



## Department of Energy

Washington, DC 20585

August 3, 1999

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

Dear Mr. Chairman:

In the Revised Implementation Plan (IP) for Board Recommendation 93-3, *Improving DOE Technical Capability in Defense Nuclear Facilities Programs*, the Department commits to examine and revise Technical Leadership Development Program (TLDP) guidance to include methods that can be used by Department line organizations to address issues (e.g., downsizing effects on retention of interns) that have adversely affected the program.

As a deliverable pursuant to Commitment 5.3.3 of the IP, the enclosed document, the *Technical Leadership Development Program Implementation Plan*, was developed and approved by the Federal Technical Capability Panel. The revised TLDP retains the important developmental aspects of the original program while increasing local ownership and accountability.

The Secretary demonstrated the Department's commitment to the TLDP in his July 15, 1999, memorandum endorsing the Panel's Annual Report and recommendations. To support those directions, a coordinated nation-wide recruiting effort is being initiated so that the Department will be positioned to hire graduates into the TLDP next spring.

The Department has completed the actions identified under Commitment 5.3.3 and proposes closure of this commitment.

If you have any questions, please call or your staff me at (202) 426-1323.

Sincerely,

A handwritten signature in cursive script, appearing to read "David R. Roth".

David R. Roth, Executive Secretary  
Federal Technical Capability Panel

Enclosure

cc:

Chairman, Federal Technical Capability Panel  
Panel Members  
Mark B. Whitaker, Jr., S-3.1

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# U. S. Department of Energy

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## Technical Leadership Development Program

### IMPLEMENTATION MANUAL



Washington, D.C. 20585

July 8, 1999

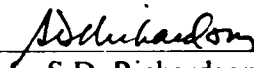
## INTRODUCTION

In the revised Implementation Plan (IP) for Defense Nuclear Facilities Safety Board Recommendation 93-3 the Department of Energy committed (Commitment 5.3.3) to the development of program guidance for the Technical Leadership Development Program (TLDP). The TLDP Program Guidance Framework was developed by the Federal Technical Capability Panel (Panel), which is responsible for overseeing completion of the IP, and forwarded to the Board in fulfillment of Commitment 5.3.3 in February 1999.

The TLDP Program Guidance Framework provided for the establishment of a corporate working group, representing stakeholders from throughout the complex, to draft the specific program procedures and methods necessary to implement the revised TLDP. This working group was championed by the Acting Deputy Manager - Rocky Flats, and was comprised of representatives from Field Offices, Headquarters Program Offices, and the Office of Management & Administration.

This Implementation Manual (Manual) describes the TLDP model and processes which the Panel agreed to endorse. The Manual, together with the TLDP Program Guidance Framework, provides the necessary structure needed to begin the recruitment of the first TLDP class under the revised IP. It remains important for the Department to identify major elements of funding for the TLDP. The Panel will continue to work with the Deputy Secretary, the Office of the Chief Financial Officer, and the Office of Management & Administration in resolving these funding issues.

This document is issued on an interim basis under the authority of the Federal Technical Capability Panel chartered by the Deputy Secretary. The requirements contained in this document are being included in the Federal Technical Capability Program Manual. This manual will be entered into the Department Directives System.



S.D. Richardson, Chair  
Federal Technical Capability Panel

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## **A. TECHNICAL LEADERSHIP DEVELOPMENT PROGRAM OVERVIEW**

The Department of Energy's Technical Leadership Development Program (TLDP) is designed to provide a continuing source of highly competent technical personnel with the skills and knowledge to meet the Department's current and future technical staffing needs while also nurturing their potential as future leaders and managers within the Department. The TLDP is designed to attract recent college graduates (entry level), current employees, and private sector candidates with 3-5 years experience.

The program consists of general and specific technical training activities; management and leadership development activities; rotational work experiences in a variety of functional programs and program support areas (at various Headquarters, Field or Area Offices, Laboratories, and/or Contractor Organizations). After the first three years, 12 months of graduate education may be made available to TLDP participants for study in a technical specialty area appropriate to the mission(s) of the home organization and/or of the Department. Attachment 1 shows the training activities, work experiences, and graduate education against a Timeline.

## **B. PROGRAM CONTENT**

### **Duration**

The first three years are structured to maximize the amount of time participants will spend at their home organization and are comprised of training, rotational assignments, and developmental activities within the home organization. After graduation from the three year structured program, participants may be provided advanced education in a technical discipline (i.e., graduate study).

### **Activities**

Rotational assignments are required to be structured work assignments at the host location and are to be completed as follows:

- One 6-month rotation at another Field or Area Office;
- One 6-month rotation at a contractor or laboratory location;
- One 6-month rotation at Headquarters.

### **Applied Engineering Fundamentals Course (AEFC)**

An Applied Engineering Fundamentals Course will be developed to provide a bridge between academic training and education and the Department's missions. The AEFC will provide TLDP participants with the ability to integrate and apply varied technical disciplines to topical DOE problems and situations.

### **Leadership/Management Training**

Leadership/Management training will be provided to TLDP participants to facilitate their ability to assume leadership positions in the Department in the future. It is expected that the Leadership/Management phase of the TLDP will be two months in length, and will cover such

subjects as: Technical Project Management, Program Management, and Contract Administration for Technical Representatives.

