or eliminating of specific HE R&D sites require new buildings?
- Please provide existing square footages and proposed square footages for all existing facilities, proposed new facilities, and facilities that are proposed to be eliminated. Please note that the 1996 Stockpile Stewardship Management PEIS (SSM PEIS), from which this Complex 2030 supplemental PEIS is “tiered,” provides plenty of precedence for giving estimated square footages of proposed buildings.
- Is downsizing or eliminating of specific HE R&D sites required to make room for the CPC at any site? Will downsizing or eliminating of specific HE R&D sites have any effect on the location of a CPC or vice versa?
- How many HE experiments are conducted annually at each site? Will this number be reduced with any of the alternatives?
- Environmental, socioeconomic, demolition, and transportation impacts at all sites must be evaluated. A baseline of each of these factors at each site must be provided.
- What are the legacy environmental impacts at each site? What will the cumulative effects be?
- Please provide a detailed cost-benefit analysis of all the different alternatives. Include a current breakdown of all current costs of at all HE R&D sites. Include an estimated breakout of all costs of downsizing in-place and/or eliminating specific activities at the sites performing HE R&D without transformation of the whole complex. Also, include the estimated costs of downsizing in-place and/or eliminating specific activities at the sites performing HE R&D included as a part of Complex 2030. Please note that the SSM PEIS provides plenty of precedence for giving estimated costs of proposed buildings at different locations.

Hydrodynamic Testing

These experiments do not use fissile material (plutonium or enriched uranium), but are conducted using test assemblies that are representative of nuclear weapons.

- This statement is misleading. Even though fissile materials may not be used, non-fissile radioactive isotopes of uranium and plutonium are sometimes used. Please list all the materials, and amounts thereof, by isotope used in all different types of hydrotests.
- Please analyze the environmental impacts of all hydrotest experiments at all sites. Please analyze the environmental impacts of leaving the wastes from these tests on and in the ground.

Fissile materials are not used in large-scale hydrodynamic experiments, but may be used in sub-critical experiments, which are conducted at the Nevada Test Site (NTS).

- Please analyze the environmental impacts of leaving the wastes from these tests in the ground.

- Is moving the location of these sub-critical experiments being considered?

Hydrodynamic testing is a central component in maintaining nuclear weapons design and assessment capability.

- Please explain the need for maintaining nuclear weapons design capability. Further, please explain why LANL expended taxpayer dollars on at least one hydrotest for a speculative RRW design while at the same time it is far behind on hydrotests designed to “baseline” the safety and reliability of existing nuclear weapons

The majority of stockpile stewardship hydrotesting is conducted at Lawrence Livermore National Laboratory (LLNL) in the Contained Firing Facility at Site 300 and at Los Alamos National Laboratory (LANL) at the Dual Axis Radiographic Hydrodynamic Test Facility, where the diagnostic capabilities have been developed to meet specific weapons design agency needs.

- Please analyze the environmental impacts of any containment, or lack thereof, of these experiments.
- What is the current level of containment at DARHT, what containment methods are used, and do they conform to the DARHT environmental impact statement Record of Decision?

No Action Alternative: Existing hydrotesting firing sites remain in operation with the existing operational limits.

Transformation Alternative and Reduced Operations Alternative: NNSA will assess reasonable alternatives that would consolidate hydrotesting. This could include options with hydrotesting at one or more sites.

- DOE must analyze a Responsible Curatorship Alternative that safely maintains the nuclear stockpile while it awaits eventual dismantlement under the NPT.
- How many hydrotest experiments are conducted annually at each site? Will this number be reduced with any of the alternatives?
- Please evaluate consolidating hydrotesting without transformation of the whole complex.
- Will consolidating hydrotesting require new buildings, such as a previously floated “Advanced Hydrotest Facility”? If so, what are projected costs?
- Please provide existing square footages and proposed square footages for all existing facilities, proposed new facilities, and facilities that are proposed to be eliminated. Please note that the 1996 Stockpile Stewardship Management PEIS (SSM PEIS), from which this Complex 2030 supplemental PEIS is “tiered,” provides plenty of precedence for giving estimated square footages of proposed buildings.
- Consolidating hydrotesting sites may increase the activity at other sites. Please analyze the environmental impacts of increased activities at these sites.
- Environmental, socioeconomic, demolition, and transportation impacts at all sites must be evaluated. A baseline of each of these factors at each site must be provided.
- What are the legacy environmental impacts at each site? What will the cumulative effects be?
- Is consolidating hydrotesting required to make room for the CPC at any site? Will consolidating hydrotesting have any effect on the location selection of a CPC or vice versa?
- Please provide a detailed cost-benefit analysis of all the different alternatives. Include a current breakdown of all current costs of at all hydrotest facilities. Include an estimated breakout of all costs of consolidating hydrotesting without transformation of the whole complex. Also, include the estimated costs of consolidating hydrotesting included as a part of Complex 2030. Please note that the SSM PEIS provides plenty of precedence for giving estimated costs of proposed buildings at different locations.

