



Department of Energy

Germantown, MD 20874-1290

April 18, 1996

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DNF SAFETY BOARD

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Dr. George W. Cunningham
 Defense Nuclear Facilities Safety Board
 625 Indiana Avenue, Suite 700
 Washington, DC 20004

Dear Dr. Cunningham:

STATUS OF DEPARTMENT OF ENERGY RESPONSES TO DEFENSE NUCLEAR FACILITIES SAFETY BOARD RECOMMENDATION 91-6

The Office of Oversight, Senior Radiological Protection Officer (SRPO), has completed a review of the status of Department of Energy responses to the Defense Nuclear Facilities Safety Board Recommendation 91-6. This review, a followup of the initial review conducted in March 1995, includes a review of the most recent (April 1996) revision of the draft "U.S. Department of Energy Management Action Plan in Response to Infrastructure Evaluation Team Recommendations." A copy of the SRPO report is enclosed.

Review of the Department's implementation of its response plan to the Board's Recommendation 91-6 is a continuing effort as part of the Department's oversight mission and its commitment to inform the Board.

If you have any questions, please contact me on (301) 903-3777, or Oliver D. T. Lynch, at (301) 903-3548.

Sincerely,

Glenn S. Podonsky
 Deputy Assistant Secretary
 Office of Oversight
 Environment, Safety and Health

Enclosure

cc w/enclosure:
 T. O'Toole, EH-1
 P. Brush, EH-1
 N. Goldenberg, EH-2
 O. Lynch, EH-2
 M. Whitaker, S-3.1
 J. Conway, DNFSB
 A. Anderson, DNFSB
 J. DeLoach, DNFSB

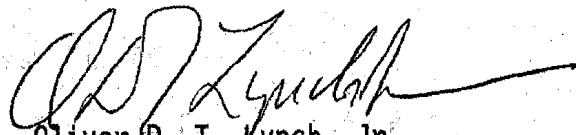


memorandum

DATE: APR 18 1996
REPLY TO: EH-2:Senior Radiation Protection Officer:Lynch:(301) 903-3548
ATTN OF:
SUBJECT: Status of DOE Responses to DNFSB Recommendation 91-6

TO: Glenn S. Podonsky
Deputy Assistant Secretary for Oversight, EH-2

As part of our ongoing effort to oversee the Department's radiation protection program, we have completed an update of the Department's response to Defense Nuclear Facilities Safety Board Recommendation 91-6, in accordance with the Department's implementation plan. Our initial review of the responses to Recommendation 91-6 was completed in March 1995. Our update provides the status of the responses as of October 31, 1995. However, we took the opportunity to review the Department's April 1996 draft Management Action Plan which had been provided to the Board's staff in response to the Infrastructure Evaluation Team Recommendations, one of the responses to Recommendation 91-6. The results of our review of the Management Action Plan are provided as Appendix B to the attached update report.



Oliver D. T. Lynch, Jr.
Senior Radiation Protection Officer
Office of Oversight
Environment, Safety and Health

Attachment

cc w/attachment:
N. Goldenberg, EH-2

**INDEPENDENT OVERSIGHT FOLLOWUP REVIEW OF THE
STATUS OF DEPARTMENT OF ENERGY RESPONSES TO
DEFENSE NUCLEAR FACILITY SAFETY BOARD
RECOMMENDATION 91-6**

INTRODUCTION

Purpose

The purpose of this report is to document the Office of Oversight's review of the Department of Energy (DOE) responses to Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 91-6. This was a limited scope review designed to determine the status of DOE's responses at specific points in time as a means of measuring progress toward completion of Recommendation 91-6 milestones.

Background

On December 19, 1991, the DNFSB sent Recommendation 91-6 to the Secretary of Energy for consideration. Recommendation 91-6 deals with radiological protection issues at DOE defense nuclear facilities. In a letter dated January 31, 1992, as amended on March 30, 1993, the Secretary accepted the Board's recommendation. The Department's response committed to provide an Implementation Plan to the Board that would address each of the Board's specific recommendations.

After several submittals, the Secretary submitted Revision 2 of the Recommendation 91-6 Implementation Plan. This revision was accepted by the DNFSB on July 2, 1993. The Office of Worker Protection Programs and Hazards Management, EH-52, is responsible for periodic reporting to the DNFSB on DOE's progress toward meeting Recommendation 91-6 commitments.

On February 13, 1995, the Deputy Assistant Secretary for the Office of Oversight designated a Senior Radiological Protection Officer (SRPO) and charged him with the responsibility to ensure that the Office of Oversight would critically examine the radiation protection program that DOE committed to develop in response to DNFSB Recommendation 91-6. The SRPO initiated a review of the status of DOE responses to DNFSB Recommendation 91-6 and produced an internal report on the status as of March 17, 1995. This review was updated as of October 31, 1995, and is reported herein.

