

**Department of Energy**

Richland Operations Office
P.O. Box 550
Richland, Washington 99352

JUL 28 1995

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

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DNF SAFETY BOARD

Dear Mr. Conway:

**DEFENSE NUCLEAR FACILITIES SAFETY BOARD (DNFSB) RECOMMENDATION 92-4
IMPLEMENTATION PLAN QUARTERLY STATUS REPORT**

Enclosed herewith is the subject report for the three month period ending June 30, 1995. This report discusses the status of commitments that were due during the second quarter 1995 and forecast status of commitments due during the third quarter 1995.

This report is submitted in accordance with Commitment Number 4.a in the 92-4 Implementation Plan.

If there are any questions, please contact Mr. E. W. Higgins, Director, Planning and Integration Division, on (509) 372-2500.

Sincerely,

A handwritten signature in cursive script that reads "Nadine M. Highland".

Nadine M. Highland
Chief Financial Officer

PID:EWH

Enclosure

QUARTERLY REPORT ON DEFENSE NUCLEAR FACILITIES SAFETY
 BOARD RECOMMENDATION 92-4 FOR THE PERIOD
 APRIL 1 - JUNE 30, 1995

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QUARTERLY REPORT ON DEFENSE NUCLEAR FACILITIES SAFETY
BOARD RECOMMENDATION 92-4 FOR THE PERIOD
APRIL 1 - JUNE 30, 1995

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DNFSB SAFETY BOARD

1.0 INTRODUCTION

1.1 PURPOSE

This report provides a status of the activities underway from April 1 to June 30, 1995, at the Hanford Site and at DOE-Headquarters regarding the topics contained in the *Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 92-4, Revision 1*.

1.2 QUARTERLY HIGHLIGHTS

- The TWRS Top-Level Systems Requirements Review (SRR) Report was completed and submitted to the DNFSB. The response to this report requires a TWRS SRR Action Plan. Several other 92-4 system engineering commitments are dependent on this Action Plan and will be rescheduled in accordance with the actions contained therein. The commitments are the revised Site and TWRS System Engineering Management Plans and their implementing procedures. The SRR Action Plan is scheduled to be submitted to DOE-Headquarters on July 24, 1995.
- The Letter of Direction to site participants regarding implementation of system engineering (Commitment 2.2.b2) and the Hanford Site Management System Directives (Commitment 3.6.a) were completed. These deliverables are currently in the process of being submitted to the DNFSB. The DOE-FM Report on DOD Systems Engineering Standards Review (Commitment 3.7.c) and the WHC staffing and training deliverables (Commitments 3.5.a, 3.5.b, and 3.5.c) were completed and submitted to the DNFSB.

1.3 REPORT FORMAT

The report documents the progress of activities initiated in response to the DNFSB Recommendation 92-4, Revision 1. The report is arranged in the same order as the *DNFSB Recommendation 92-4 Implementation Plan, Attachment B (DOE 1994)*, i.e., Sitewide Commitments, TWRS Program Commitments, and TWRS Project Commitments. Each commitment that was due or overdue during the April through June 1995 quarter and the next quarter (July through September 1995) is identified and followed by a description of the status of each commitment. Topics for each reported commitment are:

- Completion status of commitments due during the quarter and date that the deliverable was submitted to the DNFSB
- Forecast completion for commitments due in the subsequent quarter
- Other information as required to explain commitment status

In addition to this information, a Table of Commitments lists all DNFSB commitments contained in the plan. Shading on commitments indicate those commitments that have been submitted to the DNFSB.

1.4 TABLE OF COMMITMENTS

SITEWIDE COMMITMENTS

Commitment Number	Commitment/Deliverable Title	Plan Completion Date	Date Submitted to DNFSB	Status Note
2.2.a	(1) Draft Site Functions and Requirements (dated 01/10/94) and Addendums 1, 2, and 3 (2) Draft Architecture Synthesis Basis for the Hanford Cleanup System (3) Draft Systems Engineering Product Description Report for the Hanford Cleanup Mission	6/30/94	7/12/94	
2.2.b(1)	(1) Systems Engineering Implementation Plan based on FY 1995 Multi-Year Program Plan (MYPP) logic and planning for the site	11/15/94		
2.2.b(2)	(2) Letter of direction to affected site participants to include use of systems engineering in accordance with DOE policy to develop the technical baselines that will be used as the basis for MYPP updates	3/31/95		
3.6.a	Hanford Site Management System Directives	7/12/94 (Updates thru 2/1/95)	7/12/94	
3.7.d	Draft Site Systems Engineering Management Plan	3/31/94	7/12/94	
3.7.e	Final Site Systems Engineering Management Plan	Pending completion of External Review		
3.7.f	Draft Site SEMP Implementing Procedures	2/14/95		

