



October 8, 2014

The Honorable Mike Simpson  
Chairman  
House Committee on Appropriations  
Subcommittee on Energy and Water  
Development  
2362-B Rayburn House Office Building  
Washington, DC 20515

The Honorable Dianne Feinstein  
Chairman  
Senate Committee on Appropriations  
Subcommittee on Energy and Water  
Development  
The Capitol S-128  
Washington, DC 20510

The Honorable Marcy Kaptur  
Ranking Member  
House Committee on Appropriations  
Subcommittee on Energy and Water  
Development  
2362-B Rayburn House Office Building  
Washington, DC 20515

The Honorable Lamar Alexander  
Ranking Member  
Senate Committee on Appropriations  
Subcommittee on Energy and Water  
Development  
The Capitol S-128  
Washington, DC 20510

Dear Chairman Simpson, Ranking Member Kaptur, Chairman Feinstein, and Ranking Member Alexander:

As you know, the Department of Energy (DOE) is planning to build the Uranium Processing Facility (UPF) at the Y-12 National Security Complex in Tennessee. This project, still in the design phase and now known as the Uranium Capabilities Replacement Project, is already vastly over budget and behind schedule. It has become yet another multibillion-dollar DOE boondoggle. The UPF project was originally intended to consolidate enriched uranium operations, including assembly, disassembly, and dismantlement of nuclear weapons components,<sup>1</sup> but it is likely the project will be scaled back.<sup>2</sup> Not only is it over budget and behind schedule, there may not even be sufficient mission to justify its construction at all.

When the Uranium Processing Facility was initially sold to Congress in 2005, it was expected to cost between \$600 million and \$1 billion, and early estimates expected it to be operational in

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<sup>1</sup> Neile Miller, Principal Deputy Administrator, National Nuclear Security Administration, "NNSA selects John Eschenberg to head UPF design and construction project," NNSA Blog, March 12, 2012.

<http://nnsa.energy.gov/blog/nnsa-selects-john-eschenberg-head-upf-design-and-construction-project> (Downloaded September 22, 2014); Department of Energy, *FY 2014 Congressional Budget Request* (DOE/CF-0084), Volume 1, April 2013, p. WA - 216. <http://energy.gov/sites/prod/files/2013/04/f0/Volume1.pdf> (Downloaded October 7, 2014)

<sup>2</sup> Todd Jacobson, "Klotz Confirms NNSA Pivot to Scaled-back Approach on UPF," *Nuclear Security & Deterrence Monitor*, June 6, 2014. <http://www.exchangemonitor.com/publications/nuclear-security-deterrence/issues/vol-18-no-23/klotz-confirms-nnsa-pivot-to-scaled-back-approach-on-upf/> (Downloaded September 26, 2014)

2018.<sup>3</sup> The National Nuclear Security Administration's (NNSA) official cost estimate is now at least four times that—between \$4.2 billion and \$6.5 billion.<sup>4</sup> Even though this estimate takes into account the effects of inflation, other estimates are even higher. In 2011, The U.S. Army Corps of Engineers said the facility could range from \$6.5 billion to \$11.6 billion depending on annual appropriations and budget constraints,<sup>5</sup> and an analysis by the Department of Defense's Cost Assessment and Program Evaluation group estimated that completing the entire facility as designed could cost up to \$19 billion.<sup>6</sup> In response to the escalating price tag, DOE has deferred some of the work originally scheduled for the UPF.<sup>7</sup>

In addition to the UPF's escalating cost, the building will not be fully operational until at least 2030, twelve years behind schedule.<sup>8</sup> Close to a billion dollars has already been spent over the course of nine years on the design, which includes \$540 million to fix gross errors that were found too late in the initial design process, which is partially to blame for the project's delay.<sup>9</sup>

The NNSA claims that the UPF is necessary to replace Building 9212 and two other Y-12 buildings, Beta 2E and the 9215 Complex, which are allegedly aging beyond the point of repair.<sup>10</sup> The UPF would perform several uranium processing missions, including the manufacture of Canned Sub-Assemblies (CSAs), which mainly house the highly enriched