National Environmental Policy Act Complex 2030 Supplemental Programmatic Environmental Impact Statement

A draft EIS describes, analyzes, and compares the potential environmental impacts of reasonable alternatives that could accomplish the purpose and need to which the agency is responding, as well as the alternatives of continuing with on-going activities (the No Action Alternative). It also provides information on the methodologies and assumptions used for the analyses. If one or more preferred alternative(s) exist at this stage of the NEPA process, they will be identified in a draft EIS.

- Please explain the impact of scoping comments from the public.

In addition to potential environmental impacts, the ROD may include consideration of other decision factors such as technical feasibility, agency statutory mission and national objectives, and cost.

- A major factor of this SPEIS is cost. Please provide very detailed cost-benefit analyses of all options at all sites. A baseline of existing economic factors at each site must be provided.

The NEPA process does not dictate that an agency select the most environmentally beneficial alternative.

- If the most environmentally beneficial alternative is not selected, increased mitigation measures will be needed. This may increase the cost. Please specify mitigation measures.

Relationship of the Complex 2030 Supplemental Programmatic Environmental Impact Statement to other National Environmental Policy Act Documents

- Please provide all documents referenced in the Complex 2030 SPEIS in electronic form on the Internet with the release of this draft SPEIS.
- Similarly, please provide all cited reference documents in electronic form on the Internet with the release of this draft SPEIS.

The SSM PEIS assessed alternatives for maintaining the safety and reliability of the nation's nuclear weapons stockpile without underground nuclear testing.

- The SSM PEIS also carefully considered the impacts on the Comprehensive Test Ban Treaty (CTBT), the Nuclear Nonproliferation Treaty (NPT), the Strategic Arms Reduction Talks (START) I Treaty, and the START II protocol. The Complex 2030 SPEIS must assess its impacts on these treaties and vice versa as well.

NNSA is not revisiting the decisions made in the SSM PEIS.

- The SSM PEIS decided to build NIF at an estimated cost of \$1.1 billion. The cost is now over \$5 billion, and NIF is not operational to this date. The SSM PEIS decided to build Atlas for an estimated \$43 million at LANL, then tore it down and moved it to the Nevada Test Site, and still has not reassembled it. We understand why NNSA does not want to revisit these decisions.
- We submit that the conclusions of the plutonium pit lifetime studies and the urgent need to strengthen the global nonproliferation regime by solid example should give NNSA pause, and cause the agency to seriously reevaluate decisions made in the SSM PEIS.

Rather, because the U.S. has determined that the nuclear weapons infrastructure plays an important role in deterrence in the future, NNSA believes it appropriate and necessary to consider further changes to improve the efficiency and responsiveness of the nuclear weapons complex.

- Please state who, exactly, the U.S. has determined that the nuclear weapons infrastructure plays an important role in deterring in the future. Please explain what role U.S. nuclear weapons will play in the ongoing and indefinite War on Terror.

The Complex 2030 Supplemental PEIS will incorporate any decisions made pursuant to the LANL SWEIS into the Supplemental PEIS analysis.

- Does this mean that the Complex 2030 SPEIS will wait to be released until after the LANL SWEIS ROD?

Responsive Infrastructure

Unanticipated events could include a problem with a deployed warhead type.

- Please give a reasonable scenario of unanticipated events.
- Has the nuclear weapons complex ever not been able to respond to a problem with a deployed warhead type?
- Please analyze whether existing programs can be used to appropriately meet unanticipated events, instead of the provocative and costly proposed Complex 2030.

Emerging threats could call for new or modified warhead development or for providing additional warheads for force augmentation.