TWRS PROGRAM COMMITMENTS

Commitment Number	Commitment/Deliverable Title	Plan Completion Date	Date Submitted to DNFSB	Status Note
2.4.a	Initial TWRS Systems Analysis Report reflecting the systems engineering work done to 10/31/93	10/31/93	4/1/94	
2.4.b	TWRS Detailed Preliminary Functional Analysis Report	1/18/94	4/1/94	
2.4.c	TWRS Top-Level Systems Requirements Review Report	1/31/95	4/95	
2.4.d	TWRS Technical Requirements Review Report	3/31/95		
3.2.a	TWRS Integrated Technology Plan	6/10/94	9/28/94	
3.3.a	DOE-RL and Hanford Contractor Staff Qualification and Training Process (Consistent with 93-3, Commitment 4.3)	10/31/94	11/17/94	
3.3.b	Hanford Performance-Based Training and Qualification Process (REF: 93-3 Commitment 4.3)	10/31/94	11/17/94	
3.3.c	DOE-RL Qualification and Training Evaluation and Assessment Process	10/31/94	11/17/94	
3.3.d	Report of Independent Assessment of RL and WHC TWRS Qualification and Training Process	10/21/94	10/21/94	
3.4.a	DOE-HQ (EM-36) Preliminary Staff Analysis Report	3/31/94		1
3.4.b	RL TWRS Preliminary Staff Analysis Report	8/26/94		1
3.4.c	DOE-HQ (EM-36) Individual Development Plans	10/31/94		2
3.4.d	RL TWRS IDPs (Training Requirements Matrix)	10/31/94	11/17/94	
3.4.e	RL TWRS Orientation Report documenting status and initiation of orientation	10/31/94	11/17/94	
3.4.f	HQ (EM-36) Orientation Report documenting status and initiation of orientation	10/31/94	11/17/94	

TWRS PROGRAM COMMITMENTS (continued)

Commitment Number	Commitment/Deliverable Title	Plan Completion Date	Date Submitted to DNFSB	Status Note
3.4.g	Final Staff Analysis Document	90 days after 93-3 Qualif Standards Delivery		
3.4.h	Report documenting completion of required technical training identified in IDPs and TRMs	RL: 8/31/95 HQ: 10/31/95		
3.5.a	WHC TWRS Staffing Analysis and WHC Position Qualification Standards	1/27/95	4/25/95	
3.5.b	WHC TWRS Individual Qualification and Training Plans	2/28/95	4/25/95	
3.5.c	WHC TWRS Selection Process Report documenting status and completion	3/17/95	4/25/95	
3.6.b	TWRS Management Systems Description (MSD) document and Policy Annexes	11/30/94	12/13/94	
3.6.c	Schedule for development and issuance of the WHC TWRS Management Plan and associated documentation	12/30/94	3/30/95	
3.7.a	TWRS Industry/Government Standards Review Report	12/14/93	4/1/94	
3.7.b	A letter report summarizing the SE Comparison Analysis	10/31/94	11/10/94	
3.7.c	DOE-FM Report on DOD Systems Engineering Standard Review	3/31/95	6/19/95	
3.7.g	Draft TWRS Systems Engineering Management Plan	3/31/94	3/31/94	
3.7.h	TWRS SEMP Implementing Procedures Schedule	Included in Commitment 3.6.c		4

TWRS PROGRAM COMMITMENTS (continued)

Commitment Number	Commitment/Deliverable Title	Plan Completion Date	Date Submitted to DNFSB	Status
3.7.i	Revised TWRS SEMP Schedule	Included in Commitment 3.6.c		4
3.8.a	Draft Configuration Management Plan that describes technical configuration control within the TWRS program	1/31/94	4/1/94	
3.9.a	TWRS Multi-Year Work Plan	9/30/94	10/94	
3.10.a	TWRS Quality Management Policy Annex	11/30/94	12/13/94	
3.10.b	TWRS Health and Safety Management Policy Annex	11/30/94	12/13/94	

