DOE F 1325.8
(2-92)

United States Government

Department of Energy
Oak Ridge Operations Office

memorandum

DATE: September 11, 1998

LY TO
N OF: SE-32:McBroom

JECT: **TRANSMITTAL OF MEMORANDUM OF UNDERSTANDING REGARDING DNFSB 97-2 RECOMMENDATION**

TO: Edward G. Cumesty, Assistant Manager for Laboratories, LM-10
Robert D. Dempsey, Assistant Manager for Defense Programs, DP-80
Rodney R. Nelson, Assistant Manager for Environmental Management, EM-90
Joe W. Parks, Assistant Manager for Enrichment Facilities, EF-20
Robert J. Spence, Site Manager, Y-12 Site Office, DP-81
William M. Seay, Site Manager, East Tennessee Technology Park, EM-911
Jack L. Howard, Office of Assistant Manager for Project and Technical Services, PT-50

The attached Memorandum of Understanding (MOU) regarding the DNFSB 97-2 Recommendation is forwarded to you for your information and use. Several Oak Ridge Operations programs are involved in the activities covered by this MOU. As noted on the transmittal letter from the Departmental Representative to the Defense Nuclear Facilities Safety Board, this MOU is being viewed as a model for future actions on cross-program issues within the Department of Energy.

If you have any questions or if you need additional information, please call Robert McBroom at 576-9437.

Robert W. Poe
Assistant Manager
for Environment, Safety, and Quality

Attachment

cc w/attachment:
M. McBride, SE-33, OR
F. E. Kendall, SE-33, Y-12
N. Karne, SE-33, ETTP
R. Stroud, EM-96, ETTP
R. Vranicar, EF-21, PORTS
G. Bazzell, EF-22, PAD
H. Monroe, SE-31
C. Gist, EM-921, 55 Jefferson

M1980/232
Pal

Department of Energy
Washington, DC 20585
August 19, 1998

RECEIVED
OFFICE OF THE MANAGER
8/25/98

MEMORANDUM FOR DISTRIBUTION

FROM: MARK B. WHITAKER, JR.
DEPARTMENTAL REPRESENTATIVE
TO THE DEFENSE NUCLEAR
FACILITIES SAFETY BOARD

SUBJECT: Forwarding of Approved Memorandum of Understanding for Funding Criticality Safety Activities

The attached Memorandum of Understanding (MOU) is forwarded for your information and use. This document addresses funding and management responsibilities for the Department's implementation plan for the Defense Nuclear Facilities Safety Board's (Board) Recommendation 97-2. Specifically, this document formalizes the budget development and execution process for criticality safety activities by explicitly defining the roles and responsibilities between the 97-2 Responsible Manager, affected Program Offices, and the Chief Financial Officer. Further, if adequate funding cannot be achieved, the MOU provides a process for handling deviations and shortfalls.

It is my belief that the Board will continue to focus on cross-program issues within the Department either through recommendations or reporting requirements. MOU's such as the attached will become more important as we deal with these multiple program/site safety issues. The Department has several implementation plans that would benefit from similar types of MOU's. Examples would be Material Stabilization (94-1) and Uranium-233 Safe Storage (97-1). It is my intention to explore with affected organizations the use of this 97-2 MOU as a template for ensuring adequate management attention and funding for these and other cross-organizational safety issues.

I would like to thank the members of your staff along with the Nuclear Criticality Safety Program Management Team and budgeting representatives from EM, EH, DP, and CR who worked together to develop this MOU. If you have any questions, please call me at (202) 586-3887, or Ted Wyka of my staff at (202) 586-3519.