- Please provide examples of possible emerging threats and how U.S. nuclear weapons would help meet those threats.
- Please give examples of emerging threats that cannot be deterred with the existing nuclear weapons stockpile.
- Please analyze all other means, such as diplomacy and negotiations, which could handle emerging threats.
- How would RRW, as new warheads, possibly be used toward addressing emerging threats? Does that mean that RRW warheads would have new military missions different from existing U.S. nuclear weapons, which, if so, seems contrary to Congressional intent?
- What warhead modifications, if any, are anticipated?
- Given that plutonium pits last a century or more, the need to strengthen the global nonproliferation regime, the relatively small size of other nuclear weapons states arsenals and the requirements of the Moscow Treaty, what force augmentation could be possibly needed? Please explain.
- Among other things, the 2002 Nuclear Posture Review called for lower-yield nuclear weapons so that the U.S. would not be “self-deterred” from using them. In contrast, it is commonly believed that the majority of “enduring” U.S. nuclear weapons types have variable yields, even going into the sub-kiloton. Please give the lower kiloton range of “enduring” U.S. nuclear weapons. Please explain why the planned “enduring” U.S. nuclear weapons are not sufficient for meeting “emerging threats.”

In 2001, the U.S. determined that a responsive infrastructure would be necessary for deterrence to be credible in the 21st century.

- In 2009, with ongoing domestic political changes, the U.S. may determine something else.

Without a responsive infrastructure, the U.S. may be unable to deter the adversaries of the future from threatening the U.S. or its allies.

- Please analyze all other means, such as diplomacy and negotiations, which could deter the adversaries of the future without nuclear weapons.
- But, even without a responsive nuclear weapons infrastructure, the U.S. **may be able** to deter the adversaries of the future without nuclear weapons. Moreover, given our country’s indisputable sole superpower status in conventional weaponry, it is clearly in our interests to diminish the role of nuclear weapons. Thus, why is a responsive nuclear weapons infrastructure in our interests? Please explain and analyze in detail.

Key nuclear weapons design and production capabilities have not been sufficiently exercised to be timely and efficient.

- Please name all of these key capabilities.
- What are the exact effects of these untimely and inefficient capabilities?
- If, in fact, the current nuclear weapons design and production capabilities have fallen into disrepair, please explain in detail why Complex 2030 will not ever fall into disrepair.
- Is it possible that the current nuclear weapons design and production capabilities have not been sufficiently exercised because they are simply not needed?
- DOE must provide a life cycle budget for Bombplex that includes construction, operation, decommissioning, and cleanup of the complex. This budget must also incorporate the cost of disposal of hazardous and radioactive materials.
- Please provide a rigorous cost analysis that verifies or not DOE's claim that Complex 2030 will be more efficient than the current complex.
- Please explain in detail why the existing nuclear weapons complex can't be made more cost-effective and provide the claimed needed future infrastructure, thereby obviating Complex 2030. What, if anything, needs to be changed in order make the existing complex more cost-effective? In particular, given the results of the plutonium pit lifetime studies and the need to strengthen the global nonproliferation regime by solid example, why can't the existing nuclear weapons complex be radically downsized under a Responsible Curatorship Alternative?
- To date, DOE has spent ~\$90 billion on its Stockpile Stewardship Program, and at the same time claims that the Program is not failing. Why then is the Program not adequate for maintaining the stockpile? Please analyze if any of this money was wasted and explain just why this was not enough money to maintain the current stockpile. Waste and budget are important considerations for Complex 2030. As a corollary, how can increased costs for Complex 2030 be justified?

In addition to providing credible deterrence in the 21st century, a responsive infrastructure may enable a reduction in stockpile size, by allowing "back up" needs for the stockpile to be provided by infrastructure capability rather than additional non-deployed warheads.

- Please explain why the current infrastructure, especially given the plutonium pit lifetime studies, does not enable deep reductions in the stockpile
- Please explain how "responsive infrastructure," which implies the continuous cycle of nuclear weapons research and production previously referred to, helps to strengthen the global nonproliferation regime.

Sites Potentially Affected by the Complex 2030 Supplemental Programmatic Environmental Impact Statement

Stockpile management activities include dismantlement, maintenance, evaluation, repair, and replacement of weapons and their components in the existing nuclear weapons stockpile.

- New weapons designs are not mentioned here. Please explain.

Complex 2030 describes the NNSA's vision of the nuclear weapons complex in the year 2030.