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<sup>3</sup> Department of Energy, National Nuclear Security Administration, *FY 2006 Congressional Budget Request*, February 2005, p. 233. <http://energy.gov/sites/prod/files/FY06Volume1.pdf> (Downloaded September 22, 2014); National Nuclear Security Administration, "Major Relocation of Highly Enriched Uranium Completed at Y-12 National Security Complex," October 2, 2006. <http://nnsa.energy.gov/mediaroom/pressreleases/major-relocation-highly-enriched-uranium-completed-y-12-national-security-co> (Downloaded October 3, 2014)

<sup>4</sup> Written testimony by NNSA Acting Administrator Bruce Held, House Committee on Armed Services, Subcommittee on Strategic Forces, April 8, 2014, p. 4. <http://docs.house.gov/meetings/AS/AS29/20140408/102090/HHRG-113-AS29-Wstate-HeldE-20140408.pdf> (Downloaded September 22, 2014); Government Accountability Office, *Nuclear Weapons: Information on Safety Concerns with the Uranium Processing Facility* (GAO-14-79R), October 25, 2013, p. 2. <http://www.gao.gov/assets/660/658562.pdf> (Downloaded September 22, 2014) (Hereinafter GAO-14-79R)

<sup>5</sup> Government Accountability Office, *Nuclear Weapons: Factors Leading to Cost Increases with the Uranium Processing Facility* (GAO-13-686R), July 12, 2013, p. 25. <http://www.gao.gov/assets/660/655848.pdf> (Downloaded September 22, 2014) (Hereinafter GAO-13-686R)

<sup>6</sup> Todd Jacobson, "NEW Pu STRATEGY ENDORSED BY DOD CAPE, BUT UPF COST QUESTIONS RAISED: DoD Group Paints Jarring Picture for UPF Cost, Which It Says Could Rise As High as \$19 Billion," *Nuclear Weapons & Materials Monitor*, Volume 17, Number 47, December 6, 2013, pp. 2-3; Frank Munger, "Bruce Held: 'Any anomaly anywhere involving fissile material is serious,'" Atomic City Underground Blog, February 1, 2014. <http://knoxblogs.com/atomiccity/2014/02/01/bruce-held-anomaly-anywhere-involving-fissile-material-serious/> (Downloaded September 22, 2014)

<sup>7</sup> GAO-13-686R, pp. 2, 27.

<sup>8</sup> GAO-14-79R, pp. 4, 6.

<sup>9</sup> Frank Munger, "UPF math," *Knoxville News Sentinel*, October 28, 2012. (Downloaded July 23, 2013); Frank Munger, "UPF to be redesigned because equipment won't fit; \$500M already spent on Y-12 project," Atomic City Underground Blog, October 2, 2012. [http://knoxblogs.com/atomiccity/2012/10/02/upf\\_to\\_be\\_redesigned\\_because\\_e/](http://knoxblogs.com/atomiccity/2012/10/02/upf_to_be_redesigned_because_e/) (Downloaded September 22, 2014); GAO-13-686R, p. 12.

<sup>10</sup> "From aging infrastructure to the unparalleled UPF," *Y-12 Report*, Volume 9, Issue 2, February 7, 2013. <http://www.y12.doe.gov/news/report/aging-infrastructure-unparalleled-upf> (Downloaded September 22, 2014); The Oak Ridge Environmental Peace Alliance, *The Future of Y12*, November 2009, pp. 3-4. (Downloaded September 4, 2013)

uranium component of a thermonuclear warhead.<sup>11</sup> Unfortunately, the NNSA refuses to publically release information on how many CSAs will require manufacturing or remanufacturing in the coming years and therefore what capacity will actually be required of the multibillion-dollar facility.

One factor in establishing whether CSAs need to be remanufactured is if they have a hydride problem.<sup>12</sup> Hydrides are formed when a small amount of moisture gets into the CSA, particularly the highly enriched uranium component.<sup>13</sup> If that happens, it could reduce the yield of a weapon.<sup>14</sup> But even if the worst were to happen and warheads with a hydride problem were to be detonated, the nuclear yield would still be catastrophic. For example, the W-76 warhead's nuclear yield is supposed to be 100 kilotons<sup>15</sup>; if the warhead had a hydride problem, the yield could be reduced, but would still be multiple times greater than that of the devastating Hiroshima bomb.<sup>16</sup>

According to Project On Government Oversight (POGO) sources, one justification for building the UPF is that NNSA must remanufacture a high percentage, if not all, of the CSAs because of this hydride problem.

