

## **Department of Energy**

Washington, DC 20585

October 29, 1997

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

Dear Mr. Chairman:

On November 4, 1993, the Department of Energy issued its Implementation Plan for Defense Nuclear Facilities Safety Board Recommendation 93-3, which required the Department to issue quarterly progress reports within 30 days of the end of every calendar quarter. Enclosed is the fifteenth Quarterly Report which contains an update of all activities occurring during the quarterly reporting period which ended on September 30, 1997.

Should you have any questions regarding the Quarterly Report, please contact me or Mr. Tom Evans, the Technical Personnel Program Coordinator, on (202) 426-1506, or Internet thomas.w.evans@hq.doe.gov.

Sincerely,

Archer L. Durham

Assistant Secretary for

Human Resources and Administration

Enclosure

TP-97-0052

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NF SAFETY BOARD

**Quarterly Report** 

**Department of Energy** 

**Implementation Plan for** 

**Defense Nuclear Facilities Safety Board** 

**Recommendation 93-3** 

Improving the Technical Capability in Defense Nuclear

**Facilities Programs** 

**Reporting Period** 

July 1, through September 30, 1997

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## 1.0 Introduction

This Quarterly Report for the Defense Nuclear Facilities Safety Board (Board) (DNFSB) Recommendation 93-3 Implementation Plan (Plan) covers the period from July 1, through September 30, 1997. Highlights of the reporting period follow below:

- ♦ The Technical Personnel Coordinating Committee met by video tele-conference on July 16, August 19, and September 23, 1997.
- ♦ Technical Qualification Program implementation activities continued across the complex.
- ♦ The draft Revision One of the Radiation Protection Qualification Standard Study Guide was completed. The draft study guide is available on the Clearinghouse for Training, Education and Development Homepage. The study guide will be finalized in the November 1997 timeframe.
- ♦ Multiple meetings between the Technical Personnel Program Coordinator and the Board and the Board's technical staff, to discuss the revision of the 93-3 Implementation Plan, were held during this reporting period. A group of senior line managers came together for a working meeting on August 6-7, 1997 to discuss the key issues that should be addressed in the revised Implementation Plan.
- ♦ Learning Activities to support the Technical Qualification Standards continue to be developed. To date, twenty-seven self-study learning materials have been completed including: self-study guides; computer-based training; and, videos. In addition in two subject areas, project management and safeguards and security, Department-wide courses have been evaluated and cross-walked to the Technical Qualification Standard's competencies. All learning materials are available on or through the Clearinghouse for Training, Education and Development Homepage.

## 2.0 Implementation Plan Schedule

The deliverables scheduled for the third quarter calendar year (CY) 1997 were as follows:

Commitment Description
 7.1 (Deliverable) Issue the Second Quarter Calendar Year 1997 Quarterly Report to the Board (7/97).

Deliverables scheduled for the fourth quarter calendar year 1997 are as follows:

7.1 (Deliverable) Issue the Third Quarter Calendar Year 1997 Quarterly Report to the Board (10/97).

## 3.0 Commitment Status

Commitment	Due Date	Status *	Deliverable Date / Reference
1.1	October 1993	Complete	10/29/93 Policy
1.2	February 1994	#	02/22/94 Durham
1.3	September 1993	#	09/30/93 Appointment
1.4	February 1994	Complete	02/28/94 Durham
Target Date	4th Qtr 1994	Open	***
1.5	June 1994	Complete	06/30/94 Durham
Target Date	4th Qtr 1994	Complete	12/27/94 Evans
Target Date	4th Qtr 1995	Open	***
2.1 1 of 2	ASAP	Complete	12/22/94 Durham
Target Date	January 1994	#	01/31/94 Evans
Target Date	March 1994	Complete	03/31/94 Evans
2.1 2 of 2	March 1994	Open	03/31/94 Evans
2.2	May 1994	Complete	05/23/94 Evans
Target Date	3rd Qtr 1995	Open	***
2.3 1 of 2	March 1994	Complete	03/31/94 Durham
Target Date	August 1994	Complete	08/19/94 Dirks
2.3 2 of 2	ASAP	Complete	08/18/94 Dirks
2.4 1 of 2	January 1994	Complete	01/31/94 Evans
2.4 2 of 2	March 1994	Complete	03/31/94 Evans

<sup>\*</sup> The word "Open" or "Complete" is used to indicate that the Board staff and the Technical Personnel Program Coordinator have agreed on the status of the Commitment during meetings in February/March 1997.

<sup>#</sup> Although the deliverable associated with the Commitment has been met, the Board staff have concerns with implementation of the Commitment or the acceptability of the deliverable.

<sup>\*\*</sup> These items are being reported in the Technical Personnel Performance Indicator Report (TPPIR).

<sup>\*\*\*</sup> These items will be addressed by separate correspondence.

Commitment	Due Date	Status *	Deliverable Date / Reference	
3.1	October 1994	#	10/27/94 Evans	
3.2 1 of 2	June 1994	#	06/15/94 Evans	
2 of 2	November 1994	#	11/30/94 Dirks	
3.3	September 1994	Open	09/27/94 Dirks / Evans	
Target Date	1st Qtr 1995	Ongoing	03/31/95 Hardwick	
4.1/4.1.1	June 1994	Complete	06/29/94 Volpe	
Target Date	4th Qtr 1994	Open	12/27/94 Evans	
4.1.2	September 1994	Complete	09/28/94 Evans	
4.1.3	October 1994	Complete	10/28/94 Durham	
Target Date	2nd Qtr 1995	Ongoing	***	
4.1.4	June 1995	Ongoing	***	
4.2/4.2.1 1 of 2	February 1994	Complete	02/28/94 Durham	
4.2/4.2.1 2 of 2	October 1994	Complete	10/21/94 Evans	
Target Date	2nd Qtr 1995	Ongoing	08/31/96 Evans	
4.2.2	April 1994	Complete	04/29/94 Durham	
4.3	September 1994	Complete	06/30/94 Durham	
4.4/4.4.1	June 1994	Complete	06/30/94 Durham	
4.4.2	August 1994	Complete	08/03/94 Evans	
4.4.3	October 1994	Complete	10/28/94 Pearman	
4.4.4	May 1995 (Rev)	Complete	Apprv. Qual Stds	
4.4.5	December 1995	Open	**	

<sup>\*</sup> The word "Open" or "Complete" is used to indicate that the Board staff and the Technical Personnel Program Coordinator have agreed on the status of the Commitment during meetings in February/March 1997.

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<sup>\*\*\*</sup> These items will be addressed by separate correspondence.

Commitment	Due Date	Status *	Deliverable Date / Reference	
4.5	December 1994	Open	12/30/94 Evans	
Target Date	4th Qtr 1995	Open	**	
4.6	May 1995 (Rev)	#	Apprv. Qual Stds	
4.7	December 1994	#	12/28/94 Dirks	
4.8 1 of 3	April 1994	Complete	04/29/94 Evans	
4.8 2 of 3	June 1994	Complete	06/15/94 Evans	
4.8 3 of 3	December 1994	#	12/27/94 Evans	
5.1/5.1.1	December 1993	Complete	12/28/93 Durham	
5.1.2 1 of 2	February 1994	Complete	02/28/94 Evans	
5.1.2 2 of 2	June 1994	#	06/30/94 Evans	
Target Date	4th Qtr 1995	Open	**	
5.2	April 1994	Complete	04/29/94 Evans	
5.3 1 of 2	February 1994	Complete	02/28/94 Evans	
5.3. 2 of 2	August 1994	Complete	08/31/94 Durham	
5.4	Nov 1994 (Rev)	Complete	11/15/94 Durham	
5.5	January 1994	#	01/31/94 Evans	
5.6/5.6.1	October 1994	Complete	10/28/93 Evans	
5.6.2	October 1995	Open	***	
5.7	September 1994	Open	09/30/94 Evans	
5.8 1 of 2	January 1994	Complete	01/31/94 Durham	
5.8 2 of 2	June 1994	Complete	06/30/94 Evans	

<sup>\*</sup> The word "Open" or "Complete" is used to indicate that the Board staff and the Technical Personnel Program Coordinator have agreed on the status of the Commitment during meetings in February/March 1997.

<sup>#</sup> Although the deliverable associated with the Commitment has been met, the Board staff have concerns with implementation of the Commitment or the acceptability of the deliverable.

<sup>\*\*</sup> These items are being reported in the Technical Personnel Performance Indicator Report (TPPIR).

<sup>\*\*\*</sup> These items will be addressed by separate correspondence.

Commitment		Due Date	Status *	Deliverable Date / Reference
6.1	1 of 3	February 1994	Open	02/28/94 Evans
6.1	2 of 3	June 1994	Complete	06/30/94 Evans
6.1	3 of 3	September 1994	Open	09/23/94 Dirks / Evans
7.1		Quarterly January 1994	Continuing Complete	01/31/94 Durham
		July 1997	Complete	07/29/97 Durham

<sup>\*</sup> The word "Open" or "Complete" is used to indicate that the Board staff and the Technical Personnel Program Coordinator have agreed on the status of the Commitment during meetings in February/March 1997.

<sup>#</sup> Although the deliverable associated with the Commitment has been met, the Board staff have concerns with implementation of the Commitment or the acceptability of the deliverable.

<sup>\*\*</sup> These items are being reported in the Technical Personnel Performance Indicator Report (TPPIR).

<sup>\*\*\*</sup> These items will be addressed by separate correspondence.

