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To Build or Not to Build? The Role of the Kansas City Plant in the Department of Energy's Plans for Modernizing the Nuclear Weapons Complex

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New Nuclear Weapons?

Periodically the United States government reviews its doctrine on the strategic purpose and potential use of nuclear weapons. In keeping with its most recent Nuclear Posture Review, released in 2002, the Bush administration has proposed a revision of the role of nuclear weapons in U.S. foreign policy. In place of the Cold War “triad” of nuclear delivery vehicles based on land, at sea, and in the air, the review proposed a “new triad” consisting of offensive strike systems, an expansion of missile defense initiatives, and the construction of a “revitalized infrastructure” designed to develop and produce new nuclear weapons as needed.¹ A central component of this revitalized infrastructure is the plan to build a new nuclear weapons plant in Kansas City.

This report addresses the proposal to modernize and upgrade the National Nuclear Security Administration's (NNSA) nuclear weapons complex, with a special focus on the Kansas City Plant. NNSA is the semi-autonomous agency in the Department of Energy (DOE) that handles their nuclear weapons program.

But first, it is worth asking why it is necessary to upgrade the nuclear weapons complex in the first place. The 2002 posture review cited a wide range of missions, including targeting a new group of countries not traditionally thought to be the focus of the U.S. nuclear arsenal, from Iran to Syria to North Korea; responding to an attack on U.S. forces or U.S. allies by an adversary using chemical or biological weapons; supporting U.S. forces that are at risk of losing a conventional conflict; targeting underground facilities designed to research, design, and/or produce nuclear, chemical, or biological weapons; and responding to “unexpected contingencies.”²

This attempt to sustain nuclear weapons as a central element of U.S. military strategy runs counter to the opinions and analysis put forward by distinguished former U.S. government officials, including former Secretaries of State Henry Kissinger and George Shultz, former Senate Armed Services Committee chair Sam Nunn, and former Defense Secretary William Perry.³ These foreign policy experts have been joined by a bipartisan list of dozens of colleagues in the field in calling for the reduction and eventual elimination of the U.S. nuclear arsenal. This growing call for the elimination of nuclear weapons runs contrary to the notion that it is necessary to spend tens or hundreds of billions of dollars over the next two and one-half decades to modernize the U.S. nuclear weapons complex. Some of the energy and resources involved in creating a new, “improved” nuclear weapons complex would be better spent conceiving of new uses for some or all of the specialized facilities that are now on call to research and produce new nuclear weapons.

Among the incentives to eliminate or sharply reduce the U.S. nuclear arsenal are reducing the prospect of nuclear weapons ever being used again, in either a global or regional conflict; heading off the possibility of accidental use of such weapons; and making it as difficult as possible for terrorist organizations to get hold of nuclear weapons or bomb-making materials. Reducing U.S. and Russian arsenals – which currently account for about 95% of the world’s nuclear weapons stockpiles – would provide moral and political leverage in discouraging other nations from acquiring nuclear armaments.⁴

For all of these reasons, there should be a vigorous debate over the need for and purpose of nuclear weapons.

For starters, key members of Congress with authority over the relevant portions of the budget – most notably Rep. David Hobson (R-OH) and Rep. Pete Visclosky (D-IN) -- have questioned the need for building a new generation of nuclear weapons. In addition, presidential hopefuls John Edwards, Barack Obama and Bill Richardson (former head of the Department of Energy) have called for the

complete elimination of nuclear weapons worldwide.⁵ Given the resulting uncertainty about the future of the NNSA's proposed "Complex Transformation" project, it would be prudent to plan for alternative uses of the specialized and technically sophisticated laboratories and production sites that make up the nuclear weapons complex.