But POGO has been told by a number of knowledgeable sources within the government that this is a non-issue. According to one congressional staffer, who spoke on *condition of anonymity*, “there is no problem with the nuclear package of our warheads.” A former federal employee with knowledge of NNSA's weapons surveillance program, who also did not want to be identified, does not recall a hydride problem. And POGO was told by a former high-level DOE official, who spoke on the condition of anonymity, that annual random inspections of weapons did not indicate a hydride problem and therefore the weapons were certified as effective. The official was not aware of a hydride problem in any of the annual assessment reports.<sup>17</sup> In addition, there was no mention of a hydride problem in the Pantex Environmental Impact Statement, which mentions the re-qualification of weapons components.<sup>18</sup> POGO interviewed other experts as

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<sup>11</sup> Department of Energy, *Fiscal Year 2014 Stockpile Stewardship and Management Plan Report to Congress*, June 2013, p. 5-8–5-9 (Downloaded September 4, 2013); Government Accountability Office, *Actions Needed by NNSA to Clarify Dismantlement Performance Goal* (GAO-14-449), April 2014, p. 4.

<http://www.gao.gov/assets/670/662840.pdf> (Downloaded October 3, 2014)

<sup>12</sup> Weapons that do not meet certification standards can be dismantled or remanufactured.

<sup>13</sup> Union of Concerned Scientists, *Making Smart Security Choices: The Future of the U.S. Nuclear Weapons Complex*, Revised March 2014, p. 16. <http://www.ucsusa.org/assets/documents/nwgs/nuclear-weapons-complex-report.pdf> (Downloaded September 22, 2014) (hereinafter *Making Smart Security Choices*)

<sup>14</sup> *Making Smart Security Choices*, p. 16.

<sup>15</sup> Congressional Research Service, *U.S. Strategic Nuclear Forces: Background, Developments, and Issues*, April 3, 2007, pp. CRS-18. (Downloaded October 3, 2014)

<sup>16</sup> The Comprehensive Nuclear-Test-Ban Treaty Organization, “Types of Nuclear Weapons.” <http://www.ctbto.org/nuclear-testing/types-of-nuclear-weapons/> (Downloaded September 22, 2014)

<sup>17</sup> The Nuclear Weapons Council Report on Stockpile Assessments, formerly known as the Annual Certification Report, is created by both the Department of Defense and DOE and provided to the President. Department of Defense, *The Nuclear Matters Handbook, Expanded Edition*, Chapter A.8.2.

[http://www.acq.osd.mil/ncbdp/nm/nm\\_book\\_5\\_11/appendix\\_A.htm](http://www.acq.osd.mil/ncbdp/nm/nm_book_5_11/appendix_A.htm) (Downloaded September 22, 2014)

<sup>18</sup> National Nuclear Security Administration, *Final Supplement Analysis for the Final Environmental Impact Statement for the Continued Operation of the Pantex Plant and Associated Storage of Nuclear Weapons Components*, November 2012. <http://energy.gov/sites/prod/files/EIS-0225-SA-05-2013.pdf> (Downloaded September 22, 2014)

well, including a former Lockheed executive at Sandia National Laboratory and a former federal employee at the Pantex Plant, both of whom asked to remain anonymous, and neither of them was aware of hydride problems.

Yet POGO has learned that now several warheads—the W-76 and B-61—have begun going through Life Extension Programs (LEP),<sup>19</sup> NNSA is claiming it will have to remanufacture CSAs due to the hydride problem. Unfortunately, NNSA’s only solution for the undocumented hydride problem is to build the UPF for up to \$19 billion. During the course of our investigation into the UPF and the alleged hydride problem, another POGO source, who asked to remain anonymous, stated that most CSA remanufacturing is not required and it was simply a “jobs program.”

In fact, the Union of Concerned Scientists reported that the B-61 LEP “will not use newly built CSAs” and that remanufacturing “might be unnecessary, but the NNSA may simply want to retain the capability to do so” in the future.<sup>20</sup> In POGO’s opinion, it is wasteful to spend billions of dollars to build a facility that isn’t needed now and may not ever be needed.<sup>21</sup>

So what is the required capacity to manufacture and remanufacture CSAs? NNSA isn’t saying anything publically and estimates provided to Congress are uncertain according to one congressional source. POGO has tried to find out, requesting the B-61 LEP data—which would clarify the current condition of the nuclear weapons stockpile—from a number of sources. Unfortunately, we have come up empty. We also submitted a Freedom of Information Act request six months ago for data from NNSA’s surveillance program—nonnuclear tests that evaluate the condition, safety, and reliability of stockpiled weapons<sup>22</sup>—which could shed light on whether or not there is a hydride problem; we have yet to receive a substantive reply. Questions about the reliability of the current stockpile and the need for new facilities should be answered before breaking ground for a multibillion-dollar building.