RESULTS

This review found that significant additional progress was made between March 17 and October 31, 1995. However, some tasks are substantially behind schedule, and progress has been slow. Generally, the 1994 progress was slower than projected in 1993, mainly due to the focus placed by DOE and contractor radiological protection organizations on documenting their radiation protection programs as required by 10 CFR 835. The overall status of each specific recommendation is summarized below.

Specific Recommendations in DNFSB Recommendation 91-6

This review of the DOE response to specific recommendations is summarized in the following sections and in Table 1.

Table 1. Summary of Status of DOE Responses to DNFSB Recommendation 91-6

Specific Recommendation No.	Commitment Topic	Commitment Task Status
1	Radiological Protection Policy Statement	Completed
2	Radiological Protection Training Programs	17% Completed 61% In Progress 5% Canceled 5% Not Completed 11% Ongoing
3	Infrastructure Evaluation	Management Action Plan Under Development (4-96)
4	Examine Radiological Protection Resources	Management Action Plan Under Development (4-96)
5	Enhance Occurrence Reporting System	Completed
6	Compare Practices and Procedures with Standards	13% Completed 37% In Progress 50% Ongoing
7	Supplemental Measures Needed	13% Completed 37% In Progress 50% Ongoing

Specific Recommendation 1: The DNFSB recommended that the Secretary of Energy issue a formal statement of DOE's radiological health and safety policy. This policy statement was issued on June 21, 1993, completing this commitment.

Specific Recommendation 2: The DNFSB recommended that DOE review existing radiological protection training programs and develop and implement a plan for an expanded training program that would include consideration of seven specific elements (detailed in the recommendation).

The DOE response to specific Recommendation 2 is very extensive; only a brief summary is presented here. There are a total of 54 subparts (by the SRPO's count) of the response to specific Recommendation 2, of which 9 (17%) are "Completed", 33 (61%) are "In Progress", 3 (5%) are "Canceled", 3 (5%) are "Not Completed" (2.21, 2.24, and 2.30), and 6 (11%) are "Ongoing." None of the subparts reported as "In Progress" have met the originally scheduled milestones. The DOE response to this recommendation has been very protracted, and rescheduled milestones have also been missed. The status of the response is summarized in Appendix A.

Specific Recommendations 3 and 4: Specific Recommendations 3 and 4 both pertain to DOE's infrastructure for managing radiological protection, and were therefore addressed together. With respect to specific Recommendation 3, the DNFSB recommended that the Department critically examine its existing infrastructure for radiological protection program development and implementation at DOE Headquarters to determine whether resource, organizational, or managerial changes were needed. The Assistant Secretary for Environment, Safety and Health appointed an Infrastructure Evaluation Team (IET) for this purpose on September 15, 1993. The IET conducted its evaluation and provided its report to the Assistant Secretary on January 12, 1995. DOE has been considering the recommendations in the IET report for over a year. On June 28, 1995, a preliminary response to the recommendations was approved and was provided to DNFSB in July 1995. Following the announcement of the Strategic Alignment Initiative on August 3, 1995, a more complete response to the IET report was developed. The latest (April 1996) version of the "U.S. Department of Energy Management Action Plan in Response to Infrastructure Evaluation Team Recommendations," was provided to DNFSB and was reviewed by the SRPO. Comments on this plan are provided in Appendix B. We believe the April 1996 draft plan is acceptable, with minor revisions recommended.

With respect to specific Recommendation 4, the DNFSB recommended that the Department examine the corresponding radiological protection organizational units at DOE's principal operations and field offices and DOE contractor organizations to determine whether those organizations' radiological protection programs' infrastructure, responsibilities, and resources could be strengthened to expedite the implementation of radiological protection standards. A critical aspect of DOE's review was to be an assessment of management's involvement and effectiveness in implementing radiological protection programs and management's ability to communicate the steps to be taken to implement an effective radiological protection program to all levels within relevant DOE and contractor units, particularly within line organizations.

We have reviewed the status of specific commitments to respond to Recommendations 3 and 4. The status of each subpart of specific Recommendations 3 and 4 is summarized in Appendix A. In one case (3.6), EH-52

reported commitments completed, but this review found evidence of incomplete tasks as of October 31, 1995. Hence, the status is reported as "Not Completed" in the table in Appendix A.

