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## UNITED STATES DISTRICT COURT FOR THE DISTRICT OF NEW MEXICO

# THE LOS ALAMOS STUDY GROUP,

Case No. 1:10-CV-0760-JH-ACT

Plaintiff,

**V**.

## UNITED STATES DEPARTMENT OF ENERGY, et al.,

Federal Defendants.

# **DECLARATION OF DONALD L. COOK**

I, Donald L. Cook, Ph.D., pursuant to Title 28, United States Code, Section 1746, declare:

 I am the Deputy Administrator for Defense Programs at the National Nuclear Security Administration ("NNSA"), a semi-autonomous agency within the Department of Energy ("DOE"). I have held this position since June 2010, when I was confirmed by the United States Senate. As Deputy Administrator, I am responsible for managing the U.S. nuclear security enterprise of laboratories and manufacturing facilities. Prior to my Senate confirmation, I served as Managing Director and Chief Executive Officer of

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the Atomic Weapons Establishment in the United Kingdom from 2006 to 2009. From 1977 to 2005, I worked at Sandia National Laboratories, in Albuquerque, New Mexico, in Pulsed Power Sciences, Microtechnologies, Infrastructure, and Security. I am a graduate of the University of Michigan, and obtained my Ph.D. from the Massachusetts Institute of Technology. I am a Fellow of the American Association for the Advancement of Science and the Institute of Physics, and I am a member of the American Physical Society and the American Nuclear Society.

2. I oversee the proposed Chemistry and Metallurgy Research Replacement Project ("CMRR Project"), which is the subject of this litigation. This declaration provides information on the role of NNSA, the importance of the CMRR Project to our national defense, and the breadth of environmental analysis NNSA has performed and will perform to evaluate the potential environmental impacts of the proposed CMRR Project. The information contained herein is based on my personal knowledge and information provided to me during the performance of my official duties.

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## **Background on the Proposed CMRR Project**

- 3. NNSA was established by Congress in 2000 as a semi-autonomous agency within the Department of Energy. NNSA is responsible for the management and security of the nation's nuclear weapons, nuclear nonproliferation, and naval reactor programs. NNSA performs vital national security work by ensuring that the nuclear weapons in the U.S. stockpile are safe, secure, and reliable.
- 4. In the mid-1990s, Congress passed the National Defense Authorization Act, which implemented Presidential Decision Directive 15 instructing DOE "to establish a stewardship program to ensure the preservation of the core intellectual and technical competence of the U.S. in nuclear weapons." In response to this direction from the President and Congress, DOE developed the Stockpile Stewardship and Management Program to provide a single, integrated technical program for maintaining the continued safety and reliability of the nuclear weapons stockpile. The activities undertaken at DOE's Los Alamos National Laboratory ("LANL") in Los Alamos, New Mexico a laboratory administered by NNSA are essential to this mission.

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- 5. One of LANL's most important facilities is the Chemistry and Metallurgy Research ("CMR") Building. The CMR Building has unique capabilities for performing special nuclear material analytical chemistry, materials characterization, and actinide research and development. These capabilities support a number of critical national security missions, including nuclear nonproliferation programs; the manufacturing, development, and surveillance of pits (the fissile cores of nuclear warheads); life-extension programs; dismantlement efforts; waste management; material recycle and recovery; and research.
- 6. The CMR Building, a Hazard Category 2 nuclear facility (a facility with significant nuclear material and nuclear operations with the potential for significant onsite consequences), is almost 60 years old. Many of its structures, systems, and components are aged, outmoded, and deteriorated. In 1999, a seismic fault trace was discovered beneath two wings of the CMR Building, raising some concerns about its structural integrity. Over the long term, NNSA cannot continue to operate the assigned LANL mission-critical CMR support capabilities in the existing CMR Building at an acceptable

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level of risk to worker safety and health.

- 7. Since 1999, NNSA has taken steps to minimize the worker health and safety risks associated with continued operations at the CMR Building. NNSA has limited CMR operations to the minimum set of activities that support core mission requirements or that leverage CMR capabilities. It has reduced the radioactive and combustible materials inventory and the operational footprint. Programmatic operations have ceased in three of the six laboratory wings, and new technical safety requirements are currently being implemented that reduce the radioactive material-at-risk allowed in the building. During the next few years, certain functions, such as sample management, will be relocated to other facilities within LANL to further reduce the material-at-risk in the CMR Building. Through all of these actions, LANL is striving to reduce the worker health and safety risks of operating CMR while continuing to meet national security commitments.
- 8. To ensure that NNSA can fulfill its mission-critical capabilities for the next 50 years in a safe, secure, and environmentally sound manner, DOE proposed in the late 1990s to develop a new, long-term facility where current CMR

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activities could be carried out without the worker health and safety risks associated with operating the present CMR Building. This effort became known as the CMRR Project. As part of the proposed CMRR Project, a new nuclear facility ("CMRR-NF") would be constructed, allowing CMR capabilities to be replaced and relocated.

## Status of the NEPA Determination Process

9. DOE has undertaken extensive environmental review of the proposed CMRR Project pursuant to the National Environmental Policy Act ("NEPA"). On July 23, 2002, NNSA published a Notice of Intent to prepare the CMRR Environmental Impact Statement ("EIS") and invited public comment on the CMRR EIS proposal. NNSA also hosted two public scoping meetings on the proposed CMRR Project in August of 2002. After analyzing the potential environmental impacts and considering public comments, NNSA issued the Final EIS for the proposed CMRR Project in November 2003 ("2003 EIS"). In the EIS, DOE analyzed the potential impacts of four distinct alternatives, together with four construction options for each of the alternatives involving new construction.

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- 10. NNSA published its Record of Decision ("ROD") on February 12, 2004 ("2004 ROD") announcing that the new CMRR Project would consist of two buildings: a single, above-ground consolidated special nuclear materialcapable, Hazard Category 2 laboratory building (the CMRR-NF), and a separate but adjacent administrative office and support functions building, now referred to as the Radiological Laboratory Utility Office Building ("RLUOB").
- 11. According to the original design analyzed in the 2003 EIS, the proposed CMRR-NF was to have a footprint of 300 by 275 feet, with one story below ground and one story above ground. Excavation for the building would go no deeper than 50 feet, and construction was expected to last 34 months.
- 12. Since 2004, new developments have arisen that required changes to the CMRR-NF design. Specifically, a site-wide analysis of the geophysical structures that underlay the area occupied by LANL was prepared. In light of this new geologic information regarding seismic conditions at the site, and more detailed information on the various support functions, actions, and

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infrastructure needed for construction, changes were made to the proposed design of the CMRR-NF. In addition, design modifications have been made to ensure the facility implements updated DOE nuclear safety basis requirements for increased facility engineering controls to ensure protection of the public, workers, and the environment. Also, sustainable design principles have been incorporated to minimize the environmental impacts of construction and operation of the proposed CMRR-NF.

13. These changes from the original proposed design relate to structural aspects of the building, as opposed to the mission or purpose. The current design for the laboratory consists of an enlarged footprint, a deeper foundation, thicker walls, ceilings, and floors, and additional infrastructure. The current planned footprint is 342 by 304 feet, with three levels below ground and one-and-a-half levels above ground. Two concrete batch plants and approximately 560 tons of structural steel will be needed for construction, and an additional 75 feet of excavation will be required to meet seismic design requirements. Based on an enhanced understanding of the geology, current design practices will require excavation of the building footprint to an average depth of 125 feet. The resulting hole will be backfilled up to 60 feet with a lean, low-

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slump concrete to stabilize the soil and support additional facility mass. All excavated soil and rock material from the CMRR-NF site will be transported to storage areas within LANL and ultimately be reused in various construction and landscaping projects. Construction of the CMRR-NF will take longer and cost more than the proposed design analyzed in the 2003 EIS.

- 14. Despite these design changes, the purpose and need for the CMRR Project have not changed, nor has the scope of operations to be carried out in the proposed CMRR-NF. The quantity of special nuclear material that could be handled and stored in the CMRR-NF would remain constant at six metric tons. The laboratory space where key mission operations would be performed in the facility is 22,500 square feet, which is significantly reduced from what was contemplated prior to the design modification. The design changes proposed for the CMRR-NF are primarily a function of seismic and other safety concerns and are not dictated by programmatic changes.
- 15. On July 1, 2010, Plaintiff's counsel sent a letter to DOE Secretary Dr. Steven Chu and NNSA Administrator Thomas P. D'Agostino requesting that DOE halt any and all CMRR-NF design activities, make no further contractual

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obligations, and seek no further funding until a new EIS was prepared based on the updated CMRR-NF design. On July 30, 2010, I responded to Plaintiff's counsel in a letter and stated NNSA's intention to prepare a Supplement Analysis pursuant to 10 C.F.R. 1021.314(c)(2) to assist NNSA in determining whether the 2003 EIS should be supplemented, a new environmental impact statement should be prepared, or no further NEPA documentation was required.

- 16. On September 21, 2010, I determined for prudential reasons to pursue the preparation of a Supplemental Environmental Impact Statement ("SEIS") to analyze the potential environmental impacts associated with the construction of the proposed CMRR-NF (See Exhibit 1). A Notice of Intent to prepare an SEIS appears in the October 1, 2010 issue of the Federal Register (See Exhibit 2).
- 17. NNSA will conduct a public scoping process as part of the preparation of the SEIS. The scoping process will involve two public scoping meetings to assist NNSA in identifying potential impacts, alternatives, and mitigation strategies that should be analyzed in the SEIS. Other federal agencies,

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Native American tribes, agencies of the State of New Mexico, and the general public are on notice of our intention to prepare an SEIS and will have an opportunity to participate in establishing the scope of the environmental analysis. In addition, NNSA will make a draft of the SEIS available to the public for a 45-day comment period. During this period, interested members of the public and stakeholders will have an opportunity to comment on the Draft SEIS, and all comments received will be considered in the preparation of the Final SEIS.

 The Final SEIS will help me and other decision makers at DOE determine how best to proceed.

## Status of the Proposed CMRR Project

19. To date, approximately \$210 million has been expended on the proposed CMRR-NF design. This accounts for six years of building design and analysis. Currently, 283 personnel (including LANL staff and contractors) are employed on the proposed CMRR-NF Project.

- 20. NNSA is still evaluating aspects of the relative sizing and layout of the proposed CMRR-NF, and the overall project design is presently less than 50 percent complete.
- 21. No CMRR-NF construction is underway, nor will any occur as long as the SEIS is being prepared. If one were to visit the proposed CMRR-NF site today, one would see a partially excavated slope, slightly larger than the footprint of the proposed facility, and small diameter bore holes. The slope and bore holes were excavated in 2006 solely for the purpose of geological examination. The samples from this excavation revealed the seismic concerns that prompted the amended CMRR-NF design. The area was later used as construction laydown space for the RLUOB the administrative office and support functions building adjacent to the proposed CMRR-NF. The size of the excavation is consistent with the CMRR Project selected in the 2004 ROD, and no excavation or construction is planned during Fiscal Year 2011.
- 22. Construction of the RLUOB is complete, and building outfitting is currently underway. Occupancy will occur at the end of next year, with radiological

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operations scheduled to begin in 2013.

23. Once the SEIS process is completed, if NNSA decides to proceed with construction of the proposed CMRR-NF, the building would become operational in 2022.

# Importance of Continuing the CMRR Design Process

- 24. Compliance with Plaintiff's request to "halt any and all design activities, make no further contractual obligations, and seek no further funding" for the proposed CMRR Project would involve firing most, if not all, of the 283 LANL and contract staff employed on the CMRR-NF Project in a time of economic hardship.
- 25. Continuing the design process on its current track allows NNSA to advance its national security mission to manage the nation's nuclear weapons and further nuclear nonproliferation efforts. Between October 2010 and June 2011, the expected SEIS period, the overall design is expected to advance by only about 15 percent. The design activities during this period will enhance

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our understanding of the requirements for the project and will save a substantial amount of time and taxpayer money in the event that construction ultimately goes forward. NNSA will not undertake any excavation or grading activities until the SEIS process is completed.

26. I swear under the penalty of perjury that the foregoing is true and correct.

Dated this 4th day of October, 2010 in Washington, D.C.

DONALD L. COOK Deputy Administrator for Defense Programs

Exhibit 1 to the Declaration of Dr. Donald L. Cook



Department of Energy National Nuclear Security Administration Washington, DC 20585



September 21, 2010

## MEMORANDUM FOR DISTRIBUTION

FROM:

DONALD L. COOK DEPUTY ADMINISTRATOR FOR DEFENSE PROGRAMS

SUBJECT:

Supplemental Environmental Impact Statement Determination for the Chemistry and Metallurgy Research Building Replacement Nuclear Facility

Pursuant to the National Environmental Policy Act of 1969, as amended (NEPA), the National Nuclear Security Administration (NNSA) has determined to prepare a Supplemental Environmental Impact Statement (SEIS) for the proposed Chemistry and Metallurgy Research Building Replacement Nuclear Facility, (CMRR-NF). Mr. John A. Tegtmeier, Program Integration Team, AMNSM, at LASO will serve as the Document Manager for the CMRR-NF SEIS.

The Council on Environmental Quality's implementing regulations for NEPA (40 CFR Part 1502.9[c] [1] and [2]) and DOE's NEPA implementing regulations (10 CFR 1021.314) require the preparation of a supplement to an EIS when there are substantial changes to a proposal or when there are significant new circumstances or information relevant to environmental concerns. DOE may also prepare a supplemental EIS at any time to further the purposes of NEPA. In this instance, for example, new information about the geologic environment at Los Alamos has become available and there have been changes proposed to the CMRR-NF project since the *Final Environmental Impact Statement for the Chemistry and Metallurgy Research Building Replacement Project at Los Alamos National Laboratory, Los Alamos, New Mexico,* 2003 CMRR EIS (DOE/EIS-0350) was completed and the 2004 Record of Decision was issued. In furtherance of NEPA, NNSA has decided to prepare a supplemental environmental impact statement to analyze the potential environmental impacts associated with the construction and operation of the CMRR-NF. The process of preparing the SEIS will include public participation to establish the scope of the issues to be addressed in the analysis.

Please direct any questions regarding this determination to Mary E. Martin, NNSA NEPA Compliance Officer, at (202) 586-9438.



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## **DISTRIBUTION:**

C. Borgstrom, GC/HQ M. Martin, NA-50 M. Thompson, NA-10 M. Urie, NNSA GC J. Michele, NA-10 K. Smith, LASO H. Le-Doux, LASO J. Tegtmeier, LASO S. DeRoma, LASO G. Rael, LASO

# Exhibit 2 to the Declaration of Dr. Donald L. Cook

Federal Register/Vol. 75, No. 190/Friday, October 1, 2010/Notices

#### **DEPARTMENT OF ENERGY**

#### **Bonneville Power Administration**

#### Availability of the Bonneville Purchasing instructions (BPi) and Bonneville Financial Assistance instructions (BFAi)

AGENCY: Bonneville Power Administration (BPA), DOE. ACTION: Notice of document availability.

SUMMARY: Copies of the Bonneville Purchasing Instructions (BPI), which contain the policy and establish the procedures that BPA uses in the solicitation, award, and administration of its purchases of goods and services, including construction, are available in printed form for \$30, or without charge at the following Internet address: http://www.bpa.gov/corporate/business/ bpi. Copies of the Bonneville Financial Assistance Instructions (BFAI), which contain the policy and establish the procedures that BPA uses in the solicitation, award, and administration of financial assistance instruments (principally grants and cooperative agreements), are available in printed form for \$15 each, or available without charge at the following Internet address: http://www.bpa.gov/corporate/business/ bfai.

**ADDRESSES:** Unbound copies of the BPI or BFAI may be obtained by sending a check for the proper amount to the Head of the Contracting Activity, Routing DGP–7, Bonneville Power Administration, P.O. Box 3621, Portland, Oregon 97208–3621.

FOR FURTHER INFORMATION CONTACT: Manager, Communications, 1–800–622– 4519.

SUPPLEMENTARY INFORMATION: BPA was established in 1937 as a Federal Power Marketing Agency in the Pacific Northwest. BPA operations are financed from power revenues rather than annual appropriations. BPA's purchasing operations are conducted under 16 U.S.C. 832 et seq. and related statutes. Pursuant to these special authorities, the BPI is promulgated as a statement of purchasing policy and as a body of interpretative regulations governing the conduct of BPA purchasing activities. It is significantly different from the Federal Acquisition Regulation, and reflects BPA's private sector approach to purchasing the goods and services that it requires. BPA's financial assistance operations are conducted under 16 U.S.C. 839 et seq. and 16 U.S.C. 839 et seq. The BFAI express BPA's financial assistance policy. The BFAI also comprise BPA's rules governing

implementation of the principles provided in the following Federal Regulations and/or OMB circulars:

- 2 CFR Part 220 Cost Principles for Educational Institutions (Circular A-21);
- 2 CFR Part 225 Cost Principles for State, Local and Indian Tribal Governments (Circular A–87);
- Grants and Cooperative Agreements with State and Local Governments (Circular A–102);
- Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals and Other Non-Profit Organizations (Circular A-110);
- 2 CFR Part 230 Cost Principles for Non-Profit Organizations (Circular A-122); and
- Audits of States, Local Governments and Non-Profit Organizations (Circular A–133)

BPA's solicitations and contracts include notice of applicability and availability of the BPI and the BFAI, as appropriate, for the information of offerors on particular purchases or financial assistance transactions.

Issued in Portland, Oregon, on September 17, 2010.

#### Damian J. Kelly,

Manager, Purchasing/Property Governance. [FR Doc. 2010–24672 Filed 9–30–10; 8:45 am] BILLING CODE 6450–01–P

#### DEPARTMENT OF ENERGY

National Nuclear Security Administration

Notice of intent To Prepare a Supplemental Environmental Impact Statement for the Nuclear Facility Portion of the Chemistry and Metailurgy Research Building Replacement Project at Los Alamos National Laboratory, Los Alamos, NM

AGENCY: U.S. Department of Energy (DOE), National Nuclear Security Administration (NNSA). ACTION: Notice of intent.

**SUMMARY:** The Council on Environmental Quality's implementing regulations for the National Environmental Policy Act (NEPA) (40 CFR 1502.9[c][1] and [2]) and DOE's NEPA implementing regulations (10 CFR 1021.314) require the preparation of a supplement to an environmental impact statement (EIS) when there are substantial changes to a proposal or when there are significant new circumstances or information relevant to environmental concerns. DOE may also prepare a supplemental EIS at any time to further the purposes of NEPA. Pursuant to these provisions, the NNSA, a semi-autonomous agency within the DOE, intends to prepare a supplemental environmental impact statement (SEIS) to assess the potential environmental impacts of the construction and operation of the nuclear facility portion of the Chemistry and Metallurgy Research Building Replacement Project (CMRR–NF) at Los Alamos National Laboratory (LANL), Los Alamos, New Mexico.

The CMRR Project, including the CMRR-NF, was the subject of NNSA's Final Environmental Impact Statement for the Chemistry and Metallurgy **Research Building Replacement Project** at Los Alamos National Laboratory, Los Alamos, New Mexico (DOE/EIS-0350; the CMRR EIS) issued in November 2003, and a February 2004 Record of Decision (ROD) (69 FR 6967). Over time, due in large part to detailed site geotechnical investigations, some aspects of the CMRR-NF Project have changed from what was foreseen when the CMRR EIS was prepared. The potential environmental impacts of these proposed changes will be analyzed in the CMRR-NF SEIS. **DATES:** NNSA invites stakeholders and members of the public to submit comments and suggestions on the scope of the SEIS during the SEIS scoping period, which starts with the publication of this Notice and will continue for 30 days until November 1, 2010. NNSA will consider all comments received or postmarked by that date in defining the scope of this SEIS. Comments received or postmarked after that date will be considered to the extent practicable. Two public scoping meetings will be held to provide the public with an opportunity to present comments, ask questions, and discuss concerns regarding the SEIS with NNSA officials. Public scoping meetings will be held on October 19, 2010, at the White Rock Town Hall, 139 Longview Drive, White Rock, New Mexico and October 20, 2010, at the Cities of Gold Casino Hotel, Pojoaque, New Mexico. Both meetings will begin at 4 p.m. and end at 7 p.m. The NNŠA will publish additional notices regarding the scoping meetings in local newspapers in advance of the scheduled meetings. Any necessary changes will be announced in the local media.

Any agency, state, pueblo, tribe, or unit of local government that desires to be designated a cooperating agency should contact Mr. John Tegtmeier at the address listed below by the closing date of the scoping period. Federal Register/Vol. 75, No. 190/Friday, October 1, 2010/Notices

ADDRESSES: Written comments or suggestions concerning the scope of the CMRR–NF SEIS or requests for more information on the SEIS and public scoping process should be directed to: Mr. John Tegtmeier, CMRR–NF SEIS Document Manager, U.S. Department of Energy, National Nuclear Security Administration, Los Alamos Site Office, 3747 West Jemez Road, TA–3 Building 1410, Los Alamos, New Mexico, 87544; facsimile at 505–667–5948; or e-mail at: NEPALASO@doeal.gov. Mr. Tegtmeier may also be reached by telephone at 505–665–0113.

In addition to providing comments at the public scoping meetings, all interested parties are invited to record their comments, ask questions concerning the EIS, or request to be placed on the EIS mailing or document distribution list by leaving a message on the SEIS Hotline at (toll free) 1–877– 427–9439. The Hotline will provide instructions on how to record comments and requests.

FOR FURTHER INFORMATION CONTACT: For general information on the NNSA NEPA process, please contact: Ms. Mary Martin (NA–56), NNSA NEPA Compliance Officer, U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585, or telephone 202-586-9438. For general information about the DOE NEPA process, please contact: Ms. Carol Borgstrom, Director, Office of NEPA Policy and Compliance (GC-54), U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585, telephone 202– 586–4600, or leave a message at 1–800– 472-2756. Additional information about the DOE NEPA process, an electronic archive of DOE NEPA documents, including those referenced in this announcement, and other NEPA resources are provided at http:// nepa.energy.gov.

SUPPLEMENTARY INFORMATION: LANL is located in north-central New Mexico, 60 miles north-northeast of Albuquerque, 25 miles northwest of Santa Fe, and 20 miles southwest of Española in Los Alamos and Santa Fe Counties. It is located between the Jemez Mountains to the west and the Sangre de Cristo Mountains and Rio Grande to the east. LANL occupies an area of about 25,600 acres [10,360 hectares] or approximately 40 square miles and is operated for NNSA by a contractor, Los Alamos National Security, LLC. It is a multidisciplinary, multipurpose institution engaged in theoretical and experimental research and development. LANL has been assigned science, research and development, and

production mission support activities that are critical to the accomplishment of the NNSA's national security objectives as reflected in the Stockpile Stewardship and Management Programmatic EIS (DOE/EIS-0236) and the Complex Transformation Supplemental Programmatic EIS (DOE/ EIS-0236-S4). LANL's main role in NNSA mission objectives includes a wide range of scientific and technological capabilities that support nuclear materials handling, processing and fabrication; stockpile management; materials and manufacturing technologies; nonproliferation programs; research and development support for national defense and homeland security programs; and DOE waste management activities.

The capabilities needed to execute the NNSA mission activities require facilities at LANL that can be used to handle actinides and other radioactive materials in a safe and secure manner. (The actinides are any of a series of 14 chemical elements with atomic numbers ranging from 89 (actinium) through 103 (lawrencium)). Of primary importance are the facilities located within the Chemistry and Metallurgy Research (CMR) Building and the Plutonium Facility (located at Technical Areas (TAs) 3 and 55, respectively), which are used for processing, characterizing, and storage of special nuclear material. (Special nuclear material is defined by the Atomic Energy Act of 1954 as plutonium, uranium-233, or uranium enriched in the isotopes uranium-233 or uranium-235). Most of the LANL mission support functions previously listed require analytical chemistry material characterization, and actinide research and development support capabilities that currently exist within the CMR Building and are not available elsewhere. Other unique capabilities are located at the adjacent Plutonium Facility. Work is sometimes moved between the CMR Building and the Plutonium Facility to make use of the full suite of capabilities that these two facilities provide. CMR Building operations and capabilities are currently restricted in scope due to safety and security constraints; it cannot be operated to the full extent needed to meet NNSA operational requirements.

The CMR building contains about 550,000 square feet (about 51,100 square meters) of floor space on two floors divided between a main corridor and seven wings. It was constructed in the early 1950s. DOE maintained and upgraded the building over time to provide for continued safe operations. However, beginning in 1997 and 1998, a series of operational, safety, and seismic issues surfaced regarding the long-term viability of the CMR Building. In January 1999, the NNSA approved a strategy for managing operational risks at the CMR Building. The strategy included implementing operational restrictions to ensure safe operations. These restrictions are impacting the assigned mission activities conducted at the CMR Building. This strategy also committed NNSA to develop plans to relocate the CMR capabilities elsewhere at LANL to maintain support of national security and other NNSA missions. The CMRR EIS was prepared and issued in 2003, followed by a ROD in 2004. The CMRR EIS analyzed four action

alternatives: (1) The construction and operation of a new CMRR facility at TA- $5\overline{5}$ ; (2) the construction of a new CMRR facility at a "greenfield" location within TA–6; (3) a "hybrid" alternative maintaining administrative offices and support functions at the existing CMR building with a new Hazard Category 2 laboratory facility built at TA-55; and, (4) a "hybrid" alternative with the laboratory facility being constructed at TA-6. The CMRR EIS also analyzed a no action alternative where the existing CMR building would continue to be kept in service. In the 2004 ROD, NNSA announced its decision to implement the preferred alternative (alternative 1): To construct a new CMRR facility which would include a single above-ground, consolidated nuclear material-capable, Hazard Category 2 laboratory building (construction option 3) with a separate, adjacent administrative office and support functions building, now referred to as the CMRR Radiological Laboratory/Utility/Office Building (CMRR RLUOB). Upon completion, the CMRR Facility would replace the CMR Building, operations would be moved to the new CMRR Facility, and the vacated CMR Building would undergo decommissioning, decontamination, and demolition. (While the CMRR RLUOB has been constructed in TA-55 at LANL, the installation of laboratory equipment has not been completed and operations have not begun). Since 2004, the planning process for the construction and operation of the CMRR-NF has continued to progress and take into consideration newly gathered site-specific data and safety and security requirements. Purpose and Need: The NNSA's

Purpose and Need: The NNSA's purpose and need for proposing the construction and operation of the CMRR–NF have not changed since the CMRR EIS was prepared and issued in 2003. NNSA needs to provide the physical means for accommodating the CMR Building's functional, missioncritical nuclear capabilities, and to

consolidate activities for safer and more efficient operations. In the 2003 CMRR EIS, NNSA analyzed the potential environmental impacts associated with the proposed relocation of LANL analytical chemistry (AC) and materials characterization (MC), and associated research and development capabilities that currently exist primarily at the existing CMŘ building, to a newly constructed facility, and operation of the new facility for the next 50 years. In the May 2008, Final Site-Wide Environmental Impact Statement for Continued Operation of Los Alamos National Laboratory, Los Alamos, New Mexico (DOE/EIS-0380), the CMRR was considered and its potential environmental impacts analyzed as a part of the No Action Alternative and each of the action alternatives for continued operation of LANL

The potential environmental impacts associated with the construction and operation of the CMRR-NF were also analyzed within certain alternatives in the Complex Transformation SPEIS (DOE/EIS-0236-S4) as part of the proposal to reconfigure and streamline NNSA's nuclear security enterprise. NNSA issued two RODs based on the **Complex Transformation SPEIS analysis** in December 2008. In the SPEIS ROD for operations involving plutonium, uranium, and the assembly and disassembly of nuclear weapons (73 FR 77644), NNSA announced its decision to retain plutonium manufacturing and research and development at LANL, and in support of these activities, to proceed with construction and operation of the CMRR-NF at LANL as essential to its ability to meet national security requirements regarding the nation's nuclear deterrent.

#### **Proposed Action and Alternatives**

Proposed Action: The Proposed Action is to construct the CMRR–NF at TA–55. Over time some aspects of the proposed CMRR–NF Project plans have changed. These proposed changes include, for example:

• Changes to the CMRR-NF structure required for seismic safety based on new information from additional geotechnical investigations conducted at the site. These changes involve incorporating additional structural steel and concrete into the building construction and increasing the quantity of material that must be excavated for the building foundation;

• Changes to the infrastructure to support the CMRR–NF construction activities, such as concrete batch plants, construction material lay-down areas and warehouses, and temporary office trailers and parking areas. Some of these changes involve the use of additional acreage. Most of these proposed changes are temporary in duration;

• Changes to the CMRR–NF structure to ensure 10 CFR part 830 nuclear safety basis requirements are met for facility engineering controls to ensure protection of the public, workers, and the environment; and

• Changes to incorporate additional sustainable design principles and environmental conservation measures. These changes minimize the environmental impacts of construction and operation of the CMRR-NF.

The potential environmental impacts of these and similar changes will be analyzed in the CMRR–NF SEIS.

No Action Alternative: The No Action alternative would be the construction of the CMRR–NF and the ancillary and support activities as announced in the 2004 ROD.

CMR Alternative 1: Do not construct a replacement facility to house the capabilities planned for the CMRR-NF. Continue to perform analytical chemistry, material characterization, and actinide research and development activities in the CMR Building, with no facility upgrades, while performing routine maintenance at the level needed to sustain programmatic operations for as long as feasible.

*CMR* Alternative 2: Same as CMR Alternative 1, but includes making the extensive facility upgrades needed to sustain CMR programmatic operations for another 20 to 30 years.

Preliminary Identification of Environmental Issues. NNSA has tentatively identified the following issues for analysis in this SEIS. Additional issues may be identified as a result of the scoping process.

1. Potential impacts to air, water, soil, visual resources and viewsheds.

2. Potential impacts to plants and animals, and to their habitats, including Federally-listed threatened or endangered species and their critical habitats.

3. Potential impacts from irretrievable and irreversible consumption of natural resources and energy, including transportation issues.

4. Potential impacts to cultural resources, including historical and prehistorical resources and traditional cultural properties.

5. Potential impacts to infrastructure and utilities.

6. Potential impacts to socioeconomic conditions.

7. Potential environmental justice impacts to minority and low-income populations.

8. Potential cumulative impacts from the Proposed Action and alternatives

together with other past, present, and reasonably foreseeable actions at LANL.

CMRR-NF SEIS Preparation Process: The scoping process for a NEPA document is an opportunity for the public to assist the NNSA in determining the alternatives and issues for analysis. Alternatives may be added, deleted, or modified as a result of scoping. The purpose of the scoping meetings is to receive oral and written comments from the public. The meetings will use a format to facilitate dialogue between NNSA and the public and will be an opportunity for individuals to provide written or oral statements. NNSA welcomes specific comments or suggestions on the content of these alternatives, or on other alternatives that should be considered. The above list of issues to be considered in the SEIS analysis is tentative and is intended to facilitate public comment on the scope of the SEIS. It is not intended to be all-inclusive, nor does it imply any predetermination of potential impacts. The CMRR--NF SEIS will describe the potential environmental impacts of the alternatives, using available data where possible and obtaining additional data where necessary. Copies of written comments and transcripts of oral comments will be available as soon as practicable after the public scoping meeting on the Internet at: http://www.doeal.gov/laso/ NEPADocuments.aspx.

Following the scoping period announced in this Notice of Intent, and after consideration of comments received during scoping, NNSA will prepare a Draft Supplemental Environmental Impact Statement for the Construction of the Chemistry and Metallurgy Replacement Project's Nuclear Facility at Technical Area-55 Within Los Alamos National Laboratory, Los Alamos, New Mexico (DOE/EIS-0350-S1). Comments received on the Draft SEIS during the planned 45-day comment period will be considered and addressed in the Final SEIS, which NNSA anticipates issuing by July 2011. NNSA will issue a ROD no sooner than 30 days after publication by the Environmental Protection Agency of a Notice of Availability of the Final SEIS.

Issued in Washington, DC, this 28th day of September 2010.

#### Thomas P. D'Agostino,

Administrator, National Nuclear Security Administration.

[FR Doc. 2010-24681 Filed 9-30-10; 8:45 am] BILLING CODE 6450-01-P

## IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF NEW MEXICO

### THE LOS ALAMOS STUDY GROUP,

## Plaintiff,

v.

Case No. 1:10-CV-0760-JH-ACT

UNITED STATES DEPARTMENT OF ENERGY; THE HONORABLE STEPHEN CHU, in his capacity as SECRETARY, DEPARTMENT OF ENERGY; NATIONAL NUCLEAR SECURITY ADMINISTRATION; THE HONORABLE THOMAS PAUL D'AGOSTINO, in his Capacity as ADMINISTRATOR, NATIONAL NUCLEAR SECURITY ADMINISTRATION,

Defendants.

### **AFFIDAVIT OF GREGORY MELLO**

State of New Mexico ) ) ss. County of Bernalillo )

Gregory Mello, under penalty of perjury, hereby declares as follows this 21<sup>st</sup> day of October 2010:

 I am the Executive Director of the Plaintiff, Los Alamos Study Group ("Plaintiff") or "LASG"). I make this affidavit in response to Defendants' Motion to Dismiss for lack of jurisdiction.

2. I have held this position since 1992, when LASG made the transition from an informal association I co-founded in 1989 to a staffed organization. LASG is a § 501(c)(3) non-profit organized for the purposes of policy analysis and education regarding nuclear weapons

policies and institutions, especially Los Alamos National Laboratory ("LANL"), and other energy and environmental issues. My work involves technical analysis, advising government, education, litigation, providing information to journalists, scholars, and citizens, and the variety of administrative tasks that attend running a nonprofit citizens' organization.

3. I graduated with distinction from Harvey Mudd College in 1971 in systems engineering, with courses in environmental policy. I interned in the newly-formed EPA and then at the Central Clearing House in Santa Fe, then New Mexico's largest environmental organization, where I administered an external studies program in environmental policy. I was a HUD Fellow at Harvard and received a master's degree in Regional Planning. I worked for the New Mexico Environment Department (NMED, then a Division with the Health Department) twice in mid-1980s. In 1984 I led the first external regulation at LANL and was later a supervising geohydrologist at NMED. From 1989 through 1992 I was a hydrologist in private practice. Later, while at the Study Group, I was a visiting Research Fellow at Princeton University's Program on Science and Global Security. My analysis and opinions have been published in the Washington Post, Bulletin of the Atomic Scientists, Issues in Science and Technology, in thousands of news articles, and elsewhere. I have been invited to speak on nuclear weapons issues in many places, including the European Parliament and the United Nations. I have two decades of experience as a scholar and actor in the nexus of policy, management, and infrastructure of the nuclear weapons complex.

4. I have been following the development of the CMRR project carefully since its inception. It have taken part in hundreds of face-to-face meetings and conversations about this project in particular, NNSA infrastructure modernization, and plutonium warhead core ("pit")

production (the primary CMRR mission) with Defendants, cognizant executive branch officials, congressional staff, congressional research agencies, federal officials, and independent scholars. It has been my job to understand this project as thoroughly as possible and to help educate decisionmakers and the public about it as best I can. Some of our CMRR-related research and outreach products have been collected at <u>http://www.lasg.org/CMRR/open\_page.htm</u>. Our print journalism archives on plutonium infrastructure and operations at LANL are gathered at <u>http://www.lasg.org/Pit\_Prod.htm</u>. An extensively-footnoted background paper, current to one year ago, before the dramatic changes which are the subject of this litigation, can be found at <u>http://www.lasg.org/CMRR\_Dec\_09.pdf</u>.

5. I make this affidavit to present to the Court the facts concerning the following issues:

A. Defendants' purported compliance in 2003-04 with their obligations under the National Environmental Policy Act ("NEPA") with regard to the project known as the Chemistry and Metallurgy Research Replacement Nuclear Facility (CMRR-NF, Nuclear Facility) at LANL;

B. Changes in the CMRR-NF project in the last three years, which changes rendered the 2003-04 NEPA documents wholly obsolete and inapplicable to the project as it is now constituted;

C. How Plaintiff learned of the fundamental transformations in the CMRR-NF project and the growth in its expected environmental impacts; and

D. The nature of Defendants' commitment to the CMRR-NF project, such that they have predetermined the outcome of any further NEPA processes and it would serve no

purpose for the Court to await such processes; and

E. Plaintiff's members would suffer significant hardship if the project continues without judicial examination and NEPA review.

6. Although the facts presented here are fairly straightforward, this affidavit is based on a close review of hundreds of documents, running into tens of thousands of pages. There is no summary of relevant environmental information and analysis available, which is part of what we are asking for in this lawsuit.

## A. Defendants' Purported NEPA Compliance to Date.

 On November 14, 2003 Defendant NNSA issued a Final Environmental Impact Statement ("EIS") for the CMRR (<u>http://nepa.energy.gov/finalEIS-0350.htm</u>) and on Feb. 12,
 2004 a Record of Decision supporting the construction of the CMRR project as then envisioned.
 (69 Fed. Reg. 6967-72, <u>http://edocket.access.gpo.gov/2004/pdf/04-3096.pdf</u>).

8. The 2003 EIS—the purported NEPA support for the construction of the CMRR-NF—analyzes certain construction alternatives, each of which includes largely similar facilities at one of two nearby technical areas. The facilities considered were "above-ground" structures, *i.e.*, construction would go no deeper than 50 feet, or "below ground," which meant at that time to a maximum of 75 feet deep. There was no discussion of excavation deeper than this, and no acknowledgment that "below ground" construction would entail penetrating to a thick layer of poorly-consolidated volcanic ash, a situation which would later generate extensive additional project requirements, costs, and impacts. The 2004 ROD selected an alternative involving "above ground" construction, which was described as providing an upper bound on environmental impacts. Defendants later abandoned this concept. This far-reaching change is

hardly the only major driver of the project's transformation. Fundamental defects in the original concept, such as in appropriate safety engineering, were exposed by independent oversight, as discussed below.

9. Not all changes in the project may be attributable to Defendants passive responses to new information and oversight. Some may stem from changes in Defendants' proposed future uses for the building and the land around it. In any case, the changes in project conception and requirements, and an increasingly-realistic appreciation of the strong constraints posed by seismicity, geology, soils, topography, access, and the close interaction (often interference) between this project and others and with current programs, have all strongly interacted in the design process to create a very different, far more expensive, and much more environmentally destructive project.

Defendants advised Congress in 2002 that both buildings of the CMRR project 10. could be constructed for approximately \$350-500 million plus administrative costs. (NNSA FY2003 Congressional Budget Request [CBR], Weapons Activities, Project 03-D-103, http://www.cfo.doe.gov/budget/03budget/content/weapons/RTBF.pdf) In the 2003 they again advised Congress that the total cost for both buildings, including \$100 million in administrative would \$600 costs, be million. (NNSA, FY2004 CBR: 347, http://www.cfo.doe.gov/budget/04budget/content/weapons/RTBF.pdf) Defendants advised Congress in 2003 that both buildings of the CMRR project would be completed near the end of calendar year 2010. (Id.). The 2003 EIS estimated completion of construction would occur even sooner. in 2009. (NNSA, Final CMRR EIS: S-28, http://nepa.energy.gov/nepa documents/EIS/EIS0350/Summary.pdf) In 2003, when the CMRR

EIS was written, the Nuclear Facility was to have 60,000 square feet of area for management of plutonium ("Hazard Class 2" space) (NNSA, FY2004 CBR: 349, http://www.cfo.doe.gov/budget/04budget/content/weapons/RTBF.pdf) in a facility of 200.000 square feet gross area overall. (NNSA, Final CMRR EIS: 2-20, http://nepa.energy.gov/nepa\_documents/EIS/EIS0350/Chapter02.pdf). Thus about 30% of the building was to be useful Hazard Class 2 space.

11. In May 2008 NNSA issued a Final Site-Wide Environmental Impact Statement for the Continued Operation of the Los Alamos National Laboratory ("SWEIS") for LANL. (<u>http://nepa.energy.gov/1019.htm</u>) The SWEIS incorporated the publicly announced plan of 2003-04 for the CMRR-NF, without change or updating.

In 2008 NNSA's Complex Transformation Final Supplemental Programmatic 12. Environmental Impact Statement ("CTSPEIS") was issued. (http://nepa.energy.gov/1017.htm) Again, DOE's CTSPEIS included the publicly announced plan of 2003-04 for the CMRR-NF, without change or updating. DOE stated there that "because there will be no change to what has already been analyzed, no further facility NEPA analysis is planned." (CTSPEIS Vol. III, Part 1 of 1, Comment Response Document: 3-57, http://nepa.energy.gov/documents/EIS-0236-S4 F-Vol1 Chap3.pdf) On December 19, 2008 NNSA issued two RODs pursuant to the CTSPEIS (73 Fed. http://edocket.access.gpo.gov/2008/pdf/E8-30193.pdf, Reg. 77644 63, http://edocket.access.gpo.gov/2008/pdf/E8-30194.pdf), one of which included a decision to proceed with design, construction, and operation of a Nuclear Facility at LANL-as analyzed in the 2003 EIS and incorporated into the SWEIS and CTSPEIS.

## B. <u>Fundamental Changes in the Scope of CMRR-NF Render the 2003 EIS Totally</u> <u>Inadequate.</u>

13. Since 2004 certain events have drastically affected Defendants' plans for the CMRR-NF. Defendants changed their "design basis threat" standard for nuclear facilities so that above-ground facilities became politically disfavored for a variety of reasons. (Secretary of Energy Advisory Board [SEAB], "Recommendations for the Nuclear Weapons Complex of the Future," Draft Final Report, 13 July 2005: 16-17, H-5, http://www.cdi.org/PDFs/Report%20of%20the%20Nuclear%20Weapons%20Complex%20Infras tructure%20Task%20Force.pdf) Sometime between early 2007 and late 2009, for this reason and others never explained, Defendants abandoned the previously-selected "above-ground" design for the NF and moved to a design calling for excavation to 75 feet. (Defense Nuclear Facilities Safety Board [DNFSB], [CMRR] Facility Project Certification Review, Report to Congressional Defense Committees, September 2009: 2-4 2-6, http://www.hss.energy.gov/deprep/2009/FB09S04B.pdf) Once at this depth, Defendants ultimately decided, between September 2009 and March 2010, that the combination of soil and seismic conditions required them to excavate to a depth of approximately 125 feet and fill the **"**50 feet" bottom (CMRR Project Update, March 3, 2010: 44, http://www.lanl.gov/orgs/cmrr/publicmeetings/proceedings.shtml) or "60 feet" (Cook Aff. ¶13) of this excavation with solid concrete or grout before commencing construction of the actual building.

14. This current project is fundamentally different from that on which the 2003 EIS was premised, one where the total concrete and steel needed have increased by factors of *more than 55 and 23*, respectively, from what was described in 2003-04.

| Concrete          |   | Steel            |                          |
|-------------------|---|------------------|--------------------------|
| 2003 EIS          | Now   | 2003 EIS         | Now                      |
| (Two buildings)   | (CMRR-NF only)                              | (Two buildings)  | (CMRR-NF only)           |
| 6,255 cubic yards | 347,000 cu. yds.                            | 558 tons         | 12,191 tons (rebar) plus |
|                   |   |                  | 560 tons (structural)    |
| (CMRR EIS: p. 2-  | (McKinney $6/16/10$ , slide 9) <sup>2</sup> | (CMRR EIS, p. 2- |                          |
| 21) <sup>1</sup>  | slide 9) <sup>2</sup>                       | 21) <sup>3</sup> | (Exhibit 1, Cook Aff.    |
|                   |   |                  | ¶13 respectively)        |

If the 2003 EIS had separated out the resource requirements for the Nuclear Facility, allowing a direct building-to-building comparison, the inflation in resources required would be revealed as far greater than shown here.

15. Since 2003 new information has raised questions about the configuration and the very mission of the CMRR-NF. DOE's JASON advisory group issued a public report in 2006, stating that most plutonium pits have a lifetime in excess of 100 years and there are "clear mitigation strategies" for those with lifetimes of 100 years or less. None will need replacement within the lifetime of the CMRR-NF. (JASON, Mitre Corporation, "Pit Lifetime," JSR-06-335, 20 November 2006, <u>http://www.lasg.org/JASONs report pit aging ocr.pdf</u>)

16. In 2007 a new Probabilistic Seismic Hazard Analysis (PSHA) was issued for LANL (URS Corporation, "Update of the Probabilistic Seismic Hazard Analysis and Development of Seismic Design Ground Motions at the Los Alamos National Laboratory," 25 May 2007: Executive Summary, <u>http://www.lasg.org/LANL\_PSHA\_2007.pdf</u>), containing a "significantly" increased estimate of the seismic hazard in both probability and maximum acceleration, with large amplification of peak acceleration expected at the CMRR site. This new

<sup>2</sup> McKinney, Tom. "LANL Construction Corridor," Los Alamos National Laboratory Construction Forum, Espanola, New Mexico, 16 June 2010: 9, <u>http://www.lanl.gov/projects/pcc/presentations/Tom-</u> <u>McKinney Prensation for Community Forum.pdf</u>

<sup>&</sup>lt;sup>1</sup> http://nepa.energy.gov/nepa\_documents/EIS/EIS0350/Chapter02.pdf

<sup>&</sup>lt;sup>3</sup> http://nepa.energy.gov/nepa\_documents/EIS/EIS0350/Chapter02.pdf

seismic information affected the project in multiple and fundamental ways, eventually leading NNSA to question, in January of 2009, whether it was feasible to complete the project. (Exhibit 2)

17. The current design for the CMRR-NF uses a "hotel concept" which incorporates large unsupported floor areas to accommodate unstated future missions. (DNFSB Staff Issue Report, "Review of [CMRR] Facility": 8, http://www.dnfsb.gov/pub\_docs/staff\_issue\_reports/lanl/sir\_20080530\_la.pdf) This approach requires large increases in structural concrete and steel from amounts assumed in the 2003 EIS, with consequent environmental impacts. It was not part of the original 2003 project as described.