## 4.0 Activities

This section of the report provides a brief narrative discussion on actions being taken on the ten functional areas and related initiatives in the Implementation Plan. Section 4.11 highlights the reporting period meetings and Section 4.12 discusses related activities. Shaded text indicates that activities were previously documented and no further changes are noted.

The activities are listed in the same order as the functional area breakdown. This is reflected in the Table of Contents. Commitments noted as complete indicates that associated deliverables have been issued and are available for Board review. Except where explicitly stated, complete does not mean that the Department is not continuing with related efforts.

## 4.1 Functional Area 1: Technical Personnel Organization and Policy

## **Technical Excellence Policy**

Commitment 1.1 The Department developed and issued the Technical Excellence Policy on October 29, 1993. This completes Commitment 1.1

## **Technical Excellence Executive Committee**

Commitment 1.2 The

The Technical Excellence Executive Committee was established in February 1994. The first meeting was held on June 3, 1994. The meeting discussions centered on the role the Committee would play within the Department and a review of the implementation of the 93-3 Plan. Agenda items included Technical Qualification Standards. Excepted Service, the Technical Leadership Development Program, selected performance indicators and the external assessment.

The Technical Excellence Executive Committee met on December 15, 1994. Items on the agenda included the charter, Technical Qualification Standards, and the recommendations and strategy for responding to the National Academy of Public Administration (NAPA) external review.

The Technical Excellence Executive Committee met on May 4, 1995. The primary agenda item was the Department-wide Qualification Standards. All were approved by the Committee by the end of May, with the exception of the Nuclear Weapons Safety Qualification Standard, which will be completed by August 1995. Additionally, the Committee's charter was revised and approved.

The Technical Excellence Executive Committee reviewed, and approved for interim implementation, the Nuclear Explosives Safety Qualification Standard (formerly known as Nuclear Weapons Safety) in August 1995.

## **Technical Personnel Program Coordinator**

#### Commitment 1.3

The Technical Personnel Program Coordinator was selected in September 1993. Mr. Thomas W. Evans was appointed and his permanent dedicated assignment to this role completes Commitment 1.3.

## Commitment 5.5

## **Technical Personnel Coordinating Committee**

The Technical Personnel Coordinating Committee (TPCC) held the first Committee meeting on January 12-13, 1994. This action completes Commitment 5.5. Meeting minutes were issued on January 31, 1994, highlighting the meeting objectives, activities and path forward. There was an additional TPCC meeting conducted on March 16, 1994 using the tele-video conferencing system. Minutes for this meeting were issued on March 21, 1994. This meeting covered the progress of the 93-3 initiatives and reviewed plans for upcoming milestones.

A TPCC meeting was held using the tele conferencing system on April 22, 1994 to review the status of the 93-3 Plan initiatives. The TPCC also held a meeting on June 16, 1994, in Knoxville, TN. This meeting covered status of deliverables, the Qualification Program, Performance Indicators, and a round table discussion of issues the Committee should resolve. Meeting minutes were generated for both meetings.

The TPCC met on July 15, August 19 and September 23, 1994 using the video tele conferencing system to review the status of the 93-3 Plan initiatives. Meeting minutes were generated for all meetings.

The TPCC met on September 23 and November 14, 1994 using the video tele conferencing system to review the status of the 93-3 Plan initiatives. A face-to-face meeting was held on December 6-7, 1994 in Augusta, Georgia and was sponsored by the Savannah River Operations Office. Meeting minutes were generated for all meetings.

The TPCC met on January 30 and February 27, 1995, using the video tele conferencing system to review the status of the 93-3 Plan initiatives. On March 28-29, 1995 a Committee meeting was held in Westminster, Colorado, and was sponsored by the Rocky Flats Operations Office. Minutes were generated for all meetings.

The TPCC met on April 26, 1995, and May 30, 1995, using the video tele conferencing system to review the status of the 93-3 Plan initiatives. A face-to-face meeting was held June 28-29, 1995 in Albuquerque, New Mexico, and was sponsored by the Albuquerque Operations Office. Minutes were generated for all meetings.

The TPCC met on August 8 and September 26, 1995, using the video tele conferencing system to review the status of the 93-3 Implementation Plan initiatives.

The TPCC met in a face-to-face meeting in Las Vegas, Nevada on November 7-9, 1995. Mr. Timothy Dwyer, a staff member from the Defense Nuclear Facilities Safety Board, was the guest speaker. The TPCC also conducted a tele-video conference on December 12, 1995.

The TPCC met in a face-to-face meeting in Oakland, California on February 27-28, 1996. The focus of this meeting was a 1 ½ day work-group-approach to Lead Site issues. The TPCC also conducted a tele-video conference on January 17, 1996.

The TPCC met in a face-to-face meeting in Albuquerque, New Mexico on June 25-27, 1996. This was a joint meeting with the Training and Development Coordinating Group which was established a part of the Department's Strategic Alignment Initiative, SAI-44. The TPCC also conducted tele-video conferences on April 11. and May 21, 1996.

The TPCC met by tele-video conference on July 23, and September 13, 1996. In addition to tele-video conferences, a face-to-face meeting is planned for the fourth quarter 1996.

The TPCC met by tele-video conference on November 1, and at a face-to-face meeting on November 18, 1996. A working group session of this Committee is planned for January 1997.

The TPCC met by tele-video conference on February 28, and at a face-to-face working group session, hosted by the Nevada Operations Office, on January 22-23, 1997.

The TPCC met by tele-video conference on May 7, and June 20, 1997.

The TPCC met by tele-video conference on July 16, August 19, and September 23, 1997. A face-to-face meeting is planned for early in calendar year 1998.

## 4.2 Functional Area 2: Recruitment Initiatives

## **Excepted Service**

#### Commitment 2.1

The Department of Energy's (DOE) Office of Personnel & DNFSB staff met with Office of Personnel Management (OPM) personnel to advise OPM of the Department's need for Excepted Service and to solicit support for the Department's legislative initiative (11/12/93).

Headquarters & Operations Offices were surveyed on excepted service system needs and projected utilizations (12/17/94). Draft legislative language was developed and provided to the Assistant Secretary for Congressional and Intergovernmental Affairs (CI).

The Technical Personnel Program Coordinator (HR-1.5) and the Deputy Assistant Secretary for Human Resources (HR-3) with the Office of Congressional and Intergovernmental Affairs conducted briefings on Excepted Appointment Authority for Congressional staff from the following Committees: House Energy and Commerce; House Armed Services; Senate Armed Services; Senate Governmental Affairs; and, the Senate Energy and Natural Resources.

The Department's proposed language to establish an Excepted Appointment Authority has been agreed to by the Office of Management and Budget and the Office of Personnel Management. However, this agreement was reached too late to be considered in the House of Representatives' Department of Energy National Security Act.

Language for the Act was introduced by Senator Nunn (D-GA) when the Department of Energy's National Security Act was

debated on the Senate floor on July 1, 1994. The language introduced was similar to the Department's language with the major exception that Senator Nunn's language included a termination date of September 30, 1997. The Department's language allowed either the termination date of September 30, 1997 or earlier, if the National Performance Review is enacted. Another minor change states that to the maximum extent practicable appointments will be made in accordance with the merit system principles. The Senate adopted the language by a voice vote. Excepted Appointment Authority was in the Senate legislation and not in the House legislation therefore, it was an item for the Conference Committee to consider. Conference Committee for the National Security Act met the week of July 18, 1994.

The Defense Authorization Act of 1995 has been passed by both Houses of Congress and signed by the President. This legislation includes a provision allowing the Department to hire 200 individuals using "Excepted Appointment Authority." The legislation allows the Department to hire up to 100 individuals during the first year. After the first 50 individuals have been hired, the Department must conduct a survey to determine where the individuals were hired from, and assess if this causes any adverse impact to other Departments in government. This study is to be submitted to Congress.

The Defense Authorization Act of 1995 was signed by the President on October 5, 1994. On November 1, 1994, the Assistant Secretary for Human Resources and Administration issued draft policies on Department use of Excepted Service Authority for both Department of Energy Legislation Authority and Defense Authorization Act Authority. An approved Department Policy on the use of these Authorities was issued on December 22, 1994. The final policy also requested that Department Heads prepare requests for using these Authorities, and have these estimates presented to the Executive Resource Board on January 18, 1995.

As of March 31, 1995, the Department had hired 10 staff personnel through the use of the Defense Authorization Act authority. In addition, the Department had hired 8 staff personnel through the use of the DOE Act Authority.

As of June 30, 1995, the Department has hired 11 personnel through the use of the Defense Authorization Act authority and 11 through DOE Act authority. Although the Department issued a hiring freeze in 1995, there are a few key positions being recruited, using the excepted service system. Exceptions to the May moratorium may be approved by the Secretary to fill mission-critical positions. A summary of all first quarter calendar year 1995 technical hires were attached to the second quarter report.

Summaries of second calendar year quarter 1995 hiring distribution and hiring sources are attached to the third quarter Report.

Summaries of hiring data for the third quarter calendar year 1995 are enclosed as Attachments 5.2 and 5.3 to this report.

Summaries of hiring data for the fourth quarter calendar year 1995 are enclosed as Attachments 5.2 and 5.3 to this report.

Summaries of hiring data for the first quarter calendar year 1996 are enclosed as Attachments 5.2 and 5.3 to this report.