Specific Recommendation 5: The DNFSB recommended that DOE focus its efforts relating to reporting of occurrences to make the occurrence reporting system a more useful tool for enhancing radiological health and safety at DOE facilities by emphasizing determination of root causes and management followup on lessons learned. The DOE response to specific Recommendation 5 has been reported by EH-52 as "Completed" and verified by the SRPO.

Specific Recommendations 6 and 7: Specific Recommendations 6 and 7 both pertain to comparison of DOE and other practices and were therefore addressed together. With respect to specific Recommendation 6, the DNFSB recommended that DOE compare a) its operating contractor practices and procedures, and b) DOE radiological protection standards with the guidance used by other government, commercial, and professional organizations. The documents DOE should use for this study and comparison were listed in the cited references.

With respect to specific Recommendation 7, the DNFSB recommended that after the study recommended in item 6, DOE identify any supplemental measures necessary or appropriate to compensate for the differences identified between practices that conform to the cited guidance and actual practices, and between the cited standards and procedures and DOE standards and procedures for radiological protection at defense nuclear facilities.

There are a total of 8 subparts in the response to specific Recommendation 6, of which one is "Completed", three are "In Progress", and four are "Ongoing." The status of each subpart of specific Recommendation 6 is summarized in Appendix A.

The Department committed to evaluate and report annually to the Secretary on progress toward full implementation of the requirements of 10 CFR 835 and the Radiological Control Manual. The 1993 report was provided to the Secretary on January 12, 1995. The 1994 report was approved and provided to the Secretary on December 6, 1995. The protracted production of these annual reports indicates a less than adequate priority assigned by DOE.

APPENDIX A

**SUMMARY TABLE
DOE RESPONSES TO DNFSE RECOMMENDATION 91-6**

Status as of October 31, 1995

SPECIFIC RECOMMENDATION NUMBER	Commitment Topic	Commitment Status
1	Policy Statement issued	Completed
1	Statement sent to DNFSE	Completed
1	Statement published in FR	Completed
2	Review of available training programs	Completed
2	Standard core training materials provided	Completed
2	RadCon training completed by December 31, 1994	In Progress
2	RCCC evaluation of RadCon training	In Progress
2	RCCC to accelerate and advance RadCon training	In Progress
2	Three committees for RadCon training	In Progress
2	RadCon training for Facility Representative	In Progress
2	Management training (5480.20)	In Progress
2	Management training (Article 651)	In Progress
2	Technical Support Personnel (Article 652)	In Progress
2	Planners (Article 653)	In Progress
2	Radiological Control Personnel (Article 654)	In Progress

SPECIFIC RECOMMENDATION NUMBER	Commitment Topic	Commitment Status
2	Radiographers and RGD Operators (Article 655)	In Progress
2	Emergency Response Personnel (Article 656)	Canceled
2	Tour Groups (Article 657)	Canceled
2	Plutonium Facilities (Article 661)	In Progress
2	Uranium Facilities (Article 662)	In Progress
2	Tritium Facilities (Article 663)	In Progress
2	Accelerator Facilities (Article 664)	In Progress
2	Contamination control for bio-med researchers	In Progress
2	Health and Safety Technicians	Canceled
2	Auditors and Inspectors	In Progress
2	Milestones for standard core training materials	Completed
2	RadCon training completed by December 31, 1994	In Progress
2	Milestones for additional standard core training courses	In Progress
2	Status reports to DNFSB	In Progress
2	Technical basis documents for each standard core training course	Completed
2	Technical basis documents for each refresher course	Completed
2	Technical basis documents for any additional courses	In Progress

SPECIFIC RECOMMENDATION NUMBER	Commitment Topic	Commitment Status
2	Criteria for post-training evaluation program	Completed
2	Post-training evaluation program distributed	Completed
2	Post-training evaluation program implemented	In Progress
2	Requests to upgrade and improve training materials	Ongoing
2	Post-training evaluations used to upgrade site-specific training courses	Ongoing
2	Oversight of program implementation and adequacy	Ongoing
2	Description of KSAs	Completed
2	Determine key radiation protection positions	Completed
2	Identify level of KSAs needed	Not Completed
2	Document describing KSAs	In Progress
2	Position descriptions for key positions	In Progress
2	RadCon performance criteria	Not Completed
2	Performance criteria in IDPs	In Progress
2	Compare KSAs of incumbents to criteria	In Progress
2	Compare training to KSAs to identify upgrades needed	In Progress
2	Upgrade courses or new courses needed	Ongoing
2	Identify supplemental training needed	In Progress
2	Interim measures identified	In Progress

