

#### The Secretary of Energy

Washington, DC 20585

October 13, 1999

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

Dear Mr. Chairman:

In your letter of June 23, 1999, regarding the Implementation Plan (Plan) for Recommendation 93-3, *Improving Technical Capability in Defense Nuclear Facilities Programs*, you requested that the Department work to bring the Plan to closure by the end of the fiscal year. The enclosed report provides the completion status of the commitments in the 93-3 Implementation Plan, the rationale for closing Recommendation 93-3, and the Department's plan for continuing the Federal Technical Capability Program.

The Department has made significant progress related to the improvement of technical capability since the Board issued Recommendation 93-3. Accomplishments include the implementation of a technical qualification program, development of the Senior Technical Safety Manager Program, formation of the Federal Technical Capability Panel, institutionalization of the Federal Technical Capability Program, and completion of workforce analyses and staffing plans to identify the critical technical capabilities required for safe operation of defense nuclear facilities.

While the enclosed report provides the justification for closing Recommendation 93-3, the Department recognizes the vital importance of continually improving technical competence and is fully committed to aggressive implementation of the Federal Technical Capability Program. I will continue to support the efforts of the Federal Technical Capability Panel (Panel) in its management of this program for the Department. I remain personally committed to the success this program and will continue the assignment of the Deputy Secretary as the Department's senior point-of-contact for the Panel.

The Chairman of the Panel, Mr. Steve Richardson, is available to answer questions you or your staff might have concerning the report and closure of the Recommendation. Mr. Richardson can be reached on 423-576-4442. Please do not hesitate to call him if further assistance is needed.

Yours sincerely,

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Bill Richardson

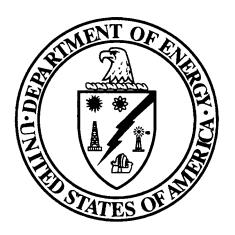
Enclosure

cc:

Mr. Steven D. Richardson, Chair Federal Technical Capability Panel Mr. Mark B. Whitaker, Jr.

## U. S. Department of Energy Federal Technical Capability Panel

# Final Report to the Defense Nuclear Facilities Safety Board on Recommendation 93-3



Washington, D.C. 20585

September 1999

# FINAL REPORT TO THE DEFENSE NUCLEAR FACILITIES SAFETY BOARD ON RECOMMENDATION 93-3

#### INTRODUCTION

Defense Nuclear Facilities Safety Board (Board) Recommendation 93-3 was issued in June 1993. The Defense Nuclear Facilities Safety Board had observed in three annual reports prior to that date that:

"... the most important and far reaching problem affecting the safety of DOE defense nuclear facilities is the difficulty in attracting and retaining personnel who are adequately qualified by technical education and experience to provide the kind of management, direction and guidance essential to safe operation of DOE's defense nuclear facilities."

Recommendation 93-3 therefore focused on the need to improve the technical capability of federal employees associated with defense nuclear facilities. The Department's Implementation Plan for Recommendation 93-3, issued in November 1993, was developed to ensure that line management had the tools necessary to recruit, deploy, develop, and retain federal personnel with the demonstrated technical capabilities required to accomplish the Department's safety missions and responsibilities.

Despite substantial progress, Department-wide implementation of commitments aimed at improving the technical capability of the Department was not institutionalized. Additionally, some commitments in the original Implementation Plan were unworkable or provided little value in the changed staffing environment in the Department associated with workforce restructuring and downsizing. In April 1997 the Board suggested that the Department revise the Implementation Plan to reflect current issues and the initiatives to address them. The Secretary submitted the Revised Implementation Plan for Improving DOE Technical Capability in Defense Nuclear Facilities Programs to the Board in May 1998.

The Department, under the leadership of the Federal Technical Capability Panel made significant progress toward completing the commitments in the revised Implementation Plan. In June 1999 the Board requested that the Department bring the Implementation Plan to closure by the end of the fiscal year. The Board requested the Department provide them a report by September 30, 1999, on the status of completing the commitments in the 93-3 Implementation Plan, the rationale for closing Recommendation 93-3 and the Department's plan for continuing the Federal Technical Capability Program. This final report serves as that report to the Board.

#### STATUS OF COMPLETION OF ALL RECOMMENDATION 93-3 COMMITMENTS

The status of completion of the commitments in the Departments revised 93-3 Implementation Plan is included in Attachment One.

