UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION



Department of Energy National Nuclear Security Administration Washington, DC 20585

June 16, 2009

OFFICE OF THE ADMINISTRATOR

The Honorable A.J. Eggenberger Chairman Defense Nuclear Facilities Safety Board 625 Indiana Avenue, NW, Suite 700 Washington, D.C. 20004-2901

Dear Mr. Chairman:

This letter transmits the final *PF-4 Ventilation System Evaluation* and other documents related to the implementation of the Defense Nuclear Facilities Safety Board Recommendation 2004-2, *Active Confinement Systems*, as requested in your January 13, 2009 letter. Specifically, you requested the following deliverables as described in the Department of Energy (DOE) Implementation Plan for Recommendation 2004-2:

- 8.6.3: A site office facility-specific Ventilation System Evaluation Report for the Plutonium Facility at the Los Alamos National Laboratory (LANL)
- 8.6.5: Program Secretarial Office concurrence with and approval of the upgrades in coordination with the Central Technical Authority

Additionally, you requested a report summarizing planned physical modifications and upgrades for the Plutonium Facility, including plans for funding, a schedule for completion, and the approach to be used to ensure that best project management practices are applied in implementing the upgrades. These deliverables are enclosed, and are briefly described below.

Enclosure (1) is the original PF-4 Ventilation System Evaluation dated November 17, 2006. This document was reviewed by DOE's Independent Review Panel (IRP), established under the DOE 2004-2 Implementation Plan, as well as the Chief of Defense Nuclear Safety (CDNS). Enclosure (2) is the October 18, 2007, transmittal of the combined IRP/CDNS report from the Los Alamos Site Office (LASO) to LANL. Enclosure (3) is the revised Table 5.1 from the PF-4 Ventilation System Evaluation which addressed the IRP/CDNS comments. The final Ventilation System Evaluation resulted in a recommendation from LANL, endorsed by LASO, to improve PF-4's nuclear safety posture by transitioning to an active confinement strategy over a five-year period. Enclosure (4) is the March 26, 2009, memorandum from LASO to the Deputy Administrator for Defense Programs which forwarded the "Report on Improving the Plutonium Facility Safety Posture". This report provides the summary of planned physical modifications and upgrades for the Plutonium Facility, including plans for funding and schedules for completion (where established), as requested in your letter.



Matter transmitted contains Unclassified Controlled Nuclear Information. When separated from enclosures, this transmittal document does not contain UCNI. The list of planned upgrades and modifications in Enclosure (4) is much broader than those determined to be needed through the PF-4 Ventilation System Evaluation alone. Many additional projects were identified as needed to improve the safety posture during the recent update to the TA-55 Documented Safety Analysis (DSA), and the corresponding Safety Evaluation Report (SER). LASO has documented its basis for risk acceptance in this recently issued SER, and the results of the PF-4 Ventilation System Evaluation are incorporated within the final DSA/SER. For this reason, some modifications identified as needed to address gaps in the confinement ventilation evaluation, completed prior to the final DSA, may have subsequently been determined as not required to meet the overall safety strategy and goals under the final approved DSA/SER.

The potential cost for the planned upgrades discussed in Enclosure (4) is estimated to be in the range of \$40 to \$80 Million. The schedule for completion is contingent on the availability of construction funding for the TA-55 Reinvestment Project, currently planned for fiscal year 2011. Several of the planned improvements are underway; others require completion of system adequacy analysis or other evaluations as prerequisites to installation work packages and high fidelity cost and schedule estimates. An integrated project plan to implement the planned improvements described in Enclosure (4) is required to be submitted as a condition of agreement (COA) to the recently approved TA-55 SER. This plan is expected to include more detail for near-term actions, and less detail on the longer term actions. Upon approval from the National Nuclear Security Administration (NNSA), this plan will become a safety basis requirement that will replace the COA. The plan will be periodically updated and will be used to drive the required improvements and identification of out-year budget needs.

Enclosures (1) through (3) to this letter satisfy Deliverables 8.6.3 and Enclosure (4), combined with this letter, serves as Program Secretarial Officer concurrence with, and approval of, the proposed upgrades to the PF-4 confinement ventilation system, in coordination with the Central Technical Authority, thus satisfying Deliverable 8.6.5. NNSA is committed to support improvements to the nuclear safety posture at PF-4, and will closely monitor and balance priorities with available resources to ensure continued safe operations.

If you have any questions concerning this letter or its enclosures, please contact me or have your staff contact Kim Loll at (202) 586-8955.

Enclosures

Sincerely,

Thomas P. D'Agostino Administrator

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