TWRS PROJECT COMMITMENTS

2.4.e	MWTF Baseline Comparison Report	9/30/95		3
2.4.f	MWTF Independent Critical Design Review Report	Prior to start of construct		3
2.4.g	Aging Waste Transfer Line Baseline Comparison Report	11/30/95		
2.4.h	Cross-site Transfer Line Baseline Comparison Report	11/30/95		
2.4.i	Initial Retrieval Demonstration Baseline Comparison Report	11/30/95		
2.4.j	Initial Pretreatment Baseline Comparison Report	11/30/95		
2.4.k	Scheduled dates for each Project Independent Design Review	1/31/95	2/13/95	
2.4.l	Summary Report for each Standdown Review	1/13/94	4/1/94	

92-4 CONTINUING COMMITMENTS

Commitment Number	Commitment/Deliverable Title	Plan Completion Date	Date Submitted to DNFSB	Status Note
4.a	Quarterly Status Reports	Quarterly		
5.a	Revised 92-4 Implementation Plan	As required		
5.b	Discussions in Quarterly Status Reports	As required		

NOTES:

1. Commitments 3.4.a and 3.4.b (RL and HQ Preliminary Staff Analysis Reports will not be submitted to the DNFSB because they will be replaced by the Final Staff Analysis document (Commitment 3.4.g).
2. Commitments 3.4.c and 3.4.d (RL and HQ Individual Development Plans) could not be submitted to the DNFSB because of Privacy Act concerns. These documents are available at HQ and RL for DNFSB review.
3. The Multi-Function Waste Tank Facility (Project W-236A) will be phased out with the capability to reassemble a project team and complete construction of two tanks in the 200 West Area five years after a decision is made concerning what additional waste storage capacity is needed. (Reference RL letter, J. E. Kinzer, DOE-RL, to President, WHC, dated March 17, 1995, "Multi-Function Waste Tank Facility - Project 2-236A Decision Paper.")
4. These commitments have been detached from Commitment 3.6.c and are being scheduled separately. See Section 2.2, Commitments 3.7.h and 3.7.i.

**2.0 STATUS: COMMITMENTS DUE/OVERDUE DURING 2ND QUARTER 1995
AND FORECAST FOR 3RD QUARTER 1995**

2.1 SITEWIDE COMMITMENTS

COMMITMENT 2.2.b(1): SYSTEMS ENGINEERING IMPLEMENTATION PLAN BASED ON FY 1995 MULTI-YEAR PROGRAM PLAN (MYPP) LOGIC AND PLANNING FOR THE SITE. (DUE: November 15, 1994)

STATUS: The Systems Engineering Implementation Plan (SEIP) continues to be delayed due to ongoing changes at Hanford. These changes include: (1) Scoping the role of, and acquisition of, an Integrating Contractor who will perform much of the site system engineering work, (2) Adjustment of work scope and planning to reflect funding decreases, (3) The SEIP must be consistent with a Hanford Management Plan, which is currently being developed, and (4) The SEIP must be consistent with the TWRS System Requirements Review (SRR) Action Plans regarding interfaces between the site and the TWRS. The Action Plans are in the final stages of preparation. A system engineering activity logic network has been developed and work is continuing in accordance with that network. Also, a System Engineering Criteria Document containing the essential elements of the system engineering process that will be used at Hanford is in the final signature cycle. The SEIP is currently forecast for issuance by September 30, 1995.

COMMITMENT 2.2.b(2): LETTER OF DIRECTION TO AFFECTED SITE PARTICIPANTS TO INCLUDE USE OF SYSTEMS ENGINEERING IN ACCORDANCE WITH DOE POLICY TO DEVELOP THE TECHNICAL BASELINES THAT WILL BE USED AS THE BASIS FOR MULTI-YEAR PROGRAM PLAN (MYPP) UPDATES. (DUE: March 31, 1995)

STATUS: This direction is part of the Fiscal Year Work Plan (FYWP) 1996 direction to the contractors. The FYWP Direction Letter is complete and a copy is being submitted to the DNFSB.

COMMITMENT 3.6.a: HANFORD SITE MANAGEMENT SYSTEM DIRECTIVES. (DUE February 1, 1995)

STATUS: This commitment required completion of a set of Site Management System (SMS) Directives. Subsequent to this commitment the RL Site Manager required a review of all directives to reduce the amount of unnecessary requirements being imposed on the site work. As a result of that review four SMS directives were retained. These are:

- RLID 5000.1 Baseline Execution and Management Process
- RLPD 5000.1 Richland Operations Office - Site Management System

- RLID 5000.2 Richland Operations Office - Long Range Planning Process
- RLP 5000.6A Richland Operations Office Procedure - Change Control

The transmittal letter for the submittal of these directives to the DNFSB is in the signature cycle.

