

[DOE LETTERHEAD]

February 29, 1996

The Honorable John T. Conway
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, N.W.
Suite 700
Washington, D.C. 20004

Dear Mr. Chairman:

On February 13, 1996, the Department of Energy (DOE) issued its Revision 1 of the Implementation Plan (IP) for Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 93-6. The IP focuses on ensuring that the Department maintains the capability to conduct safe dismantlement, modification, assembly, and testing operations.

Deliverable A. I.A, "A description of how archiving and surveillance results, including significant findings and relevant safety hazards analysis, will be used to update the weapon-specific WSSs ," is due February 29, 1996. Based on the Defense Programs Headquarters review, the determination was made that Deliverable A. 1 A is not ready for formal transmittal to the DNFSB in time to meet the February 29, 1996, due date. The deliverable will be ready for transmittal approximately March 29, 1996.

Should you have any questions, please contact me at (301) 903-2410.

Sincerely,

Victor Stello, Jr.
Principal Deputy Assistant Secretary
for Quality Management
Defense Programs

[DOE LETTERHEAD]

The Honorable John T. Conway
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, N.W.
Suite 700
Washington, D.C. 20004

Dear Mr. Chairman:

On February 13, 1996, the Department of Energy (DOE) issued its Implementation Plan for

Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 93-6 Revision 1, which required the Department to issue quarterly progress reports. Enclosed is the first quarterly report for calendar year 1996, which contains an update of all activities occurring during the reporting period that ended on March 31, 1996.

Should you have any questions concerning the quarterly report, please contact Mr Richard C. Crowe, Associate Deputy Assistant Secretary for Military Application and Stockpile Management, on (301) 903-4221.

Sincerely,

Victor Stello, Jr.
Principal Deputy Assistant Secretary
for Safety and Quality
Defense Programs

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2 Attachments:

DOE NV Operations Office Annual Test-Readiness
Exercise/Activity Plan

Archiving the Processes of the Los Alamos National
Laboratory Nuclear Test Program

1.0 Activities

This section of the report provides a brief discussion of actions being taken in the Weapons Operations, Testing, and Archiving areas during the quarter ending March 31, 1996

1.1 Pantex

Deliverable A.3 was provided to the DNFSB under separate cover dated February 2, 1996

Deliverable A.1.A was provided to the DNFSB under separate cover dated March 26, 1996.

Incorporation of safety related data from the archiving and surveillance programs continues for the W56 and W69 Weapon Safety Specifications (WSS). Issue B of the W56 WSS and Issue D of the W69 WSS will be transmitted to DOE/HQ by April 30, 1996. After internal DOE Review of the WSSs, they will be transmitted to the DNFSB by May 30, 1996, as per the Recommendation 93-6 Implementation Plan.

1.2 Y-12

Deliverable B.1 was provided to the DNFSB under separate cover dated February 2, 1996.

Requirements in the Y-12 Plant portion of the Oak Ridge Knowledge Preservation Program Plan have been extracted, categorized, and organized in a documentation notebook. This information is in addition to the 93-6 Archiving and; retiree corps programs. A rationale for resolution of each requirement was developed and recorded. Where appropriate, an action plan was written which designated responsible organizations and planned completion dates. The notebook continues to be populated with appropriate supporting documentation as required action items are addressed and completed.

1.3 Nevada

Deliverable C. 1 was provided to the DNFSB under separate cover dated February 2, 1996. The completion report for JIGSAW-95 Assembly was provided to the DNFSB under separate cover dated March 4, 1996.

The fiscal year (FY) 1996 Annual Test-Readiness Exercise/Activity Plan is located at Attachment A- 1. As now intended for future years, this plan was adjusted to address planned readiness activities on a fiscal basis. The plan identified:

- Currently planned technical and other activities which will contribute to test readiness and the Key Positions and Functional Areas which will be involved;
- Planned readiness activities;
- Readiness Exercises; and
- Documentation of readiness activity, including contributions during REBOUND 1 and HOLOG

Nevada Operations Office (NV) completed a tasking by the Assistant Secretary for Defense Programs, to review test readiness and take actions or develop recommendations which, if implemented, will enhance test-readiness posture and the ability to reconstitute underground nuclear testing in the future, should that be required. This work was documented with the publication of *Enhanced Test Readiness for the Underground Nuclear Test Program*, dated February 1996. This report contains the following two volumes:

- Volume I contains an assessment of DOE readiness posture and highlights the importance of planned subcritical experiments, contains recommendations and identifies actions necessary to reduce the time required to conduct an underground

nuclear test, describes the testing process as accomplished prior to the 1992 moratorium, identifies significant activities necessary to preserve testing expertise, emphasizes specific ways to enhance response capability, and addresses special considerations which will be required after an extended moratorium.

- Volume II contains underground nuclear testing documentation and other information selected or developed to assist future personnel in accelerating response time following an extended moratorium. It also contains in-depth discussion on several topics in Volume I.

As a part of the NV Enhanced Readiness initiative, the 206th Containment Evaluation Panel (CEP) was conducted on February 29, 1996. This CEP reviewed QUARTZITE, a potential event addressed during the Enhanced Test Readiness project. This CEP contributed to readiness response capability and directly provided training and experience for members of the panel and support staffs.