#### RATIONALE FOR CLOSURE OF RECOMMENDATION 93-3

The rationale for closing Recommendation 93-3 is threefold. First, with the exception of some minor issues indicated in Attachment One, the Department of Energy has satisfied the commitments that it made to the Board in its revised Implementation Plan for 93-3. Second, the Department has made significant progress in implementing a federal technical capability program since the Board issued Recommendation 93-3. Notable accomplishments that reflect the difference Recommendation 93-3 has made include the following:

- For the first time in the Department's history, a standardized technical qualification program was developed and implemented for approximately 1,800 federal employees across the Department engaged in work related to defense nuclear facilities programs.
- The Department identified the federal positions considered to constitute the unbroken chain of safety responsibility. The background, experience, and qualifications of the incumbents in each of these Senior Technical Safety Manager (STSM) positions were evaluated by their line management and further reviewed by the Federal Technical Workforce Review Group a predecessor group to the Panel. Shortfalls in training or experience were documented, and decisions on each individual's qualification were made. A formal and structured STSM Program is fully implemented within the Department. The Department's 1998 workforce analysis indicated that there were 168 such Senior Technical Safety Manager positions across the Department.
- The Department pursued and was granted an Excepted Service Authority for an additional 200 positions (in addition to the 200 positions allowed under the Department of Energy Organization Act) under the Defense Authorization Act through the end of FY2000. This authority is being used to fill key engineering, scientific, and other technical positions with experts having outstanding credentials. The Department intends to continue to pursue extension of the hiring authority from Congress.
- A workforce analysis and staffing plan were completed by Departmental elements with defense nuclear facility safety responsibility. This is the first known analysis of its kind that identified critical technical skills that must be maintained to assure safe operations of those facilities. Existing shortages and plans to deal with the shortages in the near-term were identified. The analyses and related staffing plans will be updated annually and used as part of the strategy to reduce the effects of downsizing on technical capabilities and as a basis for recruitment and development programs.

- The Federal Technical Capability Panel was established. The Panel consists of senior managers who have been designated as Agents to represent Headquarters and Field Offices with defense nuclear facility responsibilities. The Panel reports to the Deputy Secretary and is responsible for overseeing and resolving issues affecting the Department's Federal Technical Capability Program. This includes overseeing the Senior Technical Safety Manager (STSM) Program, conducting periodic assessments of the effectiveness of the Federal Technical Capability Program using internal and external experts, and providing recommendations to senior Departmental officials regarding DOE technical capability.
- A Federal Technical Capability Program was initiated and is being institutionalized. The Federal Technical Capability Policy (DOE P 426.1), which institutionalizes the Federal Technical Capability Program, was approved by the Secretary. DOE Order 360.1 includes detailed requirements for the training and qualification of federal employees. The Guide entitled Recruiting, Hiring and Retaining High Quality Technical Staff: A Manager's Guide to Administrative Flexibilities (DOE G 426.1-1) was reviewed, revised and issued through the Department's directives system, and provides extensive guidance on recruiting, rewarding, and retaining critical technical staff. The Federal Technical Capability Program Manual is being processed through the Department's directives system to further institutionalize other elements of the program.
- The Technical Leadership and Development Program (i.e., technical intern program) was initiated to recruit and development future technical leaders for the Department. Two classes have been completed. Thirty highly qualified personnel have completed the program and remain employed with the Department. The program is being revised to meet the current needs of the Department in a more effective and efficient manner. Recruiting efforts are under way for the class of 2000.

Third, and most important, the Department will continue its efforts to maintain the necessary technical competence to ensure the safe and effective operations of its defense nuclear facilities. The Secretary is committed to this effort as indicated by his approval of the Federal Technical Capability Policy and written endorsement of the Panel's recent recommendations regarding federal technical capability in the Department. Additionally, the Deputy Secretary will continue to be the senior point-of-contact for the Panel on matters related to federal technical capability.