Due to the reduced hiring throughout the Department it has been decided that it would be more meaningful to collect and analyze technical hiring data on an annual basis. The calendar year 1996 information will be forward to the Board in the 93-3 Quarterly Report covering the first quarter calendar year 1997 period. It is anticipated that the technical to non-technical hiring ratio for calendar year 1996 will improve to approximately 1:0.8.

The Department has identified critical unmet technical safety staffing needs and initiated actions to meet such needs. Program and Operations Offices have identified 73 highest priority critical unmet staffing needs for technical positions, many of which should be filled by the end of December 1996. A separate report giving the status of the actions to alleviate these critical unmet needs will be forwarded to the Board periodically as part of the Department/Defense Nuclear Facilities Safety Board Off-site Conference Action Plan. This report is not a commitment under the 93-3 Implementation Plan.

As of mid-December 1996, Excepted Service has been used to fill 59 critical positions across the Department. Due to differing provisions, the Defense Authorization Act has been used for 40 of the positions and the remaining 19 are through the DOE Act Authority.

Progress has been made in alleviating the critical unmet safety staffing needs which were identified as part of the initiative resulting from the Department/Defense Nuclear Facilities Safety Board Off-site Conference. As of mid-December 1996, 33 of the identified positions have been filled and an additional 27 are under active recruitment.

As of the end of this reporting period, the excepted service authorities have been used to fill 65 positions across the Department including, 24 positions which where identified as being critical unmet safety staffing needs. In addition to the 24 critical unmet needs alleviated through the use of excepted service, 18 critical unmet needs have been filled through General Schedule and Senior Executive Service selections.

The Department is requesting a two year extension, until September 30, 1999, of the excepted service authority contained in Section 3161 of the National Defense Authorization Act for Fiscal Year 1995, which expires on September 30, 1997. The request is contained in proposed legislation to "authorize appropriations for the Department of Energy for national security programs for fiscal years 1998 and 1999, and for other purposes," and in the accompanying letter to the Speaker of the House. The second excepted service authority available for the Department's use, the DOE Authorization Act, has no expiration date.

As of the end of this reporting period, the excepted service authorities have been used to fill 75 vacancies; 41 individuals have been hired under the National Defense Authorization Act and 28 individuals have been hired under the DOE Authorization Act.

The data for last quarter was reported incorrectly. Forty-one individuals have been hired under the National Defense Authorization Act, 22 individuals have been hired under the DOE Authorization Act, and an additional 6 were being recruited

under each Act, bringing the total positions to be filled through excepted service to 75.

As of the end of this reporting period, the National Defense Authorization Act has been used to fill 40 positions, 23 positions have been filled under the DOE Authorization Act (one position has been transferred from non-supervisory under the Defense Act to supervisory under the DOE Act), and an additional 11 positions are in the recruitment/staffing process under the two Acts..

## **Administrative Process**

#### Commitment 2.2

"Recruiting, Hiring, and Retaining High Quality Technical Staff, A Manager's Guide to Administrative Flexibilities" was distributed on May 23, 1994. This handbook covers the tools available, referred to as administrative flexibilities, to enhance the Department's ability to compete in the labor market for technical personnel. The flexibilities center on recruitment, hiring and retention techniques and bonuses.

The target date for implementation of selected administrative processes is September 1995. The Technical Personnel Performance Indicator Report will provide the status of the Offices' implementation of the processes including select examples.

A summary of efforts taken to implement the processes will be forwarded by separate correspondence.

The Recruiting, Hiring, and Retaining High Quality Technical Staff, A Manager's Guide to Administrative Flexibilities Handbook was updated and reissued, in December 1996, to each Program and Field Office for their information and use.

#### Technical Intern Program

#### Commitment 2.3

The Technical Leadership Development Program Plan was approved on March 31, 1994. This Plan establishes a centralized technical intern program for the Department of Energy. The Plan was modeled after the Defense Programs Intern Plan and modified by a total quality management process using complex-wide input.

There were approximately 600 applications for 25 intern positions. The applications were screened and approximately 60 applicants were interviewed in April 1994 to determine the 1994 intern class. Information concerning the individuals selected was included as Attachment 5.2 to the Third Quarter Calendar Year 1994 Quarterly Report.

The Technical Leadership Development Program (Interns) completed Part A of the professional and technical training program. This portion addressed topics such as: Environmental Laws and Regulations; Total Quality; The 7 Habits of Highly Successful People; and, Ethics Training. In September 1994, the interns started their Headquarters (HQ) rotational assignments which ended in March 1995.

The recruitment for the Technical Leadership Development Program 1995 Class was a challenging process. Over 1,200 inquiries were received for the Class, even without the benefit of spring recruiting. Applications for the Class of 1995 were due February 28, 1995 (27 candidates).

Rating and ranking panels were held in mid-April to determine which of the 385 qualified applicants for the 1995 Class should be interviewed. On April 25-26, 102 interviews were conducted, and 27 of the interviewees received offer letters on April 28.

The 1994 Class began a 16-week course at the Colorado School of Mines on May 8, 1995. The interns will then complete two rotational assignments in the field and will finish the program with an 18-month academic fellowship. Following the fellowship, they will begin their permanent assignments in the Department.

On June 26, 1995, the 1995 Class of 20 interns began the Technical Leadership Development Program. Like the 1994 class, they are a diverse group of individuals, with backgrounds in multiple engineering or science fields. They are currently completing a one-week orientation to the Department.

The 1994 Class has completed the Applied Engineering Fundamentals/Case Study (AEFC) phase of the Professional and Technical Training Program. The AEFC curriculum included class modules on: Thermodynamics, Civil Engineering, Data Communications, Nuclear Engineering, Environmental

Engineering and Pollution Control, and Radiological Controls. Following the completion of the AEFC phase, the Class began their first field rotation. There are interns currently working at 13 different sites.

The 1995 Class has completed Phase 1 of the Professional and Technical Training Program. This phase addresses topics such as: Environmental Laws and Regulations, Fundamentals of Operations, Basic Quality Training, and Project Planning and Management. Following the completion of this phase, the Class began their work rotation at Headquarters. The interns are currently working with 10 different Program Offices.

In early March 1996, the 1994 TLDP Class will begin it's final field rotation. When this rotation is complete, the Class is scheduled to begin further academic study at various universities.

On March 18, 1996, the 1995 TLDP Class will report to Rocky Flats for seven weeks of training. Initially, Hazardous Waste Operations and Radiation training will be provided at the Site. Subsequently, the Class will begin the Applied Engineering Fundamentals/case study phase of the Program at the Colorado School of Mines.

Recruitment efforts for the 1996 TLDP Class are continuing. Three career fairs have been hosted by the Department for college seniors from universities across the United States. Three additional career fairs are planned this spring.

The recruitment for the Technical Leadership Development Program 1996 Class began in January 1996. The Program was officially announced on January 3, 1996. The Office of Personnel jointly with the Office of Training and Human Resource Development participated in five career fairs during the January - March 1996 time frame.

The Class of 1994 completed their first field rotational assignments in March 1996 and will begin their second field rotation in April: Following completion of rotations, it is anticipated they will finish the Program with 16 months of advanced technical academic study. Following this phase, they will begin their permanent assignments in the Department.

The Class of 1995 completed their Headquarters rotational assignment in March. They have rotated to Rocky Flats for approximately 22 weeks. It will include technical and regulatory training courses and the Applied Engineering Fundamentals Course conducted at the Colorado School of Mines. The interns will then complete two rotational assignments in the field.

The Class of 1994 will complete their second (final) field rotational assignments in August 1996 and begin 16 months of advanced technical academic study at various universities in the August/September time frame. Following this phase, they will begin their permanent assignments in the Department.

The Class of 1995 will complete Phase Two of the Professional and Technical Training Program in August 1996. This phase includes technical and regulatory training courses and the Applied Engineering Fundamentals Course conducted at the Colorado School of Mines. Following graduation in August, they will begin their first of two 6-month field rotations in September. After completion of both field rotations, it is anticipated they will conclude the Technical Leadership Development Program with 16 months of advanced technical academic study and begin their permanent assignments in the Department.

The Class of 1994 completed their final field rotational assignments in August 1996 and began their 16 months of advanced technical academic study at various universities in the August/September timeframe. Following this phase, they will begin their permanent assignments in the Department.

The Class of 1995 completed phase two of the Professional and Technical Training Program in August 1996. This phase included technical and regulatory training courses and the Applied Engineering Fundamentals Course conducted at the Colorado School of Mines. Following graduation in August, they began their first of two 6-month Field rotations in September. After completion of both Field rotations, it is anticipated they will conclude the Technical Leadership Development Program with 16 months of advanced technical academic study and begin their permanent assignments in the Department.

The Class of 1994 began their 16 months of advanced technical academic studies at various universities in September. The Academic Phase concludes the Technical Leadership Development Program for this Class. Immediately upon completion, the interns will begin their permanent assignments in the Department of Energy.

The Class of 1995 will complete their first of two 6-month Field rotations in February and begin their second (final) field rotation in the February/March time frame. Following completion of the rotations, they will conclude the Program with 16 months of advanced technical academic studies (Academic Phase) and report to their permanent assignments in the Department of Energy.

The Class of 1994 began their 16 months of advanced technical academic studies at various universities in September 1996. The Academic Phase concludes the Technical Leadership Development Program for this Class. Immediately upon completion, the interns will begin their permanent assignments in the Department (targeted for January 1998).