The Role of the Kansas City Plant¹

The Kansas City Plant (KCP) is at the heart of the nuclear weapons complex. It produces all of the non-nuclear components that go into a nuclear warhead. The Honeywell Corporation, which runs the Kansas City plant under contract to the NNSA, estimates that KCP produces or procures 85 percent of the parts that make up a nuclear weapon.⁶ KCP specializes in the thousands of non-nuclear components that go into a nuclear weapon, such as firing and arming mechanisms, guidance systems, and reservoirs for tritium. Tritium is a radioactive gas used to "boost" the destructive power of nuclear weapons.

Out of the \$409.8 million that the National Nuclear Security Administration requested for KCP in fiscal year 2008, 98 percent is for nuclear research and production programs.⁷ In contrast, NNSA requested just \$3.7 million for environmental cleanup. This is in spite of the fact that KCP internal planning documents cite a need for at least \$20 million in cleanup funds over the same time period.

Despite its central role in nuclear weapons production, the Kansas City plant is probably the least-known element of the nuclear weapons complex. Part of the reason for this is that it does not handle special nuclear materials like plutonium or uranium, nor is it up front in lobbying for new nuclear weapons.⁸ But for the reasons outlined below, it deserves considerably more scrutiny than it is currently receiving. So far, the NNSA has moved in the opposite direction by taking steps that actually impede public and Congressional input into its plans for upgrading and rebuilding the nuclear weapons complex, under what it now refers to as "Complex Transformation."

For example, rather than include the Kansas City plant in the full-fledged, national "Programmatic Environmental Impact Statement" that includes all other key facilities in the nuclear weapons complex in its analysis of the effects of the proposed complex transformation, the Kansas City facility is being subjected to a less rigorous "Environmental Assessment." This defies logic given the centrality of

¹ This section was prepared in partnership with Jay Coghlan of Nuclear Watch New Mexico.

the Kansas City Plant to the “Complex Transformation” proposal; it also means far less citizen input and accountability in relation to a site that includes the potential construction of an entirely new facility.⁹

To underscore its integral role in plans for upgrading and rebuilding the nuclear complex, it should be noted that the idea of a new Kansas City Plant is tied directly to the development of the Reliable Replacement Warhead. Then NNSA administrator Linton Brooks made precisely this point in a public statement in February 2006.¹⁰ The current plan to build an entire new facility for the KCP – at a cost of \$500 million or more – makes no sense, strategically or economically, in the absence of an enunciated national policy on nuclear weapons in the 21st century which Congress is now demanding that the next president develop. And given cost overruns on other major DOE/NNSA projects that have resulted in costs two to ten times original estimates, there is good reason to believe that a new Kansas City Plant would exceed the current \$500 million estimate.¹¹ That’s a lot to pay for a facility that may be unnecessary within ten to twenty years time.

Another key point to consider is that just because the KCP does not handle plutonium or enriched uranium does not mean that poses no environmental risks. At least two workers at the factory have contracted incurable illnesses as a result of exposure to beryllium, and the Sierra Club has called for a systematic analysis of the impacts of leakage of PCB’s from the site into the nearby Indian River.¹² Efforts have been made to assess and ameliorate these hazardous conditions, but their existence underscores the potential health risks raised by the plant’s use of toxic materials. Moreover, there is an “environmental cleanup gap” in current NNSA budgeting. KCP strategic plans have projected that at least \$20 million was needed to fund cleanup of the current plant over fiscal years 2007 and 2008, but the NNSA has requested only \$3.7 over those two years.

Finally, in another development tied directly to the issue of accountability, there is considerable controversy over the financing mechanism that will likely be used for the building and operation of the proposed new plant. Current plans call for using a third-party financing arrangement called a “build-to-suit” lease. Under this approach, bids will be put out to private contractors to build the facility. It will be up to the winning contractor to raise *private* funds for construction of the plant. The plant will then be leased back to the U.S. government’s General Services Administration (GSA). GSA will be reimbursed for the lease payments from appropriations allocated to the National Nuclear Security Administration.¹³