Attachment

OFFICIAL FILE COPY
AMESQ
Log No. B-1073
Date Received 25-Aug-1998
Code

Printed with soy ink on recycled paper

RECORD COPY

DISTRIBUTION:
Assistant Secretary, Defense Programs
Assistant Secretary, Environmental Management
Assistant Secretary, Environment, Safety and Health
Director, Office of Energy Research
Chief Financial Officer

cc: (w/attachment)
E. Moler, AS
E. Moniz, US
E. Livingston, S-1
L. Barrett, RW-1
E. Bronstein, EM-23
D. Cabrilla, EM-66
H. Canter, MD-1
R. Crowe, Director, SMIT
R. Dintaman, DP-13
D. Huey, CR-14
M. Hutmaker, NE-80
W. Lake, RW-45
A. Lane, DP-41
W. D. Magwood, NE-1
J. McKamy, EH-34
R. Person, MD-3
R. Schwartz, ER-83
R. Staffin, DP-10
T. Todd, FM-1
Manager, Albuquerque Operations Office
Manager, Chicago Operations Office
Manager, Idaho Operations Office
Manager, Nevada Operations Office
Manager, Oak Ridge Operations Office
Manager, Oakland Operations Office
Manager, Richland Operations Office
Manager, Savannah River Operations Office
Manager, Rocky Flats Field Office
Manager, Ohio Field Office

Memorandum of Understanding
for
Funding Criticality Safety Activities

1.0 PURPOSE

This Memorandum of Understanding (MOU) between the Assistant Secretary for Defense Programs, the Assistant Secretary for Environmental Management, the Assistant Secretary for Environment, Safety and Health, the Director, Office of Energy Research, and the Chief Financial Officer formalizes the management structure and budgeting process for the Department of Energy's criticality safety programs, as established through the Department's Implementation Plan for Defense Nuclear Facilities Safety Board (Board) Recommendation 97-2. The purpose of this MOU is to delineate the overall management and financial arrangements for criticality safety activities for fiscal year 2000 and beyond so that the following objectives are met:

1. Ensure that Secretarial commitments in the Department's Implementation Plan for Board Recommendation 97-2 are met;
2. Allow the 97-2 Implementation Plan Responsible Manager to manage or oversee the expenditure of funds allocated to complete commitments; and,
3. Provide a stable, implementable, and enforceable funding structure that is sustainable within the current budget system.

This MOU will remain in effect for three years after the date signed. At the end of the period, a new MOU will be negotiated and signed as needed.

2.0 SCOPE

This MOU applies to the criticality safety activities in response to Board Recommendation 97-2, encompassing activities that are part of the Nuclear Criticality Predictability Program (NCPP) and follow-up activities necessary to institutionalize and continue criticality safety support for Department activities as recommended by the Nuclear Criticality Safety Program Management Team (Management Team). Included in this scope are the commitments in the 97-2 Implementation Plan and the following specific activities that are part of the NCPP:

<u>Los Alamos National Laboratory</u>

- Training courses at the Los Alamos Critical Experiments Facility (LACEF)
- Critical experiments conducted at LACEF
- Criticality Safety Information Resource Center (CSIRC) program
- Nuclear criticality modeling code maintenance and improvement
- Generation of Evaluated Nuclear Data Files and associated processing methods
- Criticality safety benchmark evaluation support

- Criticality safety web site maintenance

Oak Ridge National Laboratory
- Nuclear data measurements at the Oak Ridge Electron Linear Accelerator (ORELA)
- Nuclear criticality modeling code maintenance and improvement
- Generation of Evaluated Nuclear Data Files and associated processing methods
- Criticality safety benchmark evaluation support
- Radiation Safety Information Computational Center support

Oak Ridge Y-12 Site
- Criticality safety benchmark evaluation support

Idaho National Engineering and Environmental Laboratory
- International Criticality Safety Benchmark Evaluation Project

Argonne National Laboratory
- Nuclear criticality modeling code maintenance and improvement
- Generation of Evaluated Nuclear Data Files and associated processing methods
- Criticality safety benchmark evaluation support

Savannah River Site
- Criticality safety benchmark evaluation support

The scope of this MOU assumes that the Office of Energy Research (ER) will maintain the ORELA facility available to conduct funded nuclear data measurements as part of the 97-2 activities, as discussed in the memorandum from ER-2 to DP-10 dated June 10, 1997. ER should inform in writing the Responsible Manager for the 97-2 Implementation Plan of any change to the availability of ORELA.