The Class of 1995 completed their first of two 6-month field rotations in February 1997 and began the second field rotation in the February/March time frame. Following completion of the field rotations, they will begin their advanced technical academic studies.

The Class of 1994 began their final semester of advanced technical academic studies at various universities in the August / September 1997 time frame. This final semester concludes the Technical Leadership Development Program for the Class of 1994. The interns will begin their permanent assignments with the Department of Energy in January 1998.

The Class of 1995 began their 16 months of advanced technical academic studies at various universities in August / September 1997. Upon completion, the interns will report to their permanent assignments with the Department of Energy in January 1999.

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## **Near-Term Recruitment Strategy**

#### Commitment 2.4

The near-term strategy to take advantage of immediately available opportunities was issued in January 1994. When this commitment was established, it was anticipated that the early retirement initiatives would be immediately approved and a large number of open positions would be available by the end of the year. The Buy-out Bill was subsequently approved in March 1994, and is being reviewed for Department applicability and use. The Assistant Secretary for Environmental Management has been given approval to hire additional employees during the remainder of FY 1994. The current strategy is designed to support Environmental Management near-term recruitment.

## 4.3 Functional Area 3: Succession Planning and Career Path Development

#### Commitment 3.3

## Succession Planning and Career Path Development

The program guidance on technical succession planning and career path development that was issued in September 1994 called for the establishment of a focus group to develop a succession planning model for positions covered by the Technical Qualification Program. The model developed by this group will serve as the pilot for a Department-wide Succession Planning Program which will ultimately include all key/critical positions in the Department. In formulating the model, relevant aspects of other related efforts within the Department, including the Career Partnership System effort being undertaken by HR-2, would be incorporated.

The target date for implementation of this guidance in the Program and Operations Offices was the first quarter 1995. As this effort will need to integrate the Qualification Standards issued in May 1995, this item will continue to be reported in future Quarterly Reports. A memorandum confirming this was issued March 31, 1995. Full completion of this item is not anticipated until late 1995.

Program and Operations Offices will report on succession planning and career path development in the future Technical Personnel Performance Indicator Report beginning in the first quarter calendar year 1996 Report. This will allow the Offices time to integrate the Technical Qualification Standards into future planning efforts for technical personnel.

The Department and the Board held an off-site conference on June 13-14, 1996 during which an action was taken by the Department to develop a pilot program that will establish dual career tracks that include an additional available career path for technical personnel that allows progression to senior levels in technical positions, based on demonstrated performance and technical excellence. This action is scheduled to be completed first quarter calendar year 1997.

## 4.4 Functional Area 4: Education Programs

## **Graduate Technical Education Programs**

#### Commitment 3.1

An Educational Initiatives Working Group was formed to expand educational opportunities for Federal employees throughout the Department of Energy's system. This group was tasked to review the Department-wide Fellowship Program Guide and to provide data regarding existing programs between Program and Operations Offices and local colleges and universities.

The working group's report, which not only summarizes the Fellowship Guide, but also highlights existing university educational and research programs, alternative learning methodologies, university degree/certificate programs, and specifically tailored programs was attached to the fourth Quarter 1994 report.

#### Commitment 3.2

Educational Performance Indicators and Appraisal Elements
Performance indicators for individual educational achievements
were developed by Human Resources, Office of Training and
Human Resource Development. These indicators were included
in the June 1994 Technical Personnel Performance Indicator
Report. The first indicator being monitored is the number of
Technical Personnel in each Office currently receiving tuition
assistance to pursue additional educational opportunities.

For the third quarter 1994 Technical Personnel Performance Indicator Report, two additional educational performance indicators were added. The report included the breakdown of formal education for technical employees. In addition, a description of the advanced degree programs for technical employees was discussed.

A guidance document was issued to assist technical managers and supervisors and servicing personnel offices in upgrading performance appraisal plans for technical personnel. The guidance contained performance elements for managers and supervisors and sample performance elements for other personnel covered by the Technical Qualification Program.

A revised guidance document addressing performance management was modified, based on comments received, to reflect the need to integrate performance management for technical personnel with 360 degree and other non-traditional performance management systems. Additionally, a project plan to review 360 degree performance management systems Department-wide is being considered. A meeting has been scheduled for August 14 to develop a policy framework for related guidance. Any Department-wide multi-rater system adopted will address the issue of measuring technical competence.

The Technical Personnel Performance Indicator Report, covering the third and fourth quarters calendar year 1995 will compile updated educational data covering college course work being taken by technical personnel.

The Technical Personnel Performance Indicator Report, covering the first quarter calendar year 1996 will compile updated educational data covering college course work being taken by technical personnel.

The Technical Personnel Performance Indicator Report, covering the first quarter calendar year 1996, was issued in June 1996. The Report includes a section profiling the advanced education pursuits and accomplishments of the Department's technical personnel.

The Technical Personnel Performance Indicator Report, covering the second quarter calendar year 1996, was issued in September 1996. The Report provides updated information on the advanced education pursuits and accomplishments of the Department's technical personnel.

The Technical Personnel Performance Indicator Report, covering the third quarter calendar year 1996, was issued in November 1996. The Report continues to provide a profile of the advanced education accomplishments and pursuits of the Department's technical personnel.

The Technical Personnel Performance Indicator Report, covering the fourth quarter calendar year 1996, was issued in February 1997. The format of the Report changed slightly to reflect the two major Technical Qualification Program incumbent completion dates, May 1998 and 1999. The one year extension, to May 1999, is authorized for incumbents affected by: Cancellation of the Technical Manager Qualification Standard; The additional qualification requirements for the Project Manager Qualification area; and, Participants in the new Senior Technical Safety Manager Qualification Standard.

Publication of the Technical Personnel Performance Indicator Report has been suspended until it is determined which performance measures should be in place to best measure the Department's progress.

# 4.5 Functional Area 5: Management & Operating (M&O) Contractor Training and Qualification

#### **Training Implementation Matrices**

Commitment 5.1 The schedule for approving all remaining Training
Implementation Matrices (TIMs) was issued in February 1994.
The Department proceeded with having all TIMs approved by
June 1994. These actions were tracked by the Technical
Personnel Performance Indicator Report until completion. The
Target date for achieving compliance with DOE Order 5480.20 is
the Fourth Quarter 1995.

The Department approved all Training Implementation Matrices for defense nuclear facilities by June 1994. The issue of approving outstanding TIMs to meet DOE Order 5480.20 was a

management priority in the Department and a continuing focus issue for the Technical Personnel Program Coordinator's Office.

Since the approval of our Implementation Plan on November 4, 1993, there have been 29 TIMs approved for defense nuclear facilities. Of these 29, 19 of the TIM approvals were completed in June 1994. The completion of this deliverable involved a great deal of coordination effort and work to ensure all approvals would be completed by June 30, 1994. In addition, before approval of the Implementation Plan, ten other TIMs were approved during the four month effort to respond to the Board's 93-3 Recommendation.

The quarterly Technical Personnel Performance Indicator Report will continue to provide a status of the approval and implementation of all TIMs to meet DOE Order 5480.20. This status will reflect those facilities with previously approved TIMs and non-defense nuclear facilities TIMs. Additionally, facilities recently classified as nuclear facilities will use this quarterly reporting system to track and ensure defense nuclear facility TIM implementation is achieved by the 93-3 Implementation Plan target date of the Fourth Quarter 1995.

TIMs continue to be tracked in the quarterly Technical Personnel Performance Indicator Report. There are three TIMs covering Lawrence Livermore National Laboratory facilities that are in progress and are scheduled for approval in 1995. These facilities were evaluating the need for a TIM when the original June 1994 commitment was made to approve defense nuclear facility TIMs. Additionally, TIMs for 11 Richland Operations Office facilities are being revised, and one Oak Ridge Operations Office facility is revising it's TIM. They are scheduled for approval in 1995 and will pursue meeting the Fourth Quarter 1995 target date to achieve compliance with DOE Order 5480.20A.

The revised TIM for the Oak Ridge Y-12 Plant was approved in April 1995. The Richland Office has approved five revised TIMs with an additional three TIMs in the approval process. These details will be reflected in the upcoming TPPIRs.

The Albuquerque Operations Office is reviewing current contracts and having contractual negotiations to modify existing contracts to include DOE Order 5480.20A. While existing TIMs

are approved, it appears that existing contracts did not include Order 5480.20A and this may delay submission of revised TIMs and implementation of the Order. This issue is being tracked in the Technical Personnel Performance Indicator Report.

The target date for achieving compliance with DOE Order 5480.20A is the fourth quarter 1995.

The Technical Personnel Performance Indicator Report, covering the third and fourth quarters calendar year 1995, will update the status of Training Implementation Matrices (TIMs). Operations Offices are making plans to assess contractor training programs in accordance with DOE-STD-1070-94, "Guidelines for Evaluation of Nuclear Facility Training Programs."

The Technical Personnel Performance Indicator Report, covering the first quarter calendar year 1996, will update the status of Training Implementation Matrices (TIMs).

The Technical Personnel Performance Indicator Report, covering the first quarter calendar year 1996 and, the Report covering the second quarter calendar year 1996, updated the status of the Training Implementation Matrices (TIMs).

The Technical Personnel Performance Indicator Report covering the third quarter calendar year 1996 was issued in November 1996 and updated the status of the TIMs. There are currently two TIMs that were approved prior to December 1995 and are not yet implemented.