- We share Rep. Hobson's concerns that this SPEIS is an "an obviously prejudicial process aimed at ensuring the department's preferred outcome," in large part because the National Nuclear Security Administration's (NNSA's) stated three alternatives, even the so-called No Action and Reduced Operations Alternatives, all expand nuclear weapons design and production.

To achieve this vision, NNSA's proposed action is to:

- *continue currently planned modernization activities and select a site for a consolidated plutonium center for long-term research and development, surveillance, and pit manufacturing;*
- *consolidate special nuclear materials (specifically Category I/II quantities that require greater safeguards and security) throughout the nuclear weapons complex;*
- *consolidate, relocate, or eliminate duplicative facilities and programs and improve operating efficiencies;*
- *identify one or more sites for conducting NNSA flight test operations; and*
- *accelerate nuclear weapons dismantlement activities.*
 - No new weapons designs mentioned here.

The Complex 2030 Supplemental PEIS will also evaluate the No Action Alternative which represents the status quo as it exists today and includes the continued implementation of decisions made pursuant to the 1996 SSM PEIS and related site-specific environmental impact statements and environmental assessments.

- Please list all the related site-specific environmental impact statements and environmental assessments.

The following is a brief description of each potentially affected site:

- Please list, in detail, all the environmental problems caused by past weapons activities at all of these sites, also. These past environmental impacts must be included in the cumulative impacts.

Tritium Research and Development

Because these warheads depend on tritium to perform as designed, an understanding of the properties of tritium is essential, hence, the existence of tritium research and development (R&D).

- The U.S. weapons complex has been using tritium for 60 years. Aren't all the properties of tritium known by now? Do the properties of ever tritium change?

The first alternative is the No Action Alternative, maintain the status quo. Under the Transformation Alternative and the Reduced Operations Alternative, NNSA will evaluate downsizing in-place and/or eliminating specific activities at the three sites performing tritium R&D; and identify unneeded, redundant capabilities for elimination, and the possible consolidation of tritium R&D to fewer sites.

- DOE must analyze a Responsible Curatorship Alternative that safely maintains the nuclear stockpile while it awaits eventual dismantlement under the NPT.
- Please evaluate downsizing in-place and/or eliminating specific activities at the sites performing tritium R&D without transformation of the whole complex.
- Will any alternative reduce the number of tritium R&D experiments?
- Downsizing or eliminating of some tritium R&D sites may increase the activity at other sites. Please analyze the environmental impacts of increased activities at these sites.
- Will this downsizing or eliminating of specific tritium R&D sites require new buildings?
- Please provide existing square footages and proposed square footages for all existing facilities, proposed new facilities, and facilities that are proposed to be eliminated. Please note that the 1996 Stockpile Stewardship Management PEIS (SSM PEIS), from which this Complex 2030 supplemental PEIS is "tiered," provides plenty of precedence for giving estimated square footages of proposed buildings.
- Is downsizing or eliminating of specific tritium R&D sites required to make room for the CPC at any site? Will downsizing or eliminating of specific tritium R&D sites have any effect on the location of a CPC or vice versa?
- How many tritium R&D experiments are conducted annually at each site? Will this number be reduced with any of the alternatives?
- Environmental, socioeconomic, demolition, and transportation impacts at all sites must be evaluated. A

baseline of each of these factors at each site must be provided.

- What are the legacy environmental impacts at each site? What will the cumulative effects be?
- Please provide a detailed cost-benefit analysis of all the different alternatives. Include a current breakdown of all current costs at all tritium R&D sites. Include an estimated breakout of all costs of downsizing in-place and/or eliminating specific activities at the sites performing tritium R&D without transformation of the whole complex. Also, include the estimated costs of downsizing in-place and/or eliminating specific activities at the sites performing tritium R&D included as a part of Complex 2030. Please note that the SSM PEIS ROD provides plenty of precedence for giving estimated costs of proposed buildings at different locations.

Specific Comments on NNSA's Complex 2030

“An Infrastructure Planning Scenario for a Nuclear Weapons Complex Able to Meet the Threats of the 21st Century,” AKA “Getting The Job Done”

We submit these specific comments on NNSA's “Complex 2030, An Infrastructure Planning Scenario for a Nuclear Weapons Complex Able to Meet the Threats of the 21st Century”, AKA “Getting The Job Done.” Section headers are bold. Quotes from the Scenario are in italics. Our bulleted comments, recommendations, and questions follow.