Another claimed justification for the UPF is equally ridiculous. The Department of Defense has argued that NNSA needs new facilities “to surge production in the event of significant geopolitical ‘surprise.’”<sup>23</sup> This claim, however, holds little weight and is nothing more than another attempt to justify the need for a large weapons complex, including the UPF. The Union of Concerned Scientists discredited the surge capacity theory for the UPF, stating:

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<sup>19</sup> The “life extension program” is an NNSA program to repair or replace components of nuclear weapons to ensure the ability to meet military requirements. NNSA, “Life Extension Programs.” <http://nnsa.energy.gov/ourmission/managingthestockpile/lifeextensionprograms> (Downloaded September 22, 2014)

<sup>20</sup> *Making Smart Security Choices*, pp. 16, 18.

<sup>21</sup> In POGO’s 2013 report, *Uranium Processing Facility: When You’re in a Hole, Just Stop Digging*, we addressed several other reasons for building the UPF such as the aging facilities at Y-12 and the sunk costs already put into the UPF design. Project On Government Oversight, *Uranium Processing Facility: When You’re in a Hole, Just Stop Digging*, September 25, 2013. <http://www.pogo.org/our-work/reports/2013/20130925-uranium-processing-facility.html>.

<sup>22</sup> Government Accountability Office, *Nuclear Weapons: NNSA Needs to Improve Guidance on Weapon Limitations and Planning for Its Stockpile Surveillance Program* (GAO-12-188), February 8, 2012, p. 3. <http://www.gao.gov/assets/590/588307.pdf> (Downloaded September 22, 2012)

<sup>23</sup> Department of Defense, *Nuclear Posture Review Report*, April 2010, pp. 42-43.

<http://www.defense.gov/npr/docs/2010%20nuclear%20posture%20review%20report.pdf> (Downloaded September 22, 2014)

one rationale for an annual production capacity of 80 CSAs is to provide surge capacity in the event of a “geopolitical surprise.” As noted above, such a surprise is not feasible, reserve weapons would allow a rapid increase in the deployed nuclear arsenal if needed, and the U.S. deterrent would remain robust even at far lower levels of deployed and reserve weapons. Acquiring a surge capacity is therefore not a reason to build a UPF with an annual production capacity of 80 CSAs.<sup>24</sup>

Not only is there an insufficient mission to justify a new multibillion-dollar building, but there are alternatives that NNSA refuses to consider. One such alternative is to perform what mission there is at existing facilities elsewhere in the complex. Some of the major functions to be performed at the UPF—dismantlement and the certification of secondaries—can easily be accomplished at Pantex, for instance, which already dismantles weapons and certifies pits.<sup>25</sup> Adding additional functions to Pantex’s operations would also remove the need to move certain nuclear components around the country as the secondaries would not have to be shipped to Tennessee for these functions.

Former DOE official Earl Whiteman has questioned the long-term viability of uranium operations at the many different DOE facilities around the country, stating “[b]uilding the several billion dollar UPF at Y-12 essentially commits the nuclear weapons program to that site for the foreseeable future,” locking NNSA into staying in Oak Ridge, Tennessee.<sup>26</sup> Whiteman went on to offer some arguments for keeping UPF at Y-12 including strong political support, a technical workforce already in place, and a study by the Institute for Defense Analysis which found that the cost savings of relocating the Y-12 missions wouldn’t be seen until 2040.<sup>27</sup> He ultimately recommended, that “a smaller sized, reconfigured, and less costly UPF should be constructed, but the schedule should be delayed.”<sup>28</sup>

POGO has supported the design of a smaller facility instead of the stand-alone UPF for those jobs that cannot be performed elsewhere.<sup>29</sup> Earlier this year, the Committee to Recommend

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<sup>24</sup> *Making Smart Security Choices*, p. 18. The report highlighted the fact that: “First, any significant geopolitical shift would not be a surprise. A Russian or Chinese attempt to alter the strategic balance would require a massive effort that the United States would readily detect, giving it more than enough time to respond, if necessary. Second, reserve nuclear warheads at least partly offset any U.S. need for a surge production capacity.” *Making Smart Security Choices*, p. 14.