3.0 MANAGEMENT

Since criticality safety issues affect a number of Department organizations, active participation of all affected program offices is essential to conduct a coherent and efficient criticality safety program. The management structure for this MOU will be the same as that originally established and described in the Department's Implementation Plan for Board Recommendation 97-2.

The Assistant Secretary for Defense Programs (DP-1) has the overall responsibility for leading the Department's criticality safety activities. The Responsible Manager for the Department's criticality safety activities associated with the 97-2 Implementation Plan is the Deputy Assistant Secretary for Research and Development, Office of Defense Programs (DP-10), who oversees the execution of this MOU.

The Management Team is responsible for the planning, prioritization, and execution of criticality

safety activities. This team consists of representatives from the following offices: Defense Programs (DP); Environmental Management (EM); Environment, Safety and Health (EH); Energy Research (ER); Fissile Materials Disposition (MD); Office of Civilian Radioactive Waste Management (RW); and Nuclear Energy, Science and Technology (NE). Members of the Management Team must be able to represent the positions of their program offices, including technical needs, and management and funding considerations. The Management Team, co-chaired by DP and EM, will advise and assist the Responsible Manager on technical and programmatic issues involving the implementation of crosscutting activities of the Department's criticality safety program. Other responsibilities of the Management Team are described below and in its charter of January 1998.

4.0 PROCESS TO DETERMINE FUNDING LEVELS

Prior to the start of the field budget process (i.e., November or December), the Management Team will prioritize the criticality safety activities from the Nuclear Criticality Predictability Program and other commitments in the Department's 97-2 Implementation Plan. In prioritizing the criticality safety activities, the Management Team will consider inputs from the affected program offices, from personnel at sites involved in the handling, transportation, storage, and disposition of fissile material, and from the criticality safety community. The list of prioritized activities should be consistent with the Department's needs for criticality safety information for current and future operations. Once the list of prioritized activities is developed, the Management Team will recommend the appropriate activities and corresponding funding levels to the Responsible Manager. The funding levels should be based on inputs from program office and field management, and from the previous year's funding levels, to be adjusted for any planned changes to the scope of work. The funding levels may have to be further reviewed by the Management Team if unexpected funding cuts result from Congressional appropriations.

The responsible program organizations will, to the extent practicable, continue to fund those criticality safety activities for which they are currently responsible. For fiscal year 1998, the distribution of funding for criticality safety activities is approximately: Office of Defense Programs - 61%, Office of Environmental Management - 37%, the Office of Environment, Safety and Health - 2%, and the availability of ORELA by ER. This funding distribution may be used as a guide for the future. Changes in type and location of criticality safety activities, and the distribution of benefits and users of criticality safety information must also be considered. As a guide, the approximate criticality safety budget for 1998-2000 and beyond is provided in Attachment I. To the extent possible, the Management Team should specify the recommended funding requirements by site and program office to help in the budget formulation process.

The Responsible Manager will review the criticality safety activities recommended by the Management Team and ensure that the activities are consistent with the 97-2 Implementation Plan. The Responsible Manager will formally transmit a description of the criticality safety activities and corresponding funding levels to the three primary Secretarial officers (DP, EM, EH) and the CFO for inclusion in the initial funding targets for the budget formulation process.

Upon receipt of the activity and funding requirements from the Responsible Manager, the program offices (DP, EM, EH) will take the actions necessary to ensure that these are included in their budget formulation, including coordination with the appropriate operations, field, and area offices. In EM, this will be accomplished by the EM's representative to the Management Team, who will prepare a Project Baseline Summary outlining current funding requests and outyear costs. The program offices will ensure that criticality safety activities are uniquely described at the project level within their budget justification narratives, along with milestones and performance measures, as appropriate. Descriptions of criticality safety activities and associated funding will be identified in clearly delineated terms (i.e., stand-alone and not described as one of several related activities). The Chief Financial Officer (CFO) will monitor program offices to verify that all required criticality safety activities are uniquely delineated within the budget justification narratives.