Publication of the Technical Personnel Performance Indicator Report has been suspended until it is determined which performance measures should be in place to best measure the Department's progress.

## **Training Program Accreditation Plans**

Commitment 5.2

The Training Program Accreditation Plans (TPAPs) status report was issued in April 1994. The requirement for quarterly reports is being addressed by following the status of TPAPs in the Technical Personnel Performance Indicator Report.

The quarterly Technical Personnel Performance Indicator Report tracks TPAP status by facility. It includes columns for Date

TPAP Approved, On Schedule, Date Contractor Self Evaluation Report Submitted and Accreditation Date. The report also tracks a TPAP for the Savannah River Site Environment, Safety; Health & Quality Assurance Division since all Radiation Control positions report back through this Division. This is easier and more logical than repeating the Radiation Control Inspector and Supervision program for the eight major Savannah River facilities identified in DOE Order 5480.18B.

Contractor Self Evaluation Reports (CSERs) are required by the end of the fourth quarter 1995 for the Savannah River site's Defense Waste Processing Facility (DWPF) operator and shift supervisor, mechanical maintenance, Electrical and Instrument (E&I) maintenance, and technician programs. A CSER is also required by the end of the Fourth Quarter 1995 for the Savannah River Site's In-Tank Precipitation/Extended Sludge Processing (ITP/ESP) operator/supervisor program.

Accreditation efforts in third and fourth quarter 1995 were focused on reviewing Savannah River's H-Canyon and HB-Line training programs.

Current accreditation efforts are focusing on the Savannah River Site's Radiological Control Programs, HB-Line Programs, H-Canyon Programs and Tritium Facilities Programs. The status of accreditation efforts is reported in the Technical Personnel Performance Indicator Report.

The Technical Personnel Performance Indicator Report, covering the third and fourth quarters calendar year 1995, will update the status of the implementation of DOE Order 5480.18B. Fifteen Programs were accredited during this period at the Savannah River Operations Office.

The Technical Personnel Performance Indicator Report, covering the first quarter calendar year 1996, will update the status of the implementation of DOE Order 5480.18B.

#### **DOE Order 5480.18**

Commitment 5.3

A status for interim guidance updating the list of applicable facilities required to implement DOE Order 5480.18A was issued in February 1994. The results of this review will be included in the quarterly review of TPAPs in the Technical Personnel Performance Indicator Report.

The Department Order 5480.18B, Nuclear Facility Training Accreditation Program, was approved on August 31, 1994. The Order and Training Accreditation Plan (TAP) manuals have been revised to reflect the changes in facility status and Departmental responsibilities, and to provide clear and concise guidance to M&O contractors regarding implementation of the Order.

The list of applicable facilities contains 14 facilities, three of which are in standby status. Facilities in standby status are not required to meet the Order as long as they remain in standby status.

#### DOE Order 5480.20A

#### Commitment 5.4

The Department revised Departmental Order 5480.20 to incorporate lessons learned and to update the responsibilities section. The revised Order was sent out for comment in August 1994. There was not sufficient time to resolve the comments and issue the Order by the original due date of September 30, 1994. A revised due date of November 15, 1994 was established by the Department in accordance with the direction provided in Task 8 of the 93-3 Implementation Plan. The change was discussed with the General Counsel of the Board and acknowledged by the Board before the revised date was established. The Order was approved by the Assistant Secretary for Human Resources and Administration which completed this commitment on November 15, 1994.

## **Organization of Contractor Training Units**

#### Commitment 5.6

The actions necessary to review and strengthen contractor organizations responsible for training and qualification have been listed in a guidance document which was issued on October 28, 1994. This action completes the first part of this Commitment. The Department must verify by October 1995 that contractor training organizations are functioning in a manner consistent with the guidance by selected self assessments and oversight reviews.

The results of Operations Offices' assessments of contractor organizations responsible for training and qualification will be reported by separate correspondence.

# **Guidance for Contracting Offices Regarding Training & Oualification (T&O) Initiatives**

### Commitment 5.7

The guidance for contracting officers regarding training and qualification initiatives was drafted by an ad hoc committee consisting of representatives from Operations and Program Offices. The Technical Personnel Program Coordinator transmitted this guidance to the Director, Contract Reform Project Office on September 30, 1994. In addition, the guidance was distributed to the Technical Personnel Coordinating Committee requesting input from Federal personnel and soliciting input from M&O contractors. Comments from more than 10 Offices were received resulting in minor revisions to the document.

The Contract Reform Team is the Department's central focus for contracting initiatives. It was established in 1994 after the 93-3 Implementation Plan was issued. The Contract Reform Team will review and use the guidance as appropriate. The progress of this activity will be updated in future quarterly reports.

## 4.6 Functional Area 6:

Oversight of Training and Qualification Programs

#### Commitment 1.4

## **Department Policy on Roles and Responsibilities**

An interim policy and guidance document was issued on February 28, 1994 addressing the roles and responsibilities within the Department to evaluate technical training and qualification programs at defense nuclear facilities. This item has a target date for implementation of the Fourth Quarter 1994. Implementation will be tracked and followed in the Technical Personnel Performance Indicator Report.

Offices have implemented this guidance and their efforts are described in the 1994 Technical Personnel Performance Indicator Report.

This item will be tracked in the Technical Personnel Performance Indicator Report until all Offices have satisfactorily completed it.

Office efforts to implement this guidance will be reported by separate correspondence.

## **Evaluation of Contractor Training and Qualification**

Commitment 4.1.1

A peer group has been established to develop and issue guidance to Operations and Program Offices regarding the evaluation of contractor training and qualification programs. The guidance document was completed and issued on June 30, 1994. See DOE-STD-1070-94, Guidance for Evaluation of Nuclear Facility Training Programs.

## Training & Qualification (T&Q) Requirements for Federal Personnel Performing Contractor Evaluations

Commitment 4.1.2

The Qualification Standard for Personnel Evaluating Technical Training and Qualification Programs was issued on September 28, 1994. This Standard identifies the competencies required for individuals to evaluate contractor training and qualification program processes and management. This standard was incorporated into, and superseded by, the Technical Training Qualification Standard which was issued on October 28, 1994.

## Office Compliance

Commitment 4.1.4

The Program and Operations Offices will be reporting on their efforts addressing Commitments 4.1.1 and 4.1.2 in the Technical Personnel Performance Indicator Report covering the third and fourth quarters calendar year 1995. This Report was issued in August 1995.

## 4.7 Functional Area 7:

Training Organization, Administration and Infrastructure

## **Policy and Guidance on Training Organization and Infrastructure**

Commitment 1.5

The federal employee training standard, Professional Development of Federal Technical Personnel, was completed and distributed at the end of June 1994. This standard meets Commitments 1.5, 4.3, and 4.4.1. This document was developed through a series of Technical Excellence Workshops which included participation from each Program and Operations Office.

This training standard has been superseded by DOE Order 360.1, Training, which was approved in May 1995. The implementation of policy and guidance, including completion of actions necessary to comply, will be tracked in the Technical Personnel Performance Indicator Report until complete. The target date for completion of necessary actions is December 1995.

The Offices will report on their efforts to upgrade their training organization and infrastructure in the third and fourth quarter calendar year 1995 Technical Personnel Performance Indicator Report.

The results of Offices' efforts to upgrade their training organizations and infrastructure will be reported by separate correspondence.

## Commitment 4.1.3

The effort to establish selection, training and qualification requirements for Federal training staffs was completed. These requirements are contained in the Technical Training Qualification Standard which was approved by the Management Sponsor, the Office of Human Resources and Administration, on October 28, 1994. The target date for implementing initial

**Training & Oualification Requirements for Federal Trainers** 

actions is June 1995.

The Technical Personnel Performance Indicator Report will provide the individual status of each Office's activities. The next report will be issued in August 1995.

The Technical Personnel Performance Indicator Report provides the individual status of each Office's activities. The Report issued on August 31, 1995 addresses the status of this activity through June 1995. These initiatives will continue to be tracked in future Reports until complete.

Offices will update their previous replies on training and qualification requirements for Federal training staffs in the third and fourth quarter calendar year 1995 Technical Personnel Performance Indicator Report.

The manner in which each Office has implemented this commitment will be addressed by separate correspondence.

#### **Training Assistance Teams**

#### Commitment 5.8

The Training Assistance Team Program was initiated in January 1994 and is now fully operational. The Technical Personnel Program Coordinator initiated the Training Assistance Team Program and is responsible for its continued development and enhancement. A memorandum describing the Training

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**Training & Qualification Requirements for Federal Trainers** 

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Assistance Program was issued on June 30, 1994. One training assistance visit has been conducted. The Training Assistance Program is being used in the Department's Implementation Plan responding to Board Recommendation 94-4, Deficiencies in Criticality Safety at Oak Ridge Y-12 Plant.

The Training Assistance Team is being used to evaluate the technical competence of personnel supporting the Oak Ridge Y-12 Plant. In August 1995, the team will review key Federal personnel at the Oak Ridge Y-12 Plant. A review of contractors is tentatively planned for January 1996.

A Training Assistance Team visited the Oak Ridge Y-12 Plant on August 14-18, 1995, and the Headquarter's Offices of Site Operations (DP-24) on September 6-7, 1995. The Training Assistance Team Leader was Roy Schepens, the Deputy Assistant Manager for High Level Waste at the Savannah River Operations Office. With the exception of the Environment, Safety and Health (EH) personnel The Team produced a final report in September 1995.