An infrastructure planning scenario for a nuclear weapons complex able to meet the threats of the 21st century.

- Does this mean the WHOLE 21st century? What is the time horizon for Complex 2030? When does Complex 2030 end? This title seems to infer that Complex 2030 is intended to last until 2099. Please explain, and please explain with how that comports with the NPT.
- Please analyze other planning scenarios that will accomplish the same objective. NNSA seems to be prejudicing the outcome of the Complex 2030 SPEIS by not creating similar handouts for all other possible scenarios.
- Please explain the purpose of this document. It mentions RRW many times. However, RRW is not mentioned in any of the other NNSA Complex 2030 Fact Sheets.
- Is this document a “fact sheet”? Please explain why there are not sheets like this one to help support other possible Complex 2030 alternatives.

A New Triad is defined which consists of nuclear and non-nuclear strike capabilities, defenses, and a robust, responsive infrastructure supported by enhanced intelligence and adaptive planning capabilities.

- Please explain in detail why other Complex 2030 alternatives cannot support this “New Triad,” and the effects of not having the needs of this “New Triad” met.

The New Triad provides a balance of capabilities suited for the emerging threat environment, and provides military options that are credible to enemies and reassuring to allies.

- Please explain in detail why the other Complex 2030 alternatives cannot provide this balance for this “New Triad,” and the effects of not having this balance.
- Please describe in detail the emerging threat environment and why the existing stockpile is not suited for it.
- In the “Present” picture, it looks like a crumbling old factory cannot support the warheads. Yet, the Stockpile Stewardship Program certifies the current warheads every year. As per the Moscow Treaty, the United States is required to have 2,200 warheads or less by 2013. This reduction is required regardless if Complex 2030 is implemented or not. Could the crumbling old factory support half the number of

warheads than it does now? Would it be cheaper to just reinvest in the crumbling old factory? Please explain in detail why so-called complex transformation is needed?

- If, in fact, the current nuclear weapons design and production capabilities have fallen into disrepair, please explain in detail why Complex 2030 will never fall into disrepair.
- The goal of the Readiness in Technical Base and Facilities (RTBF) Program is to operate and maintain National Nuclear Security Administration (NNSA) program facilities in a safe, secure, efficient, reliable, and compliant condition, including facility operating costs (e.g., utilities, equipment, facility personnel, training, and salaries); facility and equipment maintenance costs (e.g., staff, tools, and replacement parts); and environmental, safety, and health (ES&H) costs; and to plan, prioritize, and construct state-of-the-art facilities, infrastructure, and scientific tools that are not directly attributable to Directed Stockpile Work (DSW) or a campaign, within approved baseline costs and schedule. Currently, the NNSA spends about \$1.6 billion a year on the RTBF Program. Are NNSA facilities really in disrepair? If so, why were these facilities allowed to crumble? Was money misspent? What will Complex 2030 spend yearly on RTBF?
- NNSA must provide a life cycle budget for Bombplex that includes construction, operation, decommissioning, and cleanup of the complex. This budget must also incorporate the cost of disposal of hazardous and radioactive materials.
- Please explain in detail why the existing nuclear weapons complex is not cost-effective and cannot provide needed future infrastructure, thereby necessitating Complex 2030. What, if anything, needs to be changed in order make the existing complex more cost-effective? In particular, given the results of the plutonium pit lifetime study and the need to strengthen the global nonproliferation regime by solid example, why can't the existing nuclear weapons complex be radically downsized under a Responsible Curatorship Alternative?
- To date, DOE has spent ~\$90 billion on its Stockpile Stewardship Program, and at the same time claims that the Program is not failing. Why then is the Program not adequate for maintaining the stockpile? Please analyze if any of this money was wasted and explain just why this was not enough money to maintain the current stockpile. Waste and budget are important considerations for Complex 2030. As a corollary, how can increased costs for Complex 2030 be justified?

Forward

The characteristics of this deterrent will evolve as the world changes. In 2001, the U.S. policy on strategic deterrence was revamped in recognition that the premise for our strategy had changed from one of deterring a peer adversary to one of responding to emerging threats.

- Deterring our peer adversary required responding to new threats from them, which the U.S. responded to. How is this different than any future emerging threat?
- Please describe the different types of warheads that different emerging threats will require.
- How does an “evolving,” instead of a gradually diminishing, U.S. nuclear weapons stockpile conform to the NPT?