COMMITMENT 3.7.e: FINAL SITE SYSTEMS ENGINEERING MANAGEMENT PLAN. (DUE: Pending Completion of External Review)

STATUS: Work on this deliverable is on hold pending completion of RL system engineering policy direction. The release of the System Engineering Criteria Document will initiate the work to complete the SEMP. A new date for this commitment is being established as part of the System Engineering Implementation Plan (see Commitment 2.2.b(1), above.)

COMMITMENT 3.7.f: DRAFT SITE SEMP IMPLEMENTING PROCEDURES. (DUE: February 14, 1995)

STATUS: The procedures are partially limited by the same policy guidance as the SEMP. However, TWRS is continuing to develop systems engineering procedures based on the existing TWRS SEMP. These procedures are being incorporated into a single set of Westinghouse Hanford Company/Kaiser Engineering procedures. These will form the basis for a site-wide set of integrated procedures that incorporate the principles of system engineering. A new date for this commitment is being established as part of the System Engineering Implementation Plan (see Commitment 2.2.b(1), above.)

2.2 TWRS PROGRAM COMMITMENTS

COMMITMENT 2.4.c: TWRS TOP-LEVEL SYSTEMS REQUIREMENTS REVIEW REPORT. (DUE: January 31, 1995)

STATUS: This report was completed and submitted to the DNFSB in April 1995.

COMMITMENT 2.4.d: TWRS TECHNICAL REQUIREMENTS REVIEW REPORT. (DUE: March 31, 1995)

STATUS: The schedule for the TWRS Technical Requirements Review is pending completion of the TWRS System Requirements Review (SRR) Action Plan. The SRR Action Plan is scheduled to be submitted to DOE-Headquarters for approval on July 24, 1995.

Upon approval of this plan the TWRS Technical Requirements Review and report will be re-scheduled and the DNFSB will be notified.

COMMITMENT 3.4.g: FINAL STAFF ANALYSIS DOCUMENT. (DUE: 90 days after 93-3 Qualification Standards Delivery)

STATUS: Current estimated completion date is 8/31/95. Work is currently being done using draft standards and is approximately 70% complete in identifying the education and experience mix available within TWRS. Effort is being started to identify status of qualifications against the draft standard.

COMMITMENT 3.4.h: REPORT DOCUMENTING COMPLETION OF REQUIRED TECHNICAL TRAINING IDENTIFIED IN IDPs AND TRMs. (Due: August 31, 1995)

STATUS: The original schedule for this Commitment was one year from the completion of the TWRS Individual Development Plans (IDPs) (ref. Commitment 3.4.c and 3.4.d). These IDPs were submitted to the DNFSB but the TCAP Assessment subsequently found them inadequate. They are currently being revised under the 93-3 Implementation Plan work scope. The completion of the upgraded IDPs is now scheduled for August 31, 1995 under the 93-3 Implementation Plan. There is a conflict between the 92-4 and 93-3 Implementation Plans regarding the training time period. The 92-4 Implementation Plan requires a one-year time period while the 93-3 Implementation Plan allows a two-year time period. The RL Office of Training expects to have the IDP training program ready by December 1995. The planning to correct these problems is under way and has been discussed with the staff of the DNFSB on a monthly basis.

COMMITMENT 3.7.c: DOE-FM REPORT ON DOD SYSTEMS ENGINEERING STANDARD REVIEW. (DUE: March 31, 1995)

STATUS: Complete. DOE-FM submitted this report to the DNFSB on 6/19/95.

COMMITMENT 3.7.h: TWRS SEMP IMPLEMENTING PROCEDURES SCHEDULE. (DUE: Included in Commitment 3.6.c)

STATUS: The TWRS System Requirements Review (SRR) impacted the schedule for the TWRS SEMP and its implementing procedures. The SRR Action Plan will be submitted to DOE-Headquarters for approval on July 24, 1995. Upon approval of the SRR Action Plan, the schedule for the TWRS SEMP and its implementing procedures will be submitted to the DNFSB.

COMMITMENT 3.7.i: REVISED TWRS SEMP SCHEDULE. (DUE: Included in Commitment 3.6.c.)

STATUS: See status of Commitment 3.7.h, above.

2.3 TWRS PROJECT COMMITMENTS.

No TWRS Project Commitments were due during this quarter.