The Training Assistance Team Program for Key Contractor Personnel at the U.S. Department of Energy Oak Ridge Y-12 Plant was issued in September 1995. This Program outlines the approach and guidelines for the Training Assistance Team visit to assess contractor personnel at the Oak Ridge Y-12 Plant. This visit, and issuance of the subsequent report, is scheduled for February 1996.

The Training Assistance Team visit to the Oak Ridge Y-12 Plant to assess contractor technical competence has been rescheduled. The Team anticipates starting their review on April 22, 1996 and issuance of the subsequent report in May 1996.

The Training Assistance Team visit to the Oak Ridge Y-12 Plant to assess contractor technical competence has been rescheduled. The Team will begin their review on May 6, 1996 and will issue the subsequent report in May 1996.

A Training Assistance Team visited the Oak Ridge Y-12 Plant to assess contractor technical competence May 6-10, 1996. The Training Assistance Team Leader was Roy Schepens, the Deputy Assistant Manager for High Level Waste at the Savannah River

Operations Office. The Team produced a final report in May 1996. This visit and subsequent report, completes the actions outlined in the Training Assistance Team Program Plan for Key Contractor Personnel at the Y-12 Plant, issued in September 1995 in support of Recommendation 94-4 Implementation Plan Commitment 5.5.

## 4.8 Functional Area 8: Technical Employee Qualification Programs

## **Individual Development Plans**

Commitment 4.2.1

Guidance was issued to all technical organizations to verify, establish or revise Individual Development Plans (IDPs) or ensure their equivalent are adequate. This guidance was issued on February 28, 1994. IDP completion is being tracked in the quarterly Technical Personnel Performance Indicator Report. Individual Development Plans for the Department's Technical Personnel supporting defense nuclear facilities were essentially complete by October 30, 1994.

Offices continue to ensure that new hires and transfers complete Individual Development Plans.

IDPs are being updated across the complex to support the implementation of the Technical Qualification Program.

### **Guidance for Qualification Standards**

Commitment 4.4.1

Guidance relating to the Technical Qualification Standards are covered in the Federal Employee Training Standard which was issued on June 30, 1994. This item is now complete and an organized effort to develop the Qualification Standards is underway.

Related requirements in DOE Order 360.1, Training, supersede the Federal Employee Training Standard. The Order, along with the Department-wide Qualification Standards, was issued in May 1995.

#### **General Technical Base Qualification Standard**

Commitment 4.4.2

The General Technical Base Qualification Standard was issued on August 3, 1994. This Standard addresses baseline competencies required for technical personnel. It is broad-based and includes eight areas. These eight sections contain competency statements

and associated knowledge and skill statements in the following areas:

Nuclear Fundamentals;
Radiological Fundamentals;
Environmental Management;
Quality Assurance;
Industrial Safety;
Conduct of Operations;
Nuclear Safety Documents and Evaluation; and Technical Communications.

This Standard received approval for interim implementation by the Technical Excellence Executive Committee in May 1995.

## **Technical Manager Qualification Standard**

#### Commitment 4.4.3

The Technical Manager Qualification Standard was approved by the Management Sponsor, the Office of Field Management, in October 1994. This Standard also received interim implementation approval by the Technical Excellence Executive Committee in May 1995.

As part of the initiative begun at the Joint Department/Defense Nuclear Facilities Safety Board Off-site Conference, the Technical Manager Qualification Standard has been reevaluated and is being revised. It is estimated that the revised Qualification Standard will be approved by the Technical Excellence Executive Committee and available for Department-wide use in November 1996.

The Technical Manager Qualification Standard was canceled in November 1996. A new Functional Area Qualification Standard was developed for use by the senior technical safety managers, who were identified as one of the initiatives undertaken by the Department as a result of the Joint Department/Defense Nuclear Facilities Safety Board Off-site Conference. This new Qualification Standard will be used as a key component in the evaluation of these senior managers qualifications. The Change Notices, delineating these changes in the Technical Qualification Program, were promulgated Department-wide in November 1996 and will be reflected in the next revision of DOE Order 360.1, Training.

## **Technical Specialist Oualification Standards**

#### Commitment 4.4.4

At the request of several Headquarters and Field elements, the due date for the Technical Specialist Qualification Standards was extended from December 1994 to May 1995. The extension allows for longer peer and Management Sponsor review periods.

A list of current functional area categories is included as Attachment 5.1. A discussion of the Department's rational for revising the deliverable due date for the Technical Qualification Standards is addressed under Functional Area 10, Commitment 8, Change Control Progress.

The extended peer and Management Sponsor review periods were useful in gaining subject matter expert and Management Sponsor input and support. The Technical Excellence Executive Committee approved all but one Standard, the Nuclear Weapons Safety Qualification Standard, in May 1995. A list of the functional areas is provided in Attachment 5.1.

The delay in issuing the Nuclear Weapons Safety Qualification Standard was discussed with Board staff and processed according to the change control process. The additional time period was needed to ensure that the Standard was compatible with the 5610 series Orders being revised as part of the Department's Recommendation 93-1 Implementation Plan initiative.

The Nuclear Explosives Safety Qualification Standard (formerly known as Nuclear Weapons Safety) was approved for interim implementation by the Technical Excellence Executive Committee in August 1995.

As part of the initiative begun at the Joint Department/Defense Nuclear Facilities Safety Board Off-site Conference, the Project Manager Qualification Standard has been reevaluated. It is estimated that revised implementation procedures for this qualification area will be promulgated Department-wide in November 1996 after receiving the approval of the Technical Excellence Executive Committee.

The process to review and revise the Radiation Protection Qualification Standard has begun. A request has been made, Department-wide, to provide suggestions for improving the Qualification Standard. A subject matter expert workshop will be conducted to disposition those comments and to review the Standard to ensure identification and strengthening of any weak areas.

It was determined that the Project Manager Qualification Standard is adequate without revision. However, to address the concerns of the lack of technical focus, a requirement for participants in this Functional Area to also qualify in a second Functional Area was added in November 1996. Due to this new requirement, participants in this Functional Area have been granted a one year extension, until May 1999, to complete their qualification program.

Review and revision of the Radiation Protection Qualification Standard was nearly completed. The draft revised Standard will be provided to the Board staff for their review, as agreed to during the Recommendation 91-6 closure negotiations. Upon resolution of any issues, the revised Standard and implementation procedures will be issued Department-wide.

Revision of the Radiation Protection Qualification Standard was completed. The draft revised Standard was provided to the Board staff in January for their review. Upon resolution of any issues resulting from that review, the revised Standard and implementation procedures will be issued Department-wide.

Revision 1 of the Radiation Protection Qualification Standard was approved by the Technical Excellence Executive Committee on June 11, 1997. Incumbents already pursuing qualification in the Radiation Protection Functional Area will be given the option to complete Revision 0. For those individuals who choose to complete Revision 0, as well as those who have already completed Revision 0, the new competencies contained in Revision 1 will be completed through continuing training within two years (June 1999).

The draft Revision One of the Radiation Protection Qualification Standard Study Guide was completed. The draft study guide is available on the Clearinghouse for Training, Education and Development Homepage. The study guide will be finalized in the November 1997 timeframe.

# **Performance Appraisal Standards**

#### Commitment 4.7

Policy and guidance upgrading the language in performance appraisal standards for various technical positions were issued as interim guidance in December 1994. This effort also addressed the portion of Commitment 3.2 on specific performance elements for appraisal plans.

# 4.9 Functional Area 9: Technical Training Programs and Processes

## **Current Training Database**

#### Commitment 4.2.2

An on-line data base of training courses was established in April 1994. The data base identifies currently available sources of training both inside and outside the Department. It was updated in December 1994 and is maintained on the Trainer-Net System. It will be necessary to update the information as the Standards for the Technical Qualification Program are approved and the competency requirements are captured in formal training courses.

The updated course catalog was issued, and made available on the Trainer-Net System on March 28, 1995.

The Department is establishing an HR-2 Homepage in February 1996. This Homepage, available on the World Wide Web, will contain the HR-2 course catalog as well as the Technical Qualification Standards.

The Department has established a Homepage on the Internet entitled "The Clearinghouse for Training, Education and Development." It can be accessed through the World Wide Web at: http://cted.inel.gov/cted/ Each Program and Operations Office electronic course catalog is being "hot keyed" into the Clearinghouse which allows the user to transparently access each individual catalog. In addition to the course catalogs, the Technical Qualification Standards and related DOE Orders are online.

In the universal course catalog section of the Clearinghouse, courses which have been reviewed by a Lead Site and found to satisfy one or more competencies in a Technical Qualification Standard, and meet the requirements in DOE Order 360.1, will be identified with a unique icon. Self-study guides which have been developed to support the Technical Qualification Program will also be available on the Clearinghouse. Both courses and

self-study guides will be linked to the Technical Qualification Standards (available online through the Clearinghouse) with "hot keys." This will enable the user to query what competencies a course or self-study guide addresses; or, to query a competency for what training or study guides are available to support it.

Learning Activities to support the Technical Qualification Standards continue to be developed. To date, twenty-seven self-study learning materials have been completed including: self-study guides; computer-based training; and, videos. In addition in two subject areas, project management and safeguards and security, Department-wide courses have been evaluated and cross-walked to the Technical Qualification Standard's competencies. All learning materials are available on or through the Clearinghouse for Training, Education and Development Homepage.