18. The DNFSB expressed serious concerns about the CMRR-NF design from the viewpoints of seismic and other safety issues. *(Id.)* Congress subsequently required NNSA and DNFSB to certify that the questions had been resolved. (http://frwebgate.access.gpo.gov/cgibin/getdoc.cgi?dbname=111\_cong\_bills&docid=f:h2647enr.txt.pdf) Certification was made in September 2009, based upon several major design changes, and with many issues not yet resolved, including whether or not to excavate the layer of unconsolidated ash beneath the site and replace it with concrete. (DNFSB CMRR Certification Review: 2-4 - 2-6, http://www.hss.energy.gov/deprep/2009/FB09S04B.pdf)

19. In May 2009 the Obama Administration formally ended the Reliable Replacement Warhead program, which had been the only large-scale pit production mission intended for the CMRR-NF (see paragraph 65). Defendants then stated to Congress that they had not determined whether to proceed with the CMRR-NF project. (NNSA, FY2010 CBR: 215,

http://www.cfo.doe.gov/budget/10budget/Content/Volumes/Volume1.pdf) In September 2009 DOE's JASON advisory group reported to NNSA that new pit production was not necessary to the indefinite maintenance of the nuclear weapons stockpile. (JASON, Mitre Corporation, "Lifetime Extension Program (LEP) Executive Summary," JSR-09-334E, http://www.fas.org/irp/agency/dod/jason/lep.pdf) Defendants thereafter advised Congress that they planned to end pit production in FY 2011. (NNSA, FY2011 CBR: 81, http://www.cfo.doe.gov/budget/11budget/Content/Volume%201.pdf) Defendants adopted a policy of managing the stockpile without pit manufacturing, which would recommence only at the direction of the President and Congress. (Department of Defense, Nuclear Posture Review, April 2010: xiv, ) Defendant NNSA began two reviews of the CMRR-NF project this summer 2010. (Exhibit 3) In May 2010 the Senate Armed Services Committee noted that the question of project size of the CMRR-NF was an open one and reported its concern that Defendants follow DOE Order 413, requiring the preparation of a complete project baseline, including an accurate cost estimate. (Senate Armed Services Committee [SASC] report, FY2011 Def. Auth. Act: 274, http://frwebgate.access.gpo.gov/cgi-

## bin/getdoc.cgi?dbname=111\_cong\_reports&docid=f:sr201.111.pdf;

http://www.defense.gov/npr/docs/2010%20Nuclear%20Posture%20Review%20Report.pdf)

20. In February of 2010, Defendants estimated total costs of the CMRR-NF at \$3.4 billion. (NNSA, FY2011 CBR: 227, http://www.cfo.doe.gov/budget/11budget/Content/Volume%201.pdf) CMRR-NF has always been estimated to cost at least as much as its sister project in Tennessee, the Uranium Processing

Facility (UPF). An anonymous senior government official has confirmed to me what a press accounts had already said, that UPF is now estimated to cost over \$5 billion. Authoritative press accounts quote multiple congressional sources as saying that the estimated cost of (CMRR-NF + UPF) is expected to be \$11 billion. (Exhibit 3).

21. Therefore, the current estimated cost of CMRR-NF is between \$5.5 and \$6 billion. Multiple congressional and executive branch sources have told me that CMRR-NF as now designed will cost much more than had estimated, as the Biden letter of September 15, 2010 (discussed below) also makes clear.

22. Defendants now expect construction of the CMRR-NF to extend until 2020, with operations commencing in 2022. (Holmes, Rick, "[CMRR] Project": 4, <u>http://eteba.org/Presentations/RickHolmestoNM6.10.10.pdf</u>) The delay of more than ten years has its own impacts, which must be analyzed, and creates the need for interim use of the existing CMR Building and, therefore, interim safety and efficiency measures that also are not discussed in the 2003 EIS.

23. As of August 2009, Defendants were planning a 270,000 gross square foot Nuclear Facility with approximately 38,500 square feet of Hazard Category 2 programmatic space, including 22,500 square feet of laboratories. These plans envisioned a NF of 36% less Hazard Class 2 space in a building of about 44% more gross area than was proposed in the 2003 EIS and the 2003 budget request, giving a much smaller proportion of usable area for program use than was proposed and compared to alternatives in the 2003 EIS (i.e. 14% now vs. 30% then).

| Planned CMRR-NF gross space categories as of August 2009<br>(from CMRR Project Update March 20, 2009: Fong slide 21,<br><u>http://www.lanl.gov/orgs/cmrr/publicmeetings/proceedings.shtml</u> (measured from<br>image), broadly confirmed by teleconference with Steve Fong, August 12, 2009) |         |         |  |  |
|---|---------|---------|--|--|
| Function  | Sq. ft. | Percent |  |  |
| Labs  | 22,500  | 8       |  |  |
| Vault   | 7,500   | 3       |  |  |
| Miscellaneous   | 5,000   | 2       |  |  |
| Large vessel handling   | 3,500   | 1       |  |  |
| Utilities   | 71,500  | 26      |  |  |
| Structure and building systems  | 160,000 | 59      |  |  |
| Total   | 270,000 | 100     |  |  |

Since then, Defendants' staff have told us on several occasions that the gross square footage of the Nuclear Facility has grown, without clarification. NNSA has told me that the internal height (i.e. depth) of the Nuclear Facility has increased approximately 25 feet, its volume increased by roughly 2.6 million square feet, and its gross square footage increased by approximately 130,000 square feet. The Nuclear Facility project has continued to evolve further away from the simple plan outlined in 2003.

24. Much of the most recent information my colleagues and I have been able to compile about the expanding impacts of this project was obtained from Defendants written and oral presentations at their June 16, 2010 "Construction Forum" in Espanola, which I and other staff and board members of my organization attended and videotaped. The information provided at this forum was merely indicative, vague, and outside any context in which environmental impacts were or could be evaluated by any party. Any mention of environmental impacts was ancillary to the primary purposes of the meeting and comprised a very small fraction of the presentations. Of particular note were briefings with slides by Tom McKinney, LANL Associate Director, and John Bretzke, LANL Deputy Associate Director. It is by such small tidbits that my

colleagues and I have attempted to assemble a meaningful picture of the nature and impacts of this project, for which purposes Defendants' published NEPA analyses have been no use whatsoever. Defendants' 2003 NEPA analysis is highly misleading and incorrect, both positively and by gross omission. Only by expensive and time-consuming efforts can one gain even a fragmentary sense of what this project now entails. In my extensive personal experience, few if any relevant decisionmakers in government, outside Defendants' own directly cognizant staff and contractors, have any understanding of what this project now involves beyond the vague generalities provided to them by Defendants. Defendants failure to accurately describe their project, to thoughtfully analyze alternatives and impacts, and to provide for meaningful public, tribal, and governmental notice and comment opportunities has greatly harmed this organization, because it instead of being able to provide our knowledge, experience, and perspectives, and to assist Defendants and other government parties in providing thoughtful public education and discussion, I and my colleagues must expend scarce nonprofit resources in merely attempting to discover the most basic facts concerning Defendants' plans. In the period from March 12, 2010 until the filing of this lawsuit my organization filed several Freedom of Information Act (FOIA) requests, including requests for NEPA and NEPA-related analyses, in our attempt to learn basic information about this project. Defendant DOE has not responded to any of those requests.

25. The following partial transcript we prepared from this meeting illustrates the casual manner in which major new project elements, environmental and socioeconomic impacts, and NEPA compliance issues were mentioned or implied at this forum. (LANL Construction Forum videotapes, Study Group files) The sprawling project described in them, with acknowledged significant new regional impacts, bears little resemblance to the comparatively

small, self-contained project of the 2003 EIS. The following oral remarks are from Ike Richardson, Deputy Director of LANL (emphasis added):

"As all of you are aware, the increased number of people at the work site translates into several indirect benefits to all the communities. <u>These</u> workers are going to need housing....A particular concern of mine is how are we going to house all these people.... These are people, these are trades, they want to have nice, clean accommodations, work here for six or seven years, and then go to the next big construction project. So housing is going to be a particular challenge."

"Due to our planned closure that you'll hear about in just a moment — of Pajarito Road— there's going to be some disruption to commuters and their normal routines. We're currently completing a traffic study to fully understand these challenges and develop the operational strategies to minimize the impacts."

The following oral remarks were made by John Bretsky (emphasis added):

"...we see this becoming a big deal, not just to Los Alamos National Laboratory, but to northern New Mexico in total. These projects [CMRR plus nine other "Pajarito Construction Corridor" projects] line up roughly all at the same time. The top project, the Nuclear Facility, this is ten years plus...."

"When you add all that up [CMRR workforce plus nine other "Pajarito Construction Corridor" projects] we show that we're getting <u>almost to a</u> <u>thousand additional craft going up and down the hill every day, working at</u> <u>the hill, to help us complete this particular scope.</u> So a big impact."

"Traffic studies is a huge one for us right now[....] We are going to be changing traffic flows. So we're trying to do our best right now to understand and predict where we think that traffic is going to go, what kind of impact are we going to have down in White Rock, what impact are we going to have on State Road 4, what impact are we going to have along the truck route, etc. We will be changing traffic loads at intersections. We know that. We're trying to quantify that right now...."

"...as you can imagine bringing this number of new people up there it's already tight for parking. We need to figure out exactly where we're going to be asking primarily the construction workforce to park, truck them to the site. We know we don't have the flat area right around the area for them to just drive to the site itself."

"Road relocation: as part of looking at what we need to do with this particular road, an option we are looking at is can we slide it a little to the South. For those of you that have been on the road you know that it quickly drops off. So it's not an easy decision to make and its one that we're going through a lot of cost analysis right now to understand what's the best way to keep this place safe...."

"<u>Craft facility</u>: for those of you that have worked up there you know that we're kind of number 2 in the nation as far as lighting strikes. We need a place to be able to safely put the craft if the site comes under some kind of abnormal event, weather or otherwise, and so we need places for them to go to, so we're planning for that. We're going to need support to build that facility."

"Site prep. activities - a warehouse. <u>We've probably got about a 10,000</u> square foot design warehouse that we need to build in the area to support the receipt of the equipment that's going to go into the Nuclear Facility."

"We show Pajarito Road on here as red. That's not a project per se, but that's when we see that we're going to have to have some restrictions on that road that are going to have a significant impact to the population along Pajarito. As Tom [McKinny] mentioned, we've got about 4,400 people that work every day along Pajarito Corridor, and somewhere in the middle of that road we're going to put up stop signs and say 'you gotta make a U-turn. And so we're going to be changing traffic flows, we know we're going to be changing traffic flows. We need to keep that road open for emergency vehicle access, fire, other emergency vehicles, security, etc., and so we'll maintain that, but that road will not be available for normal access."

"What we are anticipating is that we are going to have to shut down the road right here in this area, to back up in here [TA-48 to TA-46?, see video of presentation for clarification]. That's where we'll put the restriction in place. People will be able to come up from White Rock through Pajarito, and they'll be able to get to about the TA-48 area off of the Diamond Drive, for those of you familiar with the details of Los Alamos. But we've got a lot of people that work back here along Pecos Drive that are going to be impacted. Instead of them to go to meetings, for example, up in our main core area at TA-3, they're going to end up coming out of White Rock and going all the way around Highway 4 and back up the truck route. And so not only are we impacting northern New Mexico with the additional traffic loads, just to bring the construction personnel, construction material, all the concrete, the sand, the rock, etc., the aggregate up there.

but within the site itself we've got a lot of micro-planning that's going on in the background to try to help the lab deal with this impact because for a decade we are going to be disrupting their lives pretty significantly."

"Additionally there's truck inspection: you can imagine bringing this much steel, this much aggregate, this much material to the construction sites. Our current truck inspection facility which is supporting our ongoing mission operations is not capable of this kind of increased load, and so we'll probably be installing a dedicated truck inspection station that really is focused on the construction activities themselves."

Question from Vincent Chiravalle, Los Alamos County Council: "I'd like to understand if you've considered building a bypass road around the construction site...?"

Answer: <u>"Yes we have considered that, and those options are still on the</u> <u>table</u>. This is a difficult area to build an alternative route through because of the canyons and plateaus that we're dealing with, so <u>we've got three or</u> <u>four different options that we're looking at</u>, and <u>part of this trade off study</u> <u>[unclear] is part of that</u>."

26. On July 1, 2010, my organization wrote Defendants a letter with our profound concerns about the lack of NEPA compliance indicated in the new information we had gleaned, seeking to avoid this lawsuit. (Plaintiff's letter of July 1, 2010 to Secretary Chu and Administrator D'Agostino, <u>http://www.lasg.org/CMRR/LASG\_LOI\_CMRR\_1Jul2010.pdf</u>) In that letter we attempted to summarize Defendants various statements, including those above, about the expanded nature of this project in a short table (Id., Table 1). New impacts and changes to the project have appeared since we prepared that Table, which now understates our concerns.

27. The acreage required for construction yards and office space, parking lots, concrete plants, utilities, security, spoil disposal, storm water retention, housing of construction workers, and road realignment has increased significantly since the 2003 EIS (see photograph of Defendant's very recent map not otherwise provided, Exhibit 4, which does not include remote

locations for spoils storage and disposal, truck inspection station, parking lot or lots, etc.) The CMRR EIS describes 26.75 acres of land disturbance for "construction...at TA-55." (NNSA, CMRR EIS: 4-12, <u>http://nepa.energy.gov/nepa\_documents/EIS/EIS0350/Chapter04.pdf</u>). As now planned, direct disturbance impacts will extend far beyond TA-55 to include portions of TA-46, TA-48, TA-50, TA-52, T-63, TA-64, TA-66, and also to TA-54 or TA-36 for the required truck inspection facility that is now part of this project. In addition, Defendants now plan to close a major access road (Pajarito Road) for two years and thereby disrupt worksite access for approximately 4,400 people. Anonymous Defendants' contractor personnel have informed me that one or more large remote parking lots will be required and are being planned.

28. As noted above, concrete and soil/grout requirements have increased from 6,255 cubic yards (for *two* buildings) to 347,000 cubic yards. Production of the increased amount of cement and delivery of aggregate is likely to generate more than 100,000 metric tons of carbon dioxide in addition to mining impacts and other transport impacts. (See, for example, http://www.buildinggreen.com/auth/article.cfm/1993/3/1/Cement-and-Concrete-Environmental-Considerations/)

29. As noted above, steel requirements have increased from 558 tons to approximately 13,000 tons.

30. Estimated construction employment has increased from a peak of 300 (CMRR EIS, p. 2-21) to 822 (Bretzke, John, "Pajarito Construction Activities," LANL Construction Forum: 4, <u>http://www.lanl.gov/projects/pcc/presentations/John-Bretzke\_Prensation for Community Forum.pdf</u>). The increase will have impacts on local housing and infrastructure, as noted above.

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31. The construction period has increased from 34 months to 144 months.

32. My calculations suggest that the remaining volume to be excavated from the site has increased from approximately 100,000 cubic yards to approximately 400,000 cubic yards. The increase will have impacts on transport, storage, and disposal, raising environmental, aesthetic and cultural issues. On numerous occasions Defendants have stated they may use spoil to cap some of the LANL material disposal areas for radioactive and hazardous waste that will be undergoing closure, an action requiring its own environmental analysis.

33. The completion date of the CMRR-NF has moved from 2009 to 2020, with operations beginning in 2022 at the earliest. Interim facilities to be used in 2010 through 2022 have not been identified, nor have impacts of interim use been analyzed.

34. Ancillary facilities now required for the CMRR-NF include a craft worker facility, an electrical substation, a truck inspection facility, and a warehouse.

35. Pajarito Road is expected to be closed for two years; as mentioned above temporary or permanent bypass(es) may be built.

36. As noted above, operations in other facilities along Pajarito Road may be displaced during construction, causing additional impacts.

37. The larger, heavier, and more deeply-buried CMRR-NF, with more internal equipment and fixtures, calls into question Defendants' ability to remediate and dispose of this facility, in situ or elsewhere, at the end of its life. Defendants' most recent attempted large plutonium facility had a working life of about one month. In October, 1988, Building 771, the plutonium-reprocessing "front end" of pit production, had to be shut down when three workers inhaled plutonium dust. Building 371, intended to replace it, was begun in 1973, completed in

1981 at a cost of \$225 million, but operated for only one month in 1982 before DOE realized that the technology on which it was based would not work. The repair job was to cost \$400 million and take eight years. DOE called it a "fiasco." (Schneider, Keith, "U.S. Spent Billions on Atom Projects That Have Failed, *New York Times*, December 11, 1988, p. A1)<sup>4</sup> The 2003 EIS did not analyze this problem.

38. These paragraphs only touch on the unexamined environmental issues facing this now-gigantic project. I have focused on construction impacts, which are to take place over a period Defendants say will be as short as a decade, and have not touched upon operational impacts, which new information available since 2003 has also changed. Defendants' 2003 EIS is grossly misleading and inapplicable.

39. Further, NNSA's willingness to proceed with a project that has increased in cost per square foot of useful space provided since 2003 by a factor of approximately 23 implies, there are many alternatives to meeting the stated mission need of projects of similar or lesser magnitude, cost, risk, delay in outcome, and environmental impacts that should be analyzed under NEPA.

# C. <u>Plaintiffs Became Aware of the Fundamental Transformations in this Project and</u> <u>Consequent Growth in its Expected Environmental Impacts only in March and</u> <u>June, 2010.</u>

40. As noted in paragraph 4 above, where salient information regarding the CMRR has become available, or might have become available, I have diligently sought it.

<sup>&</sup>lt;sup>4</sup> <u>http://www.nytimes.com/1988/12/12/us/us-spent-billions-on-atom-projects-that-have-failed.html?scp=1&sq=Schneider,%20Keith,%20%E2%80%9CU.S.%20Spent%20Billions%20on%20Atom%20Projects%20That%20Have%20Failed&st=cse</u>

41. As a result of a settlement agreement to resolve disputes concerning an air quality permit issued by the New Mexico Environment Department (NMED) for CMRR construction, there have been 10 public informational meetings organized by defendants on a semi-annual basis. The sole purpose of these meetings is to update the public on aspects of the CMRR project and provide for some discussion of the project. The first meeting was on March 9, 2006. I have been present personally at many if not most of these meetings, and other members of the Study Group have been present at others. Usually a dozen or more interested and knowledgeable citizens have been present at these meetings. Presentations and verbatim transcripts from every meeting are archived at <a href="http://www.lanl.gov/orgs/cmrr/publicmeetings/proceedings.shtml">http://www.lanl.gov/orgs/cmrr/publicmeetings/proceedings.shtml</a>. This record can be taken as a solid indication of what has been communicated to the public regarding changes in this project and the expected environmental impacts of those changes.

42. At the first eight of these meetings (through September 23, 2009), no changes in the Nuclear Facility project let alone any significant changes affecting environmental impacts, were mentioned in any presentation made by Defendants. Since the purpose of these meetings was to provide updated project information, the absence of information about project changes strongly implied to all present that there were no relevant changes to present. As far as communicating changes to the project, the first eight meetings comprise an entirely negative record.

43. In the September 2009 meeting, LANS CMRR project manager Rick Holmes clearly stated that the "direction" of the project had not substantially changed. (CMRR Project Update, September 23, 2009: 13, http://www.lanl.gov/orgs/cmrr/publicmeetings/proceedings.shtml)

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So, um, <u>the direction to the project has not substantially changed.</u> It is finish the rad lab facility within the baseline, which we are about to say, "Yep, we're done." Prepare for and get started on the equipment installation, and we've done that. Um, resolve the certification issues. And we've done that too. And keep working on the design, essentially, to maintain continuity of the design teams. And then, the budget for '09 was 97.2 million. For '10, the House [US House of Representatives] mark is at 55 million. We're at 97 million in the Senate [US Senate] version. I don't think the two committees have joined yet to reach a conference committee decision, um, because I think Congress has been a little busy lately. So the direction has not changed substantially to the project. [emphasis added]

At the time these statements were made, Defendants had just filed a certification report on Nuclear Facility design with Congress as noted above, which Mr. Holmes mentioned but did not describe in his oral presentation. This certification report required significant redesign, with dramatic impacts on resource use and environmental impacts.

44. At the March 3, 2010 meeting, a baseline schedule was presented showing 5 project phases. (CMRR Project Update, March 3, 2010, Fong presentation slide 20, http://www.lanl.gov/orgs/cmrr/publicmeetings/proceedings.shtml) (This management approach had been presented as an "option" to Congress in Defendants' February 2010 budget request.) Under this approach, construction was to begin in mid-FY2011 on an "infrastructure package," which included nine or more elements. A map showed involvement of additional technical areas (Id., slide 21). At this meeting I first learned of the 125 foot excavation depth being planned for the project and a "50 foot" thick layer of "lean concrete" to be emplaced beneath the foundation—a plan that more than doubled the concrete required (see below). It was also stated that there is no nearby source for coarse aggregate, implying many thousands of heavy truck trips from somewhere.

45. To date, Defendants have not mentioned any Nuclear Facility project changes in

any Project Data Sheet (PDS) submitted to Congress. PDSs are the primary way Congress is updated regarding Defendants' construction projects and are the primary basis for authorization and appropriation.

46. LASG has attempted to speak with Defendants' CMRR project leader in Washington, DC, but without success. Defendants' CMRR web site, <u>http://www.lanl.gov/orgs/cmrr/</u>, has been and remains highly uninformative.

47. Defendants' Los Alamos Site Office (LASO) CMRR project team has taken the time to answer some of LASG's questions about the project over the past few years. LASG's records show a total of 12 telephone conversations with a total of four people in this team over a twelve month period from 6/8/09 to 6/14/10, i.e. about one per month. Project staff has responded to specific questions, although often the answers were vague. However, there was no hint of any significant project change until June 18, 2009 when I asked Steve Fong, CMRR Project Manager at LASO, about the concrete and steel requirement in the context of seismic safety. Mr. Fong said these requirements were not yet known, but were "big."

48. On August 11, 2009, when I asked, Mr. Fong told me it was thought that the project needed 120,322 cubic yards of concrete and 12,191 tons of reinforcing bar. (Exhibit 1) No structural steel estimate was available. Mr. Fong said that the design team had "wrestled with" what he called "the soft zone" beneath the building. He said that NNSA "*may* remove this layer" to "reduce g forces" in seismic events (emphasis added). The amount of material involved, or the wide environmental import of this strategy, were beyond my imagination at the time. They were never mentioned.

49. The DNFSB certification report of September 2009 was the first public statement

that the Nuclear Facility would be placed 75 feet deep, i.e. deeper than mentioned in the 2004 ROD. (DNFSB CMRR Certification Review: 2-4 to 2-6, ) The full range of changes caused by

placing the building 75 feet deep were not mentioned and may have been unknown.

50. In an October 7, 2009 telephone conversation with Mr. Fong I heard again that the geotechnical aspects of the project were still in flux. This uncertainty was also communicated to me in multiple discussions with the DNFSB in Washington and New Mexico between October 2009 and February 2010.

51. I spoke with Tom Whitacre of LASO on March 10, 2010 concerning sand and gravel aggregate sources. He confirmed that crushed tuff might not work in cement grout, potentially increasing the number of truck trips needed yet again.

52. As noted above, on June 16, 2010 a "Construction Forum" in Espanola, NM. (LANL, "Los Alamos National Laboratory to host forum June 16, Businesses can learn about upcoming construction opportunities at Lab,"

). The same day, LANL unveiled its "LANL Construction: Pajarito Corridor" web site, . In their talks and in the discussion that followed, Defendants

mentioned significant new elements in the project, including some at locations other than those described previously, and mentioned significant local and regional additional environmental impacts, which had not heretofore been revealed.

# D. <u>NNSA's Commitment to the Chemistry and Metallurgy Research Replacement</u> <u>Nuclear Facility (CMRR-NF, or Nuclear Facility) is Unequivocal and Specific.</u>

53. Defendants ask the Court to dismiss this case, supposedly so that they can further

analyze the environmental impacts of the facility and then decide whether they should proceed. The fact is that the Defendants have already decided that the CMRR-NF will be built more or less as now planned. They are deeply engaged in detailed, final design, have partially excavated the site, are poised to let additional large contracts for the project, have sought and received emergency funding from Congress to accelerate their investment this fall and henceforward, and have begun ancillary construction. NNSA is committed not just to a general idea but to a very specific plan on which \$210 million dollars has already been spent (Cook Aff. ¶19) and an additional unstated amount contractually obligated. Much has been spent, but about 96% of the project's expenditures lie ahead.

54. Defendants' budget submittals to Congress state that \$289.5 million was appropriated for the Nuclear Facility in FYs 2002-2010. (NNSA FY2011 CBR: 223 under "Total Project Cost", <u>http://www.cfo.doe.gov/budget/11budget/Content/Volume%201.pdf</u>) An additional \$168.5 million was appropriated on October 1, 2010 in the Continuing Resolution. Based on the spending pattern in Defendants' budget request, if Congress extends this appropriation for the balance of FY2011, the total federal commitment to date is \$458 million.

55. In this Court Defendants signal their clear commitment to this project. They state: "The proposed CMRR-NF is a unique facility, central to LANL's mission and critical to the national security of the United States. The proposed facility...is critically necessary as a replacement for the 60-year-old Chemistry and Metallurgy Research Building ("CMR") at LANL." (Mot. at 1) Defendants' witness, Donald Cook, swears to "the importance of the CMRR Project to our national defense" (Cook Aff. ¶2), pointing out that the missions currently

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housed in the CMR building are important to national defense and NNSA has determined that they should continue in the CMRR. (Cook Aff. ¶8).

56. Defendants in the late 1990's pursued upgrades to the existing CMR Building, but in the early 2000's they decided to build a new facility. Thus, Defendants stopped the CMR upgrades at the end FY2001 in favor of a future CMR replacement project. (NNSA, FY2002 CBR: <u>http://www.cfo.doe.gov/budget/02budget/weapons/readtech.pdf</u>) The following year (FY2002), \$7 million was spent on conceptual design of the CMRR. (NNSA, FY2003 CBR: <u>http://www.cfo.doe.gov/budget/03budget/content/weapons/RTBF.pdf</u>) Defendants have not wavered from that decision. Thus, the 2003 EIS analyzed no alternatives that did not contain a Nuclear Facility (except for the "No Action" alternative).

57. By late 2009, as evidenced by Defendants' proposed FY2011 budget (prepared in late 2009 and submitted to Congress in early February), Defendants' commitment to the project had become total and intense, with requested annual funding rising to \$168.5 million, from a FY2010 level of \$58.2 million. (NNSA, FY2011 CBR, http://www.cfo.doe.gov/budget/11budget/Content/Volume%201.pdf). The project was expected to proceed into final design and initial construction in FY2011.

58. Defendants are committed to a very specific project. Thus, as noted above, on September 14, 2009 they sent to Congress a design safety certification report, which was a condition of authorization of \$50 million of the FY 2010 funding. That certification could only be made as to a specific design, based on detailed review and analysis by NNSA and LANS and their specialist contractors and subcontractors, as well as DNFSB. The certification requirement led to addition of concrete and steel, replacement of a geological stratum, requirements for more "safety class" and "safety significant" equipment and building systems, and other changes increasing costs and enhancing the environmental impacts.

59. Defendants' stated commitment to this project has only increased in intensity during the present litigation. On September 15, 2010, one day before a planned vote on ratification of the "New START" treaty in the Senate Foreign Relations Committee, Vice President Biden wrote to the Committee, promising the Administration's "unequivocal" commitment to the CMRR Nuclear Facility and other NNSA projects. (Biden, Jr., Vice President Joseph R., Letter to Senator John F. Kerry, 15 September 2010: 124-125, http://foreign.senate.gov/download/?id=4C65B25B-F3E8-4CF6-8660-36E21D639ECC). This letter is dated two days before defendants' attorney[s] wrote plaintiffs promising to prepare a Supplemental Environmental Impact Statement (SEIS), a process supposedly intended to provide an objective review of whether or not to build the Nuclear Facility. The Vice President acknowledged that the estimated costs of these modernization projects had increased, and he promised that the Administration would seek additional funding from Congress to cover the rising costs in "future budget years." He spoke of the President's pursuit of an "immediate start" to these modernization initiatives, including the CMRR-NF, pointing to their requested inclusion in the Continuing Resolution (Office of Management and Budget, "FY2011 Continuing Resolution (CR) Appropriations Issues":

http://republicanleader.house.gov/UploadedFiles/CRanomalylist.pdf). Biden stated:

Since the New Strategic Arms Reduction Treaty (New START) was submitted to the Senate for advice and consent, questions posed...have highlighted...the Administration's plans to modernize the U.S. nuclear weapons complex, in particular the President's budget request for FY 2011 and projected out-year requests.... I write to assure the Committee of the Administration's strong support for this program...The FY 2011-2015 President's Budget was based on the best estimates available at that time, and reflected our assessment of necessary investments and the capacities to absorb increased funding...NNSA has used the time since the spring...to work on updating initial assumptions. We now have a more complete understanding of stockpile requirements, including the life extension program needs. Similarly, the designs of key facilities such as the Uranium Processing Facility and the Chemical and Metallurgy Research Replacement Facility have progressed...we expect that funding requirements will increase in future budget years.

Later this fall, the Administration will provide the Congress with information that updates the Section 1251 report [laying out future plans and budgets]....

Finally, the Administration has actively engaged the House and Senate Appropriations Committees in support of the President's 2011 request, and we will continue to do so. Moreover, as further evidence of the President's commitment to an immediate start to his modernization initiatives, the Administration earlier this month recommended that the Committees provide for a rate of operations consistent with the President's request for NNSA weapons activities during any continuing resolution period.

This Administration has expressed its unequivocal commitment to recapitalizing and modernizing the nuclear enterprise, and seeks to work with Congress on building a bipartisan consensus in support of this vital project....

The Administration's "unequivocal commitment" to the project, including an

"immediate" start to the CMRR-NF project, refers, and can only refer, to the existing,

certified project design.

60. The "immediate" increase in funding supplied by the Continuing Resolution (H.R. 3081, "An Act making appropriations for the Department of State, foreign operations, and related programs for the fiscal year ending September 30, 2010, and for other purposes," 29 September 2010, http://appropriations.senate.gov/customcf/uploads/34ddd9ae-1c8b-4672-b658-

a98ee03ea3de/CR%20Text.pdf), presuming it is continued through FY 2011, would

increase the annual appropriation for nuclear weapons spending at LANL by \$338 million, or 26%, the largest absolute and percentage increase in funding since the Manhattan Project. Annual funding for the Nuclear Facility comprises half of this increase. (Exhibit 5). The overall financial commitment represented by the CMRR-NF approximately equals the \$5.9 billion replacement cost of *all existing buildings and facilities at LANL put together (See http://www.lanl.gov/news/index.html)*. Expected Nuclear Facility costs exceed the costs of all activities of the Manhattan Project in New Mexico (\$899 million in inflation-corrected 2010 dollars), by approximately a factor of six. (Exhibit 6).

61. Defendants' have continued to pursue this project despite its more than ten-fold explosion in expected cost, from \$300 to \$400 million in 2002-03 (if we reasonably assign two-thirds of the initial cost given both buildings to the Nuclear Facility), to \$3.4 billion by February, 2010, and on to a reported \$5.5 to \$6 billion today. The even greater increase in cost per square foot of useful space (see Cook Aff. ¶20) underscores the Administration's apparently unshakable commitment to this specific project.

62. The procurement process bears out this commitment, to the extent we can see into it. The prime contractor for the CMRR-NF is Los Alamos National Security, LLC (LANS), the management and operating (M&O) contractor for LANL. Most Nuclear Facility expenditures to date have been to LANS, or through LANS to its subcontractors, and are largely opaque to the public. Now LANS, in addition to whatever contracts NNSA itself has let and is planning to let in the near future, is reportedly planning to let significant new contracts for Final Design of the Nuclear Facility this month, the first in the new fiscal year, when a large new tranche of money was expected to be available, and now is. (DNFSB, "Los Alamos Report for Week Ending July 23, 2010," <u>http://www.dnfsb.gov/pub\_docs/weekly\_reports/lanl/wr\_20100723\_la.pdf</u>)

**Chemistry and Metallurgy Research Replacement (CMRR) Project:** The Integrated Design Coordination Meeting for the CMRR project was conducted in Los Alamos this week and included representatives from NNSA, LANL and project subcontractors. For the CMRR Nuclear Facility, the project is completing the closure of issues identified in the Technical Independent Project Review that was conducted late last year. The CMRR Nuclear Facility final design contracts are expected to be awarded in October. (emphasis added)

63. In addition to these contracts, LANS also plans to issue requests for proposals (RFPs) for at least \$60 million for CMRR-NF construction this month and next. (Exhibit 7). These RFPs include \$30 million in "site excavation," \$25 million in "site preparation laydown," \$5 million in "site utilities relocation," and \$10 million in "temporary utilities." Obviously these RFPs concern construction activities.

64. In addition, LANS has issued a number of requests for interest (RFIs) for very detailed aspects of Nuclear Facility design.<sup>5</sup> These detailed RFIs are premised on the existence of a specific Nuclear Facility design.

65. Further, Defendants' commitment to the project is reflected by the excavation of 90,000 cubic yards of earth and rock at the CMRR-NF site in late 2006. (Aerial photograph, Exhibit 8). The House Appropriations Committee criticized this excavation as premature:

<sup>&</sup>lt;sup>5</sup> <u>http://www.lanl.gov/orgs/sup/procurement/solicitations/cmrr2010/BubbleTightIsolationDamper.pdf,</u> <u>http://www.lanl.gov/orgs/sup/procurement/solicitations/cmrr2010/DieselEngineDrivenGenerators.pdf,</u> <u>http://www.lanl.gov/orgs/sup/procurement/solicitations/cmrr2010/HVAC\_FanAssemblies.pdf,</u> <u>http://www.lanl.gov/orgs/sup/procurement/solicitations/cmrr2010/NuclearAirTreatmentSyst.pdf,</u> <u>http://www.lanl.gov/orgs/sup/procurement/solicitations/cmrr2010/SafetyClassFirePump.pdf,</u> and <u>http://www.lanl.gov/orgs/sup/procurement/solicitations/cmrr2010/SafetySignifAirHandling.pdf</u>

The CMRR facility has no coherent mission to justify it unless the decision is made to begin an aggressive new nuclear warhead design and pit production mission at Los Alamos National Laboratory....The [House Appropriations] Committee is concerned the NNSA is proceeding with large expenditures for this project [CMRR] while there are significant unresolved issues, and recommends the fiscal year 2007 [sic - 2008] funding be held in reserve. Although the NNSA claims the Nuclear Facility Phase 3 of the project is under review, the Committee notes the Laboratory excavated 90,000 cubic yards of soil at the construction site where the CMRR Phase 3 Nuclear Facility is proposed to be built. The Committee also notes the Department's CMRR acquisition strategy combines Critical Decision 2 (approval of performance baseline) and Critical Decision 3 (approval to start construction) under DOE Order 413.3A on project management. The Committee does not support construction projects that fail to strictly adhere to DOE Order 413.3 requirements by abbreviating the process.

(House Report 110-185, June 11, 2007: 105, <u>http://thomas.loc.gov/cgi-bin/bdquery/z?d110:H.R.2641</u>)

A "need" to excavate and dispose of 90,000 cubic yards of tuff – a volume the size of a football field, 51 feet deep – for the sole purpose of conducting a shallow geotechnical investigation (as opposed to boring or trenching as LANL has done in other investigations) is not credible. This excavation was not necessary to create a laydown yard for construction of the first CMRR building at that site.

66. Defendants' increasing commitment is confirmed by examining their project management requirements and, specifically, where NEPA compliance fits into them. DOE Order 413.3A, "Program and Project Management for the Acquisition of Capital Assets," describes mandatory capital project management. DOE uses <u>four</u> project phases (Initiation, Definition, Execution, and Transition/Closeout) and <u>five</u> formal milestones, called "Critical Decisions" (CDs). These latter are: CD-0, Approve Mission Need; CD-1, Approve Alternative Selection and Cost Range; CD-2, Approve Performance Baseline; CD-3, Approve Start of Construction; and

CD-4, Approve Start of Operations or Project Completion. (DOE O 413.3A Chg 1, Program and Project Management for the Acquisition of Capital Assets, 28 July 2006, https://www.directives.doe.gov/directives/current-directives/413.3-BOrder-

ac1/view?searchterm=None). DOE Order 413.3A describes the CD process as follows:

The five Critical Decisions are major milestones approved by the Secretarial Acquisition Executive or Acquisition Executive that establish the mission need, recommended alternative, Acquisition Strategy, the Performance Baseline, and other essential elements required to ensure that the project meets applicable mission, design, security, and safety requirements. Each Critical Decision marks an increase in commitment of resources by the Department and requires successful completion of the preceding phase or Critical Decision. [emphasis added] Collectively, the Critical Decisions affirm the following:

- [CD-0] There is a need that cannot be met through other than material means;
- [CD-1] The selected alternative and approach is the optimum solution;
- [CD-2] Definitive scope, schedule and cost baselines have been developed;
- [CD-3] The project is ready for implementation; and
- [CD-4] The project is ready for turnover or transition to operations.

67. Table 2 in this Order lists the "mandatory prerequisites" for each CD. Defendants must complete "environmental documents, including [NEPA] strategy and analyses, and permit applications" during the CD-0 stage, prior to CD-1 approval. The CD-0 stage is described as follows.

CD-0, Approve Mission Need. The Initiation Phase begins with the identification of a mission-related need. . . . <u>The mission need is independent of a particular solution, and should not be defined by equipment, facility, technological solution, or physical end-item. This approach allows the Program the flexibility to explore a variety of solutions and not limit potential solutions. (*emphasis added*)</u>

That is, under Order 413.3A, Defendants may not choose a particular facility or alternative before completion of NEPA analyses. Only after NEPA analysis is complete may defendants

proceed to the project execution phase:

CD-1, Approve Alternative Selection and Cost Range. CD-1 approval marks the completion of the project Definition Phase, during which time the conceptual design is developed. This is an iterative process to define, analyze, and refine project concepts and alternatives. This process uses a systems methodology that integrates requirements analysis, risk identification and analysis, acquisition strategies, and concept exploration to evolve a cost-effective, preferred solution to meet a mission need. Approval of CD-1 provides the authorization to begin the project Execution Phase and allows Project Engineering and Design funds to be used. For design-build projects, Project Engineering and Design funds may be used to develop a Statement of Work/Request for Proposal. Additionally, long-lead procurements may be approved during this phase, provided National Environmental Policy Act documentation is prepared, where applicable. [emphasis added]

Defendants approved CD-1 ("Approve Alternative Selection and Cost Range") for the CMRR project in May, 2005 (Bretzke, John. "Pajarito Construction Activities," LANL Construction Forum, 16 June 2010; S7, <u>http://www.lanl.gov/projects/pcc/presentations/John-Bretzke\_Prensation\_for\_Community\_Forum.pdf</u>). Under DOE's management system, Defendants chose their alternative at that time and began the "Execution" phase.

68. The same relationship of NEPA compliance with project management phases can also be found in DOE Order 430.1, "Life Cycle Asset Management." (DOE G 430.1-1, Chapter 3, "Stages of Project Development," 28 March 1997,

https://www.directives.doe.gov/directives/current-directives/430.1-EGuide-1-Chp03/view).

Under "Stages of Project Development" (Chapter 3) NEPA analysis is to be completed in the "Pre-Title I phase of project development," i.e. prior to preliminary design and CD-1, just as in Order 413.3A.

69. Under DOE Order 413.3, reopening the consideration of alternatives by preparing a SEIS would bring the project back to the CD-0 (conceptual design) "Definition" stage, where "alternative concepts, based on user requirements, risks, costs, and other constraints, are

analyzed to arrive at a recommended alternative." (DOE O 413.3A Chg 1, Program and Project Management for the Acquisition of Capital Assets, 28 July 2006,

https://www.directives.doe.gov/directives/current-directives/413.3-BOrder-

<u>ac1/view?searchterm=None</u>). In that stage, all engineering design would cease. Obviously, this has not happened.

70. Defendants' commitment to their current plans for the CMRR-NF is also shown by their approach in managing CMRR-NF as a "design-build" project—a system that combines stage CD-2 ("Approve Performance Baseline") with CD-3 ("Approve Start of Construction") into a single "CD-2/3." The design-build approach accelerates the agency's commitment closer to the beginning of the project. The approach may aid speed and economy *on simple projects*. Defendants' Order 413.3A describes the circumstances for which a "design-build" procedure is suitable:

> Design-Build is a project delivery method where a single contract is awarded for both design and construction. <u>Design-Build can be used most</u> <u>successfully with projects that have well-defined requirements, are not</u> <u>complex</u>, and have limited risks. This applies to projects that have few "unknowns" or new technology requirements, little to no program or system integration, and are not unique or first-of-a-kind. . . . <u>Projects for</u> which Design-Build is an appropriate delivery method will generally have clear and well-defined requirements early in the process. Accordingly, at the time of CD-0, much of the cost and schedule information is known along with key design criteria. [emphasis added]

Obviously, the CMRR-NF project does not fit the requirements for a design-build project.

71. Nevertheless, Defendants have taken design-build a step further, dividing the project into separate "packages," or "chunks" as they sometimes call them, *each* of which is to proceed by a design-build process *at different times*. (Bretzke, John. "Pajarito Construction Activities," LANL Construction Forum, 16 June 2010: S7,

# http://www.lanl.gov/projects/pcc/presentations/John-

<u>Bretzke Prensation for Community Forum.pdf</u>) There are five separate phases or "packages," the first two of which are to be completed (*i.e.* past CD-4), and construction on the third far along (normally, past CD-3), while the structure and internal systems remain at CD-1, awaiting initiation of final design and construction (CD-2/3). Thus, construction is slated to begin years before even *preliminary* design of the Nuclear Facility *building* is concluded. As a result, federal commitment to the entire project occurs at a very early stage, raising the management risk even higher than it is already is for a project whose final stages are complicated, expensive, and unique. Many of the project's construction impacts would occur prior to completion of preliminary facility design, or a reliable cost estimate and schedule for the project.

72. These first three of five phases of the Nuclear Facility project ("Infrastructure Package Construction," Pajarito Road Relocation Package Construction," and "Basemat Construction") involve very significant environmental impacts and can be expected to generate much if not most of the environmental impacts from construction. (Id.) Each of these construction "packages" constrains later design phases. For instance, site excavation has a precise size, location with certain exact provisions and alignments for utility connections, and so on. Thus, Dr. Cook's affidavit states (¶13) that the current size of the building is "342 feet by 304 feet," in keeping with the need for specificity at this stage.

73. Defendants' final design and construction "go-ahead" (CD-2/3) for the "Infrastructure Package" is estimated to occur in March 2011. (Bretzke, John. "Pajarito Construction Activities," LANL Construction Forum, 16 June 2010; S7, <u>http://www.lanl.gov/projects/pcc/presentations/John-</u>

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<u>Bretzke Prensation for Community Forum.pdf</u>) This "Infrastructure Package" includes one or more concrete batch plants (the project requires two), "temporary utilities," "site preparation laydown," "site utility relocation," "site excavation," "soil stabilization," "warehouse design/build," and (electrical) "substation design/build." (Id.) For these construction activities CD-2/3 would be the *final* stage in project approval, after which construction would run to completion. As noted above, RFPs for the much of this work (defendants' estimated cost: \$60 million) are currently poised for release.

74. Despite the lack of formal CD-2 approval, Defendants revealed in February 2010 that appropriations and obligations for "Final Design" of the Nuclear Facility actually began in FY 2008. At that time a breakdown of expenditures was provided to Congress. (NNSA, FY2011 CBR: 221, <u>http://www.cfo.doe.gov/budget/11budget/Content/Volume%201.pdf</u>). Appropriations and obligations for Final Design of the Nuclear Facility were \$39.4 million in FY2008, \$92.2 million in FY2009, and \$57 million in FY2010. Some \$166 million for Final Design of the Nuclear Facility was requested for FY2011.