Dr. Robert Civiak, a former budget analyst at the White House Office of Management and Budget who was in charge of overseeing expenditures on the nuclear weapons complex, has harshly criticized similar third-party, private

financing deals in a discussion of a plan for funding a new facility at the Los Alamos nuclear weapons labs (a plan that was later abandoned) : “During my ten years at OMB, DOE sites regularly proposed similar third-party financing schemes. They were universally rejected, because such schemes reduce financial accountability, create an obligation for future spending without congressionally appropriated authority, and increase the cost of the project.”¹⁴

The reduction in congressional accountability inherent in these schemes is particularly troubling. If approved, the third party plan would allow the costs of the new facility to be hidden in the fine print of the DOE budget – if it is highlighted at all -- rather than singled out as a line item for a new facility, an approach that would draw much more scrutiny. Third party financing is particularly inappropriate when the project at hand is a nuclear weapons facility rather than a simple office building or other facility with far fewer policy, strategic, or environmental implications. Nevertheless, the current NNSA administrator has stated that he would like to “copy cat” recent examples of private financing like those already adopted for new buildings at a nuclear weapons facility in Tennessee across the entire nuclear weapons complex.

Depending upon how the contract is written third-party financing could violate the federal Anti-Deficiency Act. The act calls for full funding for major projects to be authorized up front, unless they meet certain requirements. One such requirement is that the facility being built not be so specialized as to prevent its leasing for other purposes in the event that the existing lease is not renewed. Or, in the words of the Office of Management and Budget, “The asset is a general purpose asset rather than being for a special purpose of the Government and is not built to unique specifications for the Government as lessee.”¹⁵ It is hard to see how a nuclear weapons plant would not be considered a “specialized” facility, unless the third party financing is only used to fund the shell of the factory. But the devil is in the details, and the details needed to make this assessment are not yet available.

The time to ask hard questions about third party financing of a new Kansas City Plant is now. An official with the General Services Administration for the “heartland” region has suggested that pending approval by Congress and the White House Office of Management and Budget (OMB), requests for proposed bids to build and finance the new plant could be sought as early as May 2008. The relevant Congressional committees need to carefully analyze this financing mechanism now, before a contract is signed, a circumstance that would make it that much harder for Congress to roll back plans for a new \$500 million nuclear weapons facility in Kansas City.¹⁶

The Costs of Nuclear Modernization: The Kansas City Plant in Context

The Kansas City Plant is just part of a larger, and much more costly process. The immediate costs of the NNSA's proposed "transformation" of the nuclear weapons complex are relatively modest, but the budgetary proposals for FY 2008 are just the beginning of a major spending initiative that will grow dramatically over the next five years. The overall cost of "transforming" the nuclear weapons complex could reach \$150 billion or more between now and 2030 (see below for further details on the cost estimate). This of course assumes that future administrations stick to the plan and that Congress fully funds it. Neither of these outcomes is by any means assured.

As noted above, the centerpiece of the NNSA's transformation plan is the Reliable Replacement Warhead (RRW), which it has justified on the grounds that it will extend the effective life of the U.S. nuclear stockpile while simultaneously creating a weapon that is both safer and harder for terrorists to utilize should such an organization get its hands on one – a remote but potentially disastrous possibility. The primary rationale for the RRW has already been debunked by a report of the high level Pentagon advisory group JASON, which has found that current weapons could maintain their explosive power for 80 to 100 years, obviating the need to build new warheads.¹⁷ Given this reality, the New York Times has described the RRW and the larger "transformation" process that it is a part of as "a make-work program championed by the weapons laboratories." The Times editorial urged Congress to "stop this program before any more dollars are wasted, or more damage is done to American credibility."¹⁸