<sup>25</sup> Babcock & Wilcox Technical Services Pantex, LLC, *Pantex Plant FY 2013 Twenty-Five Year Site Plan*, September 20, 2012, p. 23. [http://nnsa.energy.gov/sites/default/files/nnsa/01-13-multiplefiles/2013-01-15%20Pantex%20e466527%20FINAL\\_0.pdf](http://nnsa.energy.gov/sites/default/files/nnsa/01-13-multiplefiles/2013-01-15%20Pantex%20e466527%20FINAL_0.pdf) (Downloaded July 23, 2013); National Nuclear Security Administration, *Final Supplement Analysis for the Final Environmental Impact Statement for the Continued Operation of the Pantex Plant and Associated Storage of Nuclear Weapons Components*, November 2012, p. 5. <http://energy.gov/sites/prod/files/EIS-0225-SA-05-2013.pdf> (Downloaded July 23, 2013)

<sup>26</sup> Earl Whiteman, “Issues and Questions Associated with New Major NNSA Nuclear Facilities,” in *In the Eyes of the Experts: Analysis and Comments on America’s Strategic Posture—Selected Contributions by the Experts of the Congressional Commission on the Strategic Posture of the United States*, ed. Taylor Bolz, p. 147.

<http://www.usip.org/sites/default/files/In%20the%20Eyes%20of%20the%20Experts%20full.pdf> (Downloaded September 22, 2014) (Hereinafter “Issues and Questions”)

<sup>27</sup> “Issues and Questions,” p. 147.

<sup>28</sup> “Issues and Questions,” p. 153.

<sup>29</sup> Lydia Dennett, “Energy Department Looks for Alternatives to UPF,” POGO Blog, January 16, 2014. <http://www.pogo.org/blog/2014/01/energy-department-looks-for-alternatives-to-UPF.html>

Alternatives to the Uranium Processing Facility Plan in Meeting the Nation's Enriched Uranium Strategy<sup>30</sup> (the Red Team) reviewed the UPF design and came to a similar conclusion. They determined that the current design will not be able to manage the necessary safety and risk reduction activities within the \$6.5 billion budget.<sup>31</sup> One of the Red Team's recommendations is to stop the "big box," single structure plan. It also concluded that a new "comprehensive reevaluation of program requirements and applicable design standards" be conducted.<sup>32</sup> The Red Team's recommendation was founded on the theory that an alternate design would allow the UPF to stay on budget and open by 2025. NNSA, however, has not officially announced whether it will follow the Red Team's recommendations.

Another alternative that isn't being fully pursued is to downblend surplus Highly Enriched Uranium (HEU) into Low Enriched Uranium (LEU). Doing so reduces a security risk, cuts government spending, and could generate millions (if not billions, depending on the market) of dollars for the United States Treasury through sales of the LEU to nuclear power plants.<sup>33</sup> NNSA sources told POGO that the Highly Enriched Uranium Materials Facility (HEUMF) at Y-12—a facility that opened in 2010 and exceeded the original cost estimate<sup>34</sup>—is only 57 percent full. The Red Team stated that making full use of the HEUMF should be done with the "utmost urgency."<sup>35</sup> If the government dismantles more CSAs and downblends the resulting HEU,<sup>36</sup> even more space would be available in HEUMF for other operations. As a result, a number of the activities planned for the UPF could be consolidated in the HEUMF, thereby alleviating the need for UPF and its multibillion-dollar price tag.

NNSA's demand for bigger and better facilities seems to be a running theme, but the agency has fabricated the missions and cost of many of these projects. Only a few years ago the NNSA pulled a similar scheme with the estimated requirement capacity for plutonium pit production at

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<sup>30</sup> On January 15, 2014, Acting Administrator of the National Nuclear Security Administration, Bruce Held, requested Thom Mason, director of Oak Ridge National Laboratory, to lead a "project peer review" of the Uranium Processing Facility. Thom Mason, *Final Report of the Committee to Recommend Alternatives to the Uranium Processing Facility Plan in Meeting the Nation's Enriched Uranium Strategy*, April 15, 2014, pp. ix, A-3. [http://nnsa.energy.gov/sites/default/files/nnsa/05-14-inlinefiles/Uranium\\_Review\\_Final\\_Report\\_unclassified\\_withappendices.pdf](http://nnsa.energy.gov/sites/default/files/nnsa/05-14-inlinefiles/Uranium_Review_Final_Report_unclassified_withappendices.pdf) (Downloaded September 22, 2014) (Hereinafter Red Team Report)

<sup>31</sup> Red Team Report, p. 15.