# E. <u>Plaintiff's Members would Suffer Harms if the Project Continues Without NEPA</u> <u>Review.</u>

75. Defendants have asserted that it would not harm Plaintiff's interests if Defendants proceed with the project. (D.Br. 14) But the hardship is real. Plaintiff has about 2,691 members within 50 miles of LANL and about 2,341 within 30 miles of LANL. Plaintiff's members stand to be adversely affected by the short and long-term environmental impacts of the CMRR project and related projects. In addition, Plaintiff and its members have sought to obtain and disseminate information about the CMRR project since approximately 1999 and have commented to DOE and NNSA about that project at all available opportunities. As noted above,

Defendants have greatly impeded Plaintiff in its chartered purpose.

76. Members of the Plaintiff organization are exposed to these risks and injuries:

A. Immediately forthcoming impacts of the construction effort, including the closure of Pajarito Road to all but construction workers; the onset of large-volume truck traffic as massive quantities of concrete and other construction materials are brought to the site; years of dust, noise, fumes, and air pollution attendant upon major construction work; the visual impact of removal and relocation of huge volumes of excavated spoil; and the destruction of large swaths of vegetation, impacting vistas and native wildlife.

B. Short-term risks of the continued operation of the existing CMR Building, which Defendants have failed to maintain in condition that meets current standards for seismic risk and for risk of nuclear accident and release of radionuclides.

C. Fifty years of enhanced risks of installation and operation of an enlarged Plutonium storage, research, and fabrication facility in Los Alamos, containing at least twice the plutonium capacity of the current CMR building, and capable of carrying out large-volume plutonium pit production, operations that entail significant risks of nuclear accident and release of radionuclides.

D. Risks of releases of radioactivity and hazardous substances in the demolition of the existing CMR Building and the ultimate demolition of the CMRR Building, when its life is concluded.

77. In this situation, Plaintiff is exposed to clear risks of future environmental damages affecting their interests, and Plaintiff respectfully submits that the case should not be dismissed, but should go forward to trial and enforcement of NEPA.

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Gregory Mello, Affiant, being first duly sworn states on oath, that all of the representations in this Affidavit are true as far as the Affiant knows or is informed, and that such Affidavit is true, accurate and complete to the best of Affiant's knowledge and belief.

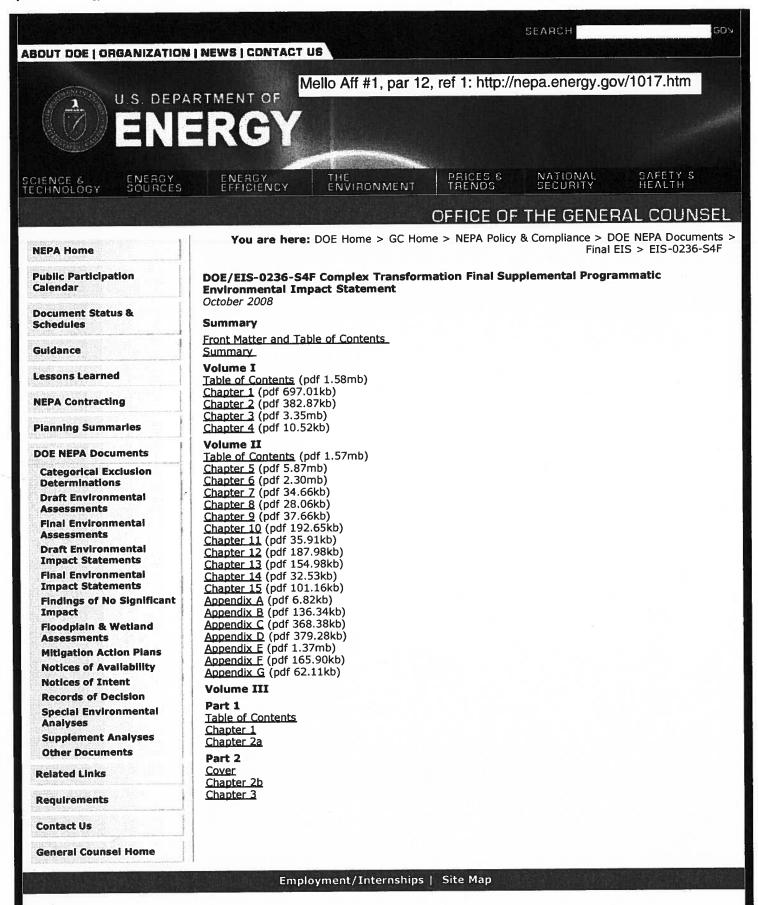
Dated: October 21, 2010.

Gregory Mello

My Commission Expires: May 26/2013 SUBSCRIBED AND SWORN TO before me this 21<sup>st</sup> day of October, 2010, by Gregory



Department of Energy - EIS-0236-S4F



# APPENDIX 3 GOALS, OBJECTIVES, & MEASURES

Mello Aff #1, par 12, ref 3: http://edocket.access.gpo.gov/2008/pdf/E8-30193.pdf

| qualified to test voting systems to Fede<br>standards   | rat procedures by at least 50 percent of accredited laboratories<br>annually.   |
|---|---|
| 3. Administer the testing, certification,<br>decentrication, and recentification of                                     | <ul> <li>Test ICC percent of systems presented for testing.</li> <li>Conduct of least one review of a menufacturing facility of a</li> </ul>                                |
| voting system hardware and software t<br>accredited laboratories.   | <ul> <li>registered manufacturer a least once every 4 years.</li> <li>Conduct field reviews for at least 50 percent of justisdictions that volumeer for reviews.</li> </ul> |
|   | <ul> <li>Respond to requests for interpretations of voting system<br/>standards with 46 days.</li> </ul>  |
| ومستعملها فتعادلنا فسادينا المعاولية بالباراة بيرانية فالجرائي الأكر ومعتجم وجيدهم البارية البارية فباجد ومنبات الشروعي | izational and management excellence.  |
| Objectives<br>1. Implement e high performance<br>organization   | Measurea  Meet annual performance measures.  Difain a clean audit opinion on agency financial statements  |
|   | <ul> <li>within 2 years.</li> <li>Institute an internal integrated budget and financial management system within 6 months.</li> </ul>                                       |
|   | <ul> <li>Implement 90 percent of OIG audit recommendations within<br/>agreed upon timetrames.</li> </ul>  |

#### Thomas R. Wilkey,

Executive Director, U.S. Election Assistance Commission.

[FR Doc. E8–30195 Filed 12–18–08; 8:45 am] BILLING CODE 6820-KF-C

# DEPARTMENT OF ENERGY

Record of Decision for the Complex Transformation Supplemental Programmatic Environmental Impact Statement—Operations involving Plutonium, Uranium, and the Assembly and Disassembly of Nuclear Weapons

**AGENCY:** National Nuclear Security Administration, U.S. Department of Energy.

ACTION: Record of decision.

**SUMMARY:** The National Nuclear Security Administration (NNSA), a separately organized agency within the U.S. Department of Energy (DOE), is issuing this Record of Decision (ROD) for the continued transformation of the nuclear weapons complex (Complex). This ROD is based on information and analyses contained in the *Complex Transformation Supplemental Programmatic Environmental Impact Statement* (SPEIS) (DOE/EIS–0236–S4) issued on October 24, 2008 (73 FR 63460); comments received on the SPEIS; other NEPA analyses as noted; and other factors, including cost, technical and security considerations, and the missions of NNSA. The SPEIS analyzes the potential environmental impacts of alternatives for transforming the nuclear weapons complex into a smaller, more efficient enterprise that can respond to changing national security challenges and ensure the longterm safety, security, and reliability of the nuclear weapons stockpile.

The alternatives analyzed in the SPEIS are divided into two categories: programmatic and project-specific. Programmatic alternatives involve the restructuring of facilities that use or store significant (i.e., Category I/II) quantities of special nuclear material (SNM).<sup>1</sup> These facilities produce plutonium components (commonly called pits<sup>2</sup>), produce highly enriched uranium (HEU) components (including

<sup>2</sup> A pit is the central core of a nuclear weapon, principally made of plutonium or enriched uranium. secondaries <sup>3</sup>), fabricate high explosives (HE) components, and assemble and disassemble nuclear weapons. The decisions announced in this ROD relate to the programmatic alternatives analyzed in the SPEIS. NNSA is issuing a separate ROD relating to the projectspecific alternatives.

<sup>^</sup>NNSA has decided to implement its preferred programmatic alternative as described in the SPEIS and summarized in this ROD. This decision will transform the plutonium and uranium manufacturing aspects of the complex into smaller and more efficient operations while maintaining the capabilities NNSA needs to perform its national security missions. The three major elements of the decisions announced in this ROD are:

(1) Manufacturing and research and development (R&D) involving plutonium will remain at the Los Alamos National Laboratory (LANL) in New Mexico. To support these activities, NNSA will construct and operate the Chemistry and Metallurgy Research Replacement–Nuclear Facility (CMRR–NF) at LANL as a replacement for portions of the Chemistry and Metallurgy Research (CMR) facility, a structure that is more than 50 years old

<sup>&</sup>lt;sup>1</sup> As defined in section 11 of the Atomic Energy Act of 1954, special nuclear material is: (1) Plutonium, uranium enriched in the isotope 233 or in the isotope 235 and any other material which the U.S. Nuclear Regulatory Commission determines to be special nuclear material; or (2) any material artificially enriched by any of the foregoing. Special nuclear material is separated into Security Categories I, II, III, and IV based on the type, attractiveness level, and quantity of the material. Categories I and II require the highest level of security.

<sup>&</sup>lt;sup>3</sup> A secondary is the component of a nuclear weapon that contains elements needed to initiate the fusion reaction in a thermonuclear explosion.

and faces significant safety and seismic challenges to its continued operation.

(2) Manufacturing and R&D involving uranium will remain at the Y-12 National Security Complex in Tennessee. NNSA will construct and operate a Uranium Processing Facility (UPF) at Y-12 as a replacement for existing facilities that are more than 50 years old and face significant safety and maintenance challenges to their continued operation.

(3) Assembly and disassembly of nuclear weapons and high explosives production and manufacturing will remain at the Pantex Plant in Texas.

These decisions will best enable NNSA to meet its statutory mission while minimizing technical risks, risks to mission objectives, costs, and environmental impacts. These decisions continue the transformation begun following the end of the Cold War and the cessation of nuclear weapons testing, particularly decisions announced in the 1996 ROD for the Programmatic Environmental Impact Statement for Stockpile Stewardship and Management (SSM PEIS) (DOE/ EIS-0236) (61 FR 68014; Dec. 26, 1996). This ROD explains why NNSA is making these programmatic decisions, why it is appropriate to make them at this time, and the flexibility NNSA has to adapt these decisions as needed in response to any changes in national security requirements that may occur in the near term.

FOR FURTHER INFORMATION CONTACT: For further information on the Complex Transformation SPEIS or this ROD, or to receive copies of these, contact: Ms. Mary E. Martin, NNSA NEPA Compliance Officer, Office of Environmental Projects and Operations, NA-56, U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585, toll free 1-800-832-0885 ext. 69438. A request for a copy of the SPEIS or this ROD may be sent by facsimile to 1-703-931-9222, or by e-mail to

complextransformation@nnsa.doe.gov. The SPEIS, this ROD, the projectspecific ROD, and additional information regarding complex transformation are available at http:// www.ComplexTransformation SPEIS.com and http:// www.nnsa.doe.gov.

For information on DOE's NEPA process, contact: Ms. Carol M. Borgstrom, Director, Office of NEPA Policy and Compliance (GC-20), U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585, 202-586-4600, or leave a message at 800-472-2756. Additional information regarding DOE NEPA activities and access to many DOE NEPA documents are available through the DOE NEPA Web site at: http://www.gc.energy.gov/NEPA. SUPPLEMENTARY INFORMATION:

#### Background

NNSA prepared this ROD pursuant to the regulations of the Council on Environmental Quality (CEQ) for implementing the National Environmental Policy Act (NEPA) (40 CFR Parts 1500-1508) and DOE's NEPA **Implementing Procedures (10 CFR Part** 1021). This ROD is based on information and analyses contained in the Complex Transformation Supplemental Programmatic Environmental Impact Statement (SPEIS) (DOE/EIS–0236-S4) issued on October 24, 2008 (73 FR 63460); comments received on the SPEIS; other NEPA analyses as noted; other factors, including cost, technical and security considerations, and the missions of NNSA. NNSA received approximately 100.000 comment documents on the Draft SPEIS from Federal agencies; state, local, and tribal governments; public and private organizations; and individuals. In addition, during the 20 public hearings that NNSA held, more than 600 speakers made oral comments.

National security policies require DOE, through NNSA, to maintain the United States' nuclear weapons stockpile, as well as the nation's core competencies in nuclear weapons. Since completing the SSM PEIS and associated ROD in 1996, DOE has pursued these objectives through the Stockpile Stewardship Program. This program emphasizes development and application of greatly improved scientific and technical capabilities to assess the safety, security, and reliability of existing nuclear warheads without nuclear testing. Throughout the 1990s, DOE also took steps to consolidate the Complex to its current configuration of three national laboratories (and a flight test range operated by Sandia National Laboratories), four industrial plants, and a nuclear test site. This Complex enables NNSA to design, develop, manufacture, maintain, and repair nuclear weapons; certify their safety, security, and reliability; conduct surveillance on weapons in the stockpile; store Category I/II SNM; and dismantle and disposition retired weapons. Sites within the Complex and their current weapons program missions are described in the following paragraphs.

Lawrence Livermore National Laboratory (LLNL), Livermore,

California—LLNL conducts research, design, and development of nuclear weapons; designs and tests advanced technology concepts; provides safety, security, and reliability assessments and certification of stockpile weapons; conducts plutonium and tritium R&D, hydrotesting, HE R&D and environmental testing; and stores Category I/II quantities of SNM. LLNL also conducts destructive and nondestructive surveillance evaluations on pits to evaluate their reliability. NNSA is currently removing Category I/II SNM from the site and by 2012 LLNL will not maintain these categories of SNM. NNSA is constructing the National Ignition Facility (NIF) at LLNL, which will allow a wide variety of highenergy-density investigations. NIF is scheduled to begin operations in 2009.

Los Alamos National Laboratory (LANL), Los Alamos, New Mexico-LANL conducts research, design, and development of nuclear weapons; designs and tests advanced technology concepts; provides safety, security, and reliability assessments and certification of stockpile weapons; maintains production capabilities for limited quantities of plutonium components (i.e., pits) for delivery to the stockpile; manufactures nuclear weapon detonators for the stockpile; conducts plutonium and tritium R&D, hydrotesting, HE R&D and environmental testing; and stores Category I/II quantities of SNM. LANL also conducts destructive and nondestructive surveillance evaluations on pits to assess their reliability.

Nevada Test Site (NTS), 65 miles northwest of Las Vegas, Nevada—NTS maintains the capability to conduct underground nuclear testing; conducts high hazard experiments involving nuclear material and high explosives; provides the capability to process and dispose of a damaged nuclear weapon or improvised nuclear device; conducts non-nuclear experiments; conducts hydrodynamic testing and HE testing; conducts research and training on nuclear safeguards, criticality safety, and emergency response; and stores Category I/II quantities of SNM.

Pantex Plant (Pantex), Amarillo, Texas—Pantex dismantles retired weapons; fabricates HE components, and performs HE R&D; assembles HE, nuclear, and non-nuclear components into nuclear weapons; repairs and modifies weapons; performs nonintrusive pit modification; <sup>4</sup> and evaluates and performs surveillance of weapons. Pantex stores Category I/II

<sup>&</sup>lt;sup>4</sup>Nonintrusive pit modification involves changes to the external surfaces and features of a pit.

quantities of SNM for the weapons program and stores other SNM in the form of surplus plutonium pits pending transfer to SRS for disposition.

Savannah River Site (SRS), Aiken, South Carolina—SRS extracts tritium and performs loading, unloading, and surveillance of tritium reservoirs, and conducts tritium R&D. SRS does not store Category I/II quantities of SNM for NNSA's weapons activities, but does store Category I/II quantities for other DOE activities. SRS is currently receiving Category I/II surplus, non-pit plutonium from LLNL for storage pending its disposition.

Y-12 National Security Complex (Y-12), Oak Ridge, Tennessee—Y-12 manufactures uranium components for nuclear weapons, cases, and other nuclear weapons components; evaluates and tests these components; stores Category I/II quantities of HEU; conducts dismantlement, storage, and disposition of HEU; and supplies HEU for use in naval reactors.

The following two sites are part of the Complex but would not be affected by decisions announced in this ROD.

Kansas City Plant (KCP), Kansas City, Missouri-KCP manufactures and procures non-nuclear components for nuclear weapons and evaluates and tests these components. KCP has no SNM. The General Services Administration, as the lead agency, and NNSA, as a cooperating agency, prepared an Environmental Assessment (DOE/EA-1592, Apr. 2008) regarding the potential environmental impacts of modernizing the facilities and infrastructure for the non-nuclear production activities conducted by the KCP as well as moving these activities to other locations. The agencies issued a Finding of No Significant Impact (73 FR 23244; Apr. 29, 2008) regarding an alternative site in the Kansas Čity area. The SPEIS does not assess alternatives for the activities conducted at the KCP.

Sandia National Laboratories (SNL), Albuquerque, New Mexico; Livermore, California; and other locations—SNL conducts systems engineering of nuclear weapons; conducts research, design, and development of non-nuclear components; manufactures non-nuclear components, including neutron generators, for the stockpile; provides safety, security, and reliability assessments of stockpile weapons; and conducts HE R&D, tritium R&D, and environmental testing. The principal laboratory is located in Albuquerque, New Mexico (SNL/NM); a division of the laboratory (SNL/CA) is located in Livermore, California. SNL also operates the Tonopah Test Range (TTR) near Tonopah, Nevada, for flight testing of

gravity weapons (including R&D and testing of nuclear weapons components and delivery systems). In 2008, NNSA completed the removal of SNL/NM's Category I/II SNM. SNL/NM no longer stores or uses these categories of SNM on an ongoing basis, although it may use Category I/II SNM for limited periods in the future. No SNM is stored at TTR, although some test operations have involved SNM.

# **Alternatives Considered**

NNSA has been considering how to continue the transformation of the Complex since the Nuclear Posture Review<sup>5</sup> was transmitted to Congress by the Department of Defense in early 2002. NNSA considered the Stockpile Stewardship Conference in 2003, the Department of Defense Strategic Capabilities Assessment in 2004, the recommendations of the Secretary of Energy Advisory Board Task Force on the Nuclear Weapons Complex Infrastructure in 2005, and the Defense Science Board Task Force on Nuclear Capabilities in 2006 as to how transformation should continue. Based on these studies and other information, NNSA developed the range of reasonable alternatives for the Complex that could reduce its size, reduce the number of sites with Category I/II SNM (and storage locations for these categories of SNM within sites), eliminate redundant activities, and improve the responsiveness of the Complex. The following programmatic capabilities involving SNM are evaluated in the SPEIS:

• Plutonium operations, including pit manufacturing; Category I/II SNM storage; and related R&D;

• Enriched uranium operations, including canned subassembly manufacturing, assembly, and disassembly; Category I/II SNM storage; and related R&D; and

• Weapons assembly and disassembly and HE production (collectively, A/D/HE).

The programmatic alternatives analyzed in the SPEIS are discussed in the following paragraphs.

No Action Âlternative. NNSA evaluated a No Action Alternative, which represents continuation of the status quo including implementation of past decisions. Under the No Action Alternative, NNSA would not make additional major changes to the SNM missions now assigned to its sites.

Programmatic Alternative 1: Distributed Centers of Excellence. This

alternative would locate the three major SNM functional capabilities (plutonium, uranium, and weapons assembly and disassembly) involving Category I/II quantities of SNM at two or three separate sites. This alternative would create a consolidated plutonium center (CPC) for R&D, storage, processing, and manufacture of pits. Production rates of up to 125 pits per year for single shift operations and up to 200 pits annually for multiple shifts and extended work weeks are assessed for a CPC in this alternative. A CPC could consist of new facilities, or modifications to existing facilities at LANL, NTS, Pantex, SRS, or Y–12. The SPEIS also evaluated an option under this alternative that would upgrade facilities at LANL to produce up to 80 pits per year. This option would involve the construction and operation of the CMRR-NF. Highlyenriched uranium storage and uranium operations would continue at Y-12. Under this alternative, NNSA analyzed two options-construction of a new UPF and an upgrade of existing facilities at Y–12. The weapons A/D/HE mission would remain at Pantex under this programmatic alternative.

**Programmatic Alternative 2:** Consolidated Centers of Excellence. NNSA would consolidate the three major SNM functions (plutonium, uranium, and weapons assembly and disassembly) involving Category I/II quantities of SNM at one or two sites under this alternative. Two options were assessed: (1) The single site option (referred to as the consolidated nuclear production center [CNPC] option); and (2) the two-site option (referred to as the consolidated nuclear centers [CNC] option). Under the CNPC option, a new CNPC could be established at LANL, NTS, Pantex, SRS, or Y-12. Under the CNC option, the plutonium and uranium component manufacturing missions would be separate from the A/D/HE mission. The Consolidated Centers of Excellence Alternative assumed production rates of up to 125 weapons per year for single shift operations and up to 200 weapons annually for multiple shifts and extended work weeks.

Programmatic Alternative 3: Capability-Based Alternative. Under this alternative, NNSA would maintain a basic capability for manufacturing components for all stockpile weapons, as well as laboratory and experimental capabilities to support stockpile stewardship, but would reduce production facilities in-place such that NNSA would produce only a nominal level of replacement components (approximately 50 components per year). Within this alternative, NNSA

<sup>&</sup>lt;sup>5</sup> The Nuclear Posture Review is a comprehensive analysis that lays out the direction for the United States' nuclear forces.

also evaluated a No Net Production/ Capability-Based Alternative, in which NNSA would maintain capabilities to continue surveillance of the weapons stockpile, produce limited life components, and dismantle weapons, but would not add new types or increased numbers of weapons to the stockpile. This alternative involves minimum production (i.e., production of 10 sets of components or assembly of 10 weapons per year) within facilities with a larger manufacturing capability. Both options of this alternative would involve the construction and operation of a CMRR-NF.

## **Preferred Alternative**

The Final SPEIS identified the following preferred alternatives for restructuring facilities that use significant quantities of SNM:

Plutonium R&D and manufacturing: LANL would provide a consolidated plutonium research, development, and manufacturing capability within TA-55 (the Technical Area at LANL containing plutonium processing facilities) enabled by construction and operation of the CMRR-NF. The CMRR-NF would replace the existing CMR facility (a 50year-old facility that has significant safety issues that cannot be addressed in the existing structure), to support transfer of plutonium R&D and Category I/II quantities of SNM from LLNL, and consolidation of weapons-related plutonium operations, including plutonium R&D and storage of Category I/II quantities of SNM, at LANL. Until completion of a new Nuclear Posture Review in 2009 or later, the net production at LANL would be limited to a maximum of 20 pits per year. Other national security actinide missions (e.g., emergency response, material disposition, nuclear energy) would continue at TA-55.

• Uranium manufacturing and R&D: Y-12 would continue as the uranium center, producing components and canned subassemblies, and conducting surveillance and dismantlement. NNSA completed construction of the Highly Enriched Uranium Materials Facility (HEUMF) in 2008 and will consolidate HEU storage in that facility.<sup>6</sup> NNSA would build a UPF at Y-12 to provide a smaller and modern highly-enriched uranium production capability, replacing 50-year-old facilities.

• Assembly/disassembly/high explosives production and

manufacturing: Pantex would remain the assembly/disassembly/high explosives production and manufacturing center. NNSA would consolidate non-destructive weapons surveillance operations at Pantex.

• Consolidation of Category I/II SNM: NNSA would continue ongoing actions to transfer Category I/II SNM from LLNL under the No Action Alternative and phase out Category I/II operations at LLNL by the end of 2012.

# **Environmentally Preferable Alternative**

Section 101 of NEPA (42 U.S.C. 4331) establishes a policy of federal agencies having a continuing responsibility to improve and coordinate their plans, functions, programs, and resources so that, among other goals, the nation may fulfill its responsibilities as a trustee of the environment for succeeding generations. The CEQ, in its "Forty Most Asked Questions Concerning CEQ's NEPA Regulations" (46 FR 18026; Mar. 23, 1981), defines the "environmentally preferable alternative" as the alternative "that will promote the national environmental policy expressed in NEPA's Section 101."

The analyses in the SPEIS of the environmental impacts associated with the programmatic alternatives indicated that the No Net Production/Capability Based Alternative is environmentally preferable. This alternative would result in the minimum infrastructure demands (e.g., electricity and water use would be reduced by almost 50 percent at some sites); produce the least amount of wastes (radioactive wastes would be reduced by approximately 33-50 percent compared to the No Action Alternative); reduce worker radiation doses (by approximately 33-50 percent compared to the No Action Alternative); and require the fewest employees (up to 40 percent fewer at some sites). Almost all of these reductions in potential impacts result from the reduced production levels assumed for this alternative.

## Alternatives Considered but Eliminated From Detailed Study

NNSA considered programmatic alternatives other than those described above, but concluded that these alternatives were not reasonable and eliminated them from detailed analysis. As discussed in the SPEIS, the following alternatives were considered but eliminated from detailed study: (1) Consolidate the Three Nuclear Weapons Laboratories (LLNL, LANL and SNL); (2) Curatorship Alternative; (3) Smaller CNPC Alternative; (4) New CPC with a Smaller Capacity; (5) Purchase Pits; (6) Upgrade Building 332 at LLNL to enable pit production; (7) Consider Other Sites for the CPC; (8) Redesign Weapons to Require Less or No Plutonium; and (9) Do Not Produce New Pits (see Section 3.15, Volume I of the SPEIS).

#### Decisions

With respect to the three major SNM functional capabilities (plutonium, uranium, and weapons assembly and disassembly) involving Category I/II quantities of SNM, NNSA has decided to keep these functional capabilities at three separate sites:

 Plutonium manufacturing and R&D will remain at LANL, and NNSA will construct and operate the CMRR-NF there to support these activities;

• Uranium manufacturing and R&D will remain at Y–12 and NNSA will construct and operate a UPF there to support these activities;

 Assembly/disassembly/high explosives production and manufacturing will remain at Pan

manufacturing will remain at Pantex. With respect to SNM consolidation, NNSA will continue ongoing activities <sup>7</sup> to transfer Category I/II SNM from LLNL under the No Action Alternative and phase out Category I/II operations at LLNL by the end of 2012.

## **Bases for Decisions**

#### Overview

NNSA's decision locates the three major functional capabilities involving Category I/II quantities of SNM at three separate sites where these missions are currently performed. The selected alternative, which is a combination of the Distributed Centers of Excellence and Capability-Based Alternatives, has the least cost and lowest risk. Consolidation or transfer of uranium and plutonium operations to other sites (as analyzed in several options under the Distributed and Consolidated Centers of Excellence Alternatives) could result in lower operational costs and other benefits if and when such an alternative were fully implemented. However, movement of any of these three major capabilities to another site poses unacceptable programmatic risks and would cost far more than the selected alternative for an extended period of time. Moving one or more of these capabilities would take years to achieve and might be unsuccessful; in the interim, NNSA would need to build some new facilities at the sites where these capabilities are currently located

<sup>&</sup>lt;sup>e</sup> The environmental impacts of HEUMF and its alternatives are analyzed in the *Site-wide Environmental Impact Statement for the Y-12 National Security Complex* (DOE/EIS-0309, 2001); NNSA announced its decision to construct and operate HEUMF on March 13, 2002 (67 FR 11296).

<sup>&</sup>lt;sup>7</sup> In regard to surplus, non-pit, weapons-usable plutonium currently at LLNL, transfer to SRS for storage pending disposition is being undertaken consistent with decisions announced on September 11, 2007, in an Amended ROD (72 FR 51807) based on the Storage and Disposition of Weapons-Usable Fissile Materials Programmatic EIS.

simply to maintain those capabilities during the relocation process.

Similarly, the No Action Alternative is unacceptable because it would require NNSA to continue operations in facilities that are outdated, too costly to operate, and not capable of meeting modern environment, health and safety (ES&H) or security standards. These facilities cannot be relied upon much longer, and must be replaced or closed.

Under NNSA's decision, plutonium operations remain at LANL. It will not construct a new pit manufacturing facility such as a CPC or a CNPC because it appears unlikely there will be a need to produce more than 10-80 pits per year in the future and because constructing these facilities would be very expensive. Instead, NNSA will upgrade the existing plutonium facilities at the laboratory and will construct a CMRR-NF.8 Construction of this facility is a needed modernization of LANL's plutonium capabilitiescontinued use of the existing CMR facility is inefficient and poses ES&H and security issues that cannot be addressed by modifying the CMR. Uranium operations remain at Y-12, and NNSA will construct a UPF because the existing uranium production facilities are also beyond their useful lives, inefficient, and present ES&H and security issues similar to those at CMR. CMRR-NF and UPF will be safer, seismically robust, and easier to defend from potential terrorist attacks. Their size will support production rates appropriate for a reasonable range of future stockpile sizes, and would not be much smaller if future production rates were much lower than currently anticipated.9

<sup>9</sup>NNSA evaluated various sizes for facilities analyzed in the SPEIS to determine if smaller facilities should be considered in detail for the Distributed and Consolidated Centers of Excellence Alternatives. NNSA evaluated the programmatic risk, cost effectiveness, and environmental impacts of smaller facilities and concluded that smaller facilities were not reasonable for some of these alternatives (see Section 3.15 of the SPEIS). Smaller facilities were considered for the Capability-Based Alternative.

## **Plutonium Operations**

With respect to plutonium manufacturing, NNSA is not making any new decisions regarding production capacity until completion of a new Nuclear Posture Review in 2009 or later. NNSA does not foresee an imminent need to produce more than 20 pits per year to meet national security requirements. This production level was established almost 10 years ago in the ROD (64 FR 50797, Sept. 20, 1999) based on the Site-wide Environmental Impact Statement for Continued Operation of the Los Alamos National Laboratory (1999 LANL SWEIS; DOE/ EIS-0238). The ROD based on the 2008 LANL SWEIS (DOE/EIS-0380) continued this limit on production (73 FR 55833; Sept. 26, 2008). NNSA will continue design of a CMRR-NF that would support a potential annual production (in LANL's TA-55 facilities) of 20–80 pits. The design activities are sufficiently flexible to account for changing national security requirements that could result from a new Nuclear Posture Review, further changes to the size of stockpile, or future Federal budgets. Furthermore, because NNSA's sensitivity analyses have shown that there is little difference in the size of a facility needed to support production rates between 1 and 80 components per year, the future production capacity is not anticipated to have a significant impact on the size of the CMRR-NF.<sup>10</sup> With a new CMRR--NF providing support, the existing plutonium facility at LANL will have sufficient capability to produce between 1 and 80 pits per year. A new CMRR-NF will also allow NNSA to better support national security missions involving plutonium and other actinides (including, e.g., the plutonium-238 heat source program undertaken for the National Aeronautics and Space Administration (NASA); nonproliferation programs, including the sealed source recovery program; emergency response; nuclear counterterrorism; nuclear forensics; render safe program (program to disable improvised nuclear devices); material disposition; and nuclear fuel research and development).

#### Uranium Operations

With respect to uranium manufacturing, NNSA will maintain the current capacity in existing facilities at Y-12 as discussed in Section 3.5 of the SPEIS and within the planning basis discussed in Section 3.1.2 of the 2001 Site-wide Environmental Impact Statement for the Y-12 National

Security Complex (2001 Y-12 SWEIS; DOE/EIS-0309). NNSA is preparing a new SWEIS for Y-12 (Site-wide Environmental Impact Statement for the Y–12 National Security Complex, Oak Ridge, Tennessee (Y-12 SWEIS; DOE/ EIS-0387)), which will evaluate sitespecific issues associated with continued production operations at Y-12, including issues related to construction and operation of a UPF such as its location and size. The Y-12 SWEIS will consider any new information (such as a new Nuclear Posture Review or further changes to the stockpile) that becomes available during the preparation of that document.

Assembly and Disassembly of Weapons and High Explosives Production

NNSA will continue to conduct these operations at Pantex as announced in the ROD (62 FR 3880; Jan. 27, 1997) for the Environmental Impact Statement for the Continued Operation of the Pantex Plant and Associated Storage of Nuclear Weapon Components (DOE/EIS-0225, 1996).

#### **Production Rates and New Facilities**

While NNSA is not making any new decisions regarding the production rates of plutonium or uranium components, it has decided that a CMRR-NF and UPF are essential to its ability to meet national security requirements regarding the nation's nuclear deterrent. The existing facilities where these operations are now conducted cannot be used much longer and cannot be renovated in a manner that is either affordable or acceptable (from ES&H, security, and production perspectives). As NNSA continues the design and, in the case of a UPF, NEPA analysis of these facilities, it can modify them to reflect changing requirements such as those resulting from a new Nuclear Posture Review, further changes to stockpile size, and future federal budgets. In short, a CMRR-NF and UPF are needed for NNSA to maintain its basic nuclear weapons capabilities because they would replace outdated and deteriorating facilities. These facilities are needed regardless of how many or what types of weapons may be called for in the future.

#### National Security Requirements and Stockpile Size

In making these decisions, NNSA considered its statutory responsibilities to support the nuclear weapons stockpile as determined by the President and the Congress. President Bush's goal is to achieve a credible nuclear deterrent with the lowest possible number of nuclear warheads consistent with

<sup>&</sup>lt;sup>e</sup> NNSA prepared an Environmental Impact Statement for the Chemistry and Metallurgy Research Building Replacement Project at Los Alamos National Laboratory, Los Alamos, New Mexico (CMRR EIS) (DOE/EIS-0350). The CMRR EIS evaluates potential impacts of the proposed relocation of analytical chemistry and materials characterization activities and associated R&D to a new CMRR. The proposed CMRR consists of a nuclear facility—CMRR-NF—and a separate radiological laboratory, administrative office, and support building. See also the 2008 Site-Wide Environmental Impact Statement for Los Alamos National Laboratory (2008 LANL SWEIS, DOE/EIS-0380). In deciding to construct the CMRR-NF at LANL, NNSA considered the analyses in the CMRR EIS and the 2008 LANL SWEIS, as well as those in the SPEIS.

<sup>10</sup> See note 9 supra.

national security needs. In 2002, he and Russia's President Putin signed the Moscow Treaty, under which the United States and Russia will each reduce the number of operationally deployed strategic nuclear weapons to 1,700-2,200 by 2012. In 2004, President Bush issued a directive to cut the entire U.S. stockpile—both deployed and reserve warheads—in half by 2012. This goal was later accelerated and achieved in 2007, five years ahead of schedule. At the end of 2007, the total stockpile was almost 50 percent below what it was in 2001. On December 18, 2007, the White House announced the President's decision to reduce the entire nuclear weapons stockpile by another 15 percent by 2012. This means the U.S. nuclear stockpile will be less than onequarter its size at the end of the Cold War—the smallest stockpile since the Eisenhower Administration.

NNSA's analyses in the SPEIS are based on current national policy regarding stockpile size (1,700-2,200 operationally deployed strategic nuclear warheads by 2012) with flexibility to respond to future Presidential direction to make further changes in the numbers of weapons. Maintaining a stockpile requires the ability to detect aging effects and other changes in weapons (a surveillance program), the ability to fix identified problems without nuclear testing (the stockpile stewardship program), and the ability to produce replacement components and reassemble weapons (a fully capable set of production facilities).

NNSA understands that at least two major reviews of the requirements for the future nuclear weapons program are expected during the next year. These reviews may influence the size and composition of the future nuclear weapons stockpile, and the nuclear infrastructure required to support that stockpile. First, the Congress has established the Congressional Commission on the Strategic Posture of the United States. This commission is to conduct a review of the strategic posture of the United States, including a strategic threat assessment and a detailed review of nuclear weapons policy, strategy, and force structure. Its recommendations, currently scheduled for completion in the spring of 2009, are expected to address the size and nature of the future nuclear weapons stockpile, and the capabilities required to support that stockpile. Second, Congress has directed the Administration to conduct another Nuclear Posture Review in 2009 to clarify the United States' nuclear deterrence policy and strategy for the near term (i.e., the next 5-10 years). A

report on this Nuclear Posture Review is due on December 1, 2009.

NNSA has structured its programs and plans in a manner that allows it to continue transforming the complex and to replace antiquated facilities while retaining the flexibility to respond to evolving national security requirements, which is essential for a truly responsive infrastructure. The decisions in this ROD allow NNSA to continue to rely on LANL facilities (with a new CMRR–NF) to provide maximum flexibility to respond to future changes in plutonium requirements.

# Costs, Technical Risks, and Other Factors

NNSA prepared detailed business case studies of the programmatic alternatives. These studies are available at http://www.ComplexTransformation SPEIS.com. They provide a cost comparison of the alternatives and include costs associated with construction, transition, operations, maintenance, security, decontamination and decommissioning, and other relevant factors.11 Based on these studies, NNSA determined that the costs through 2030 for the consolidation alternatives would be approximately 20-40 percent greater than for the alternatives that would maintain the three major capabilities—plutonium operations, uranium operations, and A/D/HE operations—at their current sites. Additionally, NNSA's analysis found that, through 2060, the costs for the consolidation alternatives would be greater than those for the alternatives that maintain the three capabilities where they are currently located.

With respect to technical risk, as part of the business case studies, NNSA evaluated five types of risk: (1) Engineering and construction; (2) implementation; (3) program; (4) safety and regulatory; and (5) security. These analyses balance nearer-term risks incurred while transitioning to an alternative with longer-term operational risks. For example, consolidation alternatives would have higher risks during the transition due to the challenges associated with mission relocations, but could have lower longterm operational risks because of reduced safety, regulatory, or security risks. All risk criteria were rated equally (20 percent each); a sensitivity analysis determined that the conclusions were not significantly affected by adjustments of plus or minus five percent in risk rating criteria.

The risk assessment was performed by a group of NNSA and contractor employees who are subject-matter experts, site experts, or both. The least risky options are those where the sites have previous experience with the mission or the nuclear material used in that mission. Alternatives that would locate the plutonium mission at LANL or SRS, the uranium mission at Y-12, and the weapons assembly and disassembly mission at Pantex, were determined to pose the lowest risk. Overall, the consolidation alternatives were judged to have 25-160 percent more technical risk than alternatives that would not consolidate or relocate missions.

With respect to plutonium R&D and manufacturing, the cost and risk analyses showed that keeping this mission at LANL has the least cost and poses the lowest risk. This results primarily from the fact that plutonium facilities are very expensive to construct and LANL has existing facilities, infrastructure, and trained personnel that can be used for this mission.

The CMRR–NF was analyzed in the Environmental Impact Statement for the Chemistry and Metallurgy Research Building Replacement Project at Los Alamos National Laboratory, Los Alamos, New Mexico (DOE/EIS-0350, Nov. 2003). The CMRR EIS evaluated potential environmental impacts of the proposed relocation of analytical chemistry and materials characterization activities and associated R&D to a new CMRR. Following completion of that EIS, NNSA announced its decision to construct and operate a CMRR consisting of two main buildings, one of which was the CMRR-NF (69 FR 6967; Feb. 12, 2004). The second buildingproviding laboratory, administrative, and support functions-currently is under construction at LANL. However, NNSA decided to defer a decision regarding construction and operation of the CMRR-NF until it completed the Complex Transformation SPEIS (see Section 1.5.2.1, Volume 1 of the SPEIS).

Analyses of the potential impacts of constructing and operating the CMRR– NF were updated in the Site-Wide Environmental Impact Statement for Continued Operation of Los Alamos National Laboratory, Los Alamos, New Mexico (2008 LANL SWEIS; DOE-LIS– 0380, May 2008) as part of the Expanded Operations and the No Action Alternatives. In a ROD based on the 2008 LANL SWEIS, NNSA announced its decision to continue to implement the No Action Alternative with the

<sup>&</sup>lt;sup>11</sup> The cost analyses considered both life-cycle costs (i.e., the cumulative costs over an approximately 50-year life) and discounted cash flows (i.e., a net present value in which all future costs are reduced by a common factor (generally the cost of capital)).

addition of some elements of the Expanded Operations Alternative. NNSA did not make any decision related to the CMRR–NF. It explained in the SWEIS ROD that it would not make any decisions regarding proposed actions analyzed in the SPEIS prior to completion of the SPEIS (73 FR 55833; Sept. 26, 2008). NNSA considered the analyses in the CMRR EIS and the 2008 LANL SWEIS, as well as those in the SPEIS in deciding to construct the CMRR–NF.

With respect to uranium manufacturing and R&D, the cost analyses indicated that building a UPF at Y-12, eliminating excess space, and shrinking the security area at the site will significantly reduce annual operational costs. The UPF at Y-12 will replace 50-year-old facilities, providing a smaller and modern production capability. It will enable NNSA to consolidate enriched uranium operations from six facilities at Y-12, and to reduce the size of the protected area at that site by as much as 90 percent. A new UPF will also allow NNSA to better support broader national security missions. These missions include providing fuel for Naval Reactors; processing and down-blending incoming HEU from the Global Threat Reduction Initiative; down-blending HEU for domestic and foreign research reactors in support of nonproliferation objectives; providing material for hightemperature fuels for space reactors (NASA); and supporting nuclear counter-terrorism, nuclear forensics, and the render safe program (program to disable improvised nuclear devices).

The life cycle cost analysis predicts an average annual savings over the 50year facility life of approximately \$200 million in FY 2007 dollars. The risk analysis found that moving the uranium mission to a site other than Y-12 would more than double the technical risks. The site-specific impacts for a UPF, including issues such as its location and size, will be analyzed in a new SWEIS for Y-12 that NNSA is currently preparing.

With respect to weapons assembly and disassembly and high explosives production, NNSA's decision to keep that mission at Pantex will result in the least cost and pose the lowest programmatic risk because the facilities necessary to conduct this work safely and economically already exist. Although no further NEPA analysis is required to continue these missions at Pantex, NNSA will continue to evaluate and update site-specific NEPA documentation as required by DOE regulations (10 CFR Part 1021). With respect to SNM removal from LLNL, transferring Category I/II SNM to other sites and limiting LLNL operations to Category III/IV SNM will achieve a security savings of approximately \$30 million per year at LLNL.

# Potential Environmental Impacts

As described in greater detail in the following paragraphs, NNSA considered potential environmental impacts in making these decisions. It analyzed the potential impacts of each alternative on land use; visual resources; site infrastructure; air quality; noise; geology and soils; surface and groundwater quality; ecological resources; cultural and paleontological resources socioeconomics; human health impacts; environmental justice; and waste management. NNSA also evaluated the impacts of each alternative as to irreversible or irretrievable commitments of resources, the relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity, and cumulative impacts. In addition, it evaluated impacts of potential accidents on workers and surrounding populations. The SPEIS includes a classified appendix that assesses the potential environmental impacts of a representative set of credible terrorist scenarios.

The environmental impacts of the alternatives are analyzed in Chapter 5 of the SPEIS. The impacts of the alternatives NNSA has decided to pursue are summarized as follows:

Land Use—Minor land disturbance during construction of new facilities (approximately 6.5 acres at LANL for a CMRR–NF and 35 acres at Y–12 for a UPF); less area would be disturbed after construction is complete. At Y–12, construction of a UPF will allow NNSA to reduce the protected area by as much as 90 percent, which will improve security and reduce costs. At all sites, land uses will remain compatible with surrounding areas and with land use plans. At LANL and Y–12, the land required for operations will be less than 1 percent of the sites' total areas.

*Visual Resources*—Changes consistent with currently developed areas, with no changes in the Visual Resource Management classification. All sites will remain industrialized.

Infrastructure—Existing infrastructure is adequate to support construction and operating requirements at all sites. During operations, any changes to power requirements would be less than 10 percent of the electrical capacity at each site.

Air Quality—During construction, temporary emissions will result, but National Ambient Air Quality Standards will not be exceeded as a result of this construction. Operations will not introduce any significant new emissions and will not exceed any standards.

Water Resources—Water use will not change significantly compared to existing use and will remain within the amounts of water available at the NNSA sites. Annual water use at each site will increase by less than 5 percent.

Biological Resources—No adverse effects on biota and endangered species. Consultations with the U.S. Fish and Wildlife Service have been completed for the CMRR–NF. Consultations with the Fish and Wildlife Service will be conducted for a UPF during preparation of the Y–12 SWEIS.