Two meetings were conducted to address REBOUND 1 contributions to test readiness and plan the evaluation of results and documentation of these activities. Numerous actions which parallel those necessary for preparation of an underground nuclear test are being conducted through panels and normal Nevada Test Organization (NTO) activity. This subcritical experiment will be conducted to achieve the technical objectives for Stockpile Stewardship. Function-specific or integrated readiness exercises during REBOUND 1 are not planned. There will be, however, significant and direct contributions to test readiness. Some of the contributions are:

- Personnel will be active in their Key and Critical Positions in all of the ten Functional Areas, except Post Shot Drilling. Experiment control actions will be under an Experiment Controller and (D-1 and D-Day) include appropriate Test Control Center Activities.
- Appropriate designations, actions, reviews, approvals, and authorizations will be accomplished. Activities which parallel most of those necessary for preparation of an underground nuclear test are ongoing. Some of this activity is being accomplished through special panels to review containment and criticality, and other reviews and assessments are designed to ensure that the experiment is safely conducted and objectives are satisfied. The plan which identifies requirements and establishes the DOE/NV management process for subcritical experiments was in development during this period and will soon be published.

Lawrence Livermore National Laboratory (LLNL) initiated field operation for the HOLOG subcritical experiment. Operational planning and construction is proceeding substantially as with underground testing. Internal LLNL reviews of technical plans and progress are being conducted to assure compliance with LLNL standards, and to match the proposed DOE Order 5480.23-based authorization basis.

1.4 Archiving

The first Recommendation 93-6 Archiving TeleVideo Conference was conducted on March 19, 1996. This conference provided an update on what took place regarding Recommendation 93-6 Archiving during the quarter. A summary of the TeleVideo Conference was provided to the DNFSB on April 9, 1996.

Los Alamos National Laboratory (LANL) completed the document *Archiving the Processes of the Los Alamos National Laboratory Nuclear Test Program*, during the quarter and is located at Attachment A-2. This plan details the LANL approach to recovery of information relating to maintaining the capability to safely and effectively conduct an underground nuclear test at some future date. Over two dozen specific areas for documentation have been identified to date, and specific documentation outlines and personnel lists have been drawn up in twenty cases. A schedule of videotape sessions for FY 1996 has been determined. Three videotape sessions corresponding to three topics, were completed in the second quarter of this FY: Timing and Firing, Radiochemical Diagnostics Design, and Rack Design. Response to the sessions by retirees and present employees has been enthusiastic.

2.0 Meetings

Meetings held during this reporting period include:

- January 9-10, 1996 Underground Test (UGT) Process Review (Review and comment of Bechtel Nevada and Raytheon flow charts on the UGT process). Selected active and retired NTO representatives participated.
--Supports Subrecommendation 7--
- January 30, 1996 Subcritical Experiment Meeting (NV discussions on required analyses, standards, documentation, etc, for subcritical experiments).
--Supports Subrecommendation 7--
- January 30, 1996 REBOUND/HOLOG 1 Readiness Requirements Meeting (Discussions on readiness contribution and requirements during subcritical experiments) Participants were NV, Los Alamos National Laboratory, and Bechtel Nevada.
--Supports Subrecommendation 7--
- February 14, 1996 REBOUND 1 Readiness Assessment (NV discussions on requirements and status)
--Supports Subrecommendation 7 --
- February 28, 1996 Containment Review Assessment Meeting (Review and action on REBOUND - Experiment by Comment Review Panel)
-- Supports Subrecommendation 7--
- February 29, 1996 206th Containment Evaluation Panel (CEP meeting to categorize QUARTZITE, a potential Enhanced Test Readiness event).
--Supports Subrecommendation 7--
- February 29, 1996 Executive Management Team for Dismantlement met. (Recommendation 93-6 major milestones and plans for the upcoming TeleVideo Conference on archiving activities were discussed).

-- Supports Subrecommendations 1 and 6--

March 13, 1996 93-6 Archiving Conference Call --Supports Subrecommendation 5-

March 19, 1996 93-6 Archiving TeleVideo Conference
--Supports Subrecommendation 5--

March 19, 1996 93-6 Archiving TeleVideo Conference
--Supports Subrecommendation 5--

March 19, 1996 NTS Archiving Group Meeting (Discussion on status and how to proceed. Assignment of actions to overcome delays).
--Supports Subrecommendation 5--

Meetings planned for the second quarter of calendar year 1996 are as follows:

April 2-4, 1996 Nuclear Weapons Information Group meeting
--Supports Subrecommendation 5--

April 30, 1996 Executive Management Team for Dismantlement will meet.
-- Supports Subrecommendations 1 and 6--

May 1-2, 1996 Seven Year Weapon Related Activities Integrated Plan meeting will be held at Albuquerque Operations Office. (The prioritized - schedule for implementing Seamless Safety -21 and performing Safety Evaluations and Nuclear Explosive Safety Studies will be reviewed for all planned weapon activities) .
--Supports Subrecommendation 1--

May 8, 1996 93-6 Archiving Conference Call
--Supports Subrecommendation 5--

May 17, 1996 93-6 Archiving TeleVideo Conference
--Supports Subrecommendation 5--