Specifically, the NPR called for the following:

- *Changing the size, composition, and character of our nuclear stockpile in a way that reflects the reality that the Cold War is over;*
 - How about Cold War Over = No Nukes Needed?
 - Please describe in detail the composition and character of the proposed new nuclear stockpile. How many new designs and new missions will be required?
- *Achieving a credible deterrent with the lowest-possible number of nuclear warheads consistent with our*

national security needs, including our obligations to our allies

- Please explain why Complex 2030 is the only way to achieve this. To suggest that it is a non-sequiter. Stockpile reductions should be de-linked from the Complex 2030 proposal and the Reliable Replacement Warhead Program and considered on their own merits.

These replacement warheads will have the same military characteristics, be carried on the same types of delivery systems, and hold at risk the same targets as the warheads they replaced, but they will be re-designed for long-term confidence in reliability and greater security, and ease of production and maintenance.

- So, the RRWs will not be needed for any new emerging threats? So, the character of the future nuclear stockpile will be the same? Then why not keep the same existing stockpile, already extensively tested? Moreover, the 2002 Nuclear Posture Review suggests that the above statements are not true concerning the claim that replacement warheads will have same military characteristics.

By 2030, according to our vision, the deployed stockpile will be backed up by a much smaller, non-deployed stockpile than today.

- By 2013, the deployed stockpile is due to be 2,200 or under warheads as per the Moscow Treaty. This is about a half of today's stockpile. Please explain how the non-deployed stockpile won't be smaller anyway, irrespective of NNSA's proposal for Complex 2030.

The infrastructure that supports this smaller stockpile will be robust, fully capable and sufficiently flexible to fix technical problems in the stockpile, and able to respond to adverse geopolitical change.

- Please describe any technical problems that the current infrastructure was unable to fix.
- Does being able to respond to adverse geopolitical change mean new warhead types with new missions and military characteristics?
- How does this conform to the NPT?

Executive Summary

NNSA has developed a planning scenario that sets out our vision for the nuclear weapons complex of 2030.

- Statements like this might lead one to believe that the final decisions of the Complex 2030 SPEIS are prejudiced.

Our transformation will not result in Cold War-like nuclear capabilities.

- This is directly contradicted by testimony given by the now-Acting NNSA Administrator to Congress in April 2006. Please explain this contradiction.

In the 1980s, the nuclear weapons complex contained 14 sites; it contains eight today. While the scenario proposes eight sites in 2030...

- Why is the Waste Isolation Pilot Project not listed as an integral site given the need for disposal of radioactive wastes from expanding nuclear weapons design and production?
- Whereas the consolidation of Category I/II special nuclear materials is discussed, why isn't the reduction of active NNSA sites discussed? Why, for example, isn't closure of the Lawrence Livermore National Laboratory discussed? What is the need for two redundant nuclear design labs, especially given the pit lifetime studies, etc? There should be a real reduction in the geographic footprint of the nuclear weapons complex. NNSA should consider it, especially given that Category I/II special nuclear materials are slated for removal from Livermore.

Executive Summary Table

Complex 2030 - Laboratory facilities are not used for nuclear production missions.

- LANL is one of the sites under consideration for the CPC. If LANL is chosen for the CPC, won't Laboratory facilities be used for nuclear production missions? Alternatively, is NNSA planning to have a second contractor, a separate management entity, at Los Alamos in charge of pit and other manufacturing production? Please explain. Perhaps in the future the Lab won't have Category I/II special nuclear materials, but to imply that they would be categorically removed from Los Alamos as a geographical location would be disingenuous.

Complex 2030 -

Modernized centers of production excellence:

Plutonium – At existing Category I/II SNM site to be determined.

Uranium – Y-12.

Assembly/Disassembly – Pantex.

Tritium – Savannah River.

- Please analyze doing this without so-called transformation of the complex and with existing facilities that could be downsized and consolidated to begin with.

Complex Today - Facilities with a footprint of approximately 37 million square feet in 2006.

- What is the total security footprint of the complex today?

Significantly smaller nuclear weapons complex footprint supported by weapons account funding.

- Please describe all non-weapons account funding currently supporting the nuclear weapons complex.
- Please analyze doing this without so-called transformation of the complex. The notion of consolidating and downsizing the complex should be de-linked from NNSA's proposed Complex 2030, which obviously is not the only way to do it.