Socioeconomics—Short-term employment increases at LANL and Y– 12 during construction activities. The selected alternatives will have the least disruptive socioeconomic impacts at all sites. At Y–12, the total workforce will be reduced by approximately 750 workers (approximately 11 percent of the site's workforce) after UPF becomes operational. Employment at all other sites will change by less than 1 percent compared to any changes expected under the No Action Alternative.

Environmental Justice—No disproportionately high and adverse effects on minority or low-income populations will occur at any affected site; therefore, no environmental justice impacts will occur.

*Health and Safety*—Radiation doses to workers and the public will remain well below regulatory limits at all facilities and at all sites. Doses to the public and workers will cause less than one latent cancer fatality annually at all sites. Conducting future operations in the CMRR–NF and UPF will reduce the dose to workers compared to the doses they receive in existing facilities.

Accidents—The risk of industrial accidents is expected to be low during construction of the new facilities. Radiological accident risks will be low (i.e., probabilities of less than one latent cancer fatality) at all sites. The CMRR– NF and a UPF are expected to reduce the probability and impacts of potential accidents.

Intentional Destructive Acts---Construction of a UPF and CMRR--NF will provide better protection to the activities conducted in these facilities, as it is generally easier and more costeffective to protect new facilities because modern security features can be incorporated into their design. Although the results of the intentional destructive acts analyses cannot be disclosed, the following general conclusion can be drawn: The potential consequences of intentional destructive acts are highly dependent upon distance to the site boundary and size of the surrounding population—the closer and higher the surrounding population, the higher the potential consequences. Removal of SNM from LLNL will reduce the potential impacts of intentional destructive acts at that site.

Waste Management—Waste generation will remain within existing and planned management capabilities at all sites. Existing waste management facilities are sufficient to manage these wastes and maintain compliance with regulatory requirements.

*Cumulative Impacts*—The cumulative environmental impacts of the alternatives are analyzed in Chapter 6 of the SPEIS. The impacts of the alternatives when added to past, present, and reasonably foreseeable future actions will be within all regulatory standards and not result in significant new impacts.

#### **Mitigation Measures**

As described in the SPEIS, NNSA operates in compliance with environmental laws, regulations, and policies within a framework of contractual requirements; many of these requirements mandate actions to control and mitigate potential adverse environmental effects. Examples include site security and threat protection plans, emergency plans, Integrated Safety Management Systems, pollution prevention and waste minimization programs, cultural resource and protected species programs, and energy and water conservation programs (e.g., the Leadership in Energy and Environmental Design (LEED) Program). Any additional site-specific mitigation actions would be identified in sitespecific NEPA documents

#### Comments Received on the Final SPEIS Related to the Programmatic Alternatives

During the 30-day period following the EPA's notice of availability for the Final SPEIS (73 FR 63460; Oct. 24, 2008), NNSA received written comments from the following groups: Alliance for Nuclear Accountability, Project on Government Oversight, National Radical Women, Physicians for Social Responsibility, Oak Ridge Environmental Peace Alliance, Tri-Valley CAREs, the Union of Concerned Scientists, Nuclear Watch New Mexico, the Arms and Security Initiative of the New America Foundation, Concerned Citizens for Nuclear Safety, Embudo Valley Environmental Group, Ecology Ministry, Loretto Community, Aqua es

Vida Action Team, Citizens for Alternatives to Radioactive Dumping, and Tewa Women United. Written comments were also received from approximately 30 individuals. The comments NNSA received related to the programmatic alternatives and NNSA's responses follow.

Some commenters substantively reiterated comments that they had provided earlier on the Draft SPEIS, including comments that suggested:

1. NNSA should make no decisions on Complex Transformation until a new Nuclear Posture Review has been completed by the newly elected administration and the report issued by the Congressional Commission on the Strategic Posture of the United States.

Response: NNSA believes the SPEIS analysis is consistent with and supports national security requirements and policies. It is unreasonable to assume that nuclear weapons would not be a part of this nation's security requirements over the time period analyzed in the SPEIS and beyond. The range of alternatives analyzed in the SPEIS covers the range of national security requirements that NNSA believes could reasonably evolve from any changes to national policy with regard to the size and number of nuclear weapons in the foreseeable future. Accordingly, there is no reason to delay the decisions announced in this ROD on complex transformation pending a new Nuclear Posture Review or the recommendations of the Bipartisan Panel reevaluating the United States Nuclear Strategic Posture (see Comment Response 1.C, Volume III, Chapter III of the SPEIS). This ROD fully explains why NNSA is making these programmatic decisions, why it is appropriate to make these decisions at this time, and the flexibility NNSA has to adapt to any changes in national security requirements that may occur in the near term.

2. The United States does not need nuclear weapons or the infrastructure that produces and maintains them and should pursue disarmament consistent with the Nuclear Non-Proliferation Treaty.

Response: Decisions on whether the United States should possess nuclear weapons and the type and number of those weapons are made by the President and the Congress. As long as this nation has nuclear weapons, a Complex must exist to ensure their safety, security and reliability. NNSA believes the SPEIS analysis is consistent with and supports national security requirements and policies (see Comment Responses 1.0, 2.K.12, and 3.0, Volume III, Chapter III of the SPEIS).

3. There is no need to produce new pits (or no need for certain production rates).

Response: While pits may have extremely long lifetimes and there may ultimately be no need to produce many additional ones, prudence requires that the nation have the capability to produce pits should the need arise. NNSA is not proposing to manufacture any pits unless they are needed to meet national security requirements. A need to produce pits could arise due to the effects of aging on existing pits or changes to our national security policies that could require more pits than the few NNSA is currently manufacturing for stockpile surveillance (see Comment Responses 2.K.16, 2.K.22, and 5.C.1 Volume III, Chapter III of the SPEIS). Until completion of a new Nuclear Posture Review in 2009 or later, the net production at LANL will be limited to a maximum of 20 pits per year.

4. NNSA should undertake further efforts at compliance with Article VI of the Nuclear Non-proliferation Treaty (NPT) (or, Complex Transformation violates this treaty).

Response: The United States has made significant progress toward achieving the nuclear disarmament goals set forth in the NPT, and is in compliance with its Article VI obligations. The NPT does not mandate disarmament or specific stockpile reductions by nuclear states, and it does not address actions they take to maintain their stockpiles. NNSA disagrees with the assertion that Complex Transformation violates the NPT (see Comment Response 1.F, Volume III, Chapter III of the SPEIS).

5. NNSA should have included Stockpile Curatorship as a reasonable alternative fully considered in the SPEIS.

Response: The Curatorship Alternative as proposed by comments on the Draft SPEIS would have required NNSA to give up the capabilities to design and develop replacement nuclear components and weapons, forcing it to rely solely on the surveillance and nonnuclear testing program to maintain weapons and identify when they need repairs. NNSA believes it is unreasonable to give up these capabilities in light of the uncertainties concerning the aging of weapons and changing national security requirements. As explained in the SPEIS in Section 3.15, this would impair NNSA's ability to assess and, if necessary, address issues regarding the safety, security, and reliability of nuclear weapons (see Comment

Responses 2.H.2, 5.H.2, and 7.O, Volume III, Chapter III of the SPEIS)

6. The transformed complex should not support design or production of new design or modified nuclear weapons.

Response: NNSA is required to maintain nuclear weapons capabilities, including the capability to design, develop, produce, and certify new warheads. Maintenance of the capability to certify weapons' safety and reliability requires an inherent capability to design and develop new weapons. NNSA has not been directed to produce newly designed weapons (see Comment Responses 1.B, Volume III, Chapter III of the SPEIS).

7. NNSA should provide additional information on epidemiological studies of radiation health of workers and communities.

Response: Many of the workers at DOE's 20 major sites have been studied epidemiologically, some for decades. The National Institute for Occupational Safety and Health continues to update these studies as warranted by public health and scientific considerations. As more powerful epidemiological study designs become available, new studies of these workers may provide better information about health risks associated with radiation exposure (see Comment Responses 14.K.5 and 14.K.6, Volume III, Chapter III of the SPEIS). Many of the epidemiological studies and other related studies are available at http://cedr.lbl.gov

NNSA should focus on clean-up of its sites rather than building new facilities to make weapons.

Response: DOE has a large remediation program and is aggressively addressing past contamination issues at each of its sites. This program is conducted in accordance with federal and state regulatory requirements and includes administrative and engineered controls to minimize releases, as well as surveillance monitoring of the environment and reporting of exposure assessments. These remediation activities are directed by federal and state regulators, have their own schedule and funding, and are separate from actions proposed in the SPEIS (see Comment Responses 7.J and 9.B, Volume III, Chapter III of the SPEIS). It is inaccurate to suggest that cleanup and transformation are mutually exclusive.

 NNSA should consolidate special nuclear material from LLNL faster than its current schedule.

Response: NNSA has begun the removal of Category I/II SNM from LLNL, and plans to complete it by 2012. NNSA will continue to give this action the high priority requested by the commenter. Safety, security, and logistical issues associated with preparing SNM for shipment; shipping the materials; and storage at the receiving sites determine the schedule for completing this removal (see Comment Response 5.N.4, Volume III, Chapter III of the SPEIS).

10. The modernization of the Kansas City Plant should have been included in the SPEIS.

Response: The activities of the Kansas City Plant were not included in the SPEIS because NNSA concluded that decisions regarding the consolidation and modernization of the Kansas City Plant's activities (the production and procurement of electrical and mechanical non-nuclear components) would not affect or limit the programmatic alternatives analyzed in the SPEIS, or the decisions NNSA makes regarding these alternatives (see Comment Response 12.0, Volume III, Chapter III of the SPEIS).

11. The SPEIS is not written in plain language and lacks a clear format. *Response:* NNSA prepared the SPEIS

Response: NNSA prepared the SPEIS in accordance with the requirements of NEPA and the DOE and CEQ NEPA regulations. NNSA believes that the SPEIS is clearly written and organized in light of the highly technical subject matter and complex nature of the alternatives (see Comment Response 2.A, Volume III, Chapter III of the SPEIS).

12. NNSA inadequately addressed the environmental impacts of intentional destructive acts. NNSA must disclose the potential impacts of successfully executed credible terrorist attack scenarios at sites in the nuclear weapons complex and make this information available to the public.

Response: A classified appendix to the Complex Transformation SPEIS evaluates the potential environmental impacts of credible terrorist attacks that NNSA assumed (for purposes of analysis pursuant to NEPA) were successful at specific existing and proposed facilities. The appendix is classified both because the scenarios evaluated contain classified information and because there is a risk that these scenarios and their potential impacts could be exploited by terrorists or others contemplating harmful acts. Therefore, the SPEIS provides limited information about these acts and their potential consequences (see "Potential Environmental Impacts" above and Comment Responses 13.B and 13.D, Volume III, Chapter III of the SPEIS).

13. NNSA failed to consider longacting consequences of nuclear weapons production, including the impacts that result from every year of operation. NNSA also failed to consider the deployment or potential use of the nation's nuclear arsenal.

Response: The SPEIS assesses the direct, indirect, and cumulative environmental impacts of the No Action Alternative and reasonable alternatives for the proposed action. Impacts are assessed for both construction and operations. For operations, the SPEIS focuses on the steady-state impacts of operations. Those annual operational impacts are assumed to occur year-afteryear. Now that NNSA has made decisions regarding programmatic alternatives, it may need to prepare additional NEPA documents such as site- or facility-level analyses (e.g., the ongoing Y-12 SWEIS for a UPF now that NNSA has decided to locate it at Y-12) (see Comment Response 11.0 Volume III, Chapter III of the SPEIS). NNSA does not make decisions concerning the size, deployment or potential use of the nation's nuclear arsenal, and therefore the consequences of these decisions are not appropriate for analysis in the SPEIS

14. NNSA inadequately addressed the cumulative impacts of the alternatives, including a detailed and careful analysis of the cumulative impacts of major nuclear-related facilities in New Mexico. Additionally, Comment Response 14.J.4 incorrectly states that Appendix C and D include information about an analysis of cumulative impacts with an extended region of influence of 100 miles.

Response: NNSA addressed potential cumulative impacts resulting from Complex Transformation and ongoing and reasonably anticipated actions of NNSA, other agencies and private developers. In response to public comments, NNSA added a detailed analysis of the cumulative impacts of major nuclear-related facilities in New Mexico. NNSA thinks that analysis is appropriately detailed. The assessment of cumulative impacts is in Chapter 6 of Volume II of the SPEIS (see Comment Responses 2.I and 14.O, Volume III, Chapter III of the SPEIS). With respect to the analysis of cumulative impacts with an extended region of influence of 100 miles, NNSA agrees that the Final SPEIS incorrectly referred the reader to Appendix C and D. NNSA intended to refer the reader to the LANL SWEIS which shows that extending the region of influence out another 50 miles increases the affected population by 300 percent, while the population dose increases by only 13 percent. NNSA regrets this error.

15. NNSA inadequately addressed Environmental Justice, including a more detailed analysis of transportation impacts and waste disposal.

Response: Under Executive Order 12898, NNSA is responsible for identifying and addressing potential disproportionately high and adverse human health and environmental impacts on minority or low-income populations. Based on the SPEIS's analyses, NNSA concluded that there would not be any disproportionately high and adverse human health and environmental impacts on minority or low-income populations. In response to public comments received, NNSA also included information regarding a "special pathways analysis" for operations at LANL for the purpose of assessing how impacts would change compared to standard modeling results. The special pathway analysis is identified in Volume II, Chapter 5, Section 5.1.10 of the SPEIS, and the results of that analysis are presented in Comment Response 14.J, Volume III, Chapter III of the SPEIS

16. NNSA inadequately addressed the impacts associated with design and production of Reliable Replacement Warheads.

*Response:* The continuing transformation of the complex is independent of decisions regarding Reliable Replacement Warheads that the Congress and President may make. At present, the Congress has declined to provide additional funding for development of these warheads (see Comment Responses 2.K.19 and 8.0, Volume III, Chapter III of the SPEIS).

17. NNSA has provided an inadequate basis to decide to locate a UPF at Oak Ridge and there is insufficient information in the SPEIS to select a site for a UPF.

**Response:** Programmatic alternatives regarding a UPF are analyzed in the SPEIS. The SPEIS is the appropriate document to analyze and support programmatic decisions related to major uranium missions and facilities. The Y-12 SWEIS, currently under preparation, will evaluate site-specific issues associated with continued production operations at Y-12, including issues related to construction and operation of a UPF such as its location and size NNSA will make decisions regarding the specific location and size based on the more detailed analysis that will be in the Y-12 SWEIS (see Comment Response 5.C.2, Volume III, Chapter III of the SPEIS).

18. Commenters said that NNSA should accelerate consolidation of excess SNM and down-blend hundreds of metric tons of excess HEU, which is highly desirable to nuclear terrorists who could use it to quickly and easily create a crude nuclear device. Response: Disposal of excess SNM is addressed by the Material Disposition Program. NNSA has an ongoing program to down-blend HEU for disposition, as described in the ROD (61 FR 40619; August 5, 1996) for the Disposition of Surplus Highly Enriched Uranium Environmental Impact Statement (DOE/ EIS-0240, 1996). The potential environmental impacts of an intentional destructive act, such as terrorism or sabotage, are addressed in a classified appendix to the SPEIS (see Comment Responses 5.M, 5.N, and 13.0, Volume III, Chapter III of the SPEIS).

19. NNSA should not move forward with the construction of the CMRR–NF at LANL because of problems with NNSA construction projects, the federal government's limited economic resources, and adequate existing space at the LANL PF–4. Another commenter asked why the CMRR–NF is needed.

Response: As explained in detail in this ROD, the CMRR–NF is a needed modernization of LANL's plutonium capabilities. Continued use of the existing CMR facility is inefficient and poses ES&H and security concerns that cannot be addressed by modifying the CMR. The CMRR–NF will be safer, seismically robust, and easier to defend from potential terrorist attacks (see Comment Responses 3.0, 5.C.1, 5.C.6, and 9.0, Volume III, Chapter III of the SPEIS).

20. The potential environmental impacts of postulated accidents are not adequately addressed in the SPEIS, including the potential impacts to air, land, and water resulting from postulated accidents.

*Response:* Accidents are addressed in the Health and Safety Sections for each site and include analyses for a full spectrum of accidents with both high and low probabilities (see Comment Response 14.N, Volume III, Chapter III of the SPEIS). The accident analysis focused on human health impacts, which NNSA decided was a reasonable metric for comparing the programmatic alternatives.

21. A new, more thorough, more transparent cost analysis needs to be done before Complex Transformation plans are allowed to proceed.

Response: The purpose and need for complex transformation result from NNSA's need for a nuclear weapons complex that can be operated less expensively. NNSA prepared business case analyses to provide cost information on the alternatives considered in the SPEIS. NNSA considered these studies, the analyses in the SPEIS, and other information to make these decisions regarding transforming the complex. The business case analyses are available to the public on the project Web site: http:// www.ComplexTransformation SPEIS.com (see Comment Response 9.0, Volume III, Chapter III of the SPEIS). NNSA believes these studies are adequate for making programmatic and project-specific decisions.

22. NNSA failed to consider an alternative that truly consolidates the nuclear weapons complex.

Response: The SPEIS analyzes alternatives that would make the complex more efficient and responsive than it would be under the No Action Alternative. Consolidation alternatives were formulated with that purpose and need in mind. The SPEIS assesses a range of reasonable alternatives for the future weapons complex that includes alternatives that, if they had been selected, would have eliminated one or more nuclear weapons complex sites (see Comment Responses 7.A.5, 7.A.6, and 7.A.7, Volume III, Chapter III of the SPEIS). As this ROD explains, relocating uranium, plutonium, and A/D/HE capabilities would be too expensive and risky.

23. Complex Transformation endangers human health.

*Response:* New facilities would be designed and operated to minimize risk to both workers and the general public during normal operations and in the event of an accident. Benefiting from decades of experience, NNSA employs modern processes; manufacturing technologies; and safety, environmental, security, and management procedures to protect against adverse health impacts (see Comment Response 14.K, Volume III, Chapter III of the SPEIS).

24. NNSA has not adequately addressed public comments about water usage, radioactive and toxic air emissions, impacts to humans, and impacts to agricultural lands or prime farmlands surrounding LANL resulting from past, current, and future operations of LANL.

Response: The environmental impacts of operating LANL are described in Chapter 4, Section 4.1 of Volume 1 of the SPEIS. The analysis examined surrounding land uses, water availability and usage, air quality and airborne emissions, surface and groundwater quality and discharges, human health, waste management, visual resources, noise, and other impacts of operating LANL. Chapter 5, Section 5.1 of Volume II of the SPEIS analyzes the potential environmental impacts of the alternatives evaluated in the SPEIS in the same media areas. See Comment Responses 14.E.11 through 14.E.14, Volume III, Chapter III of the SPEIS. For example, comment response 14.E.11 states that "due to concern expressed for the quality of agriculture in the LANL region, NMED (New Mexico Environment Department) collects and analyzes foodstuff samples as part of its surveillance program to ensure quality standards are met." The 2008 LANL SWEIS (DOE/EIS–0380), and the ROD (73 FR 55833; Sept. 26, 2008) based on the analyses in it, presented NNSA's responses to similar comments in more detail. NNSA based its programmatic decisions affecting LANL on both the SPEIS and the SWEIS.

25. Albuquerque will begin drinking water from the Rio Grande on December 5, 2008. The Albuquerque Water Utility Authority (WUA), which oversees the project, has detected long-lived alphaemitting radionuclides in the river. Although the levels of these radionuclides are below regulatory concern, the research shows that the current EPA standards for long-lived alpha-emitting radionuclides are not protective of the fetus and the young child. The WUA has asked LANL to reveal the extent of the radiation on the plateau and canyons that contribute to the river to no avail.

Response: Water quality and use at LANL are addressed in the SPEIS at Section 4.1.5 of Volume I. Impacts of complex transformation on water resources at LANL are addressed in Section 5.1.5 of Volume II. There is no indication that contamination from LANL is affecting Albuquerque's drinking water supply. According to a 2007 water quality report, gross alpha particle activity, radium-228, radium-226, and uranium were among regulated substances that were monitored but not detected (Albuquerque Bernilillo County Water Utility Authority, 2007 Drinking Water Quality Report). The 2007 water quality report may be accessed at http://www.abcwua.org/ content/view/280/484/ (see Comment Response 14.E, Volume III, Chapter III of the SPEIS

26. NNSA failed to address comments concerning elevated levels of radionuclides in the Rio Embudo Watershed.

Response: The levels of radionuclides from the fallout produced by atmospheric testing of nuclear weapons (e.g., cesium-137, strontium-90, and plutonium-239) are expected to be elevated at Trampas Lake and in the Sangre de Cristo Mountains in which the Embudo Valley lies. The Trampas Lake data agree with expectations for global fallout at this location and are not a result of LANL activities (see Comment Response 14.K.8, Volume III, Chapter III of the SPEIS). 27. Seismic fasteners, ties, and other protections should be used in the construction of the Radiological Laboratory, Utility, and Office Building (RLUOR) within the CMPP project

(RLUOB) within the CMRR project. Response: NNSA is building the RLUOB to the highest applicable seismic standards. Even though the structure is a radiological laboratory and would not normally be constructed to the same standards as a high hazard nuclear facility, NNSA is nevertheless constructing it to those higher standards (see Comment Response 14.K.7, Chapter III, Volume III of the SPEIS).

28. NNSA did not respond to the comment that it must expand air monitoring in downwind communities and should no longer hide under the grandfather clause for air emissions from its old facilities at LANL.

Response: Operating permits issued pursuant to Title V of the Clean Air Act at NNSA sites include requirements for monitoring emissions from sources and keeping records concerning those sources and their emissions. Monitoring of the environment in and around NNSA sites generally includes air, water, soil, and foodstuffs, and monitoring results are reported in annual environmental surveillance reports. Chapter 10 of Volume II of the SPEIS describes permits issued by regulatory authorities for NNSA facilities and operations. At LANL NNSA complies with the Clean Air Act and its emissions are regulated by the New Mexico Environment Department (see Comment Response 14.D.2, Chapter III, Volume III of the SPEIS)

29. Will LANL become the second Waste Isolation Pilot Plant (WIPP) site in New Mexico under the Complex Transformation proposal?

Response: This comment concerns the disposal path for newly generated transuranic waste that could result from decisions made on complex transformation. The alternatives analyzed in the SPEIS could generate transuranic waste after WIPP's scheduled closure in 2035. At this time, DOE is not considering any legislative changes to extend WIPP's operation or to develop a second repository for transuranic waste. Any transuranic waste that is generated without a disposal pathway would be safely stored until disposal capacity becomes available (see Comment Response 14.M.4, Chapter III, Volume III of the SPEIS).

30. LANL has failed to install a reliable network of monitoring wells at the laboratory.

Response: LANL's groundwater monitoring program was discussed in the 2008 LANL SWEIS. Groundwater monitoring at LANL is conducted in compliance with the "Order on Consent for Los Alamos National Laboratory' (Consent Order), and consistent with the Interim Facility-wide Groundwater Monitoring Plan that was approved by the New Mexico Environment Department in June 2006. Some of the groundwater data at LANL are being reassessed due to potential residual drilling fluid effects. Drilling fluid effects are quantitatively assessed in LANL's Well-Screen Analysis Report, Rev. 2 (LA-UR-07-2852; May 2007). Fifty-two percent of the well screens evaluated in this report produce samples that are not significantly impacted by drilling fluids. LANL has initiated a program to better evaluate the wells and to rehabilitate wells that may be producing suspect results. LANL is using the results of a pilot study to develop a proposed course of action for approval by the New Mexico Environment Department. The process is established by and in compliance with the Consent Order (see Comment Responses 14.E.2 and 14.E.1, Chapter III, Volume III of the SPEIS)

31. The existing CMR facility is not safe and the seismic hazards at LANL are uncertain. The commenters assert that many of their specific comments concerning seismic issues at LANL were not properly addressed. The commenters also state that due to seismic risks, all plutonium operations at LANL should immediately cease.

Response: Section 4.1.6 of Volume I of the SPEIS addresses seismic issues at LANL and Comment Responses 7.0, 14.F.1, 14.K.12, 14.N.8 and 19.E provide additional information on the seismic issues at LANL and the Justification for Continued Operation under which the laboratory's facilities operate. NNSA decided to construct the CMRR–NF largely because the CMR facility cannot be modified to safely operate for many more years (see the basis for decision for plutonium research and development and operations above).

In addition to the comments that were essentially identical to ones submitted on the Draft SPEIS and to which NNSA responded to in the Final SPEIS, NNSA received the following new comments.

1. Some commenters stated they were unable to identify responses in the Final SPEIS to some of their comments.

Response: NNSA reviewed the comments it received to ensure that responses had been included in the Final SPEIS. Based on this review, NNSA concluded that it had provided appropriate responses for all comments and that responses to these commenters' submissions were included in the Final SPEIS. 2. The April 9, 2008, comments of the New Mexico Conference of Catholic Bishops, in a letter signed by Most Rev. Michael J. Sheehan, Archbishop of Santa Fe, and Most Rev. Ricardo Ramirez, CSB, Bishop of Las Cruces, were omitted from the SPEIS's text and compact disc (CD).

Response: NNSA does not have any record of receiving the letter identified above prior to issuing the Final SPEIS. However, NNSA contacted the commenter and requested a copy of the letter. That letter raised questions and issues related to: Potential violations of treaties; an international arms race; whether transformation of LANL will result in a more responsive infrastructure; whether the proposed transformation of the complex is based on a Nuclear Posture Review conducted before or after September 11, 2001; the type of Congressional support that has been received; and the costs and funding source for decontamination and decommissioning. NNSA reviewed these comments and concluded that the Final SPEIS addresses each of them.

3. A commenter asserted that the Scarboro community, within 5 miles of the Y-12 facility, is disproportionately impacted, historically and currently, by the pollutants released on the Oak Ridge Reservation. This commenter also urged NNSA to refrain from issuing a ROD for the SPEIS until it commissions and receives an independent study of canned subassembly/secondary reliability, indicating whether a UPF is actually necessary; and until NNSA prepares a supplemental EIS considering the nonproliferation impacts of the proposed action.

Response: NNSA conducted its **Environmental Justice analysis** consistent with the requirements of the applicable Executive Order and related guidance. Section 14.J of Volume III, Chapter III, addresses the **Environmental Justice comments** received during the comment period. The Scarboro community is identified as the closest developed area to Y-12 (see Volume II, Chapter 4, Section 4.9.2 of the SPEIS). The analysis in the SPEIS did not result in any disproportionately high and adverse impacts on any minority or low-income populations at Y-12 (see Volume II, Chapter 5, Sections 5.9.10, 5.9.11, and 5.9.12 of the SPEIS). The reasons for NNSA's decision to proceed with a UPF are set forth above in the discussion of uranium manufacturing and research and development. Comment Response 1.F, Volume III, Chapter III, addresses the nonproliferation impacts of Complex Transformation.

4. The Comment Response Document does not include several public petitions, including one from members of Santa Clara Pueblo supporting the comments made by the Tribal Council of Santa Clara Pueblo. Another petition circulated by youth in the Espanola Valley by the Community Service Organization del Norte (CSO del Norte) is also omitted. Many of the individual comment letters from people living in the Rio Embudo Watershed are missing as well. There is no listing of the names of these commenters in Tables 1.3-3, 1.3-4, 1.3-5 or 1.3-6. The listing of the "Campaign Comment Documents" fails to give any indication of the leaders of the campaigns or any geographic reference, unless one flips through that section of the document.

Response: NNSA received approximately 100,000 comment documents on the Draft SPEIS from federal agencies; state, local, and tribal governments; public and private organizations; and individuals. In addition, during the 20 public hearings that NNSA held, more than 600 speakers made oral comments. NNSA made every effort to include all comment documents in the SPEIS and to identify and to address every comment. Because it would be impractical to list the names of all commenters who submitted campaign emails, letters, and postcards, those names are provided electronically in the CD version of the SPEIS and on the project Web site (http://www.Complex TransformationSPEIS.com). In addition, the CD contains additional information on the public comment period and includes meeting transcripts and signatories for campaign documents and petitions. With regard to the petition from members of the Santa Clara Pueblo, NNSA believes this petition was submitted as a comment on the 2008 LANL SWEIS and not as a comment on the SPEIS. NNSA responded to the petition in the ROD it issued in September that was based on the SWEIS. If any comment documents or petitions were omitted from the SPEIS, **NNSA** regrets that.

5. In Comment Response 14.K.11, Chapter III, Volume III of the SPEIS, NNSA, in response to a comment related to under-reported historic radiation emissions, stated that it was "unaware of any published CDC [Centers for Disease Control and Prevention] study with findings as described by the commenter." The commenter had provided a reference to a Los Alamos Historical Document Retrieval and Assessment Project report for documentation of their claim that "DOE has grossly under-reported historic radiation emissions by nearly 60-fold."

Response: NNSA reviewed the Los Alamos Historical Document Retrieval and Assessment Project report, and NNSA stands by Comment Response 14.K.11, Chapter III, Volume III of the SPEIS, which states that, "Chapter 4, Section 4.6.1, of the LANL SWEIS (LANL 2008) shows the radiation doses received over the past 10 years from LANL operations by the surrounding population and hypothetical maximally exposed individual (MEI). The annual dose to the hypothetical MEI has consistently been smaller than the annual 10-millirem radiation dose limit established for airborne emissions by the U.S. Environmental Protection Agency. The final LANL Public Health Assessment, by the Agency for Toxic Substances and Disease Registry, reports that "there is no evidence of contamination from LANL that might be expected to result in ill health to the community," and that "overall, cancer rates in the Los Alamos area are similar to cancer rates found in other communities" (Agency for Toxic Substances and Disease Registry, Public Health Assessment, Final, Los Alamos National Laboratory, 2006).

6. A commenter noted that Comment Response 14.J.4, Chapter III, Volume III, of the SPEIS incorrectly refers the reader to Appendix D for a description of the accident analysis.

Response: The reference to Appendix D is incorrect. The correct reference should have been to Appendix C. NNSA regrets the confusion caused by this error.

7. A commenter stated that NNSA made a commitment to refrain from making a siting decision on the UPF until the Y-12 SWEIS is completed.

Response: NNSA did not make such a commitment. This ROD explains NNSA's decision to construct a UPF at Y-12 based on the analysis contained in the SPEIS and other factors. This decision is not a decision as to where at Y-12 the new facility would be located or its size. Those decisions will be made based on the more detailed analysis in the Y-12 SWEIS. Additionally, the Y-12 SWEIS will include one or more alternatives that do not include a UPF. The public will have the opportunity to review and comment on the Draft SWEIS when it is prepared.

8. With respect to the new section (Section 6.4) that NNSA added to the Final SPEIS to provide more information on the potential cumulative impacts of nuclear activities in New Mexico, one commenter stated that Pantex should be added to that cumulative assessment because it is just as close to WIPP and to LANL as WIPP and LANL are to each other. Another commenter stated that the impacts of the WSMR should be included in that assessment.

Response: NNSA added Section 6.4 in response to public comments on the Draft SPEIS that requested an analysis of cumulative impacts for the three DOE nuclear Facilities in New Mexico, as well as other major planned or proposed nuclear facilities in the state. In part, these comments stated that the regions of influence for LANL and SNL/NM overlap and that all three DOE sites are along the Rio Grande corridor in New Mexico. NNSA believes that Section 6.4 is adequate and responsive to public comments received regarding the cumulative impact assessment of nuclear activities in New Mexico. As Pantex is not located in New Mexico, and its region of influence does not extend into New Mexico, it was not included in Section 6.4. Also, because the WSMR does not conduct nuclear activities, it was not included in Section 6.4

9. A commenter stated that the socioeconomic impacts described in the SPEIS are "incomplete and vague," and asked for an explanation regarding the economic multiplier used in the analysis.

*Response:* NNSA reviewed this comment and believes that the socioeconomic analyses contained in the SPEIS are appropriate and comply with NEPA's requirements. The economic multipliers used in the SPEIS vary by location and are consistent with the multipliers estimated by the U.S. Bureau of Labor Statistics and multipliers used in other NEPA documents.

10. The SPEIS failed to address impacts on global warming.

Response: The SPEIS assesses the direct, indirect, and cumulative environmental impacts of the No Action Alternative and reasonable alternatives for the proposed action. The assessment of impacts includes, where appropriate, the direct and indirect contributions to the emission of greenhouse gases resulting from operation and transformation of the nuclear weapons complex. As to the programmatic alternatives analyzed in the SPEIS, the direct impacts would result from the construction and operation of major facilities involved in operations using SNM (e.g., a CPC, CNPC, CMRR-NF, UPF), and from the transportation of components, materials and waste. The emissions of carbon dioxide (CO<sub>2</sub>) from construction and operation of proposed major facilities are estimated in Chapter 5 (see Tables 5.1.4-1 and 5.1.4-3 in

Section 5.1.4 of Chapter 5, Volume II of the SPEIS). The potential emissions from transportation are a direct function of numbers of trips and their distances. The significant differences among the various programmatic alternatives as to transportation also appear in Chapter 5 (see Section 5.10 of Chapter 5, Volume II of the SPEIS).

The indirect impacts of the programmatic alternatives would result primarily from the use of electricity that is generated from the mix of generating capacities (gas, coal, nuclear, wind, geothermal, etc.) operated by the utilities NNSA purchases power from; these utilities may alter that mix in the future regardless of the decisions NNSA makes regarding transformation of the complex. The use of electricity under the programmatic alternatives is shown in Chapter 5 (see Tables 5.1.3–1 and 5.1.3–2 in Section 5.1.3 of Chapter 5, Volume II of the SPEIS).

Overall, the release of greenhouse gases from the nuclear weapons complex constitutes a miniscule contribution to the release of these gases in the United States and the world. Overall U.S. greenhouse gas emissions in 2007 totaled about 7,282 million metric tons of CO<sub>2</sub> equivalents, including about 6,022 million metric tons of  $CO_2$ . These emissions resulted primarily from fossil fuel combustion and industrial processes. About 40 percent of CO<sub>2</sub> emissions come from the generation of electrical power (Energy Information Administration, "Emissions of Greenhouse Gases in the United States 2007," DOE/EIA-0573 [2007]).

As the impacts of greenhouse gas releases on climate change are inherently cumulative, NNSA, and the DOE as a whole, strive to reduce their contributions to this cumulatively significant impact in making decisions regarding their ongoing and proposed actions. DOE's efforts to reduce emissions of greenhouse gases extend from research on carbon sequestration and new energy efficient technologies to making its own operations more efficient in order to reduce energy consumption and thereby decrease its contributions to greenhouse gases.

NNSA considers the potential cumulative impact of climate change in making decisions regarding its activities, including decisions regarding continuing the transformation of the nuclear weapons complex. Many of these decisions are applicable to the broad array of NNSA's activities, and therefore are independent of decisions regarding complex transformation. For example, NNSA (and other elements of the Department) are entering into energy savings performance contracts at its sites, under which a contractor examines all aspects of a site's operation for ways to improve energy use and efficiency. Also, NNSA seeks to reduce its contribution to climate change through decisions regarding individual actions, such as pursuing LEED certification for its new construction and refurbishment of its aging infrastructure. Examples of these decisions include projects that replace aging boilers and chillers with equipment that is more energy efficient. Such projects are underway at Y-12, SNL/NM, and LANL ("DOE Announces Contracts to Achieve \$140 Million in **Energy Efficiency Improvements to DOE** Facilities," August 4, 2008, available at: http://www.energy.gov/6449.htm).

NNSA considered its contributions to the cumulative impacts that may lead to climate change in making the programmatic decisions announced in this ROD. These decisions will allow NNSA to reduce its greenhouse gas emissions by consolidating operations, modernizing its heating, cooling and production equipment, and replacing old facilities with ones that are more energy efficient. Many of these actions would not be feasible if NNSA had selected the No Action Alternative, which would have required it to maintain the Complex's outdated infrastructure. Federal regulations and DOE Orders require the Department of Energy to follow energy-efficient and sustainable principles in its siting, design, construction, and operation of new facilities, and in major renovations of existing facilities. These principles, which will apply to construction and operation of a UPF at Y-12 and the CMRR-NF at LANL, as well as to other facilities, include features that conserve energy and reduce greenhouse gas emissions

Issued at Washington, DC, this 15th day of December 2008.

Thomas P. D'Agostino,

Administrator, National Nuclear Administration. [FR Doc. E8–30193 Filed 12–18–08; 8:45 am] BILLING CODE 6450–01–P

## DEPARTMENT OF ENERGY

Record of Decision for the Complex Transformation Supplemental Programmatic Environmental Impact Statement—Tritium Research and Development, Flight Test Operations, and Major Environmental Test Facilities

**AGENCY:** National Nuclear Security Administration, U.S. Department of Energy.

## 04-D-125, Chemistry and Metallurgy Research Building Replacement (CMRR) Project, Los Alamos National Laboratory (LANL), Los Alamos, New Mexico Project Data Sheet (PDS) is for Construction

## 1. Significant Changes

The most recent DOE O 413.3A approved Critical Decision (CD) is CD-1 for the Nuclear Facility (NF), Special Facility Equipment (SFE), and Radiological Laboratory/Utility/Office Building (RLUOB) equipment installation components of the project, and CD-2/3A for the RLUOB facility component of the project. The CMRR CD-1 was approved on May 18, 2005, which at the time had a preliminary cost range of \$745,000,000 - \$975,000,000. It is recognized that many of the prior planning assumptions have changed. Further discussion below addresses these changes impacting the estimate. The CD-2/3A for the RLUOB construction was approved on October 21, 2005, with a Total Project Cost (TPC) of \$164,000,000. The construction of the RLUOB is being executed with a design build contract. Subsequent Critical Decisions will be sought for the establishment of the performance baselines to install SFE equipment in the RLUOB and for the NF and associated SFE equipment. The TPC of the RLUOB construction is part of the overall CMRR Project preliminary cost range.

Based upon DOE/NNSA Program direction to the project in FY 2007 and FY 2008, the project scope description in Section 4 was modified to address incorporation of the Special Facility Equipment (formerly addressed as Phase B), into each of the respective facility components of CMRR, namely the RLUOB and NF. The start of final design was approved for the SFE associated with the RLUOB in May 2007. With the completion of the RLUOB/SFE final design in FY 2008 and the anticipated establishment of the performance baseline in FY 2009, this effort is being addressed as the Equipment Installation effort necessary for the RLUOB to become programmatically operational. For the Nuclear Facility, the facility construction, equipment procurement and installation, and facility operational readiness will be addressed within the NF performance baseline.

A revised estimate to complete assessment will be performed by the project prior to authorization for NF final design. The estimate for construction of the NF is now viewed to be significantly higher (TPC above \$2,000,000,000) than studied earlier during conceptual design. The funding profile reflected in Section 5 for the inclusive period of FY 2011 to FY 2014 is a funding placeholder for the NF final design only. No funding placeholder for construction of the Nuclear Facility is included in this data sheet. The decision about how far to proceed into final design will be based on numerous ongoing technical reviews and other ancillary decisions NNSA management will be making during the period of FY 2009 - 2010. A future decision to proceed with construction of the Nuclear Facility and associated equipment has been deferred pending the outcome of the current ongoing Nuclear Posture Review and other strategic decision making.

A Federal Project Director at the appropriate level has been assigned to this project.

This PDS is an update of the FY 2009 PDS.

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## Mello Aff #1, Par 20, Ref 1

|          |     |             |         |         |         | ars in thousan | nds)    |         |           |           |
|----------|-----|-------------|---------|---------|---------|----------------|---------|---------|-----------|-----------|
|          |     | Prior Years | FY 2010 | FY 2011 | FY 2012 | FY 2013        | FY 2014 | FY 2015 | Outyears  | Total     |
| FY 2005  | TEC | 159,130     |         |         |         |                |         |         |           | 159,130   |
| RLOUB    | OPC | 4,068       | 802     |         |         |                |         |         |           | 4,870     |
| Baseline | TPC | 163,198     | 802     | 0       | 0       | 0              | 0       | 0       | 0         | 164,000   |
| FY 2009  | TEC | 38,100      | 40,000  | 59,000  | 15,800  |                |         |         |           | 152,900   |
| REI      | OPC | 5,602       | 11,900  | 12,100  | 12,400  | 4,498          |         |         |           | 46,500    |
| Baseline | TPC | 43,702      | 51,900  | 71,100  | 28,200  | 4,498          | 0       | 0       | 0         | 199,400   |
|          | TEC | 159,130     |         |         |         |                |         |         |           | 159,130   |
| FY 2010  | OPC | 4,068       | 802     |         |         |                |         |         |           | 4,870     |
| RLOUB    | TPC | 163,198     | 802     | 0       | 0       | 0              | 0       | 0       | 0         | 164,000   |
|          | TEC | 38,100      | 40,000  | 59,000  | 15,800  |                |         |         |           | 152,900   |
| FY 2010  | OPC | 5,602       | 11,900  | 12,100  | 12,400  | 4,498          |         |         |           | 46,500    |
| REI      | TPC | 43,702      | 51,900  | 71,100  | 28,200  | 4,498          | 0       | 0       | 0         | 199,400   |
|          | TEC | 131,600     | 57,500  | 129,000 | 289,200 | 300,000        | 300,000 | 300,000 | 1,504,631 | 3,011,931 |
| FY 2010  | OPC | 34,481      | 2,000   | 2,500   | 3,000   | 3,500          | 4,000   | 4,550   | 300,500   | 354,531   |
| NF       | TPC | 166,081     | 59,500  | 131,500 | 292,200 | 303,500        | 304,000 | 304,550 | 1,805,131 | 3,366,462 |
|          | TEC | 159,130     |         |         |         |                |         |         |           | 159,130   |
| FY 2011  | OPC | 4,068       | 802     |         |         |                |         |         |           | 4,870     |
| RLOUB    | TPC | 163,198     | 802     | 0       | 0       | 0              | 0       | 0       | 0         | 164,000   |
|          | TEC | 38,100      | 40,000  | 59,000  | 15,800  |                |         |         |           | 152,900   |
| FY 2011  | OPC | 5,602       | 11,900  | 12,100  | 12,400  | 4,498          |         |         |           | 46,500    |
| REI      | TPC | 43,702      | 51,900  | 71,100  | 28,200  | 4,498          | 0       | 0       | 0         | 199,400   |
|          | TEC | 131,600     | 57,500  | 166,000 | 289,200 | 300,000        | 300,000 | 300,000 | 1,532,769 | 3,077,069 |
| FY 2011  | OPC | 34,481      | 2,000   | 2,500   | 3,000   | 3,500          | 4,000   | 4,550   | 300,500   | 354,531   |
| NF       | TPC | 166,081     | 59,500  | 168,500 | 292,200 | 303,500        | 304,000 | 304,550 | 1,833,269 | 3,431,600 |

## 7. Schedule of Total Project Costs

Note: NF data above are pre-baseline planning figures

## 8. Related Operations and Maintenance Funding Requirements

| Start of Operation or Beneficial Occupancy (fiscal quarter or date) | 4QFY2009* |
|---|-----------|
| Expected Useful Life (number of years)                              | 50        |
| Expected Future Start of D&D of this capital asset (fiscal quarter) | 2QFY2065  |

## (Related Funding requirements)

|                                 | (dollars in thousands) |          |                  |          |  |
|---------------------------------|------------------------|----------|------------------|----------|--|
|                                 | Annua                  | Costs    | Life Cycle Costs |          |  |
|                                 | Current                | Previous | Current          | Previous |  |
|                                 | Total                  | Total    | Total            | Total    |  |
|                                 | Estimate               | Estimate | Estimate         | Estimate |  |
| Operations                      | N/A                    | N/A      | N/A              | N/A      |  |
| Maintenance                     | N/A                    | N/A      | N/A              | N/A      |  |
| Total, Operations & Maintenance | N/A                    | N/A      | N/A              | N/A      |  |

<sup>a</sup> This date corresponds to the beneficial occupancy of the RLUOB construction phase only. NF date is TBD.