Deviations from the activity descriptions and funding levels that were defined by the Management Team and the Responsible Manager will be promptly reported by the program offices to the Responsible Manager. If the Responsible Manager judges the deviations to be significant (i.e., commitments in the 97-2 Implementation Plan are at risk), the Responsible Manager will report such deviations to the Assistant Secretary for Defense Programs. The Assistant Secretary for Defense Programs should report significant budget shortfalls or deviations in budget execution plans to the Deputy Secretary, and request assistance from the CFO to resolve budget shortfalls.

Once funding is appropriated for criticality safety activities, the program offices will execute their funding for criticality safety consistent with the Management Team and the Responsible Manager's recommendation. The CFO will assist the Responsible Manager in monitoring program execution. A summary process flow diagram is provided in Attachment II.

5.0 RESPONSIBILITIES

To improve commitment to continued out-year funding of criticality safety activities the following responsibilities are agreed.

Nuclear Criticality Safety Program Management Team (Management Team):

- Annually, identify and prioritize criticality safety activities required to meet the Secretary's 97-2 Implementation Plan based on input from the program offices, site management where operations involve fissile material and where criticality is a concern, and from the criticality safety community
- Prepare recommendations on the annual scope of criticality safety activities and the associated funding levels required to maintain a coherent and effective Department-wide criticality safety program, consistent with the 97-2 Implementation Plan. Recommendations for program office funding requirements should be consistent with each office's criticality safety responsibilities, current participation in the 97-2 criticality safety activities, and with the program office and field office responsibilities described in the Manual of Safety Management Functions, Responsibilities, and Authorities (FRAM) (DOE M 411.1-1).

- Submit these recommended activities and funding levels to the Responsible Manager

Responsible Manager for 97-2 Implementation Plan:

- Review the criticality safety activities recommended by the Management Team and ensure that the activities are consistent with the 97-2 Implementation Plan
- Formally notify and recommend to the three primary Secretarial Offices (DP, EM, and EH), at the appropriate time in the budget formulations process, the levels to include in their initial funding targets for the budget formulation process. Recommendations for program office funding requirements should be consistent with each office's criticality safety responsibilities, current participation in the 97-2 criticality safety activities, and with the program office and field office responsibilities described in the FRAM.
- Report any budget shortfalls or deviations in the budget executions associated with the 97-2 Implementation Plan to the Assistant Secretary for Defense Programs

Assistant Secretary for Defense Programs:

- Clearly and uniquely describe criticality safety activities required to meet the Secretary's 97-2 Implementation Plan commitments and their associated funding levels in the appropriate annual budget justification narratives, consistent with the requirements defined and recommended by the Management Team and the Responsible Manager
- As overall responsibility for implementation of the Secretary's 97-2 Implementation Plan, report significant budget shortfalls or deviations in the budget execution plans associated with 97-2 activities to the Deputy Secretary, and request assistance from the Chief Financial Officer to resolve these budget shortfalls

Assistant Secretaries for Environmental Management and Environment, Safety and Health:

- Clearly and uniquely describe criticality safety activities required to meet the Secretary's 97-2 Implementation Plan commitments and their associated funding levels in the appropriate annual budget justification narratives, consistent with the requirements defined and recommended by the Management Team and the Responsible Manager.
- Inform the Responsible Manager, in writing and with justification, of any deviations in planning or execution from the activity and funding descriptions that were defined and recommended by the Management Team and the Responsible Manager

Director, Office of Energy Research

- Maintain the Oak Ridge Electron Linear Accelerator (ORELA) available to conduct funded nuclear data measurements as part of the 97-2 activities, as discussed in the memorandum from ER-2 to DP-10 dated June 10, 1997, and inform in writing the Responsible Manager for the 97-2 Implementation Plan of any change to the availability of ORELA.