- Nuclear facility space at Los Alamos National Laboratory reduced by approximately 40%.

- Please explain how NNSA arrived at this percentage.

Introduction

[The NNSA nuclear weapons complex of the future] will be integrated, responsive, safe, secure, and will respond promptly and effectively to stockpile issues or adverse geopolitical change.

- How long will it take to produce an RRW to respond to adverse geopolitical change?
- Exactly why aren't current warheads suited for this, especially given that most types are understood to be variable yield?

Stockpile transformation is key to development of a responsive infrastructure. It is the combination of stockpile changes, through concepts such as the RRW, and achievement of a more responsive infrastructure – each enabled by the other – that will make transformation successful.

- An enabler is a person, who by their actions, make it easier for an addict to continue their self-destructive behavior.
- Any time you assist/allow another person to continue in their unproductive/unhealthy/addictive behavior, you are enabling.
- Maybe Complex 2030 and the self-invested nuclear weapons community should stop being so addicted to nuclear weapons programs and related lavish congressional appropriations and begin the transition to alternative missions.

- What happens if either RRW or Complex 2030 gets funding cut, which is not only a distinct possibility but also a near-term certainty with a Continuing Appropriations Resolution for fiscal year 2007?

The following principles serve as the foundation for our planning:

- *Transform the stockpile consistent with the Nuclear Posture Review through concepts such as RRW;*
 - What other concepts have NNSA considered? How about conformance with the NPT?
- *Balance current life-extension programs for legacy weapons with a transition to RRW concepts; and,*
 - How will this save the taxpayers money?
 - Won't there be a period of time when the US will actually have more warheads? Will there be a time when both RRW warheads and the warheads that they are replacing are both in the stockpile?
- *Transform the Complex to be more responsive and cost effective.*
 - DOE has repeatedly claimed that Complex 2030 will save taxpayers money, without any supporting justification. The Government Accountability Office has quoted DOE as saying it estimates that transformation to Bombplex will cost \$150 billion, which does not include future cleanup or decommissioning, nor annual operating costs.
 - DOE must provide a life cycle budget for Bombplex that includes construction, operation, decommissioning, and cleanup of the complex. This budget must also incorporate the cost of disposal of hazardous and radioactive materials.
 - Please provide a rigorous cost analysis that verifies or not DOE's claim that the transformed Complex 2030 will be more cost effective.
 - Please explain in detail why the existing nuclear weapons complex is not cost-effective and cannot provide needed future infrastructure, thereby necessitating Complex 2030. What, if anything, needs to be changed in order make the existing complex more cost-effective? In particular, given the results of the plutonium pit lifetime study and the need to strengthen the global nonproliferation regime by solid example, why can't the existing nuclear weapons complex be radically downsized under a Responsible Curatorship Alternative?
 - To date, DOE has spent ~\$90 billion on its Stockpile Stewardship Program, and at the same time claims that the Program is not failing. Why then is the Program not adequate for maintaining the stockpile? As a corollary, how can increased costs for Complex 2030 be justified?

A future responsive infrastructure must meet the following objectives:

- *Sustain readiness to conduct underground nuclear tests; and,*
 - Explain the need to sustain this readiness.
- *Ensure an economically sustainable nuclear weapons enterprise.*
 - Explain how the current nuclear weapons enterprise is not economically sustainable. Further, please explain why it should remain economically sustainable on into the indefinite future given ultimate NPT obligations.

Strategies

STRATEGY 1: In partnership with the Department of Defense, transform the nuclear stockpile through development of Reliable Replacement Warheads, refurbishment of limited numbers of legacy designs, and accelerated dismantlement of the Cold War stockpile:

- Please explain why accelerated dismantlement of the Cold War stockpile cannot happen without so-called transformation.

The strategy comprises the following elements:

- *...Establish an RRW-based stockpile plan by the end of 2007 with a majority of intercontinental ballistic missile, submarine launched ballistic missiles, bombs, and cruise missiles transitioned to RRW types by 2030. Ensure the stockpile has a heterogeneous mix of warheads for diversity.*
 - Describe this mix and what diversity is needed that the current warheads do not meet.
 - A Life Extension Program refurbishment lasts for 20 to 30 years. Explain the economic sense and the need to replace refurbished warheads by 2030.