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## 7. Schedule of Total Project Costs

|          | (dollars in thousands) |             |         |         |         |         |         |                                       |           |           |
|----------|------------------------|-------------|---------|---------|---------|---------|---------|---------------------------------------|-----------|-----------|
|          |                        | Prior Years | FY 2010 | FY 2011 | FY 2012 | FY 2013 | FY 2014 | FY 2015                               | Outyears  | Total     |
| FY 2005  | TEC                    | 159,130     |         |         |         |         |         |                                       |           | 159,13    |
| RLOUB    | OPC                    | 4,068       | 802     |         |         |         |         |                                       |           | 4,87      |
| Baseline | TPC                    | 163,198     | 802     | 0       | 0       | 0       | 0       | 0                                     | 0         | 164,00    |
| FY 2009  | TEC                    | 38,100      | 40,000  | 59,000  | 15,800  |         |         |                                       |           | 152,90    |
| REI      | OPC                    | 5,602       | 11,900  | 12,100  | 12,400  | 4,498   |         |                                       |           | 46,50     |
| Baseline | TPC                    | 43,702      | 51,900  | 71,100  | 28,200  | 4,498   | 0       | 0                                     | 0         | 199,40    |
|          | TEC                    | 159,130     |         |         |         |         |         |                                       |           | 159,13    |
| FY 2010  | OPC                    | 4,068       | 802     |         |         |         |         |                                       |           | 4,87      |
| RLOUB    | TPC                    | 163,198     | 802     |         | 0       | 0       | 0       | 0                                     | 0         | 164,00    |
|          | TEC                    | 38,100      | 40,000  | 59,000  | 15,800  |         |         |                                       |           | 152,90    |
| FY 2010  | OPC                    | 5,602       | 11,900  | 12,100  | 12,400  | 4,498   |         |                                       |           | 46,50     |
| REI      | TPC                    | 43,702      | 51,900  | 71,100  | 28,200  | 4,498   | 0       | 0                                     | 0         | 199,40    |
|          | TEC                    | 131,600     | 57,500  | 129,000 | 289,200 | 300,000 | 300,000 | 300,000                               | 1,504,631 | 3,011,93  |
| FY 2010  | OPC                    | 34,481      | 2,000   | 2,500   | 3,000   | 3,500   | 4,000   | 4,550                                 | 300,500   | 354,53    |
| NF       | TPC                    | 166,081     | 59,500  | 131,500 | 292,200 | 303,500 | 304,000 | 304,550                               | 1,805,131 | 3,366,46  |
|          | TEC                    | 159,130     |         |         |         |         |         | · · · · · · · · · · · · · · · · · · · |           | 159,13    |
| FY 2011  | OPC                    | 4,068       | 802     |         |         |         |         |                                       |           | 4,87      |
| RLOUB    | TPC                    | 163,198     | 802     | 0       | 0       | 0       | 0       | 0                                     | 0         | 164,00    |
|          | TEC                    | 38,100      | 40,000  | 59,000  | 15,800  |         |         |                                       |           | 152,90    |
| FY 2011  | OPC                    | 5,602       | 11,900  | 12,100  | 12,400  | 4,498   |         |                                       |           | 46,50     |
| REI      | TPC                    | 43,702      | 51,900  | 71,100  | 28,200  | 4,498   | 0       | 0                                     | 0         | 199,40    |
|          | TEC                    | 131,600     | 57,500  | 166,000 | 289,200 | 300,000 | 300,000 | 300,000                               | 1,532,769 | 3,077,069 |
| Y 2011   | OPC                    | 34,481      | 2,000   | 2,500   | 3,000   | 3,500   | 4,000   | 4,550                                 | 300,500   |           |
| ٧F       | TPC                    | 166,081     | 59,500  | 168,500 | 292,200 | 303,500 | 304,000 | 304,550                               | 1,833,269 | 3,431,600 |

Note: NF data above are pre-baseline planning figures

## 8. Related Operations and Maintenance Funding Requirements

| Start of Operation or Beneficial Occupancy (fiscal quarter or date) | 40FY2009* |
|---|-----------|
| Expected Useful Life (number of years)                              | 50        |
| Expected Future Start of D&D of this capital asset (fiscal quarter) | 20FY2065  |

## (Related Funding requirements)

|                                 | (dollars in thousands) |                   |                  |                   |  |
|---------------------------------|------------------------|-------------------|------------------|-------------------|--|
|                                 | Annua                  | Life Cycle Costs  |                  |                   |  |
|                                 | Current<br>Total       | Previous<br>Total | Current<br>Total | Previous<br>Total |  |
| Operations                      | Estimate<br>N/A        | Estimate<br>N/A   | Estimate<br>N/A  | Estimate<br>N/A   |  |
| Maintenance                     | N/A                    | N/A               | N/A              | N/A               |  |
| Total, Operations & Maintenance | N/A                    | N/A               | N/A              | N/A               |  |

<sup>a</sup> This date corresponds to the beneficial occupancy of the RLUOB construction phase only. NF date is TBD.

Weapons Activities/RTBF/Construction/ 04-D-125, CMR Building Replacement Project, LANL

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WRITER:

Thomas M. Hnasko Partner thnasko@hinklelawfirm.com

Mello Aff #1, par 26.

July 1, 2010

The Honorable Dr. Steven Chu, Secretary Department of Energy 1000 Independence Ave SW Washington, DC 20585

The Honorable Mr. Tom D'Agostino, Administrator National Nuclear Security Administration 1000 Independence Ave SW Washington, DC 20585

## Re: A new Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA) is needed for the Chemistry and Metallurgy Research Replacement Nuclear Facility (CMRR-NF) at Los Alamos National Laboratory (LANL).

Dear Secretary Chu and Administrator D'Agostino:

The undersigned represents the Los Alamos Study Group (Study Group).<sup>1</sup> The purpose of this letter is to invite your attention to the following important matters regarding the construction and operation of the proposed CMRR-NF, presented first in summary form and subsequently in greater detail.

The Study Group is a nonprofit research and educational organization based in Albuquerque, New Mexico, which focuses on educating the general public, federal and contractor management, members of Congress, and others on a range of interrelated policy issues, including Department of Energy (DOE) missions, programs, and infrastructure. The Study Group and many of its members have been intimately involved in analysis and education regarding LANL plutonium infrastructure and programs since October 1989.<sup>2</sup>

The Study Group has approximately 2,691 members and supporters within a 50-mile radius of LANL, approximately 2,341 of whom live within a 30-mile radius of LANL. These people, along with other Study Group members, are directly affected by federal choices

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<sup>&</sup>lt;sup>1</sup> For general background please see <u>http://www.lasg.org</u> and for specific background regarding the CMRR and closely related issues see <u>http://www.lasg.org/CMRR/open\_page.htm</u>.

<sup>&</sup>lt;sup>2</sup> Some of the resulting public discussion is archived at <u>http://www.lasg.org/Pit\_Prod.htm</u>.

regarding construction and operation of the proposed CMRR-NF. Many of these members would be directly harmed by the environmental impacts of CMRR-NF.

From time to time and as the occasion warrants, the Study Group has been formally joined in its concerns regarding LANL plutonium infrastructure and programs – including many of the same issues we raise here – by hundreds of nonprofit organizations, churches, and businesses.<sup>3</sup>

The Study Group and its members have commented to the National Nuclear Security Administration (NNSA) and its predecessor DOE Defense Programs (DP) regarding the matters raised here on almost every possible occasion over the last two decades. The Study Group commented on the scope of the CMRR EIS.<sup>4</sup> Dozens of Study Group members commented on the draft CMRR EIS.

On numerous occasions, the Study Group discussed CMRR issues with NNSA officials in Los Alamos and has travelled dozens of times to Washington, DC to meet with NNSA and other executive branch officials, as well as members of Congress and their staff, regarding some of the issues raised here, as well as closely related matters. To the limit of the Study Group's resources and abilities, and within the limits of information available to them, the Study Group has carefully followed and engaged with the federal government on all CMRR issues. They have diligently pursued and exhausted all the administrative remedies available to them, and many more, over a decade-long period, specifically concerning CMRR.

## **Brief CMRR Background**

The aim of the CMRR Project (initially an element within NNSA Project 03-D-103, now Project 04-D-125) is to complete two new buildings at LANL's Technical Area (TA-) 55, the CMRR-NF and a Radiological Laboratory, Utility, and Office Building (RLUOB).<sup>5</sup> A general location map is attached as Figure 1. Figure 2 is an aerial view showing the CMRR site. The primary purpose of the CMRR facility is to facilitate the large-scale production of plutonium warhead cores ("pits").<sup>6</sup>

<sup>&</sup>lt;sup>3</sup>For "Call Disarmament" example the endorsers of the for Nuclear see at http://www.lasg.org/campaigns/CallEndorsers.htm, which includes: "We therefore call upon our elected leaders to: Stop the design and manufacture of all nuclear weapons, including plutonium bomb cores ("pits") at Los Alamos and elsewhere [;] ... Halt disposal of nuclear waste at Los Alamos, as thousands of citizens and dozens of environmental organizations have already requested."

<sup>&</sup>lt;sup>4</sup> Letter from Greg Mello to Elizabeth Withers, CMRR EIS document manager, August 14. 2002. Not in CMRR EIS.

<sup>&</sup>lt;sup>5</sup> NNSA's most recent Project Data Sheet (PDS) for the CMRR Project is in the DOE FY2011 Congressional Budget Request (CBR), Vol. 1, pp. 215-235, available at <u>http://www.cfo.doe.gov/</u> under "Products and Services."

<sup>&</sup>lt;sup>6</sup> "The CMRR facility has no coherent mission to justify it unless the decision is made to begin an aggressive new nuclear warhead design and pit production mission at Los Alamos National Laboratory." House Report 110-185,

CMRR-NF and RLUOB comprise 90% and 10% of the total estimated CMRR construction cost, respectively (i.e. \$3,431.6 million and \$363.4 million, respectively, out of a recently-estimated \$3,795.0 million).<sup>7</sup> The CMRR project would also decommission, demolish, and dispose of the Chemistry and Metallurgy Research (CMR) building, unless this work is arranged under another line item,<sup>8</sup> or unless part of the CMR is retained.<sup>9</sup> CMR disposition is expected to cost in the neighborhood of \$400 million in today's dollars (a very preliminary estimate).<sup>10</sup> Including this rough figure for CMR disposition, the total CMRR cost given in DOE's February 1, 2010 budget submission to Congress becomes \$4,195 million.

RLUOB is physically complete and is being outfitted for use. It is expected to be ready for full occupancy in fiscal year (FY) 2013 and for full beneficial use approximately one year later in 2014, according to NNSA.<sup>11</sup> In contrast, all aspects of CMRR-NF are still in preliminary design. Despite congressional concern<sup>12</sup> there is no CMRR-NF performance baseline.<sup>13</sup>

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 11,
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 p.
 105,
 http://frwebgate.access.gpo.gov/cgi 

 bin/getdoc.cgi?dbname=110
 cong
 reports&docid=f:hr185.110.pdf.

<sup>7</sup> NNSA, CMRR PDS for FY2011.

<sup>8</sup> Ibid.

<sup>9</sup> NNSA is currently considering retaining CMR Wing 9. Oral statement of members and staff of the Defense Nuclear Facilities Safety Board (DNFSB) to Greg Mello, May 7, 2010. NNSA had a funded project, partially executed when it was terminated at the end of FY2001 in favor of CMRR, to upgrade all but two CMR wings.

<sup>10</sup> Study Group estimate in 2010 dollars, to one significant digit, from DOE FY2011 CMRR PDS, p. 228.

<sup>11</sup> Steve Fong, NNSA Los Alamos Site Office (LASO) CMRR Project Manager, and Rick Holmes, LANL CMRR Project Manager, "Chemistry and Metallurgy Research Replacement (CMRR) Project Update, March 3, 2010, LA-UR 10-01115. <u>http://www.lasg.org/CMRR/LA-UR-10-01115\_CMRR-Public-Mtg\_Mar-2010-Vol-9.pdf</u>. Steve Fong, telephone conversation, 6/1/2010.

<sup>12</sup> "The committee is very concerned that the NNSA follow the DOE 413 order series and project management and guidance. The NNSA is also directed to conduct a true independent cost estimate for the CMRR Nuclear Facility [CMRR-NF], phase III of the CMRR project. The committee is concerned that the phase III project [CMRR-NF] is being divided into multiple sub-projects. Notwithstanding this management approach the committee directs the CMRR baseline to reflect all phases and subprojects for the purposes of the cost and schedule baseline provision and to be accounted for as a single project." FY2011 Defense Authorization Act Senate Report, pg. 274, at http://frwebgate.access.gpo.gov/cgi bin/getdoc.cgi?dbname=111 cong reports&docid=f:sr201.111.pdf.

<sup>13</sup> In DOE project management, a "performance baseline" consists of a detailed project scope of work, a completed preliminary design (25-30% of completed design, with a clearly-understood path to all the rest), key performance parameters understood, specified, and agreed to by all relevant parties, a cost estimate (80-90% confidence), a completion schedule (80-90% confidence), and well-organized and approved documentation supporting these. DOE G 413.3-5 "Performance Baseline Guide," 9/12/08, <u>http://www.er.doe.gov/opa/PDF/g4133-5%20Performance%20Baseline.pdf</u>.

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As shown in Figure 3, NNSA now seeks to divide CMRR-NF into five (5) phases and to begin (proposed concurrent) final design and construction of the initial CMRR-NF phase in mid-FY2011, i.e. on or about 4/1/10,<sup>14</sup> unless Congress directs otherwise or does not provide adequate funding. The first CMRR-NF phase includes temporary utilities, site preparation for laydown yards, site utility relocation, site excavation to 125 ft deep, soil stabilization involving a projected 225,000 yd<sup>3</sup> of lean concrete and/or soil grout, warehouse (concurrent design/build), and electrical substation (concurrent design/build). The fifth and final CMRR-NF phase, which includes the proposed concurrent final design and construction of all aspects of the CMRR-NF facility itself other than its foundation and structural components, will not acquire a performance baseline, including a reasonably confident cost estimate, until on or about April 1, 2014<sup>15</sup> – three years after construction is slated to begin.

## Summary of Concerns

As shown in Figure 4, the CMRR proposed today is expected to cost ten times as much<sup>16</sup> as was estimated in the November 14, 2003 CMRR EIS.<sup>17</sup> Roughly the same scaling factor applies to the nuclear laboratory component of CMRR, now called CMRR-NF, which in absolute terms is responsible for nearly all the projected cost increases.

Even without adducing further evidence, these huge cost increases strongly suggest that reasonable alternatives exist in lieu of conducting the project as currently proposed. The range of alternatives analyzed in the CMRR EIS was very narrow, in part because the nuclear laboratory component of the project was expected to be relatively inexpensive and soon available. Neither has turned out to be true. The CMRR EIS was based on a matrix of assumptions now known to be false.

Most of this cost increase has occurred in the last three years – much of it in just the last year, betokening a recent rapid expansion in project scale and impacts. Since most of the increased impacts, new impacts, and novel project elements were added recently – some of the most egregious very recently indeed – the full measure of the Study Group's concerns could hardly have been expressed sooner. This dramatic cost increase has been accompanied by a huge increase in resource requirements. In key cases more than ten times as many resources are now required as were originally estimated, as shown in Table 1 (attached).

Today's proposed CMRR-NF, which is on a larger scale entirely than the alternatives analyzed in 2003, has never been the subject of any NEPA analysis. In fact, the presently

15 Ibid.

<sup>16</sup> Figure 4 cost estimates are from NNSA's PDSs for the CMRR, found in annual congressional budget requests.

<sup>17</sup> DOE Final CMRR Environmental Impact Statement, EIS-0350, at <u>http://www.gc.energy.gov/NEPA/finalEIS-0350.htm</u>.

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<sup>&</sup>lt;sup>14</sup> John Bretzke, LANL Deputy Associate Director, "Pajarito Construction Activities," June 16, 2010 presentation, slide 7, at <u>http://www.lanl.gov/projects/pcc/presentations/John-Bretzke Prensation for Community Forum.pdf</u>.

proposed CMRR-NF involves dramatically greater construction impacts than any of the CMRR alternatives analyzed in 2003. Some of these impacts are shown in Table 1. Today's CMRR-NF also includes several new, unanalyzed project elements, including additional buildings, construction yards, and major traffic modifications, and has entirely new categories of impacts, than were never mentioned in the CMRR-EIS, let alone analyzed there.

Central, pervading elements of the *initial* CMRR-NF phase ("Infrastructure Package Construction") were never analyzed in the CMRR EIS. The February 18, 2004 Record of Decision (ROD)<sup>18</sup> did not choose the CMRR-NF that NNSA now wants to build. Significantly, the presently proposed CMRR-NF was not even among the choices analyzed or available when the ROD was issued.

Moreover, no NEPA analysis of the CMRR nuclear laboratory, now CMRR-NF, was provided in either the April 4, 2008 LANL Site-Wide Environmental Impact Statement (SWEIS)<sup>19</sup> or the October 24, 2008 Complex Transformation Supplemental Programmatic Environmental Impact Statement (CTSPEIS).<sup>20</sup> This lack of appropriate NEPA analysis is all the more apparent when CMRR-NF is considered in the context of NNSA's integrated "Pajarito Construction Corridor"<sup>21</sup> and its "Integrated Nuclear Planning,"<sup>22</sup> both of which include a number of connected infrastructure plans, decisions, and projects. These projects are functionally interrelated, geographically proximate, and more or less contemporaneous. See, for example, Figures 5 and 6 (attached), presented by LANL to the Espanola business community and public on June 16, 2010.<sup>23</sup>

Without further disclosure of the project alternatives that have been considered - and, upon information and belief, are still being, or are about to be considered - and without any

<sup>22</sup> E.g. "NNSA will not make a decision [in the CMRR ROD] on other elements or activities that have been recently undertaken *associated* with the LANL "Integrated Nuclear Planning" (INP) initiative. ...Recognizing the need for the CMRR Project to be *integrated* with other contemplated actions, near and long term, affecting nuclear mission capabilities at LANL, NNSA and UC at LANL developed the INP process. INP is intended to provide an *integrated*, *coordinated* plan for the *consolidation* of LANL nuclear facility construction, refurbishment and upgrade, and retirement activities." CMRR EIS, op. cit., p. S-7. Emphasis added. The decisions made under INP are "connected actions" under NEPA: "Connected actions, which means that they are closely related and therefore, should be discussed in the same impact statement. Actions are connected if they: (i) Automatically trigger other actions which may require environmental impact statements; (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously; (iii) Are interdependent parts of a larger action and depend on the larger action for their justification. (40 CFR 1508.25)

<sup>23</sup> See <u>http://www.lanl.gov/construction/</u>.

<sup>&</sup>lt;sup>18</sup> http://nepa.energy.gov/EIS-0350ROD\_021404.pdf.

<sup>&</sup>lt;sup>19</sup> http://www.doeal.gov/laso/NEPASWEIS.aspx.

<sup>&</sup>lt;sup>20</sup> http://www.complextransformationspeis.com/.

<sup>&</sup>lt;sup>21</sup> LANL, Bretzke, op. cit.

NEPA analysis of the resulting environmental impacts, it is not clear whether NNSA's overall Pajarito Road project is (1) tantamount to a "Modern Pit Facility," for which no EIS was ever completed; or (2) is really a "Pajarito Corridor Construction Project,"<sup>24</sup> for which no EIS has even been initiated; or (3) is quite simply a different and new project now called CMRR-NF, for which no applicable EIS was ever produced. In any of these alternative cases an original EIS is needed, beginning with establishment of an appropriate scope of analysis through the required scoping process.<sup>25</sup>

In addition to the above concerns, there was never any notice or comment process involving the public, agencies, or tribes concerning: (1) the nature of project being designed today; (2) the available alternatives; or (3) the likely impacts of the new project and its alternatives. Six years past the CMRR ROD, the public, agencies, and tribes have not even been notified that the project alternatives analyzed in the CMRR EIS, and the alternative chosen in the CMRR ROD, were far smaller and less impactful projects than the one proposed today, as Table 1 shows. These procedural and informational injuries have harmed all these parties and they have harmed the Study Group.

## **Remedy**

The Council on Environmental Quality (CEQ) states at (40 CFR 1502.9(c)(1):

Agencies: (1) Shall prepare supplements to either draft or final environmental impact statements if: (i) The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or (ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.

These requirements are echoed at 10 CFR 1021.314. However, the preparation of a SEIS at this stage is inadequate and inappropriate because there are not *only* "substantial changes to the [CMRR] proposal" and "significant new circumstances or information relevant to environmental concerns" (10 CFR 1021.314) but *also and in addition*, these changes are of such a sweeping nature as to affect the range of "actions, alternatives, and impacts" that are the essence of the scoping process (40 CFR 1508.25) and of the project definition itself. Failure to publicly review the scope of possible actions and alternatives would be tantamount to a post-decision environmental analysis – better paperwork, but without the objective "hard look" needed to freshly evaluate project alternatives without prejudice. As stated at 40 CFR 1500.1:

<sup>&</sup>lt;sup>24</sup> As presented in the LANL June 16, 2010 forum.

<sup>&</sup>lt;sup>25</sup> See especially 40 CFR 1501.7, 1508.22, and 1508.25. DOE's scoping requirements at 10 CFR 1021.311 include the notice of intent requirements of 40 CFR 1508.22, which must include the proposed alternatives to be analyzed. "Scope consists of the range of actions, alternatives, and impacts to be considered in an environmental impact statement..." (40 CFR 1508.25). This range has changed dramatically since the original notice of intent of July 23, 2002 to prepare an EIS for CMRR (http://www.epa.gov/EPA-IMPACT/2002/July/Day-23/i18552.htm).

NEPA's purpose is not to generate paperwork – even excellent paperwork – but to foster excellent action. The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment. (40 CFR 1500.1)

Because the original EIS never analyzed the project being designed and proposed today, together with reasonable alternatives to it, there is no applicable EIS to supplement.

NNSA cannot continue its investigation of its currently-preferred alternative without applicable NEPA analysis. The Council on Environmental Quality's (CEQ's) government-wide NEPA regulations state (at 40 CFR 1506.1):

(a) Until an agency issues a record of decision as provided in §1505.2 (except as provided in paragraph (c) of this section), no action concerning the proposal shall be taken which would: (1) Have an adverse environmental impact; or (2) Limit the choice of reasonable alternatives....

DOE's NEPA regulations state (at 10 CFR 1021.210):

(b) DOE shall complete its NEPA review for each DOE proposal before making a decision on the proposal (e.g., normally in advance of, and for use in reaching, a decision to proceed with detailed design), except as provided in 40 CFR 1506.1 and §§1021.211 and 1021.216 of this part.

DOE further requires (at 10 CFR 1021.211, "Limitations on actions during the NEPA process") that:

While DOE is preparing an EIS that is required under §1021.300(a) of this part, DOE shall take no action concerning the proposal that is the subject of the EIS before issuing an ROD, except as provided at 40 CFR 1506.1.

Pursuant to these laws, we request that you halt any and all CMRR-NF design activities, make no further contractual obligations, and seek no further funding until a CMRR-NF EIS is written and subsequent ROD is filed. These actions must be undertaken and are necessary and appropriate to evaluate and choose viable project alternatives.<sup>26</sup>

<sup>&</sup>lt;sup>26</sup> The CMRR-NF project has been developed long past DOE's normal NEPA threshold, incurring some \$289 million in appropriations so far (but still only 8.5% of expected total costs), prejudicing NNSA's choice of alternatives. It is precisely to avoid a waste of resources and to avoid prejudicing decisions that "[I]n conventional construction, this step [NEPA analysis] occurs in the Pre-Title I phase of project development." DOE Order 430.1-1, p. 3-4. <u>https://www.directives.doe.gov/directives/current-directives/430.1-EGuide-1-Chp03/view?searchterm=NEPA.</u>

Neither Congress nor the Administration has made any commitment to initiate final design ("Critical Decision 2," in DOE parlance), or to build ("Critical Decision 3") CMRR-NF. As noted above, both commitments are expected on about April 1, 2011, barring further delays. Thus, if the needed NEPA (and business case) analyses are begun promptly, NNSA should be able to achieve NEPA compliance without any, or without any significant, project delay.

The present moment is an ideal time to initiate the required NEPA analysis. Accurate NEPA analysis could not have begun prior to this year, given the very recent changes and expansions in the ever-evolving, and now quite different than previous, "project." In contrast, delaying the necessary NEPA analysis would significantly delay the project – assuming it can properly go forward at all given the recently-expressed concerns of Congress. The Senate Armed Services Committee has requested a review of CMRR-NF project alternatives<sup>27</sup> and as noted above also questions the propriety of initiating final design and construction without an approved project baseline, which will take at least two or three years to complete.<sup>28</sup> Consequently, our request, and NEPA's requirements, need not delay agency action and will help, not harm, agency interests.

<sup>28</sup> From a hearing of the Strategic Forces Subcommittee of the Senate Armed Services Committee, April 14, 2010:

SEN. BINGAMAN: Thank you. Let me ask about this CMR replacement project facility. The budget you have given us doesn't have in it any cost estimates. I guess your statement just a few minutes ago related to this. When would we expect to have firm cost estimates and completion dates for that project?

LANL (see Figure 3) more recently estimated a completion date of 2014 for this milestone.

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<sup>&</sup>lt;sup>27</sup> "The committee continues to believe that replacing the existing Chemical and Metallurgical Research facility [sic] is essential but that the new Chemical and Metallurgical Research Replacement (CMRR) facility has many unresolved issues including the appropriate size of the facility. CMRR will be a category I facility supporting pit operations in building PF-4. Now that the Nuclear Posture Review is completed the NNSA and the Department of Defense (DOD) are in a better position to ensure that the facility is appropriately sized." FY2011 Defense Authorization Act Senate Report, pg. 274, at <u>http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111\_cong\_reports&docid=f:sr201.111.pdf</u>.

MR. D'AGOSTINO: We expect, I expect in calendar year 2012 time frame. Whether that bridges into fiscal year '12 or '13, I'd have to double check exactly. It's going to take us a good year-and-a-half more of design work to be confident. But the most important thing is my desire, the secretary's desire, is to work, get the department's reputation back on track with respect to large facilities. We do have programs in the department that do well in this, and what we've learned is that in getting the design work largely completed, we're getting it to around the 80 to 90 percent level is what it takes in order to do that. So, we're going to work on that approach here for these two facilities. My expectation is about the 2012 time frame to get that done. If it takes longer though, sir, I'm willing to push back the performance baseline by a year in order to make sure I know what we're asking for. I think in the long run that will be the right thing to do.

Thank you for your consideration of these matters. We would appreciate a prompt and principled response so that we may avoid pursuing further legal remedies.

Sincerely,

fres drast

Thomas M. Hnasko

Attachments:

Figure 1: CMRR-NF location map Figure 2: Aerial view of LANL TA-55, showing RLUOB and CMRR-NF site Figure 3: CMRR-NF project schedule Figure 4: History of CMRR projected costs Figure 5: Map of selected "Pajarito Construction Corridor" projects Figure 6: List of "Pajarito Construction Corridor" projects Table 1: Selected CMRR-NF construction requirements & impacts; new & omitted elements

cc:

President Barack Obama Vice President Joe Biden Senator Jeff Bingaman, New Mexico Senator Tom Udall, New Mexico Representative Ben Ray Lujan, New Mexico Third Congressional District Senator Dan Inouve, Chairman, Committee on Appropriations Senator Thad Cochran, Vice-Chairman, Committee on Appropriations Senator Byron Dorgan, Chairman, Appropriations Subcommittee on Energy and Water Development Senator Bob Bennett, Ranking Member, Senate Subcommittee on Energy and Water Development Senator Carl Levin, Chairman, Committee on Armed Services Senator John McCain, Ranking Member, Committee on Armed Services Representative Dave Obey, Chairman, Committee on Appropriations Representative Jerry Lewis, Ranking Member, Committee on Appropriations Representative Peter J. Visclosky, Chairman, Subcommittee on Energy and Water Development Representative Rodney Frelinghuysen, Ranking Member, Subcommittee on Energy and Water Development Representative Ike Skelton, Chairman, Committee on Armed Services Representative Howard P. (Buck) McKeon, Ranking Member, Committee on Armed Services Peter S. Winokur, Chairman, Defense Nuclear Facilities Safety Board Jonathan Gill, Assistant Director, Government Accountability Office Jonathan Medalia, Specialist in Nuclear Weapons Policy, Congressional Research Service

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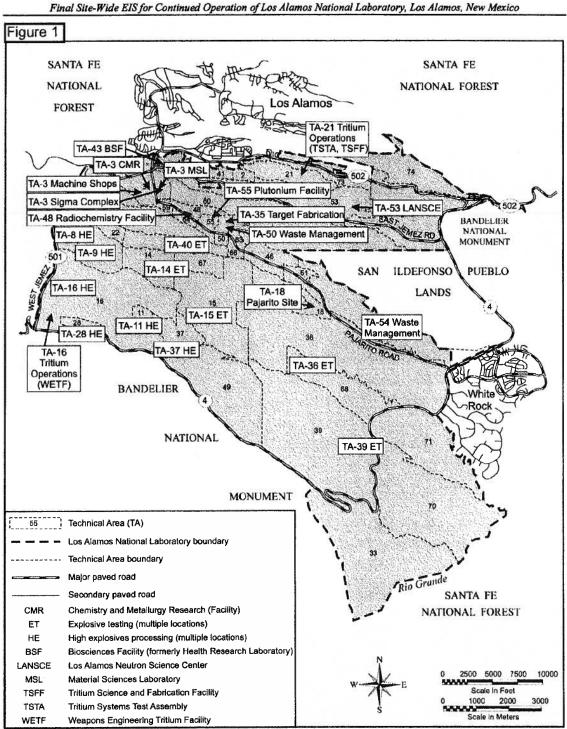
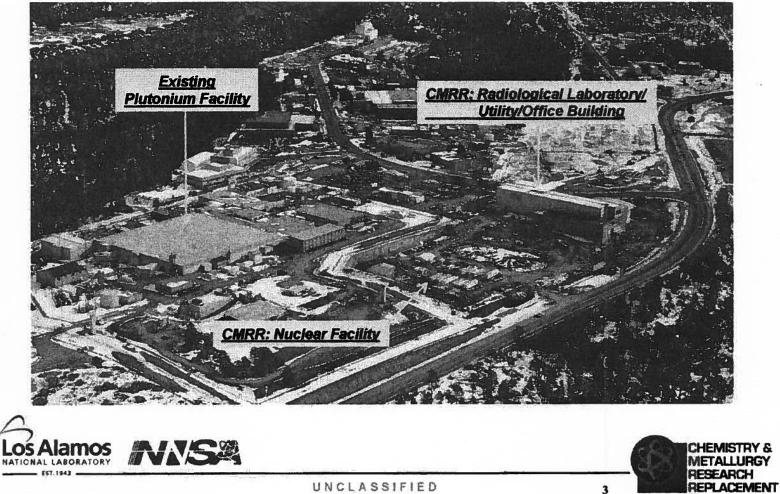


Figure S-4 Locations of Key Facilities

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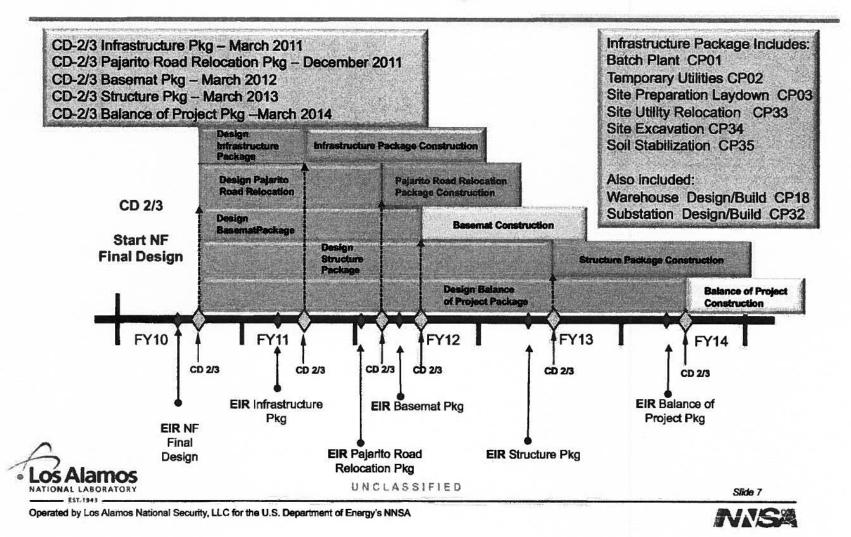
## Figure 2 **CMRR at Technical Area-55**

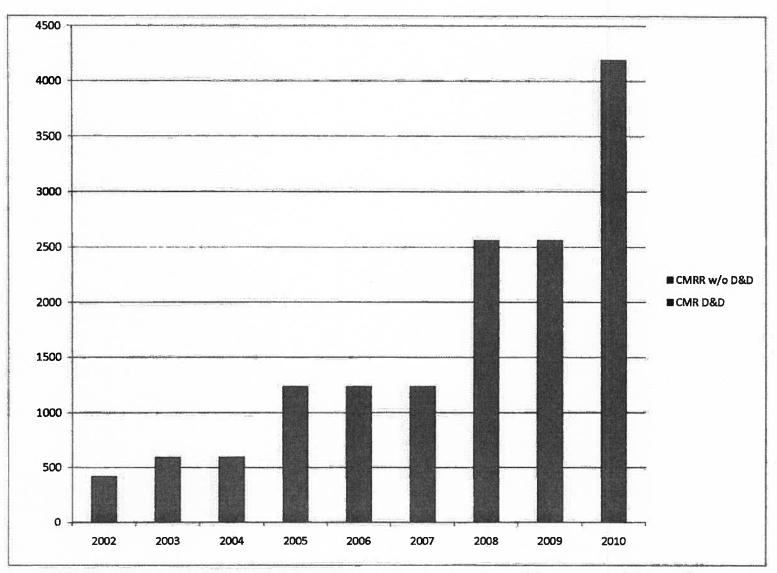


LA-UR 10-01115



# Figure 3 **CMRR Nuclear Facility Baselines**



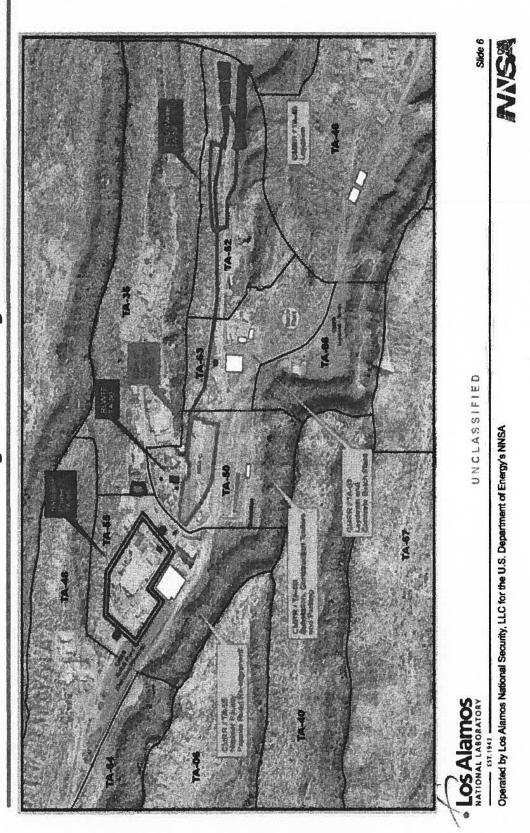


## Figure 4: History of NNSA CMRR Cost Projections So Far (\$ million, M) (NNSA)

All costs are Total Project Cost (TPC) except 2002, which is the mid-point in the Total Estimated Cost (TEC) range; CMR D&D at \$400 M; project laboratory space declined over this period, raising the per unit cost of space more than indicated

00649

# **Construction Project Layout**



00650

## Figure 6

# **Major Projects-Near Concurrent Activities**

- Chemistry & Metallurgy Research Replacement (CMRR)
- Nuclear Materials Safeguards and Security Upgrade Project (NMSSUP) Phase II
- TA-55 Revitalization Project (TRP) Phase II & III
- Radioactive Liquid Waste Treatment Facility (RLWTF)
- TRU Waste Facility (TRU)
- Material Disposal Area-C Closure
- Material Disposal Area-G Closure
- Waste Disposition Project
- RLUOB Occupancy



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Slide 3

Operated by Los Alamos National Security, LLC for the U.S. Department of Energy's NNSA



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# Table 1: Selected CMRR-NF construction requirements & impacts; new and omitted project elements; operational impacts omitted

| Assessed construction requirements                                   | CMRR EIS (two or three buildings)             | CMRR-NF only  |
|--|---|---|
| Land   | 26.75 acres                                   | Greatly increased acreage   |
| Locations  | TA-55 (or TA-6)                               | TA-55, TA48, TA-63, TA-66, TA-46<br>and TA-50, TA-54 or TA-36 and<br>possibly more. |
| Laydown yard(s)  | 1 site, 2 acres max                           | Many sites, ~19 acres   |
| Concrete and soil grout  | 6,255 yards <sup>3</sup>                      | 347,000 yards <sup>3</sup> (55 times original for both buildings)                   |
| Steel  | 558 us tons                                   | >15,000 us tons (27 times original for both buildings)                              |
| Peak employment  | 300   | 844   |
| Temporary worker housing   | Minimal impact                                | Major impact  |
| Construction period  | 34 months                                     | 144 months  |
| Excavation depth   | 50-75 ft. Max                                 | 125 ft.   |
| Un-assessed construction impacts                                     |   |   |
| CO2 emissions from concrete  | Not analyzed                                  | >100,000 metric tons  |
| Other sources  | Not analyzed                                  | Significant emissions   |
| Truck traffic and worker transport                                   |   |   |
| Aggregate deliveries for concrete                                    | Not analyzed                                  | Up to 24,000 dump truck trips (at 55k lbs.)   |
| Traffic impacts  | Not analyzed                                  | Significant impacts   |
| Air quality  | Not analyzed                                  | Needs analysis  |
| Road wear  | Not analyzed                                  | Needs analysis  |
| Other trucking impacts   | Not analyzed                                  | Needs analysis  |
| Worker transport to site   | Minimal impact                                | Significantly increased   |
| Aggregate mining   | Not analyzed                                  | Significant impacts   |
| Worker Safety  | Not analyzed                                  | Significantly impacted by depth, scale,<br>and duration of new project              |
| CMR operations   | Assumed out by 2010, safety upgrades dropped. | Extended and maintained in unsafe<br>condition by delay and costs of CMRR<br>NF.    |
| New project elements   |   |   |
| Craft worker facility  |   | Needs analysis  |
| Electrical substation  |   | At TA-50, needs analysis  |
| Stormwater pond  |   | Needs analysis  |
| Traffic modifications  |   |   |
| Possible bypass road   |   | Route unknown, significant impacts, needs analysis                                  |
| Closure of Pajarito Road   |   | 2 years, affecting 4,600 employees, significant impacts                             |
| Truck inspection facility  |   | Location unknown, needs analysis  |
| Warehouse  |   | 10,000 square foot, needs analysis  |
| Temporary facilities for displaced<br>"Pajarito Corridor" operations |   | Needs analysis, significant impacts   |
| Omitted project elements   |   | · · · · · · · · · · · · · · · · · · ·   |
| CMRR disposition   | Not analyzed                                  | Impact very large, needs analysis   |

Sources:

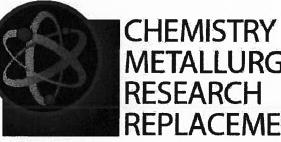
1. NNSA, "Final CMRR Environmental Impact Statement," November 2003, DOE/EIS-0350.

2. NNSA public statements.

3. Other NNSA communications,

4. "Cement and Concrete: Environmental Considerations," Environmental Building News, March 1, 1993. http://www.buildinggreen.com/auth/article.cfm/1993/3/1/Cement-and-Concrete-Environmental-Considerations/

Mello Aff #1, par. 44, ref 1&2 http://www.lanl.gov/orgs/cmrr/publicmeetings/documents/proceedings/laur10-02173vol9.pdf

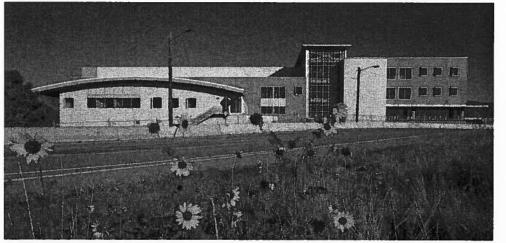


# **METALLURGY** RESEARCH REPLACEMENT

## **CMRR** Public Meeting, March 3, 2010

Volume 9

## Los Alamos National Laboratory Los Alamos, New Mexico



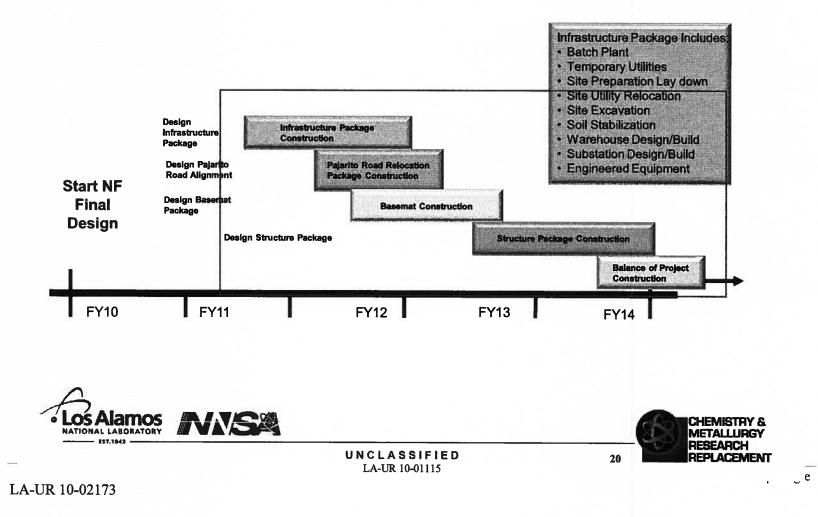




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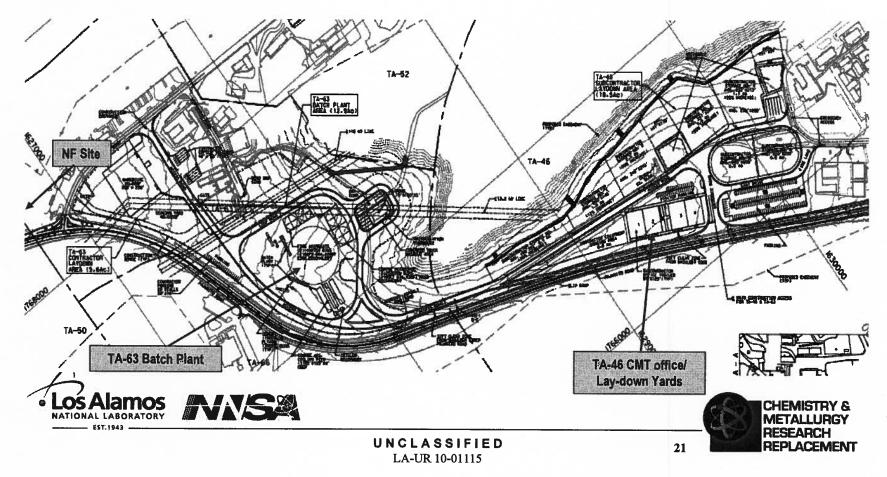
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# **Planned Nuclear Facility Baselines**



# **Construction Site Infrastructure**

Lay-down/fabrication yards offices will be established approximately 1 mile from the NF construction site at TA-63 and TA-46 due to lack of available space at the NF construction site.



Mello Aff #1, par. 67:

http://www.lanl.gov/projects/pcc/presentations/John-Bretzke\_Prensation\_for\_Community\_Forum.pdf please see instead:

http://www.lasg.org/CMRR/LA-UR-10-01115\_CMRR-Public-Mtg\_Mar-2010-Vol-9.pdf

# Chemistry and Metallurgy Research Replacement (CMRR) Project

# **CMRR Project Update**

Los Alamos, New Mexico March 3, 2010

Presented by Steve Fong, NNSA CMRR Federal Project Team

> Rick Holmes, LANL CMRR Division Leader



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# **High-Level Schedule**

## **Complete**

- 2002 CMRR Critical Decision (CD)-0 (Approve Mission Need)
- 2004 CMRR EIS Record of Decision (ROD) signed
- 2005 CMRR CD-1 (Approve Alternative Selection and Cost Range)
- 2005 CMRR RLUOB CD-2/3 (Approve Performance Baseline/Construction)
- 2007 CMRR RLUOB Equipment, Final Design Authorization
- 2008 NNSA Complex Transformation Supplemental EIS ROD
- 2009 CMRR REI CD-2/3 (Approve Performance Baseline/Procurement Installation)
- 2009 CMRR NF Safety Basis and Design Integration, and Technical Reviews

   NNSA & DNFSB Certification Safety Issues Resolved

## **This Year**

- 2010 CMRR RLUOB Facility (CD-4)
- 2010 Nuclear Posture Review (March)
- 2010 CMRR NF Final Design Authorization

## Future Years (tentative)

- 2011 CMRR RLUOB Staff Occupancy
- 2011 NF Early Infrastructure Packages (CD-2/3)
- 2011/12 NF Basemat/Structural Packages (CD-2/3)
- 2013 CMRR RLUOB Radiological Laboratory Operations
- 2014 CMRR NF Balance of Facility (CD-2/3)
- 2020 CMRR NF Construction Complete (planning)



UNCLASSIFIED LA-UR 10-01115



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Case 1:10-cv-00760-JCH-ACT Document 10-2 Filed 10/21/10 Page 1 of 12 EXHIBIT #1

Telephone rowference between Greg Mello and Steve Fong, CMRR Project Manager, 8/11/09

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Case 1:10-cv-00760-JCH-ACT Document 10-2 Filed 10/21/10 Page 2 of 12 **EXHIBIT**<sup>#</sup>2



Business and Policy Coverage of the Power, Natural Gas, Oil, Nuclear and Renewables Industries

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ED Vol. 37. No. 13

## Safety Board Raises Seismic Issue On Los Alamos Project

## BY GEORGE LOBSENZ

In a potential problem for a key nuclear weapons project, staff at a federal safety oversight board have formally notified the National Nuclear Security Administration that they may not be able to certify the design for a new plutonium-handling facility at Los Alamos National Laboratory because the agency has said it may cost too much to ensure the facility's emissions confinement system can withstand a strong earthquake.