<sup>32</sup> Red Team Report, p. xi.

<sup>33</sup> Matthew Bunn, *Expanded and Accelerated HEU Downblending: Designing Options to Serve the Interests of all Parties*, Conference Paper, Institute for Nuclear Materials Management, July 17, 2008, p. 4. <http://belfercenter.ksg.harvard.edu/files/inmm-expanded-blend-down-incentives.pdf> (Downloaded September 1, 2010)

<sup>34</sup> National Nuclear Security Administration, "NNSA Authorizes Start-up of Highly Enriched Uranium Materials Facility at Y-12," January 25, 2010. (Downloaded October 3, 2014); GAO-13-686R

<sup>35</sup> Red Team Report, p. 6.

<sup>36</sup> At the end of May, DOE put out a draft "Performance Work Statement" and "Sole Source Synopsis" (Solicitation Number DE-SOL-0007090) for "down-blending services for a minimum of 13 Metric Tons (MT) of surplus Highly Enriched Uranium (HEU) to be down-blended to Low Enriched Uranium (LEU), up to a total of 20 MT of HEU or high assay LEU may become available for down-blending." Department of Energy, "Performance Work Statement for 13 MT Highly Enriched Uranium Down-blending Services and Low Enriched Uranium Inventory Management," May 29, 2014. <http://www.pogoarchives.org/m/nss/heu-performance-work-statement-20140529.pdf>; Department of Energy, "Sole Source Synopsis HEU Down-Blending Services and LEU Inventory Management Solicitation Number: DE-SOL-0007090," May 30, 2014, p. 1. <http://www.pogoarchives.org/m/nss/heu-sole-source-synopsis-20140530.pdf>

LANL and the need for the Chemistry and Metallurgy Research Replacement-Nuclear Facility (CMRR-NF). Similar to the UPF, the CMRR-NF was first intended to replace an existing facility, but CMRR-NF's mission, cost, and design spiraled out of control, resulting in the project being placed on hold.<sup>37</sup> The debacle with the UPF is like a re-run of an old movie.

In the case of the CMRR-NF, it was first claimed by the NNSA that it needed the capacity to build 450 pits per year.<sup>38</sup> When that was questioned, NNSA reduced the number to 125, then to 80.<sup>39</sup> However, according to Philip Coyle, a former associate director of Lawrence Livermore National Laboratory, "an average production rate of only about 25 pits per year could sustain the U.S. Strategic Stockpile if it were reduced to about 1,000 weapons by the year 2050."<sup>40</sup> Additional experts questioned the need to produce more than the "existing 10 to 20 annually," as plutonium has a lifetime of 150 years.<sup>41</sup> The irony of the situation is that, despite claims of needing hundreds of pits, NNSA has not been able to produce any pits at LANL in over a year because outstanding structural safety and operational issues at the PF-4 production facility shut down operations, which have only recently begun to be resumed.<sup>42</sup>

We also witnessed the same scheme with the HEUMF. The Department's cost estimates for HEUMF were "inaccurate" and the building isn't being utilized to the fullest extent possible.<sup>43</sup> NNSA has a habit of under-estimating costs and over-asking on mission without genuine data to support its proposed operations or effective and more taxpayer-friendly alternatives.