SPECIFIC RECOMMENDATION NUMBER	Commitment Topic	Commitment Status
2	Supplemental training incorporated into IDPs	In Progress
2	KSAs evaluated by exam	In Progress
2	Impact of training on performance	Ongoing
2	Oversight evaluation of program performance	Ongoing
2	Criteria for retention of KSAs	Not Completed
2	Retention testing begun	In Progress
2	Corrective actions in IDPs	In Progress
3/4	Infrastructure Evaluation Team (IET) appointment	Completed
3/4	DNFSB notified of IET membership	Completed
3/4	IET assignments	Completed
3/4	IET evaluation	Completed
3/4	IET report	Completed
3/4	EH-1 review of IET report and confer with RCCC	Not Completed
3/4	EH-1 action on recommendations	In Progress
3/4	Corrective actions and schedules	In Progress
3/4	Oversight of DOE response to IET report	Ongoing
3/4	RadCon Manual Implementation Plans centralized	Completed
3/4	DNFSB provided with credentials of Oversight staff	Completed
5	EH staff and ORPS PM determined ORPS capabilities	Completed

SPECIFIC RECOMMENDATION NUMBER	Commitment Topic	Commitment Status
5	EH evaluation of use of ORPS information	Completed
5	Task force evaluation of ORPS use and capabilities	Completed
5	RCCC and ORPS PM review of task force recommendations	Completed
5	Task force report finalized	Completed
6/7	Technical basis document for RadCon Manual	Completed
6/7	Identify gaps in standards	Ongoing
6/7	Oversight assessment based on upgraded standards	Ongoing
6/7	Target dates for full implementation of RCM	In Progress
6/7	Annual report to Secretary on RCM Implementation	In Progress
6/7	Quarterly progress reports to DNFSB on 91-6	In Progress
6/7	RCCC evaluation of RCM implementation plans	Ongoing
6/7	Annual report to DNFSB on RCM implementation	Ongoing

NOTE: Specific commitments that have been verified as being complete are reported above as "Complete". Commitments for which work is continuing but not yet complete are reported as "In Progress". In three cases, the commitments were "canceled" and justified. In four other cases, EH-52 reported commitments completed, but this review found evidence of incomplete tasks as of October 31, 1995. Hence, the status is reported as "Not Completed". In six cases, continuing programs have been established to satisfy the commitments; these are reported in the table as "Ongoing".

APPENDIX B

OFFICE OF OVERSIGHT SENIOR RADIOLOGICAL PROTECTION OFFICER

INDEPENDENT OVERSIGHT REVIEW OF U.S. DEPARTMENT OF ENERGY MANAGEMENT ACTION PLAN IN RESPONSE TO INFRASTRUCTURE EVALUATION TEAM RECOMMENDATIONS

This appendix summarizes the independent oversight review of the Department of Energy (DOE) draft responses to the Infrastructure Evaluation Team (IET) recommendations. This review was based on the April 1996 version of the draft Management Action Plan that was provided to the Defense Nuclear Facility Safety Board. The review was conducted by the Office of Oversight, Senior Radiological Protection Officer.

General Comments:

The latest revision to the draft Management Action Plan is a significant improvement over previous versions. The April 1996 revision provides milestones, schedules, and actions to be accomplished, rather than a status report on planned actions. The latest revision does not attempt final or premature closure of issues (which are inappropriate for an action plan) and it establishes courses of action for resolution of recommendations.

The draft Management Action Plan still includes statements that "DOE actions have met recommendation __.", at the end of the discussion following each Recommendation. A statement to the effect of "DOE management has addressed Recommendation __ and a course of action has been established.", would be preferred. Then, on page 2, last paragraph, the sixth sentence should be modified accordingly.

Specific Comments:

On page 14, first full paragraph, the MAP cites the April - June 1995 Performance Indicator report, published in February 1996. This is a very long delay between data collection and publication for trying to demonstrate the effectiveness of the PIDS information system.

On page 14, second full paragraph, line 5, types A, B, & C accident investigations are cited. DOE is no longer conducting Type C accident investigations.

On page 14, third full paragraph, the last sentence discusses the availability of radiation exposure data on the EH TIS home page via the internet. The availability of radiation exposure records via the internet may violate the Privacy Act.

On page 23, under DOE Response, it is stated that "DOE does not agree that procurement of new systems and development of measurable goals are necessary." In the last paragraph, it is stated that "To correct these difficulties, DOE is enhancing existing systems and adding a number of systems ...", which seems

to contradict the first statement. In addition, the claim that measurable goals are unnecessary is not justified.

On page 30, the third paragraph, third sentence, beginning "The option of redress ..." is an awkward sentence that does not clearly express the thought. It should be revised.

On page 34, last line, the "... goal was December 1995." Was the goal met? If not, what is the new goal?