In a January 16 letter to the NNSA, the semi-autonomous Energy Department agency that manages the department's nuclear weapons complex, staff at the Defense Nuclear Facilities Safety Board (DNFSB) said the position taken by NNSA is "not acceptable" given the risks posed by the Chemistry and Metallurgy Research Replacement (CMRR) project at the seismically active Los Alamos site.

Staff at the DNFSB said they wanted NNSA to "re-(Continued on p. 3)

# **Court Backs FERC**, **Raps Blumenthal On Power Deregulation**

#### **BY JEFF BEATTIE**

In a solid win for FERC in the debate over U.S. power market deregulation, a federal appeals court Friday backed the commission and rejected Connecticut Attorney General Richard Blumenthal's protests that temporary "hybrid" markets in place as New England moves to competitive wholesale markets have produced unjust and unreasonably high power prices.

As is common in such cases, the U.S. Court of Appeals for the District of Columbia offered few direct opinions on the actual structure of the electricity markets in question.

Instead, by a 3-0 vote, a three-judge panel of the court said Blumenthal (D) had not met the burden of proving that the Federal Energy Regulatory Commission's decisions on various steps towards deregulation were unreasonable, showing considerable deference to the agency's decision-making.

In the process, the court backed FERC's decision to reject a proposal from Blumenthal to effectively re-regulate his state's power (Continued on p. 4)

# House Panel Passes Renewable Tax Fix, But Senate Balks

stimulus Economic legislation approved by the

House Ways and Means Committee last week includes language that would allow renewable energy developers to convert tax credits into cash via a proposed new Energy Department grant program. However, the legislation, which the ailing wind and solar industries say is vital to their ability to attract investment, faces opposition in the Senate.

The Ways and Means bill (H.R. 598) would extend the federal tax credit for energy produced from renewable resources for three years; allow renew-

able energy developers to BY CHRIS HOLLY

claim an investment tax credit (ITC) in lieu of the production tax credit (PTC); and allow developers to receive DOE grants in lieu of claiming the ITC for certain projects.

The bill also contains other tax components of an underlying \$825 billion stimulus package being pushed through Congress to revive the flagging economy.

The complicated renewable tax fix is aimed at resolving a problem facing wind and solar developers who have used the ITC or PTC as a way to lure investors to back their projects. Much

of the investment, for example, in the wind industry over the past few years has come from investment banks who valued the credits as a way to reduce their own tax exposure.

But with the economic crisis running roughshod through corporate balance sheets, banks and other investors have little or no taxable income, hence their desire for tax credits has diminished sharply. This means that developers can't raise the cash they need to build new wind, solar and other renewable energy projects.

With the Ways and Means fix, however, developers in effect could trade their credits for DOE cash, which could be used to expand renewable energy capacity in a variety of ways, said Gregory (Continued on p. 2)

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#### THE ENERGY DAILY

Monday, January 26, 2009 • 3

## Palin Puts In-State Gas Pipe On Front Burner

Citing sagging state revenues, Alaska Gov. Sarah Palin in a state-of-the-state speech Thursday said she intends to revive efforts to build a partnership between state authorities and an Alaskan energy firm to build a new in-state natural gas pipeline.

Palin's remarks appeared to acknowledge that the much bigger pipeline planned by the state and TransCanada Corp. to bring North Slope gas supplies to the lower 48 states may face delays and will not come in time to shore up Alaska's withering finances, which include a \$1 billion revenue shortfall for the state's government.

In her speech to state lawmakers in

Juneau, Palin (R) said she intends to introduce legislation next month to renew an in-state pipeline project by the Alaska Natural Gas Development Authority and Anchorage-based ENSTAR Natural Gas Co. The project was first proposed in July.

The announcement comes as tightening global credit and low energy prices have conspired to freeze up the considerable funding necessary to advance TransCanada's colossal 1,715-mile pipeline from the North Slope.

While focusing on the smaller instate pipeline initiative, Palin said the TransCanada project remains critically important: "I assure you: The line will be built-gas will flow---Alaska will succeed," she said.

As originally proposed, the in-state pipeline would develop new natural gas resources within the Cook Inlet and Copper River basins and have a capacity of 460 million cubic feet of gas per day about twice what Alaskans currently use daily. However, with Cook Inlet gas supplies largely depleted, ENSTAR has begun to look elsewhere for supplies for its proposed \$3.3 billion line, which is to run along the Parks Highway from Fairbanks to Anchorage.

## Safety Board Raises Seismic Issue... (Continued from p. 1)

confirm its commitment" to making the emissions confinement system capable of withstanding so-called performance category, or PC-3, earthquake events.

NNSA's position is somewhat unusual because commercial nuclear power plants and other nuclear facilities are typically designed to earthquake safety standards that are substantially equivalent to the PC-3 standard used by DOE.

The DNFSB staff's concerns are important because Congress in the defense authorization bill for fiscal year 2009 specifically gave the DNFSB certification authority for the design of the CMRR project, which NNSA says is vital to maintaining weapons design and production capabilities at Los Alamos.

Under the defense authorization bill, Congress withheld \$50.2 million in fiscal 2009 funding for the CMRR project subject to the DNFSB and NNSA providing formal certification to the House and Senate armed services committees that design of the CMRR facility was adequately protective of public safety.

As part of the certification process, the DNFSB staff carlier this month began sending "findings" to NNSA laying out their initial concerns about aspects of the CMRR design.

The staff has sent two findings, one about overall seismic safety of the CMRR and the other focusing on the so-called confinement ventilation system, which is critical to capturing and preventing the release of any harmful emissions from the facility.

While seismic safety has long been a key DNFSB concern on the CMRR project, the January 16 finding on the confinement ventilation system contains stronger language from DNFSB staff about the need for NNSA to change its position.

"The [NNSA's] CMRR Nuclear Safety Design Strategy... states that it may not be economically feasible to seismically design and qualify some components of the active confinement ventilation system or its support system to PC-3 seismic design requirements," the staff said in the finding.

"It is not acceptable to downgrade PC-3 seismic design requirements for the active confinement ventilation system."

As for a solution, the DNFSB staff said: "NNSA should reconfirm its commitment to seismically design the active confinement ventilation system to PC-3 seismic design requirements."

And in an accompanying letter to Gerald Talbot, assistant

deputy NNSA administrator for nuclear safety and operations, DNFSB staff said that by sending a finding to NNSA, the staff was highlighting a safety issue that "has not been adequately resolved and that could preclude board certification."

NNSA officials said they expected to address the DNFSB concerns in an internal review of the CMRR project that was now under way.

"We are aware of their concerns," NNSA said in a statement to *The Energy Daily* Friday. "We are in the midst of a major internal review of our design plan and feel confident that the board's questions will be answered when they see the results of this review. We look forward to continuing to work constructively with them to ensure that the CMRR is safe."

NNSA has said that moving forward with the CMRR project is vital because the existing Chemistry and Metallurgy Research (CMR) building at Los Alamos is more than 50 years old and does not meet modern earthquake, fire safety and other environmental and public health protection requirements.

NNSA has been attempting to respond to safety concerns in the interim by removing some plutonium and other hazardous materials from the CMR building. However, the agency says it cannot shut down the CMR building because it provides critical capabilities for handling plutonium and other nuclear materials used in nuclear weapons.

As a result, NNSA has been trying to expedite construction of the CMRR facility, but has run into difficult design and cost problems, with the project's price tag roughly doubling to an estimated \$2 billion.

The DNFSB has had longstanding concerns with the design of the CMRR, especially NNSA's initial plan to use "passive confinement" strategies to prevent radioactive releases in some accident scenarios; passive confinement means radioactive releases will be confined by the buildings walls and ceiling, as opposed to being sucked up by an "active" ventilation system and trapped in filters.

Earthquake issues are of particular concern for the CMRR facility because Los Alamos is located in a seismically active area of New Mexico, In addition, the lab recently completed a new seismic review that showed earthquake risks to lab facilities are roughly 50 percent higher than previously believed.

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## NNSA PUSHING COOPERATION TO REDUCE RISKS ON UPF, CMRR-NF

The National Nuclear Security Administration is encouraging the contractors working on the agency's two major construction projects to work together to address common issues, and the agency is seeking to tie Fiscal Year 2011 contract incentives to the effort. According to a Sept. 3 Defense Nuclear Facilities Safety Board report, which was only made public recently after passing a classification review, NNSA has directed the Y-12 and Los Alamos site offices to develop performance-based incentives for FY2011 that would reduce "known project risks" for the Uranium Processing Facility at Y-12 and the Chemistry and Metallurgy Research Replacement-Nuclear Facility at Los Alamos National Laboratory.

The incentives, which would be included in the annual Performance Evaluation Plan for B&W Y-12 and Los Alamos National Security, LLC, have not been released, but NNSA spokeswoman Jennifer Wagner suggested that some common procurements could help level out the risks involved in purchasing some commodities, and she singled out reinforcing bar as one example. "NNSA often aligns contract incentives to achieve common goals," Wagner said. "In this instance, given that NNSA has two large construction projects in development concurrently, common strategies are being encouraged to address a suite of traditional market and execution risks." She said the common procurement of reinforcing bar for both facilities could "reduce the cost risk of market fluctuations and the schedule risk of timeliness and availability when needed. Common measures also promote integration in planning, work sequencing, vendor qualification, etc." In its report, the DNFSB said the incentives would be designed to "give stakeholders increased confidence in timely project execution within cost and schedule constraints."

## A Construction Management Compromise?

The cooperative approach appears to track with the NNSA's interest in consolidating the agency's construction

work under one umbrella contract vehicle, though momentum for that contract has cooled in recent months as site contractors have pushed to exclude major construction projects like UPF and CMRR-NF from the contract. The agency announced plans to create a construction management contract in late March, but after an industry day in April, there has been scant communication with industry, and it's unclear when-or if-a statement of work for the contract will be released. The incentives, however, appear to provide both evidence for and against such a contract. On the one hand, the NNSA is clearly interested in increasing cooperation on its major construction projects-one of the main goals of the construction management contract-but it also could be an indicator that the agency is pushing to achieve that cooperation through its existing contracts.

#### **Costly Concerns**

Cost and schedule issues for the facilities remain a major concern for NNSA officials. The UPF is currently estimated to cost between \$1.4 and \$3.5 billion, and Fiscal Year 2011 budget documents indicate that the price tag for CMRR-NF is likely to soar past \$4 billion, but most officials believe that the cost of the facilities will be substantially higher. Sen. Bob Corker (R-Tenn.) suggested earlier this year that the cost of UPF is likely to land between \$4 and \$5 billion, and Congressional aides currently believe the combined cost of the facilities could reach \$11 billion. Both facilities are expected to be completed in 2020 and operational by 2022, and are key to efforts to modernize the nation's weapons complex-as well as Senate ratification of the New Strategic Arms Reduction Treaty with Russia. Senate Republicans have pushed the Administration for adequate funding to modernize the weapons complex and arsenal, and while the Administration earlier this year committed \$80 billion over the next decade for the effort, Vice President Joseph Biden acknowledged last month that more resources would be needed for the modernization effort and promised to update the Administration's plans later this fall.

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October 11, 2010

Likewise, Y-12 officials said last week that the cost range for UPF would also be updated later this fall, but the actual baseline won't be completed until the facility's design is 90 percent done, which Y-12 Site Office spokesman Steven Wyatt said is projected to occur in the spring of 2013. Wyatt said in the three years since the UPF cost range was established, "we have continued to bring clarity to this critical national security priority, including requirements, assumptions, design maturity, and project schedule. These changes will ultimately affect the cost range."

#### 'Independent Eyes' Looking at Projects

The NNSA's latest push to control costs is part of a continuing effort to try to decrease the price tag of the multi-billion-dollar facilities as it wrestles with how to build the facilities and what requirements will be included in the projects. Don Cook, the agency's Deputy Administrator for Defense Programs, this summer initiated a review of the facilities' requirements by the Department of Energy's Office of Cost Analysis and the Pentagon's Cost Analysis Improvement Group, representing "independent eyes" to look at the projects, Cook said. Cook said in an August interview that those reviews were expected to be completed last month, but the NNSA has not released any information about the reports. At the time, Cook suggested that he didn't expect drastic changes to the projects. "As far as cutting something way back, I don't think that is likely to occur, because we designed these things not to be capacity-driven in the first place but to give us a basic capability that had some adjustability in capacity but not a lot," Cook said. "We're not too far away from that." A review last year by former Defense Programs chief Everet Beckner of UPF found that the facility was mostly sized appropriately for the nation's needs.

However, there is some evidence that site contractors are looking for ways at decreasing the facility's requirements. According to Bill Reis, the defense programs chief at the Y-12 National Security Complex, the accelerated pace of dismantlement at the facility is designed, in part, to limit the capabilities that need to be replicated in UPF. "We're designing this facility with an expectation that we have dismantled a significant number of those [warhead] components prior to moving into that facility so that we don't have to build in a capability that is not necessary," Reis said. "In other words, if there are some components that we can get taken apart before we put in that facility then there's equipment we don't have to build into that facility." He added: "If we don't have as much to do, that's a good thing."

---Todd Jacobson

## 'NEW START' NEGOTIATOR VOICES HIGH HOPES FOR TREATY PROSPECTS

Seeming confident that the concerns of many Republican Senators have been addressed, Rose Gottemoeller, the chief U.S. negotiator on the New Strategic Arms Reduction Treaty with Russia, said last week that she is hoping for an overwhelming show of support for the arms control pact when the Senate votes on the ratification of the treaty later this year. "We are hoping that we will have the same kind of vote which was the vote for the [original] START treaty, 95-0," she told reporters last week in New York on the sidelines of the United Nations General Assembly First Committee meeting. "We're looking for that kind of vote this time around as well."

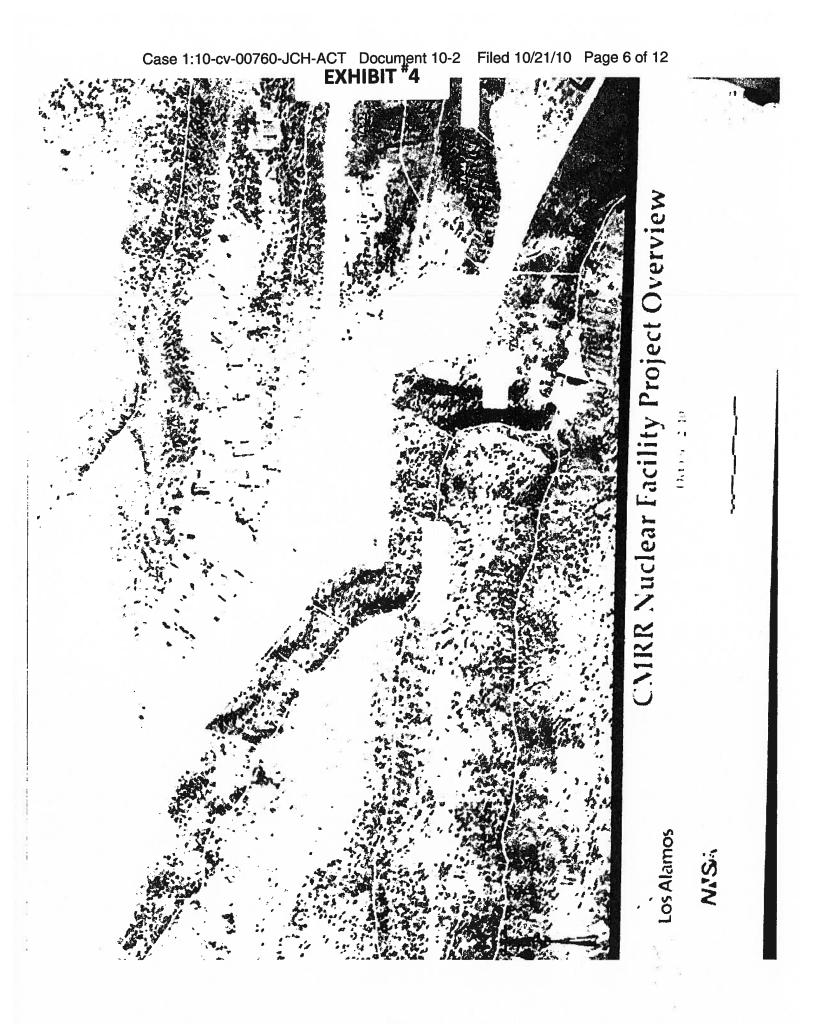
The Senate Foreign Relations Committee approved a resolution of ratification for the treaty, 14-4, on Sept. 16, but the full Senate isn't expected to vote on the treaty until a post-election lame-duck session. Gottemoeller said the Administration was seeking "this vote as soon as possible." Because the treaty needs to be ratified by two-thirds of the Senate, at least eight Republicans along with 59 Democrats are needed for the treaty to enter into force. Russia's Duma also must ratify the treaty, and it is expected to act after the Senate.

In reductions to be made over the next seven years, the treaty would cap the size of the U.S. and Russian strategic deployed stockpiles at 1,550, down from the 1,700-2,200 range allowed by the Moscow Treaty, and would limit the number of deployed and reserve strategic delivery vehicles to 800 with a maximum of 700 missile launchers and bombers allowed to be deployed at one time. It would also reestablish verification and transparency measures that have been lacking since the START Treaty expired Dec. 5. The treaty will last 10 years.

#### 'Building a Corvette in a Model-T Factory'

The ratification process hasn't been easy, and though three Republicans supported the treaty in committee (Sens. Richard Lugar (R-Ind.), Bob Corker (R-Tenn.), and Johnny Isakson (R-Ga.)), many Republicans remain undecided about how they'll vote for the treaty. Much of the uncertainty comes from concerns about modernization of the National Nuclear Security Administration's weapons complex and nuclear arsenal. Thus far, the Administration has committed \$80 billion over the next decade for the agency's weapons program, but many Republicans believe that's not enough—a point Vice President Joseph Biden conceded last month—and are waiting on the Administration to update its pledge. Sen. Jon Kyl (R-Ariz.) has led the Senate GOP charge on modernization and most observers

October 11, 2010



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|--|---|---|----------------------|---|----------------------|------------------------|----------------|-----------|
|  | 1   |   |                      |   | her sites not includ | led)                   |                |           |
|  | the second s  | FY2010  |                      | FY2011 Requested                        |                      | Requested Increase, \$ |                | crease, % |
|  | Total DOE   | WA  | Total DOE            | WA                                      | Total DOE            | WA                     | Total DOE      | WA        |
| (CP  | 462.045   | 459.382   | 535.433              | 532.949                                 | 73.388               | 73.567                 | 15.9%          | 16.0%     |
| LNL  | 1,137.176   | 992.913   | 1,213.180            | 1,051.070                               | 76.004               | 58.157                 | 6.7%           | 5.9%      |
| ANL  | 1,823.225   | 1,299.169   | 2,216.629            | 1,636.838                               | 393.404              | 337.669                | 21.6%          | 26.0%     |
| ITS  | 323.953   | 243.041   | 389.079              | 228.669                                 | 65.126               | (14.372)               | 20.1%          | -5.9%     |
| P  | 534.716   | 534.473   | 533.140              | 532.317                                 | (1.576)              | (2.156)                | -0.3%          | -0.4%     |
| NL   | 1,309.770   | 953.098   | 1,491.998            | 1,141.953                               | 182.228              | 188.855                | 13.9%          | 19.8%     |
| irs  | 1,619.585   | 229.656   | 1,632.317            | 191.685                                 | 12.732               | (37.971)               | 0.8%           | -16.5%    |
| -12  | 742.709   | 656.610   | 792.565              | 676.756                                 | 49.856               | 20.146                 | 6.7%           | 3.1%      |
| otals  | 7,953.179   | 5,368.342   | 8,804.341            | 5,992.237                               | 851.162              | 623.895                | 10.7%          | 11.6%     |
| ANL + SN   | NL, percent of total  | proposed (and f   | or WA, actual) in    | ncrease, all 8 site                     | 575.632<br>s         | 526.524                | 67.6%          | 84.4%     |
| otal WA  | , <u>ali</u> sites  | 6,384.431   | or WA, actual) i     | ncrease, all 8 site<br><b>7,008.835</b> |                      | 520.524                | 67.6%          | 84.4%     |
| 'otal WA<br>'otal WA   | , <u>all</u> sites<br>provided until 12/  | 6,384.431<br>/3/10, <u>all</u> sites  |                      |   |                      | 520.524                | 67.6%          | 84.4%     |
| otal WA<br>otal WA   | , <u>ali</u> sites  | 6,384.431<br>/3/10, <u>all</u> sites  |                      | 7,008.835                               |                      | 525.524                | 67.6%          | 84.4%     |
| otal WA<br>otal WA<br>ortion D   | , <u>all</u> sites<br>provided until 12/  | <b>6,384.431</b><br>/3/10, <u>all</u> sites<br>ease not provide   |                      | 7,008.835                               | 5                    |                        | 67.6%          | 84.4%     |
| otal WA<br>otal WA<br>ortion D<br>CP                                       | , <u>all</u> sites<br>provided until 12/<br>OE requested incre  | <b>6,384.431</b><br>'3/10, <u>all</u> si <del>tes</del><br>ease not provide   | ed, <u>all</u> sites | 7,008.835                               | 5                    |                        | 67.6%          | 84.4%     |
| otal WA<br>otal WA<br>ortion D<br>CP<br>LNL                                | , <u>all</u> sites<br>provided until 12/<br>OE requested incre<br>Kansas City Plant   | <b>6,384.431</b><br>/3/10, <u>all</u> sites<br>ease not provide<br>core National Lab  | ed, <u>all</u> sites | 7,008.835                               | 5                    |                        | 67.6%          | 84.4%     |
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| otal WA<br>otal WA   | , <u>ali</u> sites<br>provided until 12/<br>OE requested incre<br>Kansas City Plant<br>Lawrence Liverm<br>Los Alamos Natio<br>Nevada Test Site<br>Pantex Plant<br>Sandia National I | <b>6,384.431</b><br>/3/10, <u>all</u> sites<br>ease not provide<br>nore National Lab<br>onal Laboratory<br>Laboratories<br>site | ed, <u>all</u> sites | 7,008.835                               | 5                    |                        | 67.6%          | 84.4%     |

## Continuing Resolution Dramatically Benefits New Mexico Nuclear Weapons Laboratories (LASG, 9/30/10) Current and Requested Appropriations for NNSA Weapons Complex Sites (in millions of dollars)

00664

EXHIBIT <sup>#</sup>5

Case 1:10-cv-00760-JCH-ACT Document 10-2

Filed 10/21/10 Page 7 of 12

Case 1:10-cv-00760-JCH-ACT Document 10-2 Filed 10/21/10 Page 8 of 12 **EXHIBIT** \*6

!

# ATOMIC AUDIT

THE COSTS AND CONSEQUENCES OF U.S. NUCLEAR WEAPONS SINCE 1940

Stephen I. Schwartz, editor

Bruce G. Blair, Thomas S. Blanton, William Burr, Steven M. Kosiak, Arjun Makhijani, Robert S. Norris, Kevin O'Neill, John E. Pike, and William J. Weida, contributing authors

> BROOKINGS INSTITUTION PRESS WASHINGTON, D.C.

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**Building the Bomb** 

## TABLE 1-1. Auditing the Manhattan Project: Where Did the Money Go?

Cumulative costs in millions of dollars as of December 31, 1945

| Site/program                                       | Then-year dollars <sup>a</sup> | Constant 1996 dollars |
|--|--------------------------------|-----------------------|
| Oak Ridge (total)                                  | 1,188.35                       | 13,565.66             |
| K-25 Gaseous Diffusion Plant                       | 512.17                         | 5,846,64              |
| Y-12 Electromagnetic Plant                         | 477.63                         | 5,452.41              |
| Clinton Engineer Works—HQ and<br>central utilities | 155.95                         | 1,780,26              |
| Clinton Laboratories                               | 26.93                          | 307,44                |
| S-50 Thermal Diffusion Plant                       | 15.67                          | 178.90                |
| Hanford engineer works                             | 390.12                         | 4,453,47              |
| Special operating materials                        | 103.37                         | 1,180.01              |
| Los Alamos Project                                 | 74.06                          | 845.38                |
| Research and development                           | 69.68                          | 795.45                |
| Government overhead                                | 37.26                          | 425.29                |
| Heavy-water plants <sup>b</sup>                    | 26.77                          | 305.57                |
| Total  | 1,889.61                       | 21,570.83             |

Source: Original data from Hewlett and Anderson, 1939/1946, p. 11.

a. Includes capital and operations costs from 1942 through 1945. Costs adjusted using a base year of 1944. Actual costs per facility per year are apparently unknown.

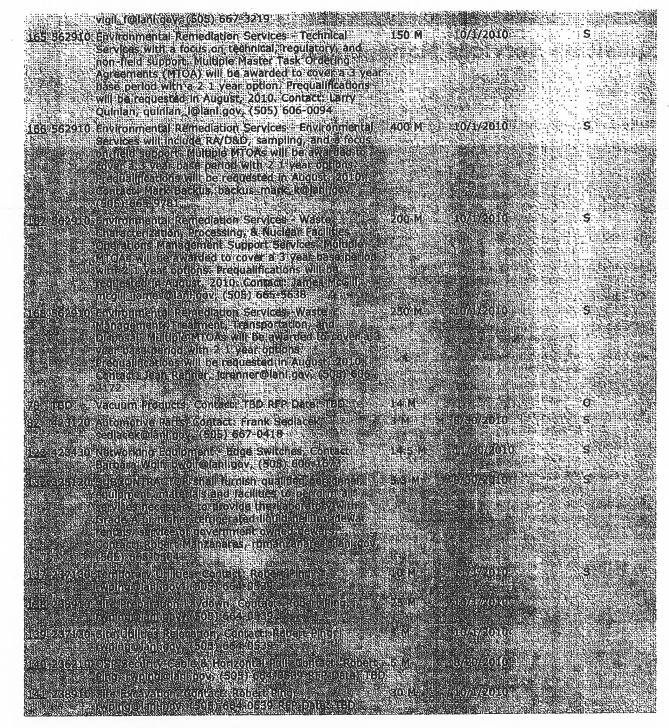
b. Designed and constructed by E. B. Badger and Sons and the Consolidated Mining and Smelting Company of Canada in Trail, British Columbia, and by E. I. Du Pont de Nemours and Company in Morgantown, West Virginia; Montgomery, Alabama; and Dana, Indiana.

> but preparations for "Operation Crossroads" kept about one-eighth of the scientists busy.<sup>55</sup> There was no question, however, that the program would continue after the war. At a meeting of the Interim Committee on May 31, 1945 (formed by Secretary of War Stimson to consider postwar policy options for the atomic bomb and including Stimson, Groves, Army Chief of Staff George C. Marshall, Oppenheimer, Lawrence, Bush, MIT president Karl T. Compton, Undersceretary of the Navy Ralph A. Bard, Assistant Secretary of State William L. Clayton, and Secretary of State-designate James F. Byrnes), Lawrence spoke forcefully in favor of continued production, recommending "that a program of plant expansion be vigorously pursued and at the same time a sizable stock pile of bombs and material should be built up" to ensure that the nation would "stay out in front." Later in the meeting, Byrnes "expressed the view, which was generally agreed to by all present, that the most desirable program would be to push ahead as fast as possible in

<sup>55.</sup> Jonathan Welsgall, Operation Crossroads: The Atomic Tests at Bikini Atoll (Annapolis, Md.: Naval Institute Press, 1994), p. 137.

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Los Alamos National Laboratory: Procurement Opportunities: Selection



## **Competition Type**

- O = Open Competition
- S = Small Business Set-Aside
- 8 = 8(a) Set-Aside
- D = Service Disabled Veteran-Owned Set-Aside

http://supply.lanl.gov/forecasts/selection.aspx[9/8/2010 10:56:04 AM]

Exhibit 8

e

# **LANL Construction Corridor**

Tom McKinney, Associate Director Project Management and Site Services Directorate Los Alamos National Laboratory September 8, 2010 LA-UR 10-05995



UNCLASSIFIED

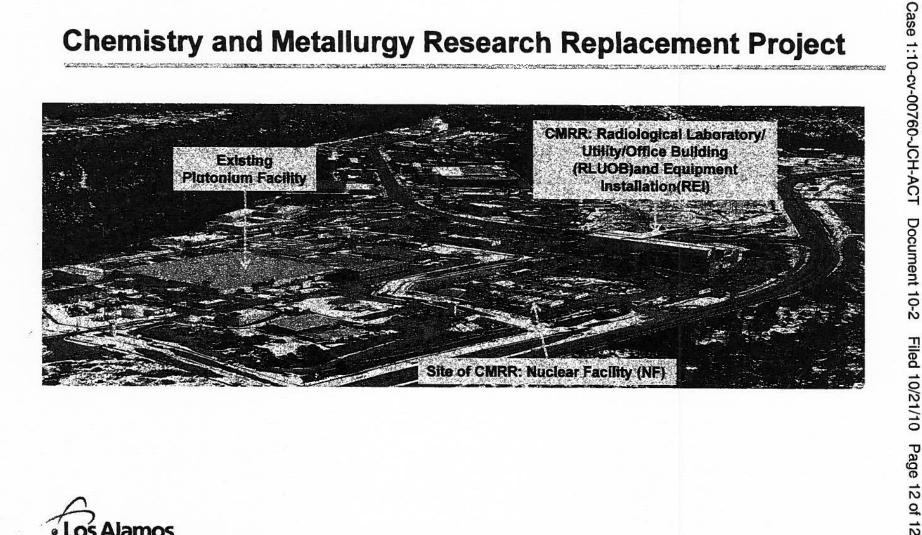
Operated by Los Alamos National Security, LLC for the U.S. Department of Energy's NNSA



Case 1:10-cv-00760-JCH-ACT Document 10-2 EXHIBIT \*8

Filed 10/21/10 Page 11 of 12

## **Chemistry and Metallurgy Research Replacement Project**





UNCLASSIFIED

Slide 8

Operated by Los Alamos National Security, LLC for the U.S. Department of Energy's NNSA



## IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF NEW MEXICO

## THE LOS ALAMOS STUDY GROUP,

#### Plaintiff,

v.

Case No. 1:10-CV-0760-JH-ACT

UNITED STATES DEPARTMENT OF ENBRGY; THE HONORABLE STEPHEN CHU, in his capacity as SECRETARY, DEPARTMENT OF ENERGY; NATIONAL NUCLEAR SECURITY ADMINISTRATION; THE HONORABLE THOMAS PAUL D'AGOSTINO, in his Capacity as ADMINISTRATOR, NATIONAL NUCLEAR SECURITY ADMINISTRATION,

Defendants.

## SECOND AFFIDAVIT OF GREGORY MELLO

| State of New Mexico  | )     |
|----------------------|-------|
|                      | ) ss. |
| County of Bernalillo | )     |

Gregory Mello, under penalty of perjury, hereby declares as follows this 12<sup>th</sup> day of

November 2010:

1. I am member and the Executive Director of the Plaintiff, Los Alamos Study Group

("Plaintiff" or "LASG"). I make this affidavit in support of Plaintiff's Motion for Preliminary

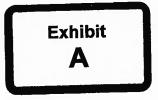
Injunction.

2. My background and qualifications were described in ¶ 2-5 of my first Affidavit.

3. I make this affidavit to present pertinent facts concerning the following issues

relative to defendants' Chemistry and Metallurgy Research Replacement Nuclear Facility

("CMRR-NF" or "Nuclear Facility"):



A. If a preliminary injunction is not granted defendants will proceed to complete design of, and to construct, the CMRR-NF as quickly as their schedule will allow. Their stated "unequivocal" commitment to a specific Nuclear Facility alternative will enter the full construction stage. Defendants will try to build up equities in favor of the project alternative they have chosen. Defendants seek to bring the CMRR-NF project to such a point that no court would consider delaying its completion to permit NEPA compliance.

B. If defendants are allowed to proceed now, the resulting impacts to the environment and injuries to plaintiff will be those of the entire proposed action, including construction, operation, and decommissioning or abandonment.

C. If a preliminary injunction is not granted, there will be irreparable injuries to plaintiff and the environment, both immediate and long-term. These will include:

- 1. Direct impacts of Nuclear Facility construction;
- 2. Direct impacts of connected construction projects;
- 3. Indirect impacts of construction of the Nuclear Facility and connected projects;
- 4. Operational impacts of Nuclear Facility and connected projects; and
- Impacts associated with <u>decommissioning or abandonment</u> of the Nuclear Facility and connected projects.
- 6. Harms to plaintiff, others, and the environment from violation of due process and the informational requirements of the National Environmental Policy Act (NEPA).

D. Significant resources will be irreversibly committed if a preliminary injunction is not

granted.

A. If a preliminary injunction is not granted Defendants will proceed to complete design of, and to construct, the CMRR-NF as quickly as their schedule will allow. Their stated "unequivocal" commitment to a specific Nuclear Facility alternative will enter the full construction stage. Defendants will try to build up equities in

# favor of the project alternative they have chosen. Defendants seek to bring the CMRR-NF project to such a point that no court would consider delaying its completion to permit NEPA compliance.

4. Plaintiff has demonstrated defendants' commitment to the construction of the CMRR-NF in accordance with their current plans. (Mello Aff. #1: ¶53-74) There is additional evidence:

a. On October 28, 2010 defendant D'Agostino stated: "...it is critical that we complete the design and construction of key facilities like...the Chemistry and Metallurgy Research Replacement (CMRR) project at Los Alamos."<sup>1</sup>

b. Progress on the Nuclear Facility is an indicator of whether the LANL management and operating (M&O) contractor, Los Alamos National Security, LLC ("LANS"), will keep its position.<sup>2</sup> The gross value of LANL's contract is \$2.2 billion for FY2011; this includes nearly all of the funds appropriated for CMRR-NF.<sup>3</sup> This contract includes annual renewal options for more than 20 years.<sup>4</sup> NNSA's Performance Evaluation Plan ("PEP") establishes priorities for LANS. In the PEP, the task of CMRR-NF design is deemed "essential."<sup>5</sup> Even partial failure to achieve "essential" goals jeopardizes renewal of the entire LANS contract.

c. LANS is NNSA's prime contractor for developing purpose and need, managing, and executing CMRR-NF. LANS' gross income rises in proportion to CMRR-NF cost, which depends on requirements and specifications LANS influences, to the extent those costs do not

<sup>&</sup>lt;sup>1</sup> D'Agostino, Thomas, Woodrow Wilson Center speech, 28 Oct 2010, <u>http://nnsa.energy.gov/mediaroom/speeches/wilsoncenter102810.</u>

<sup>&</sup>lt;sup>2</sup> NNSA, Los Alamos Site Office (LASO), FY2010 LANL Performance Evaluation Plan (PEP), 28 Apr 2010: 40, http://www.doeal.gov/FOIADOCS/RR00486.pdf.

<sup>&</sup>lt;sup>3</sup> NNSA, FY2011 Congressional Budget Request (CBR), Laboratory Tables, 1 February 2010: 41-43, http://www.cfo.doe.gov/budget/11budget/Content/FY2011Lab.pdf.

<sup>&</sup>lt;sup>4</sup> NNSA, Management and Operating Contract for LANL, DE-AC52-06NA25396, 21 Dec 2005: 12. http://www.doeal.gov/laso/NewContract.aspx.

<sup>&</sup>lt;sup>5</sup> Id. 40

infringe on other LANL programs - a problem the Administration promises to avoid.<sup>6</sup>

d. NNSA is also using cash bonuses to LANS to promote CMRR-NF construction. The

FY 2010 PEP calls upon LANS to develop integrated planning to support Pajarito Corridor

construction by June 30, 2010.<sup>7</sup> By that date LANS was to:

Institute...a process to manage the institutional interfaces and resolve issues for TA-50-55 related projects (CMRR, TA-55 Reinvestment, RLWTF, New TRU, and NMSSUP2) that enhance overall site project performance and minimize operational impacts for the next decade.

This calendar year, LANS was to be rewarded for producing tools for planning very specific

construction activities for CMRR-NF and connected projects:

- 1. laydown, staging and warehousing;
- 2. concrete batch plant strategy;
- 3. parking and workforce transportation;
- 4. security strategy;
- 5. scope or schedule conflicts;
- 6. master integrated schedule;
- 7. multi-year staffing plan; and
- 8. FY 2011 and FY 2012 budgets.

If LANS met each measure it would receive a \$300,000 cash bonus. Defendants are

compensating LANS for proceeding with construction as planned for CMRR-NF and other

Pajarito Corridor projects.

e. The specificity of Vice President Biden's "unequivocal commitment" to the Nuclear

<sup>&</sup>lt;sup>6</sup> Biden, Jr., Vice President Joseph R., Letter to Senator John F. Kerry, in Senate Foreign Relations Committee report of 15 September 2010: 124-125. <u>http://foreign.senate.gov/download/?id=4C65B25B-F3E8-4CF6-8660-36E21D639ECC</u>.

<sup>&</sup>lt;sup>7</sup> NNSA, Los Alamos Site Office (LASO), FY2010 LANL Performance Evaluation Plan (PEP), 28 Apr 2010: 121, <u>http://www.docal.gov/FOIADOCS/RR00486.pdf</u>.

Facility (Mello Aff. #1: ¶59) is revealed in an exchange with Senator Kyl, the Senate Minority Whip. On August 19, 2010 Kyl wrote to Biden, suggesting that the failure to provide Congress with realistic (higher) cost estimates for CMRR-NF "raises questions about the Administration's long-term commitment" to the project and, therefore, threatens ratification of the New START treaty.<sup>8</sup> Thereafter, the Vice President responded, promising increased financial commitment to the projects "this fall." (Mello Aff. #1: ¶59). Press reports indicate Biden and Kyl will meet within days, or have met, to increase the Administration's commitment to the CMRR-NF.<sup>9</sup>

f. Essentially all of defendants' design efforts apply only to today's specific CMRR-NF project. By August 2010 defendants had completed "40-45%" of engineering design<sup>10</sup> and they expect the overall design to advance 15% between October 2010 and June 2011. (Cook Aff. ¶25). Thus, by June 2011 design will be 55% or 60% complete. Preliminary design, let alone the pre-conceptual or conceptual design where NEPA analysis is due (Mello Aff. #1 ¶¶66-69), is past, as defendants advised Congress in February. Then, defendants requested funds for Final Design <u>only</u>,<sup>11</sup> meaning detailed design based upon specified project parameters. At this rate of advance final design would be at least two-thirds complete by the end of 2011.

g. Defendants are now reportedly pursuing "front-end" funding for the multi-billiondollar CMRR-NF project, a unique financing approach for DOE that would fully commit the federal government at the beginning of construction and wrest yearly funding control from

<sup>&</sup>lt;sup>8</sup> Kyl, Senator Jon, letter to Vice President Biden, 19 Aug 2010, <u>http://lasg.org/CMRR/Litigation/MPI/Kyl\_ltr\_to\_Biden\_19Aug2010.pdf</u>.

<sup>&</sup>lt;sup>9</sup> Jacobson, Todd, "Despite GOP Gains, Admin. Still Urging Lame-Duck 'New START' Vote," Nuclear Weapons and Materials Monitor, 8 Nov 2010, <u>http://lasg.org/CMRR/Litigation/MPI/NWMM\_8Nov2010.pdf.</u>

<sup>&</sup>lt;sup>10</sup> Ramos, Derrick, NNSA, email to Katle Matthews, Rep. Markey's office, 6 Aug 2010, <u>http://lasg.org/CMRR/Litigation/MPI/Matthews\_Samuels\_CMRR\_review\_6Aug2010.pdf.</u>

<sup>&</sup>lt;sup>11</sup> NNSA, FY2011 Congressional Budget Request (CBR), 1 February, 2010: 221, <u>http://www.cfo.doe.gov/budget/11budget/Content/FY2011Lab.pdf</u>.

Congress.<sup>12</sup>

5. In mid-2010 defendants anticipated "beginning" construction of the Nuclear Facility "infrastructure package" in approximately April of 2011, with other CMRR-NF project phases beginning construction after that. (Mello Aff. #1 ¶44). (CMRR-NF construction really began in 2006 with the otherwise-unnecessary removal of 90,000 cubic yards of earth. Mello Aff. #1 ¶65) Major construction on the CMRR-NF was never meant to begin at the CMRR-NF site itself, and that is not defendants' plan today. Defendants state they will not begin "excavation or construction" during FY 2011 *at the Nuclear Facility excavation site itself* (Cook Aff. 21). Excavation at the CMRR-NF site itself requires extensive prior construction of required infrastructure elsewhere, which has already begun to a slight degree as discussed below, and which will increase in 2011 long prior to any site excavation.

6. Construction of a parking lot for security perimeter construction workers, and later for future CMRR-NF staff, is already underway on the south side of Pajarito Road. (Oral report from defendants' project personnel, October 20, 2010). The parking lot appears on defendants' CMRR-NF project map and in defendants' 2010 Supplement Analysis (SA); its area is given as 13 acres.<sup>13</sup> In July 2005 the NF site itself was a parking lot.<sup>14</sup> It is a parking lot today.<sup>15</sup> Without CMRR-NF, another parking lot might not be needed.

<sup>15</sup> Los Alamos Study Group, CMRR aerial photo, Jan 2009, http://lasg.org/CMRR/Litigation/MPI/CMRR\_aerial\_photo\_Jan2009.pdf.

<sup>&</sup>lt;sup>12</sup> Jacobson, Todd, "Costly Uranlum Processing Facility Also a Necessity, Harencak says; Are Multi-Year Appropriations an Answer to GOP Concerns on Out-Year Funding for Major NNSA Projects?" Nuclear Weapons and Materials Monitor, 15 Nov 2010, <u>http://lasg.org/CMRR/Litigation/MPI/NWMM\_15Nov2010.pdf.</u>

<sup>&</sup>lt;sup>13</sup> NNSA, CMRR Nuclear Facility Project Overview LA-UR10-07047, October 2010, http://nnsa.energy.gov/sites/default/files/nnsa/inlinefiles/LA-UR10-

<sup>07047</sup>CMRRNuclearFacilityProjectOverview.pdf; NNSA, CMRR SA:11,

http://lasg.org/CMRR/Litigation//MPI/CMRR predecisional SA 17Aug2010.pdf; Benson, Jody, Affidavit, 2 Nov 2010, http://lasg.org/CMRR/Litigation/MPI/Benson Jody affidavit.pdf

<sup>&</sup>lt;sup>14</sup> Google Earth, LANL TA-55, image of 30 Jul 2005, <u>http://lasg.org/CMRR/MPI/Litigation/GoogleEarth\_TA-55\_30Jul2005.pdf</u>.

7. Large portions of defendants' Nuclear Materials Safety and Security Upgrades (NMSSUP) Phase II project, under construction since December 2009, are in effect part of the CMRR-NF. A major purpose of NMSSUP is to expand the secure area at TA-55 to include the CMRR-NF. The whole project will cost \$245 million (approximately \$5,200 per inch of final perimeter).<sup>16</sup> Plans for NMSSUP were recently changed to move a 600-foot section 200 feet north, allowing ramp access to the CMRR-NF excavation by construction vehicles and a conveyor for concrete. (SA 14) After construction this section of perimeter will be returned to its original location or nearly so. When the Nuclear Facility is completed, NMSSUP will form a security perimeter around two sides of it.

8. Defendants plan to begin full-scale project execution imminently and at a much higher rate than past work. As of September 30, 2010 the government had appropriated \$296 million to this project, over a 9-year period (\$33 million/year). Defendants plan to invest an additional \$169 million just during FY2011. On an emergency basis they sought and received a threefold increase in CMRR-NF funding. Defendants say they will employ an average of 125 full-time *construction* workers in FY2011,<sup>17</sup> in addition to all others. At the beginning of FY2011, 283 persons were working on the project (Cook Aff at 19). Given the three-fold increase in funding, defendants may employ at least 400 people on the CMRR-NF in FY 2011. FY 2012 expenditures are likely to double from FY 2011 without injunctive relief.<sup>18</sup>

<sup>18</sup> NNSA, FY2011 Congressional Budget Request (CBR), 1 February, 2010: 227, <u>http://www.cfo.doe.gov/budget/11budget/Content/FY2011Lab.pdf</u> as updated by Biden, Jr., Vice President Joseph

R., Letter to Senator John F. Kerry, 15 September 2010: 124-125,

<sup>&</sup>lt;sup>16</sup> NNSA, FY2011 CBR, Weapons Activities, Project Data Sheet 08-D-701, Nuclear Materials Safeguards and Security Upgrades Project (NMSSUP) Phase II: 297-303, <u>http://www.cfo.doe.gov/budget/I1budget/Content/Volume%201.pdf</u>.