Continuation of the Department's efforts to maintain the necessary technical competence to ensure the safe and effective operations of its defense nuclear facilities will be accomplished through the continuing implementation of the Federal Technical Capability Program. The organizational and administrative elements are in-place to ensure that longevity of this program. Key elements of the program include:

- The Federal Technical Capability Program Manual has been drafted, concurred with by the Panel, and submitted to the Department's Directives system for formal processing and approval. This manual institutionalizes those aspects of the program not currently covered by other directives. It is anticipated that this document will be approved and issued by January 2000. The Department will then have the following documents in place to ensure institutionalization of the Federal Technical Capability Program:
  - DOE Policy 426.1 Federal Technical Capability
  - DOE Order 360.1 Training
  - DOE Manual XXX.X Federal Technical Capability Program
  - DOE Guide 426.1-1 Manager's Guide to Administrative Flexibilities
- The Federal Technical Capability Panel will continue to function in its role of monitoring and overseeing the implementation of the Federal Technical Capability Program for the Department. The Panel has an Annual Plan for FY 2000 to guide its activities. These activities encompass the recommendations the Panel made to the Secretary in its Annual Report for calendar year 1998. The Panel will continue to provide an Annual Report to the Secretary on the status of federal technical capability in the Department.
- Individual offices will continue to implement the Federal Technical Capability Program in accordance with the requirements and guidance indicated in the various directives referenced above. Several offices have initiated their own "mini federal technical capability panels" to oversee implementation of the program at a local level.
- Several offices are expanding the Federal Technical Capability Program to personnel other than those associated with defense nuclear facilities. The Secretary has endorsed the Panel's recommendation to pursue the expansion of the current Federal Technical Capability Program to include all federal technical capability requirements, not just those associated with the safe operations of defense nuclear facilities.
- The Department's Senior Technical Safety Manager Program and Facility Representative Program will continue to ensure that personnel with the appropriate technical competencies are involved in the oversight and decision making processes to ensure the safe operation of defense nuclear facilities.

### Attachment One Commitment Status

The following is a summary status for each commitment in the Revised 93-3 Implementation Plan. It is an update to the status information provided by the Board in its letter of June 23, 1999. *The status is shown as of October 7, 1999*.

Commitment Number	Commitment	Status
4.2.2.1	Chair of the Federal Technical Capability Panel to provide semiannual written report and periodic briefings to the Board	Complete
5.2.1	Designate Federal Technical Capability Agents	Complete
5.2.1.1	Establish a Federal Technical Capability Panel to oversee the Federal Technical Capability Program.	Complete
5.2.2	Revise and rename the Technical Excellence Policy.	Complete
5.2.3	Review and update the Guide entitled "RECRUITING, HIRING, AND RETAINING HIGH QUALITY TECHNICAL STAFF; A Manager's Guide to Administrative Flexibilities."	Complete
5.2.4	Modify the Functions, Responsibilities and Authorities Manual to reflect line management responsibilities for technical competence.	Open - See note 1 below.
5.3.1.	Staffing Plans provided to the Chair of the Federal Technical Capability Panel.	Complete
5.3.2	First Annual Staffing Summary Report provided to the Secretary.	Complete
5.3.3	Revised Program Guidance for Technical Leadership Development Program prepared.	Complete
5.4.1	Revise DOE Order 360.1, Training, and issue supporting guidance.	Complete
5.4.2	Phase I Assessment Reports of Technical Qualification Program completed.	Complete
5.4.2.1	Analysis of Phase I Assessments completed by Panel.	Complete
5.4.3	Updated Technical Qualification Program Plans from each affected Office provided to the Chair of the Federal Technical Capability Panel.	Complete

Commitment Number	Commitment	Status
5.4.4	Technical Qualification Programs, including Phase II Assessment, in place.	Open - See note 2 below.
5.5.1	Policies and procedures to enhance line management capabilities to preserve critical technical capabilities and positions incorporated into the Facility Representative Personnel Guide.	Complete
5.5.1.1	Policies and procedures to preserve Facility Representative capabilities and positions implemented.	Complete
5.5.1.2	Policies and procedures to preserve other critical technical positions and capabilities implemented.	Complete
5.5.2	Information briefings on administrative flexibilities provided to Operations Office and Program Office line managers.	Complete

- Note 1:A review of the FRAM was conducted, and revisions were made to section 9.1.6, to reflect line management responsibilities for technical competence. The revised section was distributed to the Panel for comment. A draft of the revised section was also provided to Board staff. Panel comments were incorporated and the revision was forwarded to the point-of-contact responsible for the FRAM. The revision to the FRAM had been delayed due to Departmental reorganizations. However, the FRAM is currently being processed through Directives, and should be approved and issued by October 15, 1999.
- Note 2:Phase II Assessments of the Technical Qualification Program were completed in September 1999 by all affected Offices. The results of several assessments show that additional work is required to fully implement the Technical Qualification Program. The Federal Technical Capability Panel will closely follow the progress being made in this area as part of the ongoing implementation of the Federal Technical Capability Program. The Panel will require that all open items from the Phase II Assessments are closed by March 2000.