STRATEGY 2: Transform to a modernized, cost-effective nuclear weapons complex:

The following are proposed for this strategy:

- *Plan, construct, and startup a consolidated plutonium center for long-term R&D, surveillance, and manufacturing operations. Plan the consolidated plutonium center for a baseline capacity of 125 units per year net to the stockpile by 2022.*
 - *Upgrade LANL plutonium facilities at Technical Area 55 to support an interim production rate of 30 to 50 RRW war reserve pits per year net to the stockpile by 2012.*
 - *Complete and operate the Chemistry and Metallurgy Research – Replacement (CMRR) as a CAT I/II facility up to 2022 (use as a CAT III/IV facility and focal point and for material science thereafter) to support plutonium operations at LANL, closure of existing LANL Chemistry and Metallurgy Research (CMR) facility, and the removal of CAT I/II quantities of plutonium from LLNL.*
- *Transition large-scale hydrodynamic testing to NTS as the Dual-Axis Radiographic Hydrodynamic Testing (DARHT) facility reaches end of life in the 2020s.*
 - As previously argued above, pit production at 125 pits per year is not necessary, and a permanent level of 20 pits per year already sanctioned at LANL is sufficient to maintain stockpile safety and reliability.
 - Is DARHT a large-scale hydrotest facility?
 - It seems that NNSA has predetermined that large-scale hydrotesting will be consolidated at NTS.
 - Please analyze doing this without so-called transformation of the complex.
- *Consolidate large-scale, high-explosives (HE) production pressing and machining at Pantex.*
 - It seems that NNSA has predetermined that HE production pressing and machining will be consolidated at Pantex.
 - Is this different that the HE R&D consolidation mentioned in NNSA's fact sheets?

STRATEGY 3: Create a fully integrated and interdependent nuclear weapons complex:

This strategy will focus on changing the operating philosophy of the nuclear weapons complex to become more efficient, more interdependent with duplication eliminated (except as required to manage risks), more uniform in technical and administrative practices, more responsive, and less costly. The following are proposed for this strategy:

- *Streamline Federal oversight, starting with pilot projects at the Los Alamos National Laboratory and Kansas City Plant.*
 - The pilot program means less NNSA oversight and more contractor self-oversight. This may be less costly, but is it safer? Given the fact that the NNSA safety oversight was decimated at LANL, apparently deliberately, we doubt that will be the case. We argue that more federal oversight is needed, not less. Possible adverse safety consequences as a result of lessened oversight need to be analyzed.

STRATEGY 4: Drive the science and technology base essential for long-term national security: Long-term health of the science and technology at our nuclear weapons laboratories and plants is essential for our future. For more than a decade, a comprehensive, science-based approach has been the basis for the assessment of the continued viability of the nuclear stockpile. The need for a robust, scientific underpinning will remain as legacy systems are retained for the next few decades and the stockpile is transformed via development of RRW concepts.

The following are proposed for this strategy:

- *Address the stress on science and technology budgets resulting from competition for resources from stockpile and infrastructure transformation by enhanced management practices and teaming with others.*
 - Others? Who?
 - Describe these enhanced management practices. Please analyze doing this without so-called transformation of the complex.
- *Transition to a lower cost of operations for NNSA national laboratories.*
 - Please analyze doing this without so-called transformation of the complex. As an aside, we regard “lower cost of operations” and “NNSA national laboratories” as an oxymoron. We’ll believe it when we see it.

Commitment

Build confidence in the transformation process by Getting the Job Done:

- *Continue to deliver our products to the DoD as we have been doing.*
 - Does that mean late, or, to use the parlance, “rebaselined” delivery?
- *Certify the W88 with a new pit and manufacture 10 W88 pits in 2007.*
 - LANL has yet to produce a certified pit. We estimate that over \$1.7 billion will be spent on pit manufacturing at LANL before the first pit is certified. What are the chances that LANL can produce 10 certified W88 pits in 2007?
- *Initiate transformation from a Life Extension Program strategy to an RRW stockpile strategy.*
 - The LEP program is working.
 - An LEP refurbishment lasts for 20 to 30 years. Explain the need to replace refurbished warheads with RRW warheads.

Demonstrate we are moving forward on transformation:

- *Complete the RRW study and move forward with the concept as directed.*
 - The use of “move forward” is a bit premature. What if RRW funding is cut?

- End of Scoping Comments -

Respectfully submitted,
Jay Coghlan, Scott Kovac and John Witham,
Nuclear Watch New Mexico