



**Department of Energy**  
Washington, DC 20585

**APR 21 1998**

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:

The Implementation Plan for Defense Nuclear Facilities Safety Board Recommendation 97-2 requires a quarterly status report. Enclosed is the Department of Energy's quarterly status report for the second quarter, Fiscal Year 1998.

Sincerely,

A handwritten signature in black ink, appearing to read "Robin Staffin".

Robin Staffin  
Deputy Assistant Secretary  
for Research and Development  
Defense Programs

Enclosure



**QUARTERLY STATUS OF THE IMPLEMENTATION PLAN  
FOR  
DEFENSE NUCLEAR FACILITIES SAFETY BOARD RECOMMENDATION 97-2  
SECOND QUARTER FY 1998**

The Department of Energy began implementation of Defense Nuclear Facilities Safety Board (Board) Recommendation 97-2 in January 1998 by formally establishing the Nuclear Criticality Safety Program Management Team (NCSPMT) and the Criticality Safety Support Group (CSSG). Both the NCSPMT and the CSSG met several times during the quarter and are performing their respective chartered functions in supporting the Response Manager's execution of the Implementation Plan (IP).

Accomplishments and key issues addressed during the period are as follows:

- Charters for both the NCSPMT and the CSSG were developed and provided to the Board in February 1998 (IP Commitment 6.9 Deliverable 1, and IP Commitment 6.8).
- The following Criticality Safety Information Resource Center (CSIRC) pilot program activities were completed: An experiment was identified for archiving (Commitment 6.2.1 Deliverable 1); logbooks for that experiment were archived at Los Alamos (Commitment 6.2.1 Deliverable 2); a videotape of the original experimenter was located (Commitment 6.2.1 Deliverable 3); and data from that experiment were digitized (Commitment 6.2.1 Deliverable 4).
- The Criticality Safety Web site is being developed and should be operational in April 1998.
- The NCSPMT conducted a Criticality Safety Program review in Oak Ridge, Tennessee. EM is assessing the level of funding for activities at Argonne and Oak Ridge National Laboratories.
- Two three-day criticality safety courses were conducted at the Los Alamos National Laboratory. A total of 27 people attended this training.

There are three attachments to the quarterly report which provide a concise IP status and the names of current NCSPMT and CSSG members. Attachment A contains a complete IP commitment and deliverable/milestone status. Attachment B provides a summary of deliverables/milestones due during the next quarter. Attachment C contains current NCSPMT and CSSG members.

The Department has made significant progress in implementing Recommendation 97-2, thereby maintaining important criticality safety infrastructure. The NCSPMT will continue to assure timely completion of IP commitments. During the next quarter, the NCSPMT will work closely with the Department's budget staff to formally select a budget strategy for Fiscal Year 2000 and beyond which institutionalizes the Department's cross-cutting criticality safety program.

**ATTACHMENT A: IP COMMITMENT AND DELIVERABLE/MILESTONE STATUS**

Commitment	Deliverable/Milestone	Due Date	Status
6.1 Reexamine the experimental program in criticality research	1. Assessment report of criticality research program	March 1998	Overdue: Per letter from DP-10 to Board dated March 30, 1998, this deliverable will be completed by May 31, 1998. A draft priority experiments list will be provided to the Board staff by April 30, 1998
6.2.1 Perform CSIRC pilot program	1. Identify an experiment to archive 2. Archive logbook(s) and calculation(s) for that experiment 3. Videotape the original experimenter 4. Digitize data and calculations 5. Publish data and calculations	November 1997 December 1997 January 1998 February 1998 April 1998	Completed Completed Completed Completed On Schedule
6.2.2 Continue to implement the CSIRC program	1. Collocate logbooks (copies or originals) from all U.S. critical mass laboratories 2. Screen existing logbooks with original author/experimenter 3. CSIRC program plan	December 1998 December 1998 December 1998	On Schedule On Schedule On Schedule
6.3 Continue and expand work on ORNL sensitivity methods development	1. Technical program plan 2. Document initiation of priority tasks from the program plan in the quarterly report to the Board	July 1998 January 1999	On Schedule On Schedule
6.4 Make available evaluations, calculational studies, and data by establishing searchable databases accessible through a DOE Internet web site	1. DOE criticality safety web site 2. Y-12 evaluations on DOE web site 3. Calculations compiled by the Parameter Study Work Group on DOE web site 4. Nuclear Criticality Information System Database on DOE web site	March 1998 June 1998 September 1998 March 1999	Overdue: Should be completed in April 1998 On Schedule On Schedule On Schedule