<sup>&</sup>lt;sup>17</sup> Bretzke, John. "Pajarito Construction Activities," LANL Construction Forum, Espanola, New Mexico, 16 June 2010, slide 4, <u>http://www.lanl.gov/projects/pcc/presentations/John-Bretzke Prensation for Community Forum.pdf</u>.

http://foreign.senate.gov/download/?id=4C65B25B-F3E8-4CF6-8660-36E21D639ECC.

Employment is likely to double correspondingly. Without injunctive relief, cumulative commitment will rise to \$465 million by September 2011 and again to roughly \$800 million by September 2012. Thus, given defendants' "unequivocal" commitment, and with construction imminent, and with cumulative investment poised to spike upwards, defendants' decisions of whether, where, and how to build any Nuclear Facility are fully predetermined.

## B. If Defendants are allowed to proceed now, the resulting impacts to the environment and injuries to Plaintiff will be those of the entire proposed action, including construction, operation, and decommissioning or abandonment.

9. Without a preliminary injunction <u>all</u> the environmental impacts of the project and <u>all</u> the predictable injuries to plaintiff, and to plaintiff's members and successors over the entire lifetime of the project and afterwards are very likely to occur. Moreover, without a preliminary injunction, the CMRR-NF project will become legally unstoppable, and all further NEPA and management analyses would be moot.

## <u>C.</u> If a preliminary injunction is not granted there will be irreparable injuries to Plaintiff and the environment.

10. Plaintiff cannot show in detail all the likely harms of this huge and closely guarded project; that is the function of an EIS. But plaintiff can indicate likely impacts and injuries based on the imperfect, incomplete, and tardy information defendants have disclosed. This project dwarfs in cost all other government projects in the history of New Mexico, save the interstate highways. Its full scope remains blurred by euphemisms like "providing capability," the "hotel concept" for missions, "integrated nuclear planning," and so on. It would bring unprecedented quantities of highly-toxic plutonium for storage, experimentation, and processing.

11. Some injuries are certain or highly likely; others are harder to predict. "Hazard" is defined as the product of likelihood ("risk") and consequence. The huge cost increases seen in this project are partly due to defendants' attempt to reduce risks and mitigate consequences to workers and the public, including for highly-consequential events associated with plutonium storage, processing, and handling. These huge costs indicate the scale of potential hazard. Every site which has operated industrial-scale facilities for plutonium has experienced serious accidents, few of which were thought likely beforehand.

12. <u>Nuclear Facility construction will have direct impacts</u>. This construction is expected to last for approximately 10 years. Most construction impacts would have permanent or long-lasting effects.

a. <u>Consumption of land and associated biota</u>. The CMRR-NF and its sub-projects (*e.g.*, construction yards and offices, a warehouse, a truck inspection facility<sup>19</sup>, a craft worker facility, an electrical substation and other utilities, parking lots, two concrete batch plants, security infrastructure, excavation spoil storage space, disposal space, stormwater retention basins, and road relocation) will occupy about 79 acres in Pajarito Canyon and adjacent mesas, exclusive of the 4-acre RLUOB.<sup>20</sup> The 1,000 car parking lot in Sandia Canyon<sup>21</sup>, will consume very roughly 13 acres, for a total of 94 acres. This does not include land for connected projects (Complaint ¶67), temporary housing for transient workers, or offices for LANL staff displaced from Pajarito Corridor facilities. This is more than four times the land usage estimated in the 2003 EIS (22.75 acres exclusive of RLUOB<sup>22</sup> and more than 14 times the CTSPEIS estimate (6.5 acres).<sup>23</sup> The

<sup>&</sup>lt;sup>19</sup> Recent information suggests this facility may not be necessary. NNSA, "Draft Supplement Analysis for the CMRR-NF" (CMRR SA), 2010: 26,

http://lasg.org/CMRR/Litigation/MPI/CMRR\_predecisional\_SA\_17Aug2010.pdf. But: "Our current truck inspection facility which is supporting our ongoing mission operations is not capable of this kind of increased load, and so we'll probably be installing a dedicated truck inspection station that really is focused on the construction activities themselves." (John Bretzke presentation, quoted in Mello Aff. #1: 25)

<sup>&</sup>lt;sup>20</sup> NNSA, CMRR SA, 2010: 17, <u>http://lasg.org/CMRR/Litigation/MPI/CMRR\_predecisional\_SA\_17Aug2010.pdf</u>.

<sup>&</sup>lt;sup>21</sup> Benson, Jody, Affidavit of 2 Nov 2010, ¶4B, http://lasg.org/CMRR/Litigation/MPI/Benson\_Jody\_affidavit.pdf.

<sup>&</sup>lt;sup>22</sup> NNSA, CMRR EIS: 2-40, <u>http://nepa.energy.gov/nepa\_documents/EIS/EIS0350/Chapter02.pdf.</u>

<sup>&</sup>lt;sup>23</sup> Federal Register, Vol. 73, No. 245, 19 December 2008: 77650, <u>http://edocket.access.gpo.gov/2008/pdf/E8-30193.pdf.</u>

land is located in technical areas ("TAs") TA-46, 48, 50, 52, 55, 63, 64, and 66; for the truck inspection facility, presumably TA-54 or 36; and for the Sandia Canyon parking lot(s), TA-53, 61, or 72. Ecologically, all these areas will be destroyed. Many of these areas are being permanently committed to industrial operations. Hydrologic effects are likely even with mitigation measures. Reclamation may never be sought and may be problematic. Defendants plan to eventually make large areas (34.4 acres) to be destroyed by CMRR-NF construction into what they enigmatically call "pits."<sup>24</sup> Thus on these acres, as well others this project devotes to permanent heavy industrial and supporting uses, the actual and potential support to the fragile ecological web of the Pajarito Plateau will be irreparably destroyed and denied. Partial destruction is likely to extend to adjoining and downstream lands, including wetlands. These certain and likely impacts will add to those resulting from past industrial use and other impacts and will combine with the effects of climate change. Climate change is widely expected to be devastating in the American Southwest<sup>25</sup> and is already very visible on the Pajarito Plateau today.<sup>26</sup> The overall fragility, ecological importance, and geographically patchy character of the key transitional habitats of the Plateau cannot be overemphasized, and the cumulative effect of construction on critical habitats and populations is unknown.

b. <u>Excavation at the CMRR-NF</u> (and possibly at sub-project and connected project sites) will generate spoil; the excavated volume is likely to be between 489,000 and 614,000 cubic

<sup>&</sup>lt;sup>24</sup> NNSA, Annex D, FY2011 Biennial Plan and Budget Assessment on the Modernization and Refurbishment of the Nuclear Security Complex: 28, <u>http://lasg.org/CMRR/Litigation/MPI/FY2011\_AnnexD\_BPMR\_NWC.pdf</u>.

<sup>&</sup>lt;sup>25</sup> For a readable entry to recent work see Joseph Romm, "New study puts the 'hell' in Hell and High Water," <u>http://climateprogress.org/2010/10/20/ncar-daidrought-under-global-warming-a-revlew/</u>, citing Aiguo Dai, "Drought under global warming: a review," National Center for Atmospheric Research, October 19, 2010, and other studies.

<sup>&</sup>lt;sup>26</sup> David D. Breshears, et. al., "Regional vegetation die-off in response to global-change-type drought," Proc. Nat. Acad. Sci. Vol 102 Issue 42, 18 Oct 2005; 15144-151482005, <u>http://www.pnas.org/content/102/42/15144.full.pdf</u>

yards from the CMRR-NF alone. Defendants plan to use 153,000 cubic yards as fill.<sup>27</sup> Transport, storage, and disposal of spoils are likely to have significant environmental, aesthetic, and cultural impacts. Spoil piles may be visible from far away. These spoils will be erodible by water and wind. Since on its removal its final disposition may be unknown or not ready, much of this material may require digging, loading, transporting, dumping, and/or spreading <u>twice</u>.<sup>28</sup> Assuming so and based on 10 cubic yards per truckload, 98,000 to 123,000 short-haul round trips will be required, with a variety of attendant impacts.

c. <u>Pajarito Road is to be closed</u> for two years and near the CMRR-NF, it is also to be relocated. Temporary or permanent traffic bypass(es) have also been publicly discussed by defendants. (Mello Aff. #1: ¶25). Moreover, road closure denies direct access to their workplace to 4,400 LANL staff. According to defendants, it will have ramifying effects on the surrounding transportation network and may require temporary work quarters elsewhere.

d. <u>Two concrete batch plants</u> with a combined capacity of 300 cubic yards per hour would supply the estimated 371,000 cubic yards of concrete and grout required for the CMRR-NF, again excluding sub-projects and connected actions. These plants require raw materials, coming from locations off the Pajarito Plateau: sand, gravel, and portland cement hauled day and night on regional roads. The CMRR-NF will require approximately 260,000 cubic yards of aggregate, *i.e.*, 26,000 round trips in 10-yard trucks. A typical delivery distance might be about 30 miles each way. Approximately 40,000 cubic yards of portland cement will be required; the typical distance each way is a minimum of 110 miles, or 1,846 round trips with a 55,000-lb standard hauler. If fly ash is used, the nearest conceivable source is roughly 230 miles distant.

<sup>&</sup>lt;sup>27</sup> NNSA, CMRR SA, 2010: 19, http://lasg.org/CMRR/Litigation/MPI/CMRR predecisional SA\_17Aug2010.pdf.

<sup>&</sup>lt;sup>28</sup> It is partly for this reason, and for similar reasons related to utilities, access, topography, and functional interdependence, that the various projects of the Pajarito Construction Corridor are connected and must be managed as a single project with multiple elements, as defendants have long recognized and are acting upon.

These batch plants will require a total of 28,000 round trips by heavy trucks, totaling about 2.0 million miles for the CMRR-NF alone. All deliveries must climb and descend a 1,775 ft hill. Batch plants emit dust, noise, and at night, light pollution.

e. <u>Noise from construction</u> will continue day and night and is likely to be audible and disturbing in the Royal Crest Trailer Park (0.7 miles north) and audible in White Rock (5 miles east southeast) under some atmospheric conditions, as well as at locations within LANL during the day. Truck noise will be present over a wide area at all hours, since aggregate deliveries must traverse long distances, often at night to avoid congestion as project staff has told me.

f. <u>Light pollution from construction</u> is already visible far from the site. This problem was discussed at a recent Los Alamos County Council meeting. These lights will affect wildlife (see below) and will do so over a wider area than assumed in the 2003 EIS.

g. <u>Construction will consume water and electricity</u>. Defendants estimate construction will require 96 million gallons of water; peak electrical demand is not known (the units presented in the SA appear incorrect).<sup>29</sup>

h. <u>Pajarito Canyon and its Two Mile Canyon tributary, downstream from and</u> <u>immediately adjacent to CMRR-NF and most of its construction areas, comprise an important</u> <u>wildlife habitat and corridor.</u> Pajarito Canyon contains more than one-third of the wetlands within LANL.<sup>30</sup> It is an important wildlife habitat for many species, including threatened and endangered species, and is a transit route for elk, deer, black bear, and mountain lion, among other species.<sup>31</sup> Its wetlands, which will become more isolated for some resident populations

<sup>&</sup>lt;sup>29</sup> NNSA, CMRR SA, 2010: 18, <u>http://lasg.org/CMRR/Litigation/MPI/CMRR\_predecisional\_SA\_17Aug2010.pdf</u>.

<sup>&</sup>lt;sup>30</sup> DOE (DOE), Final Site-Wide Environmental Impact Statement for the Continued Operation of the Los Alamos National Laboratory ("SWEIS") for LANL: 4-98, <u>http://nepa.energy.gov/documents/EIS-0380F\_Chapter04.pdf</u>.

<sup>&</sup>lt;sup>31</sup> NNSA, Integrated Natural and Cultural Resources Management Plan for Los Alamos National Laboratory, Sept 2002: 7, 42 (map of threatened and endangered species habitat), <u>http://www.lanl.gov/prr/Cultural\_Resources/PRR-CULT-0001.pdf</u>

under drying conditions, are important for threatened and endangered species, aquatic invertebrates, amphibians, and reptiles, and for numerous species of local and migratory birds.<sup>32</sup> This importance is growing under climate change, which is expected to create severe, permanent drought during the lifetime of the proposed project.<sup>33</sup> At LANL as a whole defendants list 25 threatened, endangered, and other sensitive species as highly likely or moderately likely to be present and 10 others with "low" likelihood of presence.<sup>34</sup> Construction will damage wildlife habitat and movements (daily and seasonal), and will affect endangered species, including the Mexican Spotted Owl, due to habitat loss and nighttime construction lights.<sup>35</sup> These impacts will be greater than those of the 2003 project, given the much greater land and number of sites involved and the much longer duration of construction. Deer and elk migration through the canyon may be cut off or changed by noise and lights.<sup>36</sup> Wildlife may become victims of the increased traffic, especially by increased nighttime traffic, or may lose access to habitat due to noise, lighting changes, or changes in runoff or vegetation.

i. <u>Construction will cause air pollution, directly and indirectly.</u> Defendants will seek air quality permits for, *e.g.*, one or more concrete batch plants and the nuclear facility itself.<sup>37</sup> However, respirable particulates from diesel trucks will be emitted for ten years in Espanola, Santa Clara Pueblo, San Ildefonso Pueblo, White Rock, and possibly Los Alamos, as well as densely-occupied laboratory areas, affecting drivers, cyclists, pedestrians, and children. Portland cement manufacture releases not just carbon dioxide but also mercury and other toxic materials;

<sup>32</sup> ld: 40-41.

<sup>&</sup>lt;sup>33</sup> See Paragraph 11a, note 24.

<sup>&</sup>lt;sup>34</sup> NNSA CMRR EIS: 3-38, http://nepa.energy.gov/nepa\_documents/EIS/EIS0350/Chapter03.pdf.

<sup>&</sup>lt;sup>35</sup> NNSA, CMRR EIS: S31, http://nepa.energy.gov/nepa\_documents/EIS/EIS0350/Summary.pdf.

<sup>&</sup>lt;sup>36</sup> NNSA, CMRR EIS: 3-33, <u>http://nepa.energy.gov/nepa\_documents/EIS/EIS0350/ Chapter03.pdf</u>.

<sup>&</sup>lt;sup>37</sup> NNSA and LANS, CMRR Project Update, Steve Fong and Rick Holmes, 6 Oct 2010 http://lasg.org/CMRR/Litigation/MPI/LA-UR-10-06560\_CMRR-Public-Mtg\_Oct-2010-Vol-10.pdf.

here, the most likely location, Tijeras Canyon, is near residences and schools. Aggregate will come from pits in Santa Fe, Rio Arriba, and/or Sandoval counties, necessitating heavy truck traffic in these areas. Gravel pits as well generate air pollution, dust, noise, and habitat loss.

j. <u>Construction will cause a variety of traffic impacts and dangers</u>. For ten years construction traffic on Pajarito Road will be intense. Road closure will displace from Pajarito Road the traffic from thousands of construction workers, LANL employees, and their families to other routes, including NM 4, NM 501 (Main Hill Road), the Truck Route (in Sandia Canyon), and Trinity Drive or Central Avenue in downtown Los Alamos. Defendants have stated they are studying alternatives, including new roads, to mitigate these expected traffic impacts.

"What we are anticipating is that we are going to have to shut down the road right here in this area, to back up in here [indicates on map]....And so not only are we impacting northern New Mexico with the additional traffic loads, just to bring the construction personnel, construction material, all the concrete, the sand, the rock, etc., the aggregate up there, but within the site itself we've got a lot of microplanning that's going on in the background to try to help the lab deal with this impact because for a decade we are going to be disrupting their lives pretty significantly.

[Question from Vincent Chiravalle, Los Alamos County Council] "I'd like to understand if you've considered building a bypass road around the construction site...?"

Answer: "Yes we have considered that, and those options are still on the table. This is a difficult area to build an alternative route through because of the canyons and plateaus that we're dealing with, so we've got three or four different options that we're looking at, and part of this trade off study [unclear] is part of that." (NNSA, quoted in Mello Aff. #1: ¶25)

Increased road repairs, selective widening, and traffic control upgrades are likely to be necessary

and will be costly.

Traffic studies is a huge one for us right now[....] We are going to be changing traffic flows. So we're trying to do our best right now to understand and predict where we think that traffic is going to go, what kind of impact are we going to have down in White Rock, what impact are we going to have on State Road 4, what impact are we going to have along the truck route, etc. We will be changing

traffic loads at intersections. We know that. We're trying to quantify that right now....(*Id.*)

There will be increased danger to all parties, especially bicyclists. Recreational and commuter bicycling in and through Pajarito Canyon, currently commonplace, will become dangerous to impossible. Commuters on all these roads are likely to experience delays on some occasions. Accidents and broken windshields will increase. Young drivers are of particular concern. Traffic congestion may affect businesses and tourism, including visitors to Bandelier National Monument who will travel the same roads. (Affidavit of Jody Benson)

<u>k.</u> <u>Construction, traffic, road closure, and related impacts will damage and deny</u>
 <u>recreational opportunities</u>. Even where access is theoretically possible, enjoyment may be lost.
 For example, flying debris, dust, exhaust fumes, potential collisions (especially with limited-sight vehicles), congestion, and visual impacts may make bicycling dangerous and unpleasant.

1. Pajarito Canyon is archeologically, historically, and culturally unique and important.

It has been a focus of human habitation for many hundreds of years and contains one of the largest pueblo ruins on the Pajarito Plateau (Tshirege), outstanding and unique petroglyphs, numerous cavates, and more recent homestead ruins. It has a high density of prehistoric sites and has been the subject of local poetry, a resort of photographers, and a place to contemplate the history of humankind and its fragile prospects in this unique region. It was for a time the ranch home of Ashley Pond and his family, including his daughter Peggy Pond Church. All of these civilizations have left fragile remains in the Canyon. In defendants' words, "[t]here are more than 1600 known Ancestral Pueblo archaeological sites at LANL, among the highest densities of such sites in the American Southwest."<sup>38</sup>

<sup>&</sup>lt;sup>38</sup> LANL, March 2006: 67, A Plan for the Management of the Cultural Heritage at Los Alamos National Laboratory, New Mexico, LA-UR-04-8964, <u>http://www.lanl.gov/environment/cultural/docs/CRMP\_LA-UR-04-8964.pdf</u>. The plan notes that a 165 acre parcel including portions of Pajarito and Two Mile canyons, evidentiy near CMRR-NF

m. <u>Construction will deny access to and will degrade sacred space, sites, plants, and</u> <u>animals.<sup>39</sup></u> (Exhibit 1)

n. <u>Construction of CMRR-NF supposedly entails dismantling and disposing (D&D) of</u> <u>most or all of the CMR building</u>, generating large quantities of waste including: an estimated 16,000 cubic yards of radioactive waste; 10,000 cubic yards of solid waste; regulated hazardous wastes; large volumes of asbestos, much of which is radioactive; plus radioactive soil and outbuildings.<sup>40</sup> Defendants estimate the cost of CMR D&D at \$350 to \$500 million in 2012 dollars and its duration at 4-5 years; it is a big project.<sup>41</sup> Neither defendants' most recent cost estimate provided to Congress (\$3.4 billion, now obsolete) nor any of the cost estimates used in this or my First Affidavit include D&D cost. This environmental impact and financial cost would be mitigated by alternatives, not yet analyzed, which retain and upgrade CMR wings.

13. <u>Connected project construction will also have direct impacts</u>. These connected actions include: NMSSUP; Radioactive Liquid Waste Treatment Facility (RLWTF); Transuranic (TRU) Waste Facility (which with RLWTF is part of a "Consolidated Waste Capability);" TA-55 Reinvestment Project (TRP); Material Disposal Areas (MDAs) C and G closure projects; Waste Disposition Project; RLUOB Occupancy; and other subprojects that defendants classify and manage within "Integrated Nuclear Planning" and the "Pajarito Construction Corridor."

a. Connected project construction will cause the same classes of direct impacts

discussed in paragraph 12 above.

b. Defendants plan to use a major part of the excavation spoils to cap hazardous

construction sites, has not been adequately surveyed. (Id. 53)

<sup>39</sup> Madalena, Gov Joshua, Pueblo of Jemez, letter, 4 Oct 2010, <u>http://lasg.org/CMRR/Litigation/MPI/Madalena\_ltr\_to\_Chu\_4Oct2010.pdf</u>; Sanchez, J. Gilbert, affidavit, 3 Nov 2010, <u>http://lasg.org/CMRR/Litigation/MPI/Sanchez\_J\_Gilbert\_affidavit.pdf</u>

<sup>40</sup> CMRR EIS: 2-29-34, <u>http://nepa.energy.gov/nepa\_documents/EIS/EIS0350/Chapter02.pdf</u>.

<sup>41</sup> DOE CBR FY2010: 223. http://www.cfo.doe.gov/budget/10budget/Content/Volumes/Volume1.pdf.

chemical and nuclear MDAs, specifically MDAs C and G in lieu of other closure options for those sites. Defendants state that MDAs C and G contain roughly 14 million cubic feet of diverse nuclear and chemical wastes, including transuranic wastes. Decisions to: (a) leave these wastes in place; and (b) cover these sites with volcanic ash removed from the CMRR-NF excavation, were not mentioned or analyzed in the 2003 EIS. The decision to leave 14 million cubic feet of nuclear and chemical waste in shallow unlined pits would be a major federal action significantly affecting the quality of the human environment, with far-reaching impacts.

14. <u>Construction of the CMRR-NF and connected projects will have *indirect* impacts on surrounding communities and their environment.</u>

a. <u>Continued operation of portions of the Chemistry and Metallurgy Research (CMR)</u>. <u>Building until 2022 or longer</u>, if the CMRR-NF were to proceed from this point, has become part of the project by default. Another 12 years of operation in wings 5 and 7 of CMR are likely to be necessary, if not 16 years,<sup>42</sup> meaning that the decision in 2001 to abandon seismic and major safety upgrades projects at CMR in favor of CMRR-NF would incur more than two decades of elevated worker safety risks at CMR. Moreover, CMRR-NF will not replace CMR Wing 9. Defendants may retain an (upgraded) CMR Wing 9 and its support infrastructure indefinitely, calling into question the purpose and need for, and reasonable alternatives to, CMRR-NF.<sup>43</sup> Due to CMRR-NF and related funding constraints, defendants are not investing adequately in CMR

<sup>&</sup>lt;sup>42</sup> Defendants assume a 4-year transition period once CMRR-NF begins full operation. NNSA, CMRR EIS: 2-38, <u>http://nepa.energy.gov/nepa\_documents/EIS/EIS0350/Chapter02.pdf.</u>

<sup>&</sup>lt;sup>43</sup> Oral briefing with Greg Mello, Los Alamos Study Group and DNFSB Chair, Vice-Chair and member Peter Winokur, John Mansfield, Joseph Bader, respectively, and DNFSB senior staff, May 7, 2010, Washington, DC; NNSA Principal Associate Director of Defense Programs Glenn Mara letter to Don Winchell, NNSA Los Alamos Site Office (LASO) Site Manager of Pebruary 22, 2008 (study of hot cell capabilities -- housed in Wing 9 – "ongoing"); LANL, *Ten-Year Site Plan FY09-FY18*, September 2008, LA-UR-08-0654; 41 ("Until replacement facilities can be developed, Wing 9 of CMR will need to remain in operation to support NE [Nuclear Energy] as well as environmental, NNSA, and other activities"); Mello conversation with Brett Broderick, DNFSB LANL site representative, 1 June, 2010 (NNSA or LANL study of Wing 9 retention underway).

maintenance. "The CMR facility currently operates on a 'run-to-replacement' philosophy due to funding constraints and in anticipation of CMRR project completion."<sup>44</sup> All LANL's existing nuclear facilities are affected. "Given the fiscal realities of declining budgets, maintenance investment decisions require consideration of potentially significant tradeoffs at the site level." (*Id.* 69)

a. <u>Peak construction employment</u> has been estimated at 844 and at 1,000 persons for the CMRR-NF.<sup>45</sup> If connected actions are included the figure is greater. Such an increase in the transient workforce, some of whom will come from out of state because nuclear quality certifications are in some instances required, could affect local housing markets, possibly requiring temporary housing. (NNSA, Mello Aff. #1: ¶25). Such an influx is likely to affect schools, roads, public transportation, medical services, housing, and local job markets.

b. <u>Regional prices and availability of construction materials may be affected.</u> (Affidavit of Jody Benson.)

15. <u>Operation of the CMRR-NF and connected projects will have on-site and</u> <u>offsite impacts.</u> Defendants estimate the CMRR-NF operational period at 50 years.<sup>46</sup> The operational impacts of the Nuclear Facility closely depend on what is done in, and as a result of, CMRR-NF and how prudently and safely those activities are managed. For reference, in 2003 defendants estimated CMRR-NF would generate 2,754 cubic yards of nuclear and hazardous waste annually.<sup>47</sup> This large waste volume would be disposed at a variety of locations on- and

<sup>44</sup> LANL, Ten Year Site Plan FY09-FY18: 25.

<sup>&</sup>lt;sup>45</sup> Bretzke, John. "Pajarito Construction Activities," Los Alamos National Laboratory Construction Forum, Espanola, New Mexico, 16 June 2010, slide 4, <u>http://www.lanl.gov/projects/pcc/presentations/John-Bretzke Prensation for Community Forum.pdf</u>; NNSA, CMRR SA, 2010: 25, <u>http://lasg.org/CMRR/Litlgation/MPI/CMRR predecisional SA 17Aug2010.pdf</u>.

 <sup>&</sup>lt;sup>46</sup> DOE, CMRR EIS: 2-39, <u>http://nepa.energy.gov/nepa\_documents/EIS/EIS0350/Chapter02.pdf</u>.
 <sup>47</sup> Id. 2-41.

off-site, causing permanent sacrifice of the lands involved. Defendants have not provided sufficient information to estimate operational impacts given their vision of CMRR-NF as a "hotel" for unstated missions.<sup>48</sup> A major mission of the CMRR-NF and driver of its design is to enable a program of plutonium explosions in tanks on-site at LANL, a dangerous activity having the potential for releases.<sup>49</sup>

16. <u>Short- and long-term impacts are associated with ultimate decommissioning</u> <u>or abandonment of the Nuclear Facility.</u> The CMRR-NF will become contaminated upon first use and will grow more thoroughly contaminated over time. Its scale and internal complexity make decommissioning an expensive challenge. Initiation of plutonium storage and processing in this facility creates a hazard that will require hundreds of millions in today's dollars for decommissioning and disposal. (Paragraph 12n). No matter what strategy is pursued, some hazard will remain on site and new hazards will be created by transportation and disposal.

17. There will harms to Plaintiff, others, and the environment from violations of

#### the due process and informational requirements of NEPA.

18. Walatowa (Jemez) Pueblo has written defendants, expressing detailed concern

over the interwoven issues of environmental impact and due process, calling for a cessation of investment pending a *de novo* EIS, including proper notice and comment to tribes.<sup>50</sup>

19. The Pajarito Group of the Sierra Club (PGSC), which has more than 350 members

in Los Alamos County, has written defendants, expressing a number of concerns regarding the

<sup>&</sup>lt;sup>48</sup> DNFSB Staff Issue Report, "Review of [CMRR] Facility": 8,

http://www.dnfsb.gov/pub\_docs/staff\_issue\_reports/lani/sir\_20080530\_la.pdf.

<sup>&</sup>lt;sup>49</sup> For background see defendants' materials at <u>http://www.lasg.org/technicai/lanl-hydrotest-index.htm</u> and LANL Comprehensive Site Plan 2000, LA-UR 99-6704, 31 Jan 2000, Vol. IV: 4, <u>http://lasg.org/maps/pages/contents/ComprehensiveSitePlanVol2/03%20Program%20Needs.pdf</u>. Compare to LANS, Holmes, Rick, 10 June 2010, "[CMRR] Project": 13,

http://eteba.org/Presentations/RickHolmestoNM6.10.10.pdf.

<sup>&</sup>lt;sup>50</sup> Governor Joshua Madelena, letter to Steven Chu and Thomas D'Agostino, 4 October 2010. http://lasg.org/CMRR/Litigation/MPI/Madalena\_ltr\_to\_Chu\_4Oct2010.pdf.

CMRR-NF project, which have in common violations of required NEPA procedure.<sup>51</sup> (Exhibit 2) They request a halt to any physical actions in the environment and only very limited planning in support of mission definition, cost assessment, and development of alternatives until a *de novo* EIS (not a SEIS) is prepared.

20. Defendants admit violations of NEPA. On October 6, 2010 defendants' LASO Deputy Manager Roger Snyder stated, "Are we covered by the 2003 environmental impact statement? We are partially covered..."<sup>52</sup>

21. On November 10, 2010 the City of Santa Fe passed a resolution requesting a full EIS, not a SEIS, for the CMRR-NF project, citing the need for timely citizen involvement in the notice and comment process.<sup>53</sup>

## D. Resources will be irreversibly committed if a preliminary injunction is not granted.

22. <u>Land will be irreversibly committed</u>, including but extending beyond the 94 acres discussed above. The Nuclear Facility and its connected projects require a zone of increased security and institutional commitment affecting land uses over a wider area, both directly and through the creation of an industrial-scale plutonium storage, processing, and handling complex, which will prejudice a variety of future decisions. Over the presumed life of the facility, 1,370,000 cubic yards of nuclear and hazardous waste would be created, not counting CMR disposition or ultimate CMRR-NF disposition, to be disposed at LANL and elsewhere.<sup>54</sup> Defendants remain undecided regarding the CMRR-NF's precise purpose, requirements, and

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<sup>&</sup>lt;sup>51</sup> Pajarito Group of Sierra Club, Letter to John Tegtmeier, NNSA, 1 November 2010. http://lasg.org/CMRR/Litigation/MPI/PGSC\_CMRR\_scoping\_comments\_1Nov2010.pdf.

<sup>&</sup>lt;sup>52</sup> Snodgrass, Roger, "Facility design may proceed," Santa Fe New Mexican 10/9/10. <u>https://www.santafenewmexican.com/mobile/Los-Alamos-National-lab-Nuke-facility-design-may-go-forward</u>.

<sup>&</sup>lt;sup>53</sup> City of Santa Fe and Santa Fe County, "Joint Resolution in Support of a New Environmental Impact Statement for LANL's Chemistry and Metallurgy Research Replacement Nuclear Facility (CMRR Project)," Nov 2010. <u>http://lasg.org/CMRR/Litigation/MPI/SF\_City\_County\_CMRR\_Resolution.pdf</u>.

<sup>&</sup>lt;sup>34</sup> NNSA, 2003 CMRR EIS, p. 2-41. <u>http://nepa.energy.gov/nepa\_documents/EIS/EIS0350/Chapter02.pdf</u>.

missions.

23. <u>Defendants rely for disposal of excavation spoils on a plan that implies permanent</u> <u>shallow burial of nuclear and chemical wastes at MDAs C and G</u>, committing those specific 75 acres to long-term hazards from such disposal. In the event of a major breach of confinement, perhaps human-caused, surface users and future downstream water users could be affected. These landfills have never been permitted. They contain large quantities of waste including attractive resources, including fissile materials and metals. Defendants propose to use their excavation spoils as shallow cover for these landfills, subject to approval by the New Mexico Environment Department (NMED). To initiate excavation will significantly prejudice Defendants' LANL cleanup program by tipping the scales in favor of a least-cost "solution," *i.e.*, shallow cover, to LANL's two largest potential contamination sources.

24. <u>Vegetation and habitat will be irreversibly destroyed</u>, as mentioned above in detail. In part, defendants argue that the land has already acquired "an industrial character" – which means only that defendants have labeled it as such.<sup>55</sup> To dismiss the restoration of lands under defendants' stewardship is contrary to the policy enshrined in NEPA of "fostering conditions under which man and nature can exist in productive harmony" for "future generations of Americans." (42 U.S.C.A. §4331).

25. <u>Concrete and grout requirements</u> for the Nuclear Facility have recently increased again, to 371,000 cubic yards.<sup>56</sup> This is 116 times the estimated concrete requirement for the CMRR-NF, stated in the 2003 EIS and 2004 ROD.<sup>57</sup> Of the total, 250,000 cubic yards are needed to replace a 50-60 foot thick layer beneath the structure with lean, low-slump concrete,

 <sup>&</sup>lt;sup>55</sup> NNSA, CMRR SA, 2010: 17, <u>http://lasg.org/CMRR/Litigation/MPI/CMRR\_predectional\_SA\_17Aug2010.pdf</u>.
 <sup>56</sup> Id. 29.

<sup>&</sup>lt;sup>57</sup> DOE, CMRR EIS: table 2-1, <u>http://nepa.energy.gov/nepa\_documents/EIS/EIS0350/Chapter02.pdf</u>. I have only recently realized this table implies an estimate of 2003 Nuclear Facility concrete, also provided in the CMRR SA.

and the remaining 121,000 cubic yards will go into the building itself. This structural concrete is 38 times the original estimate. These increases stem from changes in project scope and requirements, and from a more careful consideration of the difficult geological environment.

26. <u>Steel requirements</u> are about 18,500 tons. This steel would be irreversibly committed.<sup>58</sup>

27. <u>Greenhouse gas (GHG) emissions</u> are, in the case of carbon dioxide, irreversible on a human timescale. From its usage of concrete and grout alone, the Nuclear Facility will generate more than 100,000 metric tons (MT) of carbon dioxide, more than 100 times the quantity implied by the concrete usage of the 2003 EIS<sup>59</sup> and more than four times CEQ's proposed threshold for required EIS analysis (25,000 MT).<sup>60</sup> It is more than three times the annual production of GHG from LANL as a whole.<sup>61</sup> GHGs were not analyzed in the 2003 EIS; the much greater quantities and significance of CMRR-NF GHG emissions comprise a strong, independent reason to consider alternatives to the project as designed.

28. <u>The \$5 to 6 billion required for the Nuclear Facility</u> is to be supplied by taxes and new federal debt, irreversibly committed year by year. What is spent cannot be unspent, and the project as a whole is poised to become practically irreversible (paragraphs 4-8). Over FY 2011 and FY 2012 defendants are likely to receive and spend or obligate one-half billion dollars to advance this project. In the absence of a preliminary injunction, defendants seek to spend more

<sup>58</sup> NNSA, CMRR SA, 2010: 30, http://lasg.org/CMRR/Litigation/MPI/CMRR\_predecisional\_SA\_17Aug2010.pdf.

<sup>&</sup>lt;sup>59</sup> BuildingGreen.com, Embodled Energy and CO emissions from Cement and Concrete Production: tables 2 & 4, <u>http://www.buildinggreen.com/auth/article.cfm/1993/3/1/Cement-and-Concrete-Environmental-Considerations/</u>.

<sup>&</sup>lt;sup>60</sup> Council on Environmental Quality (CEQ), "Draft NEPA Guidelines on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions," 18 Feb 2010,

http://www.whitehouse.gov/sites/default/files/microsites/ceq/20100218-nepa-consideration-effects-ghg-draft-guidance.pdf.

<sup>&</sup>lt;sup>61</sup> New Mexico Environment Department (NMED), "Inventory of New Mexico Greenhouse Gas Emissions: 2000 – 2007," 15 Mar 2010: 45-49, <u>http://www.nmeny.state.nm.us/cc/documents/GHGInventoryUpdate3\_15\_10.pdf</u>.

on this project this year and next than the *total* cost, in constant dollars, of *any* government project in the history of New Mexico, except the two interstate highways.<sup>62</sup>

Gregory Mello, Affiant, being first duly sworn states on oath, that all of the representations in this Affidavit are true as far as the Affiant knows or is informed, and that such Affidavit is true, accurate and complete to the best of Affiant's knowledge and belief.

Dated: October 21, 2010.

gregory Mello

SUBSCRIBED AND SWORN TO before me this 12<sup>th</sup> day of November, 2010, by Gregory Mello.

Notary Public

My Commission Expires: 4 124 12-012-



<sup>62</sup> See list of historic New Mexico projects at <u>http://www.lasg.org/CMRR/open\_page.htm</u>.

## JON KYL

730 HART SENATE OFFICE BUILDING (202) 224-4521

COMMITTEE ON FINANCE

COMMITTEE ON THE JUDICIARY

**REPUBLICAN WHIP** 

## Mello Aff #2, Par 4e

The Honorable Joseph R. Biden, Jr. Vice President 1600 Pennsylvania Avenue, N.W. Washington, D.C. 20500

Dear Mr. Vice President:

## Thank you for meeting with Senators Lindsey Graham, Joe Lieberman and me and for following up on the meeting in writing. As I indicated in our meeting, my purpose is not to delay consideration of New START or redefine the basic goals of the modernization program. It is, rather, to do what we can to ensure adequate and timely funding for the modernization program. To that end, I have suggested, and discussed with you, several specific and achievable steps that will, if implemented, also demonstrate a mutual commitment to successful completion of the program outlined in the section 1251 report.

As to FY2011 funding, we need to rectify the \$99 million shortfall in the House Subcommittee mark. The prior year offsets identified by the House Committee will have to be restored as will the B61 LEP reprogramming funds that were borrowed from the modernization of the Kansas City Plant. In addition, NNSA will need approximately \$60 million to recover from flooding at Pantex, and there will have to be some resolution of the \$64 million shortfall in contractor pensions that NNSA recently sought to reprogram – if the reprogramming is approved by Congress, clearly those funds will need to be restored. These are four immediate funding problems that must be addressed in a continuing resolution before October 1 and for the remainder of FY2011. If the Administration has a plan to deal with these issues, it would be helpful if you could share it with us. If there is no plan, you can appreciate our anxiety that this is an indication of a lack of seriousness about achieving the goals of the 1251 program on a timely basis. It is not acceptable for the program to fall behind in its first year.

This leads to the second and even more serious concern about FY2012 and the remainder of the 10-plus-year plan. Your letter notes that the 10-year projection of cost is only that, and that it is premature to adjust the baseline or to present a final budget for the two most costly facilities. I do not disagree. What I respectfully request, however, is that the 1251 plan be updated as more refined data permit and in view of the reality that it is already clear that original cost projections for the Chemistry Metallurgy Research Replacement (CMRR) facility and the Uranium Processing Facility (UPF) are woeffully understated; this is the inescapable conclusion of the recent trips, which you mentioned in your letter, that I have taken to key NNSA facilities. According to the lab directors and plant managers, and Administration personnel, by the end of this September, we will know the "should cost" projections for the CMRR and the UPF – the two most expensive capital projects in the modernization of the nuclear weapons enterprise.

> http://www.senate.gov/~kyl/ PRINTED ON RECYCLED PAPER

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August 19, 2010

## Hnited States Senate WASHINGTON, DC 20510-0304

While I do not suggest these will be the final costs, I am reliably informed that they will be far more realistic projections, by definition, of the facility costs than the Administration has thus far factored into its budget planning documents (e.g., the 1251 plan of the FY11 FYNSP). Failure to acknowledge this now and provide updates as to current BUT NOT FINAL budget projections raises questions about the Administration's long-term commitment to the program and risks negative reaction from Congress when the true (and significantly larger) costs are sent up for appropriation.

Not only will congressional visibility into this ongoing process avoid that problem, I believe seeing a more realistic projection is key to the Senate's confidence that the Administration is fully committed to the full modernization program. And since these projects are the most conducive to being paid for up front, the sooner these "should cost" projections are available, the sooner the Administration and Congress can determine whether and how to pay for them in view of the significant benefits that guaranteed funding and accelerated engineering and construction bring to the nuclear weapons enterprise and the taxpayer. It is neither necessary nor wise to wait two more years as you suggest.

Lastly, while I have heard that elements of the 1251 plan will be revised as circumstances warrant, I haven't seen any indication that that is being done. As you recall, I recommended 12 critical terms of reference for a more thorough 1251 plan to you and Senators Kerry and Lugar in a memo on July 28<sup>th</sup>, and asked that an update of that plan be done to inform the FY12 budget and to share with the Senate before it is asked to ratify the New START treaty. I hope this is being done.

None of the matters I have discussed should delay consideration of START. I appreciate your discussion of Russian attitudes and would simply reiterate that, the sooner concerns I've raised are addressed, the easier it will be to conclude START consideration. I suggest our staffs meet before Congress returns to session, and I assure you of my intention to deal with these issues constructively.

Sincerely

JON KYL United States Senator

cc: Senator Joseph Lieberman Senator Lindsey Graham

## Mello Aff #2, Par 4e

## DESPITE GOP GAINS, ADMIN. STILL URGING LAME-DUCK 'NEW START' VOTE Clinton Says 'We Have Enough Votes,'

but Questions Remain About Schedule

Though Republican gains in the Senate during the midterm elections last week could potentially complicate the Obama Administration's push to have the New Strategic Arms Reduction Treaty ratified during a post-election legislative session, Secretary of State Hillary Clinton said last week that she believed there are at least 67 Senators willing to vote in favor of ratifying the arms control pact. That would be enough to ratify the treaty, and last week the Obama Administration renewed its push to have the Senate consider the treaty during a lame-duck session later this month, with President Barack Obama, the Pentagon and Clinton touting the urgency of the vote. "We believe we have enough votes to pass it in the Senate," Clinton told reporters in New Zealand during a Nov. 3 press conference with politicians there. "It's just a question of when it will be brought to the vote. It may be brought-and it would certainly be my preference that it be brought in any lame-duck session in the next several weeks. And that is what I'm working toward seeing happen. But we'll have to wait and work with the Senate and the leadership when they come back for that session."

At a separate event Nov. 4, Obama noted that arms control agreements with the Soviet Union typically receive strong bipartisan support and urged Senate ratification of the treaty, saying it would "send a strong signal to Russia that we are serious about reducing nuclear arsenals." He added: "We've made great progress when it comes to sending a message to Iran that they are isolated internationally, in part because people have seen that we are serious about taking our responsibilities when it comes to nonproliferation," he said. "And that has to continue."

In reductions to be made over the next seven years, the treaty would cap the size of the U.S. and Russian strategic deployed stockpiles at 1,550, down from the 1,700-2,200 range allowed by the Moscow Treaty, and would limit the number of deployed and reserve strategic delivery vehicles to 800 with a maximum of 700 missile launchers and bombers allowed to be deployed at one time. It would also reestablish verification and transparency measures that have been lacking since the START Treaty expired Dec. 5. The treaty will last 10 years. The initial START treaty expired Dec. 5, taking with it the verification and monitoring provisions that each country uses to keep an eye on each other's nuclear arsenals.

## **GOP Gains Complicate Ratification**

In recent weeks, several factors have complicated the potential consideration of the treaty during the lame-duck session. The GOP picked up six Senate seats in the Nov. 2 mid-term elections, including one Senator who will be seated before the lame-duck session because of a special election. That could certainly provide more ammunition for Republicans to argue that the vote should be pushed back until the 112<sup>th</sup> Congress is convened in January, when the Administration would need even more Republican votes to reach the 67 votes needed for the treaty's ratification. The Administration has also not yet updated its modernization plans to Congress in order to answer key questions that have been raised by Republicans.

Moscow politicians also began to waver in their support for the treaty last week as a Russian committee backtracked and withdrew its endorsement of the treaty. The Duma International Affairs Committee had signed off on the pact, but the withdrawal of its endorsement reflects Russian concerns about the treaty's ratification in the U.S. Senate as well as portions of the resolution of ratification that was passed by the Senate Foreign Relations Committee in September, including language on missile defense and prompt global strike. The Duma has always been expected to wait until the Senate ratifies the treaty before acting on its own. "The presidents of Russia and of the U.S. have set the task of synchronizing all procedures concerning the new START treaty. Nevertheless, now we have to speak not only about synchronizing efforts to keep up with the deadlines, but of synchronizing the contents as well," Duma International Affairs Committee Konstantin Kosachev said last week, according to Russia Today.

## Should the 'New Guys' Make the Decision?

With the start of the lame-duck session looming, there is considerable uncertainty about whether the treaty will be part of the agenda. Sen. Richard Lugar (R-Ind.), the ranking member on the Senate Foreign Relations Committee and the treaty's strongest Republican supporter, appeared to lower expectations a week before the elections when he suggested that the treaty was not a high priority for Republicans and Democratic Senators and that "people just simply are not prepared to discuss it." The election results didn't do much to diminish that opinion.