Proposed funding for the Reliable Replacement Warhead is \$88.7 million for FY2008 for work at the nuclear weapons labs and an additional \$30 million for the Navy to begin to adapt to the possibility of deploying the new warheads. Projected five-year NNSA funding for the RRW is \$645.1 million, while Navy projections are for about \$80 million in expenditures over the same time period.¹⁹ As of this writing, the House of Representatives had zeroed out funding for the RRW in the FY2008 budget, and the fate of spending on the program is awaiting a House-Senate conference expected to occur before the end of this year. A related proposal for \$24.9 million to begin planning for a new factory to produce plutonium triggers for nuclear warheads – known as "pits"—was eliminated in both the House and Senate.²⁰

Proposed spending on the RRW and the new plutonium factory is only a down payment on the \$150 billion-plus price tag for the entire "Complex Transformation" effort. This rough estimate is based on an analysis done by the Secretary of Energy's Advisory Board (SEAB) of the costs of a more thorough

consolidation plan than the one currently being considered. The estimate has also been cited in a report of the Government Accountability Office (GAO) on the transformation of the complex.²¹ A tailored analysis looking at the projected cost of current transformation plans is needed. Congress should demand one as part of its ongoing oversight of the project.

Conclusion: How to Proceed?

In considering how best to plan for the future of the Kansas City Plant, it is important to consider one key fact: the Reliable Replacement Warhead, which is the central rationale for an upgrade of the entire nuclear weapons complex, may not make it past Congress, much less a new presidential administration in Washington. In discussions over the FY2008 budget, the House of Representatives eliminated all RRW funding, while the Senate cut it by about 25%, to \$66 million.²² A House-Senate conference committee will consider the fate of the RRW before the end of the year. Even if some funding survives, the RRW is going to be a continuing source of contention in the years to come – future funding for the warhead is far from certain. This uncertainty is further underscored by the advocacy in favor of eliminating all nuclear weapons engaged in by key ex-government officials like former Secretaries of State Henry Kissinger and George Shultz, former Defense Secretary William Perry, and former Senate Armed Services chairman Sam Nunn, noted above. Similar positions adopted by presidential hopefuls John Edwards, Barack Obama, and Bill Richardson could further complicate the future of the RRW, and the “Complex Transformation” initiative of which it is a part.

Given this reality, it would be prudent to come up with alternative scenarios for the use of the current Kansas City Plant in the event that the NNSA’s ambitious plans are not implemented. If there is to be long-term planning for a future in which nuclear weapons remain central elements of U.S. national security policy, there should also be long-term planning for alternative uses of the facility. During the preliminary assessment hearings on NNSA’s plans for the Kansas City Plant, a plant official bragged that because of its top-of-the-line technology “we can make anything” at KCP.

Three areas of focus for the nuclear weapons complex in the event of a sharp shift in nuclear policy might be research and development on clean energy alternatives; development of better technology to verify regimes for the reduction or elimination of nuclear weapons; and/or development of better techniques for cleaning up the massive amounts of radioactive waste and other toxic materials generated by 60 years of nuclear weapons research and production at sites throughout the country. It would remain to be seen how much of this work

would involve production as opposed to R&D, but a long-term alternative use plan could address precisely that issue, even as it explores other scenarios besides clean energy, nuclear cleanup, and verification technology.

Notes

¹ “Nuclear Posture Review [Excerpts],” January 8, 2008, posted at www.globalsecurity.org/wmd/library/policy/dod/npr.htm.

² Ibid.

³ George P. Shultz, William J. Perry, Henry A. Kissinger and Sam Nunn, “A World Free of Nuclear Weapons,” *Wall Street Journal*, January 4, 2007.

⁴ Robert S. Norris and Hans M. Kristensen, “Global Nuclear Stockpiles, 1945-2006,” *Bulletin of the Atomic Scientists*, July/August 2006, pp. 64-66.

⁵ “Senator John Edwards Addresses the Council on Foreign Relations,” May 23, 2007, available at www.cfr.org/publication/13432/; Jeff Zeleny, “Obama to Urge Elimination of Nuclear Weapons,” *New York Times*, October 2, 2007.