<b>Commitment</b>	<b>Deliverable/Milestone</b>	<b>Due Date</b>	<b>Status</b>
6.5.1 Revise and reissue DOE-STD-3007-93	1. Revise DOE-STD-3007-93	September 1998	On Schedule
6.5.2 Issue a guide for the review of criticality safety evaluations	1. Departmental guide for reviewing criticality safety evaluations	May 1999	On Schedule
6.6.1 Expand training course at LACEF	1. Expanded LACEF training course	July 1998	On Schedule
6.6.2 Investigate existing additional curricula in criticality safety	1. Assessment of additional training needs and review of available supplementary curricula	June 1998	On Schedule
	2. Initiate a program which addresses identified needs	December 1998	On Schedule
6.6.3 Survey existing contractor site-specific qualification programs	1. Report on the review of site qualification programs	June 1998	On Schedule
	2. Guidance for site-specific criticality safety training and qualification programs	September 1998	On Schedule
	3. Guidance to procurement officials specifying qualification criteria for contractor criticality safety practitioners	September 1998	On Schedule
	4. DOE Field will provide line management dates upon which contractors will have implemented guidance in Deliverable #2, above	March 1999	On Schedule
6.6.4 Federal staff directly performing criticality safety oversight will be qualified	1. Qualification program for Departmental criticality safety personnel	December 1998	On Schedule
	2. DOE criticality safety personnel qualified	December 1999	On Schedule
6.7 Each site will conduct surveys to assess line ownership of criticality safety	1. Individual sites issue report of findings	June 1998	On Schedule
6.8 The Department will form a group of criticality safety experts	1. Charter for Criticality Safety Support Group approved by the NCSPMT	January 1998	Completed
6.9 Create NCSPMT charter and program plan	1. NCSPMT charter	January 1998	Completed
	2. NCSPMT program plan	June 1998	On Schedule

**ATTACHMENT B: DELIVERABLES/MILESTONES DUE  
DURING THE NEXT QUARTER**

<b>Commitment</b>	<b>Deliverable/Milestone</b>	<b>Due Date</b>	<b>Status</b>
6.1 Reexamine the experimental program in criticality research	1. Assessment report of criticality research program	March 1998	Overdue: Per letter from DP-10 to Board dated March 30, 1998, this deliverable will be completed by May 31, 1998. A draft priority experiments list will be provided to the Board staff by April 30, 1998
6.2.1 Perform CSIRC pilot program	5. Publish data and calculations	April 1998	On Schedule: Digitized data from pilot archived experiment will be published on DOE criticality safety web site (see 6.4.1, below)
6.4 Make available evaluations, calculational studies, and data by establishing searchable databases accessible through a DOE Internet web site	1. DOE criticality safety web site	March 1998	Overdue: Should be completed in April 1998; Subcontract was established mid-April; Work has commenced setting up web site using a Los Alamos server
	2. Y-12 evaluations on the DOE web site	June 1998	On Schedule: A digitized index of the Y-12 evaluations will be placed on the web site by June 1998; Evaluations will be added as time and funding permit
6.6.2 Investigate existing additional curricula in criticality safety	1. Assessment of additional training needs and review of available supplementary curricula	June 1998	On Schedule: Draft report to be completed by May 31, 1998; final report published in June
6.6.3 Survey existing contractor site-specific qualification programs	1. Report on the review of site qualification programs	June 1998	On Schedule: DP-10 sent a memorandum on March 30, 1998, to affected sites requesting survey of existing qualification programs; data consolidation will occur in April; draft report in May; final report in June 1998
6.7 Each site will conduct surveys to assess line ownership of criticality safety	1. Individual sites issue report of findings	June 1998	On Schedule: DP-10 sent a memorandum on March 30, 1998 containing criteria consistent with ISMS verification audits to Field Office Managers for use in conducting these audits
6.9 Create NCSPMT charter and program plan	2. NCSPMT Program Plan	June 1998	On Schedule: NCSPMT will develop a draft program plan in May

## ATTACHMENT C: NCSPMT AND CSSG MEMBERS

### NCSPMT (All DOE Headquarters)

<u>NAME</u>	<u>ORGANIZATION</u>
Roger Dintaman (Co-Chair)	Defense Programs
Dennis Cabrilla (Co-Chair)	Environmental Management
Jerry McKamy	Environment, Safety and Health
Ray Schwartz	Energy Research
Richard Person	Materials Disposition
Matthew Hutmaker	Nuclear Energy
William Lake	Civilian Radioactive Waste Management

### CSSG (DOE and Contractors)

<u>NAME</u>	<u>ORGANIZATION</u>
Adolf Garcia (Chairman)	DOE-Idaho
Dennis Cabrilla	Environmental Management
Jerry McKamy	Environment, Safety and Health
Richard Anderson	Los Alamos National Laboratory
Calvin Hopper	Oak Ridge National Laboratory
Thomas McLaughlin	Los Alamos National Laboratory
James Morman	Argonne National Laboratory
Thomas Reilly	Westinghouse Safety Management Solutions, Inc.
Robert Westfall	Oak Ridge National Laboratory
Robert Wilson	Safe Sites of Colorado