

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 1st 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 101st 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”) aging¹ 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

¹ JASON, The Mitre Corporation, “Pit Lifetime,” JSR-06-335, 20 November 2006, http://www.lasg.org/JASONS_report_pit_aging_ocr.pdf.

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).

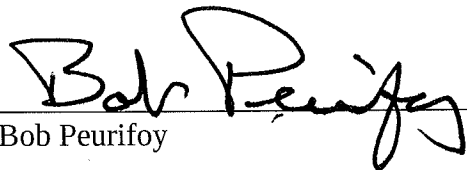
10. No pit production is currently planned in the LEP context. While it is important to maintain a *de minimus* ability to produce pits, pit production enabled by CMRR-NF is not needed to maintain U.S. nuclear weapons for decades to come. As a result, the Nuclear Facility might just sit there with nothing 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

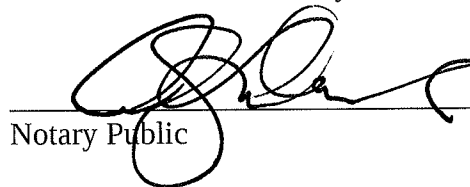
in this Affidavit are true as far as the Affiant knows or is informed, and that such Affidavit is true, accurate and complete to the best of Affiant's knowledge and belief.

Dated: November 1, 2010.



Bob Peurifoy

SUBSCRIBED AND SWORN TO before me this 1st day of November, 2010, by Bob Peurifoy.



Notary Public

My Commission Expires: 08/22/2012