⁶ Honeywell Corporation, “Kansas City Plant: Mission and History,” available at http://www.honeywell.com/sites/kcp/mission_history.htm.

⁷ Department of Energy FY 2008 Budget Request, “Laboratory Table,” p. 39.

⁸ For an overview of the complex, see William D. Hartung and Frida Berrigan, “Complex 2030: The Costs and Consequences of the Plan to Build a New Generation of Nuclear Weapons,” *Arms Trade Resource Center*, World Policy Institute at the New School, April 2007, pp. 15-17.ds

⁹ Letter from Nuclear Watch New Mexico to Carlos Salazar, General Services Administration, Commenting on the Environmental Assessment of the Kansas City Plant, May 30, 2007.

¹⁰ Scott Canon, “Honeywell Plant Gets Reassurance,” *Kansas City Star*, February 11, 2006.

¹¹ A. Fitzpatrick and I. Oelrich, The Stockpile Stewardship Program: Fifteen Years On, Federation of American Scientists, April 2007, pp.4, 40. Cost overrun figures are for the Dual-Axis Radiographic Hydrodynamic Test Facility (DAHRT), ten times the original estimate; and the National Ignition Facility (NIF), more than double the original estimate.

¹² “Workers Exposed to Beryllium Dust File Lawsuit,” *Associated Press State and Local Wire*, Kansas City, Mo., August 12, 2001; Karen Dillon, “Ex-workers Offered Medical Screenings,” *Kansas City Star*, February 10, 2007; “Ex-Plant Workers in KC Are Tested for Toxic Dust Exposure; Plant Uses Beryllium, Which Can Affect Lungs, to Make Nuclear Triggers,” *Associated Press*, June 19, 2000; Kit Wagar, “Beryllium Suits Allege Cover-up; Two Honeywell Workers Are Incurably Ill,” *Kansas City Star*, August 12, 2001; Joe Robertson, “Old Toxins Lead to New Doubts; Questions Surround Plant in South KC,” *Kansas City Star*, February 15, 2003.

¹³ Outline of leasing arrangement supplied via email exchange with Michael T. Brincks, Acting Deputy Regional Administrator, Heartland Region, General Services Administration, 9/10/07.

¹⁴ Civiak quote from Nuclear Watch New Mexico, “Off-Budget Nuclear Weapons Lab Financing Scheme Disclosed: U.S. Postal Service to Fund Construction of New Los Alamos Science Complex; Legally Mandated Federal Environment Review Not Conducted,” press release, June 21, 2006.

¹⁵ Executive Office of the President, Office of Management and Budget, Circular No. A-11, Appendix A, “Scorekeeping Guidelines,” July 2007.

¹⁶ Details from email exchanges with Michael T. Brincks, GSA, op. cit.

¹⁷ R.J. Hemley and D. Merion, study leaders, “Pit Lifetime”, *The MITRE Corporation*, JSR-06-335, January 11, 2007,

p. 1.

¹⁸ “Busywork for Nuclear Scientists,” *New York Times*, January 15, 2007.

¹⁹ Budget figures are from FY 2008 DOE budget request to Congress, Detailed Budget Justifications, Energy and Water Development Appropriations, Volume 1, National Nuclear Security Administration budget.

²⁰ Ibid.

²¹ United States Government Accountability Office, Testimony Before the Subcommittee on Energy and Water Development, Committee on Appropriations, U.S. House of Representatives, Statement of Gene Aloise, Director, Natural Resources and Environment, Nuclear Weapons: Views on Proposals to Transform the Nuclear Weapons Complex, Report GAO-06-606T, April 26, 2006, p.13. GAO figures based on U.S. Department of Energy, Secretary of Energy Advisory Board, Report of the Nuclear Weapons Complex Infrastructure Task Force:

Recommendations for the Nuclear Weapons Complex of the Future, Final Report, July 13, 2005, Appendix E, pp. E-1 and E-2.

²² Budget details available at www.fcni.org/nuclear.