## **DOE Training Standard**

## Commitment 4.3

A DOE training standard was issued in June 1994. It encompasses the principles of a systematic approach to training and establishes firm requirements for the training process required for Federal technical employees.

The new DOE Order 360.1, Training, was issued in May 1995 and supersedes the standard.

DOE Order 360.1, Training, will be revised to incorporate changes to the Technical Qualification Program implementation procedures and other areas as necessary. It is estimated that the Order will be available for Department-wide review in December 1996.

The revised, draft Order was not issued for review in December 1996. It is estimated that the Order will be distributed for Department-wide review through the Department's directives control system early in first quarter calendar year 1997.

The process to review and update DOE Order 360.1, *Training*, is continuing. Due to a greater scope of changes than originally anticipated, the timeline for issuance of the Order for Department-wide review has been extended.

# **Development of Learning Activities**

## Commitment 4.5

Efforts are being made to link course objectives with Federal specific needs. Various options for ensuring a systematic and effective approach to identifying existing courses and/or developing new courses to meet the requirements are being explored. The most recent course catalog identifying course listings in the Department was issued on December 30, 1994. Quarterly updates throughout 1995 will continue as this process matures.

In support of, but not considered a part of the Commitments, a model for the Lead Site Process was presented by the Oak Ridge Operations Office and accepted by the Technical Personnel Program Coordinator and the TPCC members. This is a process whereby DOE sites take responsibility for identifying and producing developmental activities to support the qualification process. A representative working group of TPCC members has been formed to fine tune and implement the process.

The Lead Site Working Group has met several times and met again on August 7 and September 25, 1995.

The target date for completion of necessary course modifications and course development is December 1995. This activity will not be completed by the target date and will be completed in 1996. Future Quarterly Reports will provide updates for this activity.

The target date for necessary course modifications and any necessary course development was originally December 1995. As indicated in the previous report and Department/Board Staff discussions, this effort will continue into 1996. Future Quarterly Reports and Technical Personnel Performance Indicator Reports will provide updates for this activity.

Self-study guides are being developed by the Lead Sites to support most of the subject areas in the Technical Qualification Program. Several of these study guides have been completed and, in addition to the normal hard copy distribution, are being posted on the Clearinghouse for Training, Education and Development. This Clearinghouse is one of the Department's Internet Home Pages and is available to all participants.

# **DOE Order on Federal Training**

## Commitment 4.6

The Federal training standard issued in June 1994 will be utilized in implementing training and qualification requirements for Federal technical personnel.

The standard has been incorporated into revised Departmental Order 360.1, Training, which was issued in May 1995 (due date of December 1994 was revised to May 1995).

# 4.10 Functional Area 10: Management Information System

# Commitment 4.8

# **Technical Personnel Performance Indicator Report**

A management report, the Technical Personnel Performance Indicator Report, which monitors and assesses the effectiveness of both Federal and contractor training and qualification initiatives was completed on April 30, 1994. The first report was a text report outlining the concept for selecting and tracking performance indicators. This report is being used primarily to monitor the implementation of Operations and Program Office activities required to meet target date initiatives specified in the Recommendation 93-3 Implementation Plan.

The first two indicators track the completion and approval of Training Implementation Matrices (TIMs) and the development and updating of the Individual Development Plans. This data was summarized and reported at the Technical Excellence Executive Committee meeting held on June 3, 1994. The Technical Personnel Performance Indicator Report for the second quarter was issued on June 15, 1994 to complete the second part of the commitment. This report added the TPAP status and the educational performance indicator item.

The results from the second quarter were compiled and distributed to Offices on August 12, 1994. The Technical Personnel Performance Indicator Report (TPPIR) request for third quarter data was completed. Data was retrieved from the Operations and Program Offices and the results were tabulated and issued on December 27, 1994.

The fourth quarter 1994 TPPIR was issued on April 17, 1995. The report reviews the status and progress of the following initiatives:

- 1. Individual Development Plans:
- 2. Training Implementation Plans:
- 3. Training Program Accreditation Plans:
- 4. Educational Performance Indicators; and
- 5. Implementation of Target Date Initiatives.

A report addressing first and second quarter 1995 initiatives was issued on August 31, 1995.

Upcoming reports will be tailored to reflect the implementation of the Department's Technical Qualification Program.

The Technical Personnel Performance Indicator report request for 1995 data is being prepared. A report updating Office implementation of 93-3 initiatives should be issued at the end of first quarter 1996. This report will cover the third and fourth quarters calendar year 1995 and will report on the following initiatives (Commitment #):

- 1. Technical Qualification Program (4.4);
- 2. Training Implementation Matrices (5.1);
- 3. Training Program Accreditation Plans (5.2);
- 4. Educational Performance Indicators (3.2)
- 5. Infrastructure of DOE Training Organizations (1.5);
- 6. Federal Training Staff (4.1.3); and
- 7. Implementation of Administrative Flexibilities (2.2).

The Technical Personnel Performance Indicator Report request for third and fourth quarter 1995 data was not issued. It was determined that the Report should be revised and an updated set of measures and metrics be established. The updated data set has been established and information requested for first quarter CY 1996. It reports on the following initiatives (Commitments):

- (1) Technical Qualification Program (4.4);
- (2) Training Implementation Matrices (5.1);
- (3) Training Program Accreditation Plans (5.2);
- (4) Educational Performance Indicators (3.2).

The Technical Personnel Performance Indicator Report, covering first quarter calendar year 1996, was issued in June 1996.

The Technical Personnel Performance Indicator Report for second quarter calendar year 1996 was issued in September 1996.

The Technical Personnel Performance Indicator Report, covering the third quarter calendar year 1996, was issued in November 1996. The Report provides the implementation status of the Technical Qualification Program, both from an individual Office perspective and Department-wide. The concerns of the National Treasury Employees Union remain unresolved and may impact the ability of the affected Headquarters offices to meet the May 1998 requirement for incumbent participants to attain full qualification.

The Report continues to provide an updated status of the Training Implementation Matrices (TIMs) and a profile of the advanced education accomplishments and pursuits of the Department's technical personnel.

Publication of the Technical Personnel Performance Indicator Report has been suspended until it is determined which performance measures should be in place to best measure the Department's progress.

## **External Assessment**

#### Commitment 6.1

An independent external assessment was performed by the National Academy of Public Administration. A baseline assessment was presented by the National Academy of Public Administration to the Technical Personnel Program Coordinator on June 28, 1994.

The National Academy of Public Administration (NAPA) completed their independent external assessment on August 31, 1994. Their formal report contains 27 recommendations with detailed backup and observations. To adequately address and assess the NAPA report, the Department issued a strategy for the review, adoption and implementation of accepted recommendations from NAPA's external review. This strategy was issued on September 23, 1994, and contains a four step process culminating in a Departmental Action Plan with approved initiatives and actions.

The Departmental Action Plan addressing each of the 27 recommendations, and identifying new initiatives to be

undertaken by the Department, and the corresponding time frame for each action, was issued in February 1995. The Action Plan covers an 18-month time period, with the first deliverables due in April 1995.

Due dates for a number of the actions in the Plan were revised during second quarter 1995 as it was determined to be inappropriate to initiate those actions until completion of the Department's Strategic Alignment Initiative.

The Department will plan an independent external assessment for 1996. A planning session will be held in the first quarter of calendar year 1996 to establish a path forward for future reviews.

## **Quarterly Progress Reports to the Board**

## Commitment 7.1

The Interim Report was issued on January 31, 1994. The Interim Report contained an update of all activities occurring between the issuance of the Implementation Plan and the end of the calendar year. The format of the Interim Report is being adopted for future Quarterly Reports.

The first Quarterly Report to the Board was issued on April 30, 1994. This reporting period covered the First Quarter Calendar Year 1994.

The Quarterly Report to the Board covering the Second Quarter Calendar Year 1994 was issued on July 29, 1994.

The Quarterly Report to the Board covering the Third Quarter Calendar Year 1994 was issued to the Board on October 31, 1994.

The Quarterly Report to the Board covering the Fourth Quarter Calendar Year 1994 was issued on January 30, 1995.

The Quarterly Report to the Board covering the First Quarter Calendar Year 1995 was issued on April 28, 1995.

The Quarterly Report to the Board covering the Second Quarter Calendar Year 1995 was issued on July 31, 1995.

The Quarterly report to the Board covering the Third Quarter Calendar Year 1995 was issued on October 30, 1995.

The Quarterly report to the Board covering the Fourth Quarter Calendar Year 1995 was issued on February 1, 1996.

The Quarterly report to the Board covering the First Quarter Calendar Year 1996 was issued on April 29, 1996.

The Quarterly report to the Board covering the Second Quarter Calendar Year 1996 was issued on July 29, 1996.

The Quarterly report to the Board covering the Third Quarter Calendar Year 1996 was issued on October 31, 1996.

The Quarterly report to the Board covering the Fourth Quarter Calendar Year 1996 was issued on January 29, 1997.

The Quarterly report to the Board covering the First Quarter Calendar Year 1997 was issued on April 29, 1997.

The Quarterly report to the Board covering the Second Quarter Calendar Year 1997 was issued on July 29, 1997.

# **Change Control Process**

#### Commitment 8

1. <u>Technical Specialist Qualification Standards</u> (Commitment 4.4.4.)