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<sup>37</sup> Congressional Research Service, *U.S. Nuclear Weapon "Pit" Production Options for Congress*, February 21, 2014, pp.7-8. <http://fas.org/sgp/crs/nuke/R43406.pdf> (Downloaded September 22, 2014) (Hereinafter "Pit" Production Options for Congress)

<sup>38</sup> Testimony of Philip Coyle, former Associate Director, Lawrence Livermore Laboratory, before the House Committee on Appropriations Subcommittee on Energy and Water Development, February 24, 2009, p. 195. [https://web.archive.org/web/20121001233105/http://democrats.appropriations.house.gov/images/stories/pdf/ew/Hearing\\_Volumes/Energy-FY10-Pt6.pdf](https://web.archive.org/web/20121001233105/http://democrats.appropriations.house.gov/images/stories/pdf/ew/Hearing_Volumes/Energy-FY10-Pt6.pdf) (Downloaded October 2, 2014) (Hereinafter February 2009 Testimony of Philip Coyle) Also known as a trigger, the pit is the core of a thermonuclear weapon that, when compressed, reaches a critical mass and begins a sustained nuclear fission chain reaction.

<sup>39</sup> February 2009 Testimony of Philip Coyle; Project On Government Oversight, *U.S. Nuclear Weapons Complex: Energy Department Plans to Waste Billions of Dollars on Unneeded Los Alamos Lab Facility*, January 18, 2012. <http://www.pogo.org/our-work/reports/2012/nss-nwc-20120118-us-nuclear-weapons-complex.html>

<sup>40</sup> Testimony of Philip E. Coyle III, Senior Advisor, World Security Institute, before the House Committee on Appropriations, Subcommittee on Energy and Water on "Reducing the Cost of the U.S. Nuclear Weapons Complex," March 17, 2009, p. 195. [https://web.archive.org/web/20121001233105/http://democrats.appropriations.house.gov/images/stories/pdf/ew/Hearing\\_Volumes/Energy-FY10-Pt6.pdf](https://web.archive.org/web/20121001233105/http://democrats.appropriations.house.gov/images/stories/pdf/ew/Hearing_Volumes/Energy-FY10-Pt6.pdf) (Downloaded September 29, 2014)

<sup>41</sup> *Making Smart Security Choices*, p. 12.

<sup>42</sup> Testimony of Dr. Peter S. Winokur, Chairman, Defense Nuclear Facilities Safety Board, before the House Committee on Armed Services, Subcommittee on Strategic Forces, April 8, 2014, p. 16. <http://docs.house.gov/meetings/AS/AS29/20140408/102090/HHRG-113-AS29-Wstate-WinokurP-20140408.pdf> (Downloaded September 22, 2014); Los Alamos Study Group, "Federal Safety Board Cautions DOE on LANL Plutonium Facility," May 20, 2014. [http://www.lasg.org/press/2014/press\\_release\\_20May2014.html](http://www.lasg.org/press/2014/press_release_20May2014.html) (Downloaded September 22, 2014); Todd Jacobson, "A Year After Pausing Plutonium Operations, Two-Thirds of Los Alamos PF-4 Work Back Up," *Nuclear Security & Deterrence Monitor*, July 3, 2014. <http://www.exchangemonitor.com/publications/nuclear-security-deterrence/issues/vol-18-no-27/a-year-after-pausing-plutonium-operations-two-thirds-of-los-alamos-pf-4-work-back-up/> (Downloaded October 7, 2014)

<sup>43</sup> "HEUMF's 2004 cost estimate was \$321 million, but the facility's actual final cost was \$527 million, a 64 percent increase." *GAO-13-686R*, Enclosure 1, pp. 20-21.

POGO urges you to include language in the Committee's appropriations reports tasking the independent advisory group known as JASON to assess the number of warheads that require disassembly and remanufacturing in order to determine the extent of that mission.<sup>44</sup> Depending on the outcome of JASON's assessments, DOE should consider the alternatives to the UPF, individually or in combination, that best meet the needs JASON has established: such alternatives include moving operations to other facilities at Y-12 such as the vastly underutilized HEUMF; adopting a more conservative approach that will utilize smaller, modular buildings; and moving operations to other facilities within the weapons complex.

Taxpayers should not be asked to spend billions of dollars on a project for which the need has not been specifically defined and deemed essential. If you have any questions or need additional information, please contact Lydia Dennett or me at (202) 347-1122.

Sincerely,

A handwritten signature in black ink that reads "Danielle Brian". The signature is written in a cursive, flowing style.

Danielle Brian  
Executive Director

cc: Senator Ron Wyden  
221 Dirksen Senate Office Building  
Washington, DC 20510

Senator Edward Markey  
218 Russell Senate Office Building  
Washington, DC 20510

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<sup>44</sup> JASON is a highly respected, independent group of scientists that advises the U.S. government on matters of science and technology.