Baker Spring, a nuclear weapons policy expert with the Heritage Foundation, suggested that the significant turnover in the election provides ample reason for a vote to be delayed on the treaty. He also said it's unprecedented for the Senate to vote on a major strategic nuclear arms treaty with the Soviet Union or Russia during a lame-duck session. "If you're going to have a 10-year treaty it seems to me that it's appropriate that the new guys are the ones that make the decisions on that," Spring said. That opinion was countered by Arms Control Association Executive Director Daryl Kimball, who said that Administration has answered any questions that Senators might have, including questions dealing with missile defense, prompt global strike and modernization. "There is no substantive reason why New START shouldn't be considered," Kimball said. "There is not a substantive problem with the treaty that enough Republicans have cited as reason to defeat it. If there's a vote, it would in all likelihood be passed by a wide margin."

#### **Could Delay Endanger Modernization?**

Kimball suggested that delaying a vote on the treaty could endanger the deal that is emerging on modernization of the nation's weapons complex and arsenal. The Administration said earlier this year that it would need \$80 billion over the next decade for the NNSA's weapons program, a figure that Vice President Joe Biden acknowledged in September would increase when the Administration updates Congress on its modernization plans this fall. That increase is largely due to an expected rise in the cost of the Uranium Processing Facility planned for the Y-12 National Security Complex and the Chemistry and Metallurgy Research Replacement-Nuclear Facility planned for Los Alamos National Laboratory. "If the Senate Republican leadership for some reason refuses to allow the New START Treaty to come to a vote, the fragile consensus that has emerged over the last year in support of increased funding for the weapons complex could fall apart," Kimball said. "The Obama Administration may not be able to convince Democrats in the House and the Senate to continue to increase the funding if the New START Treaty and eventually the Comprehensive Test-Ban Treaty are not going forward."

Sen. Jon Kyl (R-Ariz.) has been the GOP point man on nuclear modernization and the New START Treaty and though the Administration may not need his specific vote in support of the treaty, observers believe his cooperation-and cooperation from Senate Minority Leader Mitch McConnell (R-Ky.)-in allowing the treaty to come to the floor is essential. Biden is expected to meet with Kyl before the lame-duck session to provide an update to the modernization plan. Without Republican cooperation, there is little chance that Democratic leaders will risk valuable floor time during the lame-duck session on the treaty, said David Culp, a pro-arms control lobbyist with the Friends Committee on National Legislation. "We think we have the votes and the real problem is getting floor time," Culp said. "But if the Republican leadership doesn't want it to come up, they could do all kinds of things to block it."

#### **Brooks: 'Nail the Deal Down Now'**

Former NNSA Administrator and START negotiator Linton Brooks suggested that Republicans accept the deal and cooperate with the Administration. "If I were Senator Kyl, who I believe is key here, I would figure I've gotten everything I'm going to get and I would nail the deal down now," Brooks said. "If the deal goes away I think the funding eventually goes away. I think it is a package deal." Kyl and other Republicans are seeking a greater commitment from the Administration on modernization, and Spring suggested one way to strengthen that commitment would be to amend the Senate Foreign Relations Committee's resolution of ratification with language mandating that the heads of appropriate Congressional committees, like the authorizing and appropriations committees that oversee the National Nuclear Security Administration's budget, sign off on the modernization plan. That couldn't happen, however, until the 112th Congress convenes next year, Spring conceded. "I'd feel much more comfortable if all the relative parties that have purse-strings in this issue were on the same sheet of paper at the start of this process," he said.

Kimball, however, said the Administration had done as much as it could already to demonstrate its commitment to modernizing the NNSA's weapons complex. "Senator Kyl is holding this entire treaty up until such time that he's personally satisfied by what the FY11 and FY12 NNSA budgets look like and probably he's looking for some more guarantees of some kinds about the out-years," Kimball said. "The reality is the Administration has put forward a bigger budget than any previous Republican administration has proposed or been able to deliver on and if there are cost increases for the UPF and CMRR then a future Congress should look at it and decide whether they want to spend more money on that, or a levy project in Iowa."

—Todd Jacobson

## NNSA SEEKING OPTIONS FOR TRANSFER OF KANSAS CITY PLANT HOME

With construction of a new home for the National Nuclear Security Administration's Kansas City Plant underway, contractor Honeywell Federal Manufacturing & Technologies has begun to formally look into options for the plant it will leave behind in several years. Honeywell released a Request for Information last week soliciting input from industry on potential uses of the 1940s-era site that could reduce the cost of preparing the site for a new owner to less than the \$85 million the NNSA is currently budgeting for the disposition of the facility. The NNSA currently shares the Bannister Federal Complex with the General

November 8, 2010

## Mello Aff#2 Par 4g

Management of those projects, and others, is only one part of the contracting reform effort that has been proposed. There are two other portions of the potential contract: an enterprise services piece that would serve to standardize project management practices across the NNSA's eight sites, and a professional services piece that would include advisory services, project oversight, project planning, document and presentation development, and inspection and validation. "What this allows us to do is shift responsibility for project execution from the M&O contractors to a new integration management and executing contractor," Hickman said. "It allows the M&O contractors to focus on their core competencies which is research, development, operations and maintenance, and then we allow the IME contractor to focus on construction excellence. That's one of the keys that will get us off the GAO's High Risk List. We don't like to be there. If I can get all of our projects performing to the point where they're meeting their design requirements, their cost and schedule requirements, and the GAO just doesn't want to take us off the list, I'm OK with that, because I've got the proof that we're doing what we said we were going to do when we said we were going to do it and the project does what it said it was supposed to do."

#### Hickman: There's Value Even Without Big Projects

Hickman suggested that if UPF or CMRR-NF were not part of the scope of work, the contract could still have a lot of value to the NNSA. The NNSA previously said the contract could consist of all construction projects worth more than \$5 million, which could include projects like the High Explosive Pressing Facility at the Pantex Plant, a project that will cost more than \$100 million, but nowhere near the \$5 billion estimates currently surrounding UPF and CMRR-NF. "It'll be harder to do if there are two major sites operating under the same requirements we've had in the past," Hickman told NW&M Monitor. "We can wean them with this in place. Although that scope may be limited for us, we're changing the complex. The opportunities if we get the contract in place for the contracting community is pretty substantial over the next 15 years. It might not be what we've got on the table today; we've got to look to the future."

—Todd Jacobson

## COSTLY URANIUM PROCESSING FACILITY ALSO A NECESSITY, HARENCAK SAYS

Are Multi-Year Appropriations an Answer to GOP Concerns on Out-Year Funding for Major NNSA Projects?

KNOXVILLE, Tenn.—It's big, it's complex, it will take more than a decade to complete, and it's going to be costly. But the Uranium Processing Facility that is planned for the Y-12 National Security Complex is also necessary, according to Brig. Gen. Garrett Harencak, the National Nuclear Security Administration's top military official, who offered a spirited defense last week of the multi-billion-dollar facility that will eventually consolidate enriched uranium work at Y-12 into one building. "Is UPF going to be expensive? Yes, yes it will," Harencak said at the Energy, Technology and Environmental Business Association annual conference last week in a speech interspersed with one-liners, anecdotes and stories from the boisterous former fighter pilot. "However, look at what it will provide for us. Look at what it does. Then you ask yourself, one of the gravest threats to America is the nuclear threat and Y-12 and UPF will be there to defend it. Is that not worth it?"

Over the last year, a consensus has largely emerged that the facility is needed, shifting discussion to the cost of the UPF and its billion-dollar counterpart, the Chemistry and Metallurgy Research Replacement-Nuclear Facility at Los Alamos National Laboratory. A 2007 cost range pegged the cost between \$1.4 and \$3.5 billion, but Sen. Bob Corker (R-Tenn.) offered a hint of the potential price tag earlier this year when he said it could cost between \$4 billion and \$5 billion. Budget documents peg the price of CMRR-NF near \$4 billion, but most observers expect that the true cost of the facility is north of \$5 billion.

The price tag is important because Senate Republicans have questioned whether the Administration has committed enough money over the next decade to modernize the nation's nuclear weapons complex and arsenal, which is key to the GOP support for the New Strategic Arms Reduction Treaty with Russia. Vice President Joe Biden acknowledged in September that the \$80 billion pledge for the NNSA's weapons program over the next 10 years wouldn't be enough, and with a potential vote on the treaty looming (*see related story*), the Administration has been working to update its modernization plan to sway Republicans that are worried about the long-term funding commitment for UPF and CMRR-NF.

## 'Front-Funding' Considered for UPF, CMRR-NF?

One option that is being discussed among Administration officials involves front-funding the multi-billion-dollar projects, a drastic step that isn't typically used for Department of Energy projects. In August, NNSA Defense Programs chief Don Cook told *NW&M Monitor* that the unique financing approach was "one of the many things we consider in projects," adding: "There is always an option to do more of the forward financing, either as an entire block, or as a bigger fraction, and that has been done for some things in the Department of Defense like [air craft] carriers, but that really is entirely up to Congress." Last

week, Harencak would not comment on the discussions. "We've been asked to not talk about budget things right now even though it's a critical time as we're going through the [White House Office of Management and Budget] process," Harencak said.

While the approach would appear to address the concerns of Republicans worried about the long-term funding for the projects, it's not necessarily expected to be popular among Congressional appropriators, who aren't likely to yield the yearly control of a project easily. "Part of the way Congress ensures good management of projects is through the budgeting of them," a Congressional aide told NW&M Monitor. "If you give that up, what's your recourse for when things are going wrong?" The aide also indicated that there are serious issues with committing significant amounts of money to projects that aren't even mature enough to have a solid performance baseline. "You're going to commit out-year funding to two projects that don't have a cost estimate?" the aide said.

#### 'We're Pretty Close to Having it Right'

Harencak emphasized that the NNSA was doing all it could to contain the cost of the facility. Indeed, Cook has asked the Department of Energy's Office of Cost Analysis and the Pentagon's Cost Analysis and Performance Evaluation group to examine the facilities as the agency refines its budget request for Fiscal Year 2012. "We're doing everything in our power to contain the cost of UPF and CMRR," Harencak said. "We're just going to do it. ... At some point you just have to say it's going to cost some money, we're going to have to invest to do it. We have got to have this facility. It's as simple as that." Harencak also addressed a review that has been initiated by Energy Secretary Steven Chu to examine the requirements for the facility, which could also impact the cost. "I'm 100 percent confident in the work we've already accomplished," Harencak said on the sidelines of the conference. "I look forward to the Secretary's review. We're always looking for better ways to do things. I'll tell you, we've had a great team working this and I'm pretty confident that we're pretty close to having it right. On the other hand, it's always great to have another set of eyes looking at it and giving us ways to improve."

But in the end, Harencak reiterated the need to move quickly on modernizing the nation's nuclear deterrent, expressing that vision in a style all his own. "Would it be nice if we lived in a world where forest animals live in trees and talk to each other and wear funny suits? Yeah, that would be nice if there was such a place where we wouldn't need to worry about nuclear security, but unfortunately that place doesn't exist," Harencak said. "But we live in a world with threats, we live in a world with evil people that are threatening my children, your children, our families, our friends, our way of life, and we have to defend against that."

-Todd Jacobson

## LENGTH OF LAME-DUCK SESSION TO DECIDE FATE OF RUSSIA '123 AGREEMENT'

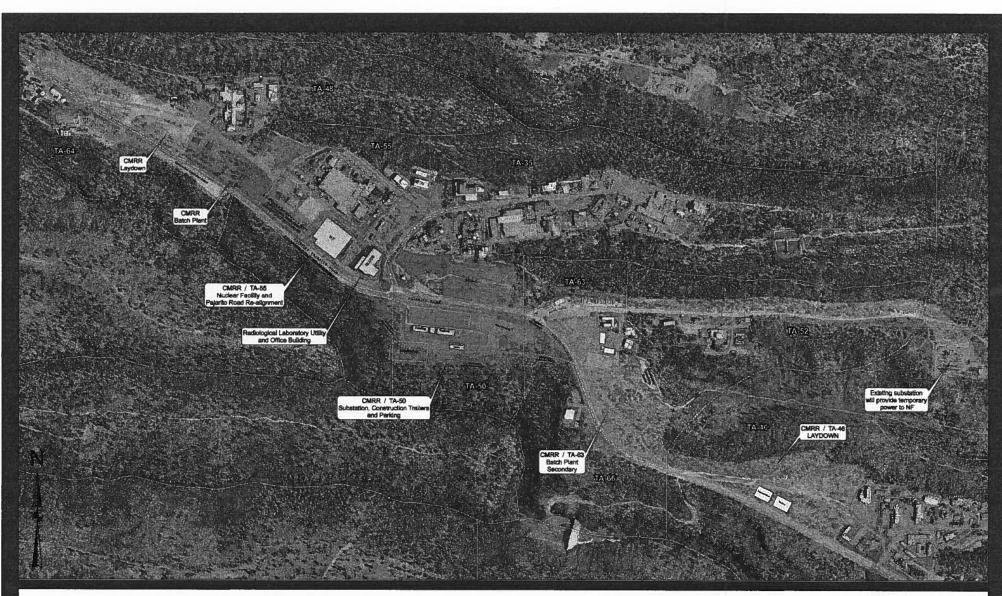
Congress will determine the fate of a civil nuclear cooperation deal with Russia over the next several weeks in a rather unconventional fashion: by deciding how long it stays in Washington for a lame-duck session. Entering the lame-duck session that starts Nov. 15, the so-called '123 agreement' has spent 75 continuous legislative days before both chambers of Congress, which means the House and Senate will need to remain in session another 15 legislative days to help the Obama Administration avoid the embarrassment of having to submit the treaty to Congress for a third time. The Bush Administration pulled the agreement from consideration in 2008 due to the Russian-Georgian conflict.

The treaty would last for 30 years before being revisited and would allow the transfer of nuclear technology and expertise between the countries—after the granting of a special permit from the Department of Energy. Like all 123 agreements, the pact will enter into force once it spends 90 continuous legislative days before Congress, an intermittent clock that stops ticking when either the House or Senate isn't in session for more than three days at a time. That has made calculating the date the treaty will enter force difficult—even for the Administration.

#### **A Moving Target**

When the agreement was submitted to Congress May 10, Administration officials believed they had left just enough time for it to sit before both chambers for 90 consecutive days of legislative review. However, several events changed the legislative clock: the Senate recessed two days earlier than anticipated before the Independence Day break, and the House trimmed seven days from its planned summer session, deciding to leave town July 30 rather than Aug. 6 like its Senate counterparts. Both chambers left Washington more than a week earlier than expected in the fall for the elections, further slowing the pace of the agreement's legislative clock. "It certainly makes you wonder, if this was that important to the Administration why did they wait so long to submit it?" a House GOP aide told *NW&M Monitor*.

The exact date the treaty could enter into force remains unclear and could very well be determined by how the



## **CMRR Nuclear Facility Project Overview**



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October 2010 Aerial Photography - September 2008

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Final EIS for the Chemistry and Metallurgy Research Building Replacement Project at Los Alamos National Laboratory

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| Population dose<br>(person-rem per<br>year)            | 0.04                                  | 0.000024   | 1.9   | 0.0011   | 2.0  | 0.0012   | 1.9  | 0.00  | )11              | 2.0  | 0.0012                 |
| MEI (millirem<br>per year)                             | 0.006                                 | 3.5 × 10-9   | 0.33  | 2.0 × 10 <sup>-7</sup>                           | 0.35   | 2.1 × 10 <sup>-7</sup>                               | 0.33   | 2.0 × | 10 <sup>-7</sup> | 0.35   | 2.1 × 10 <sup>-7</sup> |
| Average<br>individual dose<br>(millirem per<br>year)   | 0.0001                                | 7.9 × 10 <sup>-11</sup>  | 0.006   | 3.8 × 10-9                                       | 0.006  | 4.0 × 10 <sup>-9</sup>                               | 0.006  | 3.8×  | 10-9             | 0.006  | 4.0 × 10 <sup>-9</sup> |
| Total worker<br>dose (person-rem<br>per year)          | 22                                    | 0.013  | 61  | 0.04   | 61   | 0.04   | 61   | 0.0   | 4                | 61   | 0.04                   |
| Average worker<br>dose (millirem<br>per year)          | 110                                   | 0.00007  | 110   | 0.00007  | 110  | 0.00007  | 110  | 0.000 | 007              | 110  | 0.00007                |
| Hazardous<br>chemicals                                 | None                                  |  | N   | lone   | None   |  | None   |       |                  | None   |                        |

## Table 2-3 Summary of Environmental Consequences for the CMR Replacement Project



Mello Aff #2, Par 22; erratum in affidavit: should be 138,000 cubic yards of radioactive waste plus 1,235,000 lbs. of hazardous waste, over presumed 50 year life.

| Resource/Material<br>Calegories             | No Action<br>Alternative | Alternative 1<br>(relocate CMR AC<br>and MC operations<br>and MC operations | Alternative 2<br>(relocate CMR AC<br>and MC operations<br>to TA-6) | Alternative 3<br>(relocate CMR AC<br>and MC operations<br>to TA-55) <sup>b</sup> | Alternative 4<br>(relocate CMR AC<br>and MC operations<br>to TA-6) |  |
|---|--------------------------|---|--|--|--|--|
| Accidents (Maximu                           | m Annual Cancer Risk,    | LCF)  |  |  |  |  |
| Population                                  | 0.0024                   | 0.0005  | 0.00048  | 0.0005   | 0.00048  |  |
| MEI   | 4.3 × 10 <sup>-6</sup>   | 1.5 × 10 <sup>-6</sup>  | 3.3 × 10 <sup>-7</sup>   | 1.5 × 10 <sup>-6</sup>   | 3.3 × 10 <sup>-7</sup>   |  |
| Noninvolved<br>worker                       | 0.00019                  | 5.0 × 10 <sup>-6</sup>  | 0.000054   | 5.0 × 10 <sup>-6</sup>   | 0.000054   |  |
| Environmental<br>Justice                    | No disproportionally h   | igh and adverse impacts   | on minority or low-inco  | ome populations  |  |  |
| Waste Management<br>impact.                 | (cubic yards of solid wa | aste per year unless oth  | erwise indicated): Wa  | aste would be disposed o   | of properly with small   |  |
| Transuranic<br>waste                        | 19.5                     | 61 61   |  | 61   | 61   |  |
| Mixed<br>Transuranic<br>waste               | 8.5                      | 27  | 27   | 27   | 27   |  |
| Low-level <sup>f</sup><br>radioactive waste | 1,217                    | 2,640   | 2,640  | 2,640  | 2,640  |  |
| Mixed low-level radioactive waste           | 6.7                      | 26  | 26   | 26   | 26   |  |
| Hazardous waste<br>(pounds per year)        | 10,494                   | 24,692  | 24,692   | 24,692   | 24,692   |  |
| Transportation                              |                          |   |  |  |  |  |
| Accidents <sup>s</sup>                      | Dose                     | Dose -  | Dose +   | Dose   | Dese   |  |
| MEI (rem per<br>year)                       | $7.7 \times 10^{-7}$     | 0   | 0.00015 0  |  | 0.00015  |  |

LCF = latent cancer fatality; MEI = maximally exposed individual member of the public.

\* Relocate CMR AC and MC and actinide research and development activities to a new CMRR Facility consisting of an administrative offices and support functions building and Hazard Category 2 and 3 buildings.

<sup>b</sup> Relocate CMR AC and MC and actinide research and development activities to a new CMRR Facility consisting of only Hazard Category 2 and 3 buildings.

<sup>e</sup> Construction impacts are based on Construction Option 1, which is bounding.

<sup>d</sup> Acreage reflects building footprints, parking lot, and new roads as applicable.

\* CMR operations would require no additional workers beyond what was projected by the Expanded Operations Alternative analyzed in the LANL SWEIS. Increased CMRR Facility operations at LANL would require up to 550 workers. This would be an increase of 346 workers over current requirements. The Expanded Operations Alternative presented in the LANL SWEIS addressed the impact of this increase in employment.

<sup>f</sup> Volumes of low-level radioactive waste includes solid waste generated by the treatment of liquid low-level radioactive waste generated by CMR operations.

Population transportation impacts would be bounded by the normal operation and accident impacts evaluated for the various alternatives.





## Mello Aff #2, Par 25

## Table 2. Continued

| Resource        | CMRR EIS Basis for Impact Analyses   | Current CMRR Project Plans  | Potential Consequences of Current CMRR Project Plans <sup>1</sup>   |  |  |  |  |
|-----------------|--|---|---|--|--|--|--|
| Potential Relea | Potential Release Sites (continued)  |   |   |  |  |  |  |
|                 |  | MDA C (located east of CMRR Project areas)<br>was investigated for potential impacts to planned<br>and proposed actions in TA-55. No<br>contamination from this PRS exists in the CMRR<br>Project areas in TA-55 or nearby areas currently<br>being considered under the planned and proposed<br>actions.<br>There are no PRS concerns in the areas proposed<br>for the TA-48 construction trailers. LANL<br>activities will be managed to control impacts to<br>the PRS. |   |  |  |  |  |
| Resource Use a  | and Conservation   |   |   |  |  |  |  |
| Concrete        | Total: 11,255 cu yds of concrete<br>required<br>• RLUOB: 3061 cu yds<br>• NF: 3194 cu yds<br>• Other Construction: 5000 cu yds | <ul> <li>Total: 387,633 cu yds of concrete required</li> <li>RLUOB: 16,800 cu yds</li> <li>NF: 120,833 cu yds, structural concrete</li> <li>NF: 250,000 cu yds, lean concrete fill (for soil stabilization and seismic protection)</li> <li>Represents an additional 126,378 cu yds of structural concrete and 250,000 cu yds of lean (soil stabilization) concrete from what was anticipated in the CMRR EIS.</li> </ul>   | The CMRR-NF has a significantly higher requirement<br>for concrete from what was bounded in the CMRR EIS,<br>which is a direct result of unavoidable changes in the<br>structural design to address increased seismic protection<br>concerns. The CMRR EIS stated that the NF would be<br>constructed to minimize risks (to workers, public, and<br>environment) from geologic hazards including<br>earthquakes. To meet this requirement, a site-specific<br>seismic hazard analysis was conducted; its findings<br>resulting in increased structural design and soil<br>stabilization requirements for the NF, which, in turn,<br>requires more concrete. |  |  |  |  |

## IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF NEW MEXICO

## THE LOS ALAMOS STUDY GROUP,

## Plaintiff,

v.

Case No. 1:10-CV-0760-JH-ACT

UNITED STATES DEPARTMENT OF ENERGY; THE HONORABLE STEPHEN CHU, in his capacity as SECRETARY, DEPARTMENT OF ENERGY; NATIONAL NUCLEAR SECURITY ADMINISTRATION; THE HONORABLE THOMAS PAUL D'AGOSTINO, in his Capacity as ADMINSTRATOR, NATIONAL NUCLEAR SECURITY ADMINISTRATION,

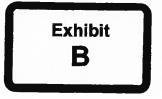
## Defendants.

## **AFFIDAVIT OF J. Gilbert Sanchez**

State of New Mexico ) ) ss. County of Santa Fe )

J. Gilbert Sanchez, under penalty of perjury, hereby declares as follows this 3 day of November 2010:

- I am a citizen of the United States and resident of the Pueblo de San Ildefonso, 34 O TAH NAH PO, Santa Fe, NM. I have lived here all my life except when serving in the USAF and attending college.
- 2. I am a Tewa person enrolled in the Pueblo de San Ildefonso and former governor, having



served in 1985-1986. I am also the creator and a former director of the Pueblos Environmental Office, Cultural Preservation Office, and Economic Development Department.

- 3. I am currently an active member of the South Kiva participating within our Ceremonies and Dances. However, I am not representing the South Kiva by any means in my making these statements.
- 4. I am currently a member of the Los Alamos Study Group and have been actively involved in the Study Group and their campaigns, as time has allowed, since 1992.
- 5. In this case, the Los Alamos Study Group has asked that the Department of Energy and National Nuclear Security Administration to comply with the National Environmental Policy Act ("NEPA") by analyzing the impacts of construction and operation of the Chemistry and Metallurgy Research Replacement Nuclear Facility ("CMRR-NF") and connected projects along the Pajarito Corridor, and of reasonable alternatives to these projects. I fully support the effort to require such NEPA analysis.
- 6. As an individual I am active in protecting our ancestral lands which include those lands on which the Los Alamos National Laboratory (LANL) is sited. I stand to protect our Sacred Space and Sites that are located within the laboratory's boundaries, as our Tribal Leadership has not come forth to do so. I have stood up against the continued destruction of our ancestral dwellings and the loss of live streams used for ceremony. I stand against the destruction of any more of our Sacred Space and Sites that will then be used for the creation of weapons of mass destruction for the sole purpose of ending human life as we

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know it here on our Earth Mother. As an example of furthering my concern of the damage being done to our Scared Space and Sites, while serving as Governor of the Pueblo de San Ildefonso I managed to have our Tribal Council do an on-site review of the impacts from the work being done at LANL. We found that many of our Scared Space and Sites had been damaged or destroyed, possible impacts on the many plants and animals that are essential for our continued survival or[and] used in our ceremonies, as medicine, or harvested for our food, and the wood we gather for heating and cooking. Since I was eighteen (18) years of age I have worked to educate my fellow Tribal Peoples regarding the harm that has come and is likely to come from LANL.

- As a long time resident of the Pueblo de San Ildefonso and an active member of the South Kiva, I have a strong personal interest in the proposed Chemistry and Metallurgy Research Replacement Nuclear Facility (CMRR-NF).
- 8. The digging of such a large hole to accommodate this building on such a Scared Space and Site has been a mystery to me. How can the Government of the United States and the Department of Energy (DOE) continue to destroy our most Scared Space and Sites under the guise of Homeland and National Security when there are laws in place for the very protection of such Sacred Space and Sites? How can this country protect a Religious State while at the same time destroying our most Sacred Space and Sites? Is this not a violation not only of Law but also of Human Rights?
- 9. What about LANL's past record of non-compliance and adherence to their own safety standards as they have acknowledged over the years in the newspapers? I would not

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want any type of contamination from this site to further impact our Sacred Area that has[is] adjoined[to] LANL since the latter's creation. LANL has yet to do a real and complete evaluation of the impacts from their past activities or on-going work to any degree to assure me that their activities have not damaged the Pueblos' Lands.

- 10. I would personally be affected adversely if the CMRR Nuclear Facility project goes forward in its present form. I reside nearby and I regularly drive on roadways that will be impacted to get to work, to take others to work or school, to enjoy the environment, harvest animals and natural resources, and practice my spirituality. I would suffer these harms if the project continues as now planned:
  - a) A high level of construction activity with attendant noise, dust, fumes, traffic, nighttime lighting, and offensive spoils and debris would intrude upon my life, economic livelihood, experience, and spiritual practices on a regular basis for approximately a[serval] decade[s].
  - b) Thousands of haulage trucks would come and go on and near Pajarito Road, NM 502, NM 40, and NM 4, at all hours near my home for more than a decade, spreading dust and diesel fumes and creating road hazards to me, my family, tribal members, and others.
  - c) Huge spoil piles would accumulate on account of the deep hole planned to be dug underneath the site of the CMRR-NF, which will require excavation of 400,000 cubic yards of crushed tuff. These piles will probably be visible from locations outside Pajarito Canyon and will be visually very offensive.

- d) Nighttime lights at the construction site are already in use. They are extremely bright and are visible even from the northern part of Los Alamos. These lights are highly intrusive upon the peace and solitude of rural New Mexico. They interfere with nocturnal wildlife and are inappropriate and harmful intrusions into my tribe's sacred sites and our night sky.
- e) Two cement plants, multiple lay down yards, site excavation, and haulage of excavation spoils will generate airborne dust that will be carried by winds in all directions, including at times east toward my home, and into Tewa sacred sites and archeological sites downwind. This will go on for at least a decade.
- f) My entire life I have visited the sacred sites of my people around Pajarito Canyon.
  With the construction activity going on, the location will be subject to noise, dust, fumes, and the regular passage of heavy machinery, and such visits will no longer be enjoyable or even possible.
- g) My entire life I have visited locations around the Pajarito Canyon to harvest game and collect wood and plants and other natural resources. The traffic, noise, dust, fumes, heavy machinery, lights, and other disturbances that this facility will generate during construction and after completion will inhibit the very wildlife that we are now taking from within our Sacred Area. The plants, waterways, and our food pathways will be harmed by this undertaking. It will further damage the migration route of the deer, elk, and other animals that I and my tribe harvest. Visits to these areas for their economic and cultural resources will no longer be enjoyable or even possible.

h) I live within 10 miles of the CMRR-NF site. My location is downwind from the CMRR-NF site. If the CMRR-NF is constructed and goes into operation, it will be the location of experimental and production usage of highly radioactive materials, including enriched uranium and plutonium. These materials are extremely hazardous and damaging to human health. Future normal operations of the CMRR-NF will cause some releases of these substances, which will reach me through the air or ground water. There is also a significant risk of an accident, causing such elements to be released into the air or water and to be inhaled or ingested by me.

These impacts will cause serious injury to me, and they threaten to continue for a decade[s] if not more. For such reasons, I submit that a thorough environmental analysis of the CMRR-NF project and other projects ongoing on the Pajarito Plateau is essential so that the responsible agencies may consider all reasonable alternatives before any such projects may go forward.

Further affiant saith not:

The foregoing is signed and declared under penalty of perjury to be true and correct.

Dated: 104. 3, 3010 A. Gilbert Sanchez

SUBSCRIBED AND SWORN TO before me this \_\_\_\_\_\_ day of November 2010, by J. Gilbert Sanchez.

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My Commission Expires:

**Notary Public** 



Case 1:10-cv-00760-JCH-ACT Document 13-3 Filed 11/12/10 Page 1 of 7

# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF NEW MEXICO

### THE LOS ALAMOS STUDY GROUP,

### Plaintiff,

v.

## Case No. 1:10-CV-0760-JH-ACT

UNITED STATES DEPARTMENT OF ENERGY; THE HONORABLE STEPHEN CHU, in his capacity as SECRETARY, DEPARTMENT OF ENERGY; NATIONAL NUCLEAR SECURITY ADMINISTRATION; THE HONORABLE THOMAS PAUL D'AGOSTINO, in his Capacity as ADMINSTRATOR, NATIONAL NUCLEAR SECURITY ADMINISTRATION,

### Defendants.

) SS.

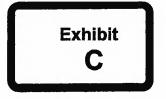
#### **AFFIDAVIT OF Jody Benson**

State of New Mexico

County of Los Alamos

Jody Benson, under penalty of perjury, hereby declares as follows this <u>day of</u> November 2010:

I am a citizen of the State of New Mexico and reside in the county of Los Alamos.
 I work with the Earth and Environmental Sciences Division at Los Alamos National Laboratory;
 our Division has teams located in TA-3 as well as TA-51 and TA-48 on the Pajarito Corridor. I
 am writing these views as a private citizen; however I am active in the community of Los



Alamos, and serve on the Los Alamos Public Schools Board of Education, the Juvenile Justice Advisory Board, and the Los Alamos Public Schools Foundation. I am a member of the Executive Committee of the Pajarito Group of the Sierra Club, a supporter of the Pajarito Environmental Education Center, and active in the League of Women Voters.

2. The Los Alamos Study Group ("LASG") has asked that the Department of Energy and National Nuclear Security Administration comply with the National Environmental Policy Act ("NEPA") by analyzing the impacts of construction and operation of the Chemistry and Metallurgy Research Replacement-Nuclear Facility ("CMRR-NF") and connected projects along the Pajarito Corridor, and of reasonable alternatives to these projects, in a new EIS for the project. I fully support LASG's effort to require new, complete NEPA analysis.

3. LASG takes the position that further expenditures and efforts in the design and construction of these projects should be suspended while this NEPA analysis is done. I agree with this position, because I have observed that there has already been significant land-clearing south of Pajarito Rd on TA-55/50, and I believe that the continuation of these projects while this EIS is prepared will make it increasingly difficult for DOE and NNSA to objectively assess environmental impacts and select the best approaches to these projects and their alternatives in an objective manner. There is no point to NEPA analysis or to NEPA if federal decisions are made before the environmental analysis of alternatives is adequately completed.

4. I would personally be affected adversely if these projects go forward in their present form. I reside in Los Alamos, work at LANL, and am frequently in the vicinity of the Pajarito Road projects. I drive and bicycle on Pajarito Road, State Route 4, and State Route 502, roads which must be used for heavy haulage, deliveries, and commuting to and from the Pajarito

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Corridor construction sites, as well as State Route 501, the main "Hill" road. I perceive the following harms to the economy and community values of Northern New Mexico, specifically Los Alamos, if the project continues as now planned:

A. Traffic Impacts on St. Rd. 4: The current NEPA document does not include a regional assessment of traffic impacts. The thousands of haulage trucks would likely necessitate upgrading State Rd 4 from "the Y" (juncture of NM 502 and NM 4) to Pajarito Rd, including widening the road and upgrading the traffic signals. Unless these requisite upgrades are paid for by the project, they would commit our very limited State transportation money to a very small, and currently inadequate five-mile stretch of road and four intersections.

B. Traffic Impacts of the Parking Lot on the Truck Route and Sandia Canyon: Included in traffic impacts: The proposed parking lot in Sandia Canyon (the Truck Route) from which buses will transport the workers to the Pajarito Corridor must be readdressed. Thousands of workers commute to LANL every day. Including another thousand cars, then creating a parking lot below TA-55 would not only destroy a large ecosystem, but require significant upgrades to the Truck Route. The traffic to the proposed parking area would impede normal LANL-commuter traffic; a signal would be required.

C. Need for a regional traffic assessment that includes an analysis of the benefits of a shared commuter parking area (e.g., at one of the casinos), and establishing a commuter-bus system from those parking lots that already exist. This would reduce excessive damage to the fragile Pajarito Plateau ecosystem as well as to commuters who are likely to experience delays, broken windshields, and other hazards and harms. Project funding should include leasing parking.

D. Housing: There has been no assessment on impacts to the surrounding communities that will be required to supply what will probably be short-term housing. Questions unaddressed include: how many non-resident workers will be hired? How much new housing, of what kind, will be required (i.e., low-income rentals, single-person housing, moderate family-housing rentals, moderate homes for ownership, high-end homes)? It is critical that communities understand the salary levels of craft/construction workers in order to plan for housing.

E. Developing Open Space and Green Space for Housing: The question of providing housing, especially short-term, is critical in that Los Alamos has very limited developable land available; the local government is currently mapping which public lands are available for housing. In the development of the Los Alamos Comprehensive Plan, the community was adamant in its desire to protect the majority of public land as green space. Developing all lands currently designated as public for housing, especially if the land is developed for short-term rentals, is contrary to the Comprehensive Plan.

F. Workers' Children in Area Schools: The impact of the proposed 1000 new workers on the schools has not been addressed. Questions that must be assessed are: How many students, and of what ages, will be moving into which area? This is, of course, important for the schools to plan whether and when to request portables. The cost of preparing for, moving, installing, and providing utilities for portables is a significant impact on school districts that are already under duress from funding cuts that have increased over since 2008. In addition, portables are in short supply in NM; these buildings may need to be acquired from other agencies or other states, a situation that could have a long lead-time. In addition, how many foreign

nationals would be hired, (a necessary question to be able to plan for a possible increase in English Language Learners)?

G. Local Projects' Needs for Concrete vs. CMRR: The impact that the hundreds of thousands of cubic yards of concrete required for the CMRR will have on any of the other construction projects in northern NM has not been addressed. Los Alamos residents passed a \$40-million bond to build new school facilities during the next five years. The money is only for these five years; the projects that must be completed during this time include: Los Alamos High School (a new three-story replacement for A, B, C, and D wings), extensive reconstruction and new construction for Los Alamos Middle School (and a possible sixth-grade academy), and an entire new classroom wing (and possible pre-school) for Aspen Elementary School. The schools construction requires concrete. The increased demand for more than 300,000 cubic yards of concrete needed by the CMRR project could not only drive up cement and aggregate costs thus making the Los Alamos School Projects reduce the extent of their construction, but could even make concrete unavailable altogether for some critical periods, thus not only impeding the schools construction, but possibly preventing it all together. It is essential that the issue of the availability of concrete be mitigated.

5. The ways that I will be personally and negatively affected if the CMRR-NF continues ahead without a new environmental impact statement, including scoping include the following;

A. I will not be able cycle on Pajarito Road at all during its closure. Cycling on Pajarito Road, NM 502, NM 4, and possibly other area roads will become dangerous and unenjoyable. Heavy haulage trucks and other construction traffic will physically endanger

cyclists with flying debris and dust, exhaust fumes, and potential collisions, and this traffic will detract from the environment and roads we enjoy;

B. Construction will generate excessive dust and noise that will affect me at my place of work, likely at my home, and very likely while traveling about;

C. Construction lights will impact the night sky above my home, place of work, and in wildlife areas and recreational areas I frequent. They will also likely disrupt the life-systems of nocturnal wildlife;

D. I work with the youth of the community, with the schools and with juvenile justice issues, and know that new, young drivers will inevitably exhibit very poor judgment in dealing with the large construction vehicles on area roadways, and thus cause an excess of accidents;

E. The wetlands in Pajarito Canyon, as well as surrounding areas that are likely to be impacted by construction activities—traffic, noise, airborne dust pollution, fumes, light pollution—provide habitat to diverse wildlife including chorus frogs, spade-foot toads, many species of lizards and snakes, badger, fox, coyotes, bobcats, many well-loved species of birds including roadrunners, hawks, and flycatchers, and many other species that will either become victims of the traffic, or will lose their habitat to the disruption of the traffic and construction. I frequently visit and enjoy wildlife areas proximate to the Pajarito Corridor construction projects and my experience and possibly even ability to do so will be impaired.

6. These losses to my personal quality of life (as well as to that of the community and to the wildlife) will cause serious injury to me, and threaten to continue for a decade during construction. and in the case of the loss of Los Alamos community public lands and the impacts

to the environment and its wildlife, for as long as I am likely to live. For these reasons, I submit that a very thorough and complete new environmental analysis of the CMRR-NF project and other projects ongoing in the Pajarito Corridor, including all reasonable alternatives, is essential before any such projects may go forward so that the responsible agencies may consider the alternatives in a fully objective manner.

Further affiant saith not:

The foregoing is signed and declared under penalty of perjury to be true and correct.

02 November 2010 Dated:

rdy Benson

Jody Benson

SUBSCRIBED AND SWORN TO before me this A day of November 2010, by Jody

Benson.

Notary Public

My Commission Expires: 12012-

# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF NEW MEXICO

## THE LOS ALAMOS STUDY GROUP,

#### Plaintiff,

v.

# Case No. 1:10-CV-0760-JH-ACT

UNITED STATES DEPARTMENT OF ENERGY; THE HONORABLE STEPHEN CHU, in his capacity as SECRETARY, DEPARTMENT OF ENERGY; NATIONAL NUCLEAR SECURITY ADMINISTRATION; THE HONORABLE THOMAS PAUL D'AGOSTINO, in his Capacity as ADMINISTRATOR, NATIONAL NUCLEAR SECURITY ADMINISTRATION,

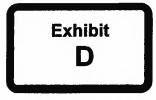
Defendants.

### **AFFIDAVIT OF BOB PEURIFOY**

State of Texas ) ) ss. County of Kerr )

Bob Peurifoy, under penalty of perjury, hereby declares as follows this 1<sup>st</sup> day of November 2010:

1. My qualifications to address matters involving nuclear weapons are as follows. I spent 39 years at Sandia National Laboratories, all in the weapon business. When I retired in March 1991, I was the vice president for technical support involving such activities as safety and reliability assessments, stockpile surveillance, effects testing at the NTS, development and remote range testing, military liaison, etc. My previous responsibilities included directing the



Sandia/Albuquerque weapon development program. Five of the eight weapon types now in the

enduring stockpile were designed in my organization. I spent four years at Sandia/Livermore.

During the period 1952-1991 I was involved in the design of:

- The Mark 5 and Mark 7 bombs.
- The first generation of hydrogen bombs, to include the Mark 14, Mark 15, Mark 17, and Mark 21.
- The warhead (W49) for the first generation land-based ballistic missiles, i.e., the Atlas, Jupiter, Thor, and Titan.
- The W68 for the Mark 3 weapon for the Poseidon weapon system.
- The W76 for the Mark 4 weapon for the Trident weapon system.
- The W78 for the Mark 12A weapon for the Minuteman 3 weapon system.
- Several modifications of the B61.
- The W80 warhead for the air-launched cruise missile.
- The W85 warhead for the Pershing 2 weapon system.
- The W88 warhead for the Mark 5 Trident weapon system.

I was a participant in several joint AEC/ERDA/DOE studies with the DoD. Some examples:

- "Funding and Management Alternatives for ERDA Military Application and Restricted Data Functions," January 1976, chaired by General A.D. Starbird; with D.R. Cotter, ATSD (AE).
- "Long-Range Planning Group," 1980, chaired by General A.D. Starbird.
- "The President's Blue Ribbon Task Group on Nuclear Weapons Program Management," 1985, William Clark, chairman.

Prior to my retirement I was designated as the technical representative for the Department of Energy in a 1990 nuclear weapon safety report established by the Committee on Armed Services, House of Representatives of the 101<sup>st</sup> Congress. After my retirement, I co-authored with Sid Drell a paper on "Technical Issues of a Nuclear Test Ban," printed in the 1994 Annual Review of Particle Science. During the period January 1993 through July 1999, I was a member of the University of California National Security Panel. I was a consultant for a 1995 JASON summer study related to nuclear weapon testing, JSR-95-320. I was a consultant for a 1999 JASON fall study on "Nuclear Weapon Remanufacture, JSR-99-300." I co-authored with Sid Drell and Raymond Jeanloz a February 19, 1999, article in *Science* titled "Maintaining a Nuclear Deterrent Under the Test Ban Treaty."

2. I make this affidavit in support of the Los Alamos Study Group's Motion for Preliminary Injunction.

3. The CMRR project involves the construction of two facilities. The first, the Radiological Laboratory, Utility, and Office building (RLUOB), is nearing completion. This building will provide office and lab space needed to continue the study of plutonium behavior. The primary purpose of the proposed second building, the Nuclear Facility, is to increase LANL's capacity to make plutonium pits. There are different views regarding the justification for this production facility. Nowhere have I found a concise, objective description justifying its need.

4. The JASON review of studies conducted by the Los Alamos National Laboratory (LANL) and Lawrence Livermore National Laboratories (LLNL) regarding plutonium warhead core ("pit") aging<sup>1</sup> provided an independent evaluation of the scientific credibility of the laboratory studies. The conclusion of the JASON report is that most plutonium pit types have credible lifetimes of at least 100 years. The oldest deployed pits will reach 100 years of age in approximately 2080.

5. No nuclear explosive ("device") has ever been retired due to pit aging.

6. Since 1980, at least 200 pits from the active stockpile have been destructively evaluated for signs of aging. To the best of my knowledge no pit aging problems have been

<sup>&</sup>lt;sup>1</sup> JASON, The Mitre Corporation, "Pit Lifetime," JSR-06-335, 20 November 2006, <u>http://www.lasg.org/JASONs\_report\_pit\_aging\_ocr.pdf</u>.

reported.

7. No Life Extension Projects (LEPs) for stockpile warheads and bombs have involved the pit.

8. The lab directors have provided 14 annual written warhead/bomb assessments. All these assessments have been favorable overall. All warheads and bombs have been recertified on each occasion.

9. With the deployed nuclear stockpile of today or smaller, and a National Nuclear Security Administration (NNSA) and lab-endorsed 100-year pit life, a steady-state pit production capability of 60 "diamond-stamped" pits per year would satisfy all stockpile needs. If properly maintained and managed, LANL's PF-4 facility could meet this production requirement without the CMRR-NF. If PF-4 cannot be maintained in a safe, productive operating condition, I suggest that the location of a new production facility might better be located at the Savannah River Site (near Aiken, South Carolina; my first choice) or Pantex (near Amarillo, Texas; my second choice).

10. No pit production is currently planned in the LEP context. While it is important to maintain a *de minimus* ability to produce pits, pit production enabled by CMRR-NF is not needed to maintain U.S. nuclear weapons for decades to come. As a result, the Nuclear Facility might just sit there with nothing to do.

11. Beyond question, there is no national security cost to a delay of a few years in Nuclear Facility construction.

Bob Peurifoy, Affiant, being first duly sworn states on oath, that all of the representations

in this Affidavit are true as far as the Affiant knows or is informed, and that such Affidavit is true, accurate and complete to the best of Affiant's knowledge and belief.

Dated: November 1, 2010.

**Bob Peurifoy** 

SUBSCRIBED AND SWORN TO before me this 1<sup>st</sup> day of November, 2010, by Bob Peurifoy.

Notary Public My Commission Expires: 08/22/2012.