The Department's Federal Technical Employee Qualification Program includes development and issuance of Standards that are required by Commitments 4.1 and 4.4. of the Implementation Plan. In December we were on schedule for completing the Standards by the required deliverable due date. However, the schedule reflected a minimal allowance for schedule slippage. Our experience in developing the Standards indicated that the time allowed for management review was very limited and was not adequate to ensure detailed reviews and acceptance by all appropriate management personnel.

The Department determined that it could not issue Technical Specialist Qualification Standards by the Plan's original due date of December 1994 and receive complex-wide support. A decision was made to use the change control process in the 93-3 Plan to revise the Plan's original due date of December 1994 to May 1995. After discussions with the Board's General Council

and staff members, a notification of our intent to change the due date was forwarded on December 14, 1994.

The revised due date of May 1995 provided additional time to obtain management review and approval from each Office which is acting as a Management Sponsor. It should be noted that all Technical Specialist Qualification Standards were drafted in 1994.

Commitment 4.4.5 requires completion and implementation of the Technical Qualification Program by December 1995. This Commitment will not change.

# 2. <u>Institutionalize the Technical Training and Qualification</u> Program (Commitment 4.6)

The Plan requires the Department to institutionalize the Technical Training and Qualification Program in an Order. A revision of DOE Order 3410, Training, will address the process but should not be issued until the Qualification Standards review process has had an opportunity to identify potential implementation issues to be resolved in the Order revision.

The Department determined that it would be prudent to delay issuing the revised Order to identify and resolve any implementation issues. The notification to the Board on the revised date for the technical specialist Qualification Standards also included a revised date for the Order issuance of May 1995. The draft revision of DOE Order 3410 should be distributed for Department-wide review and comment in February 1995.

The revised Order was issued in May 1995 as Order 360.1, Training. The Order number was changed to reflect the new Departmental Order numbering system.

# 3. <u>Technical Specialist Qualification Standards</u> (Commitment 4.4.4)

One of the Functional Area Qualification Standards, the Nuclear Weapons Safety Qualification Standard, will not be issued for interim use until August 1995. This will provide the time necessary to align with related Recommendation 93-1 Implementation Plan efforts and ensure an accurate document. The Technical Personnel Program Coordinator's staff and the

Board's staff have discussed the revised date and the Department has processed the revision using the change control process of Section B in the Implementation Plan.

The Nuclear Explosives Safety Qualification Standard (formerly known as Nuclear Weapons Safety) was approved for interim implementation by the Technical Excellence Executive Committee in August 1995.

# 4.11 Meetings During this reporting period, the following meetings were held:

- 1. The Technical Personnel Coordinating Committee met by video tele-conference on July 16, August 19, and September 23, 1997.
- 2. The Technical Personnel Program Coordinator and staff continue to support the efforts of the Program and Operations Offices to document the qualifications of the senior technical safety managers and the review of incumbents by the Federal Technical Workforce Review Group.
- 3. The Technical Personnel Program Coordinator and staff met, in a working group session and by tele-conference, with a group of senior line managers to continue the process of identifying the issues which should be included in a revised Implementation Plan and the elements critical to its successful implementation.
- 4. The Technical Personnel Program Coordinator and staff met several times with the Board and the Board's technical staff to discuss the path forward including, the revision of the Implementation Plan.

Meetings planned for the fourth quarter calendar year 1997 are as follows:

- 1. Monthly Technical Personnel Coordinating Committee meetings.
- 2. Routine meetings with the Board's staff on the implementation of 93-3 initiatives and other related issues; and continuing discussions regarding the revision of the Implementation Plan.
- 3. Continuing sessions to facilitate implementation of the Technical Qualification Program.
- 4. Continuing meetings with the group of senior line managers reviewing the key technical competence issues affecting the Department.

# 4.12 Related Activities

The following related activities occurred during the reporting period:

- ♦ The Technical Personnel Program Coordinator's staff is working with members of the Technical Personnel Coordinating Committee to implement the Lead Site Program in identification and development of learning activities to support the Technical Qualification Program.
- ♦ The Technical Personnel Program Coordinator's staff supports the development of articles on 93-3 Implementation Plan initiatives for Spectrum.
- ♦ The Office of the Technical Personnel Program
  Coordinator continues to support the Technical
  Leadership Development Program (Interns) 1994, 1995
  and future Classes.
- ♦ The Technical Personnel Program Coordinator and staff participated in meetings with the Board, Board technical staff and DOE to address the initiatives in the Department's Implementation Plan for Recommendation 95-2, specifically Task 5.
- Attachment 5.2 to this Report provides the status of several items committed to in the Implementation Plan responding to Recommendation 91-6. To facilitate closure of Recommendation 91-6, the status of these items will be included in this Report until they are completed. This reporting does not constitute an additional commitment or modification to the 93-3 Implementation Plan.

## ATTACHMENT 5.1

# TECHNICAL EMPLOYEE FUNCTIONAL AREA CATEGORIES FOR DEFENSE NUCLEAR FACILITIES

# 1. Technical Manager - canceled

- managers of technical programs and/or technical personnel; primarily those personnel in the other functional area categories listed in this document.

## 2. Facility Representative

- on-site Department management representative to oversee facility contractor operations.
- generalists in areas of design, operations, orders and regulations at a specific facility(s).

## 3. Environment, Safety and Health Resident

- on-site representative of the Environmental Safety and Health (EH) organization.
- provide independent oversight of health and safety programs at DOE facilities.

## 4. Nuclear Systems Safety

- expertise in areas such as criticality safety, nuclear safety envelope, safety analysis reports (SAR), and risk assessments.

## 5. Nuclear Explosives Safety

- expertise in areas related to safety of nuclear weapons as it relates to basic nuclear weapon design, nuclear weapon assembly and disassembly, and nuclear weapons testing.

## 6. Fire Protection

- expertise in areas such as fire protection system engineering, fire protection, fire detection systems, and fire response organizations.

## 7. Radiation Protection Revision One

- expertise in areas such as radiation instruments and detection systems, radiological engineering and administrative controls, radiation monitoring programs, and radiation health effects.

## 8. Industrial Hygiene

- expertise in areas such as industrial health regulations and laws, personnel monitoring programs, access control programs, personnel protective equipment, hazardous materials control programs, and biological effects of hazardous materials and environments.

# ATTACHMENT 5.1 (cont'd)

# 9. Occupational Safety

- expertise in areas such as federal, state and local laws and regulations related to occupational safety, construction safety, personnel protective equipment requirements, electrical safety, and transportation safety programs.

## 10. Emergency Management

- expertise in areas such as federal, state and local emergency preparedness laws, facility emergency preparedness programs, facility emergency management engineering systems, risk assessment, and root cause analysis.

## 11. Civil/Structural Engineering

expertise in areas such as seismic design and engineering, facility foundation and structural design and modifications, and structural design and safety requirements related to nuclear facilities.

# 12. Construction Management & Engineering

- expertise in areas such as facility design methodology, surveying, site preparation, reading and interpreting blueprints and specifications, industrial construction methods, construction project management, and construction contracting.

# 13. Project Management

- expertise in areas such as project management and control systems, facility modification programs, cost control, scheduling, value engineering and configuration management.

## 14. Mechanical Systems

expertise in applied facility engineering and design related to pumps, valves, piping systems, nuclear ventilation systems, emergency diesels, turbines, and heat exchangers.

## 15. Electrical Systems

expertise in applied facility engineering and design related to electrical distribution systems, motors, generators, battery systems, emergency power supplies, and electronic control systems.

## 16. Instrumentation and Control

- expertise in areas such as process control system design and operation, control loop troubleshooting, process system instrumentation, and maintenance and repair of process system components.

# ATTACHMENT 5.1 (cont'd)

## 17. Facility Maintenance Management

- expertise in areas such as maintenance engineering programs, post-maintenance testing, predictive and preventive maintenance programs, and work control systems.

## 18. Environmental Compliance

expertise in areas related to environmental laws and regulations, water quality management programs, air quality management programs, pollution prevention, and license and permit processes and requirements.

## 19. Environmental Restoration

expertise in the following areas as they relate to environmental restoration projects: environmental laws and regulations, license and permit processes and requirements, site characterization processes, hazard classifications, and decontamination and decommissioning processes and requirements.

# 20. Waste Management

expertise in areas such as federal, state and local laws and regulations related to storage and handling of hazardous waste, nuclear and non-nuclear waste management engineering systems, waste minimization programs, and waste transportation regulations.

## 21. Technical Training

- expertise in areas such as technical training and qualification program design, development, implementation and evaluation for contractor and federal technical personnel.

## 22. Safeguards and Security

expertise in areas such as control, accountability, and transportation of special nuclear material, physical security, counterintelligence, communications security, and classification of information.

## **ATTACHMENT 5.2**

## **IMPLEMENTATION PLAN 91-6 ITEMS**

I. Radiological Protection standardized core courses.

Status:

Six additional courses are either completed or are scheduled to be completed in calendar year 1997 as follows:

- 1. Radiation Safety Training for Tritium Facilities Completed in December 1996
- 2. Radiation Safety Training for Accelerator Facilities Completed in March 1997
- 3. Radiation Safety Training for Uranium Facilities Issued for comment on 6/24/97. Expected to be completed in Fourth Ouarter Calendar Year 1997
- 4. ALARA Training for Technical Support Personnel Issued for comment on 4/23/97. Expected to be complete in Third Quarter Calendar Year 1997
- 5. Radiation Producing Device Safety Training Comments received. Expected to be complete in Third Quarter Calendar Year 1997
- 6. Contamination Control for Biomedical Researchers Completed in March 1997