Chief Financial Officer:

- Ensure that criticality safety activities are uniquely delineated within the budget justification narratives
- Monitor program budget execution for 97-2 activities throughout the fiscal year
- Assist in resolving budget shortfalls or budget execution issues that may impact the timely implementation of 97-2 plan commitments

Approved:

for 15 Jul 1998
Victor H. Reis
Assistant Secretary for
Defense Programs

James M. Owendoff 7/24/98
James M. Owendoff
Acting Assistant Secretary for
Environmental Management

7/10/98
Peter N. Brush
Acting Assistant Secretary for
Environment, Safety and Health

7-23-98
Martha A. Krebs
Director, Office of
Energy Research

7/24/98
Michael L. Telson
Chief Financial Officer

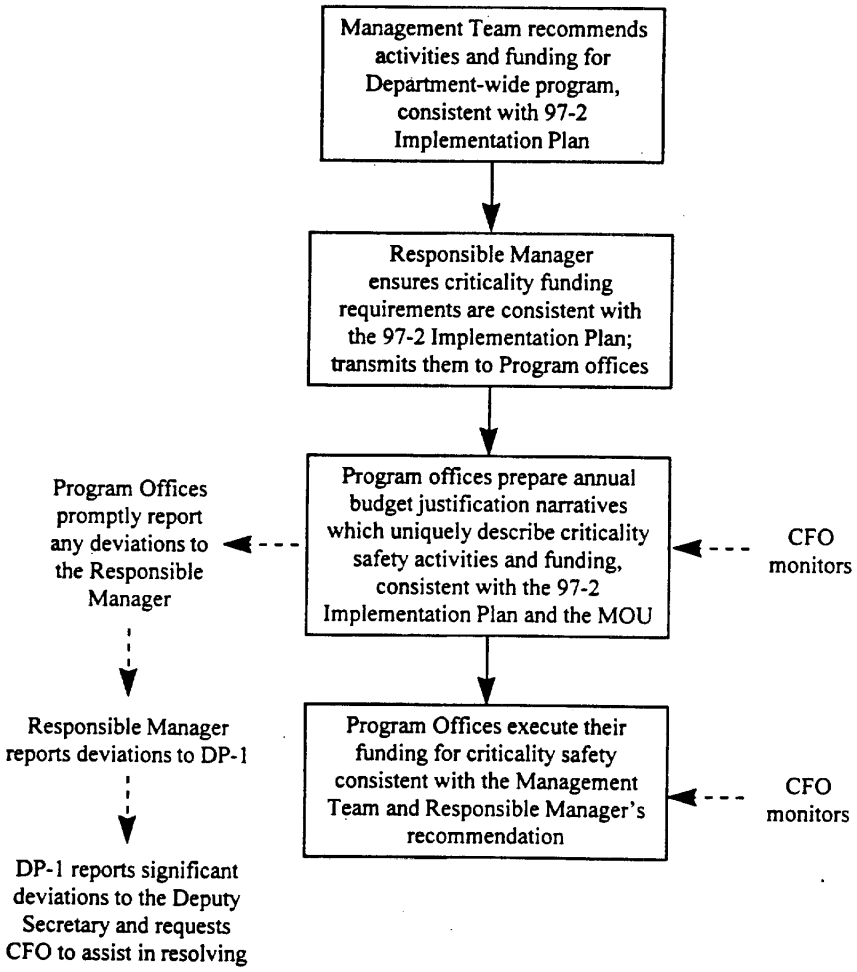
Noted:

8/14/98
Elizabeth A. Moler
Deputy Secretary

Attachment I

Approximate Criticality Safety Funding Targets*
(Dollars in Thousands)

	FY1998 (estimated)	FY1999 (estimated)	FY2000 & Beyond (estimated)
Defense Programs	$5,875	$6,250	$6,250
Environmental Management	$3,525	$3,750	$3,750
Environment, Safety and Health	$ 220	$ 220	$ 220
Total	$9,627	$10,220	$10,220

* Subject to Congressional appropriation of funds

Summary of Budget Formulation Process for Criticality Safety Activities