### **Advanced Education**

The opportunity for graduate study in a technical discipline, up to 12 months full-time or the part-time equivalent, may be made available to TLDP participants who do not already possess graduate degrees. The graduate studies will provide participants with advanced skills and knowledge that will support the accomplishment of the Department's current or projected missions. Participants will maintain full-time employee status during the graduate study phase of the TLDP.

## **C. ROLES AND RESPONSIBILITIES**

### **The Federal Technical Capability Panel**

The Federal Technical Capability Panel (FTCP) provides policy oversight and guidance for the TLDP. The Panel is comprised of senior line managers from Headquarters Program Offices, Field Offices, and representatives from the Office of Management and Administration and Office of Environment, Safety, and Health. Decisions relative to the direction of the TLDP will be made by the FTCP. Panel oversight includes, but is not limited to validating the overall effectiveness of the program, course curriculums, learning activities, and other program objectives. The Panel is also charged with ensuring that management support and resources are available to achieve program goals within their Home Organizations.

### **Office of Management and Administration**

The Director, Office of Management and Administration will assign a Program Manager for overall coordination of the TLDP and in support of the Federal Technical Capability Panel's TLDP activities. The TLDP Program Manager will oversee the national recruitment effort; the coordination of centralized training activities; the contracting, development, and maintenance of the Applied Engineering Fundamentals Course, Leadership/Management Learning Activities, and Mentoring Course. Oversee the Applied Engineering Fundamentals Course, Leadership/Management Activities, and Mentoring Course delivery, including appointment of a class supervisor to manage the participants while on detail to these learning activities. Assist in coordinating rotational assignments among HQ, Field, Laboratories and/or Contractor coordinators.

### **Program Directors/Field Managers**

Program Managers and/or Field Managers will ensure the availability of appropriate resources to support the TLDP and participants. This will include but not be limited to: funding, FTE's, training, mentoring, and other such activities that will ensure the success of the program. They will assign a TLDP Home Coordinator.

**Home Organization Management/TLDP Coordinator/Mentor**

Line Management will provide necessary support and resources to meet all objectives and goals of the Technical Leadership Development Program. The Home Organization TLDP Coordinator is responsible for coordinating all TLDP activities with HQ, Field Organizations, and internal organizations. Home Organizations (HQ and/or Field) will assign a mentor to each TLDP participant. It is mandatory that each mentor attend the Departmental Mentoring Activity prior to assuming duties as a mentor. Every effort will be made to ensure that TLDP participants are fully integrated into the Technical Qualification Program (TQP). Learning activities, rotational assignments and other TLDP planned activities should assist the participant in fulfilling the TQP and Home Organization objectives.

**D. BUDGET AND FTE's**

**Designation of FTE's**

Individual TLDP candidates will be assigned to the responsible Program and Field Offices that recruited and selected them, upon entry into the TLDP. Accordingly, Program and Field Offices electing to participate in the program will be required to dedicate positions (and associated FTE's) from within their staffing targets to support their TLDP hires. FY 2000 staffing ceilings, resulting from review and approval of Workforce 21 Staffing Plans, have been provided to all Departmental Elements. The initial FY 2000 TLDP class must be accommodated within these ceilings. (Organizations that did not include TLDP positions in their Workforce 21 Staffing Plan, but now desire to participate in the FY 2000 program, may submit a revised Workforce 21 Staffing Plan for approval in accordance with the procedures outlined by the Director of Management and Administration in his April 2, 1999, memorandum, subject: Approval of Workforce 21 Plans. Field offices that submit revised plans should also assure appropriate coordination with their Lead Program Secretarial Office, as called for by the Secretary's memorandum of April 21, 1999, subject: Changes to the Departmental Management Structure.)

FTE's required to cover Program and Field Office participation in the TLDP in FY 2001 and beyond should be requested through the Corporate Review Budget process.

**Funding**

Program and Field Offices electing to establish TLDP positions will be required to formulate budgets and provide funding to cover the costs of salaries, benefits and travel expenses for their program participants.

Additionally, to ensure the continued success of the program, a centralized, reliable source of funding will be required to cover expenses associated with those aspects of the program that are best managed centrally. Included would be costs for centralized recruitment and advertising, costs for development and administration of the Applied Engineering Fundamentals Course, and costs of maintaining a central staff to administer the program. In order to implement the program as planned with an initial TLDP Class in FY 2000, funding must be obtained in FY 1999 and FY

2000 to begin program development activities. The Office of Management and Administration (MA-31) will prepare an estimate of the funding required to support the program through FY 2000. The Office of the Chief Financial Officer will then work with the Office of Management and Administration to identify a source of funding that is sufficient to provide for development and implementation of the program within the time frames agreed upon by the Federal Technical Capability Panel.

The Office of Management and Administration will be responsible for the formulation and execution of all future budgets associated with administering the centralized aspects of the program. It will therefore be necessary for the Office of Management and Administration and the Office of the Chief Financial Officer to work together to develop a budget strategy for acquiring the funding needed to support the program in FY 2001 and beyond. The development of such a strategy should include an assessment of the propriety of including the TLDP as a line item in the Department's FY 2001 budget request.

## **E. RECRUITMENT PROCESS**

### **Identification of Staffing Needs**

Staffing needs should be identified through Headquarters and Field office coordinators in consultation with their senior technical managers. The needs of all Headquarters and Field organizations should be addressed and targeted during each recruitment trip or effort. Generic position descriptions (PD's) may be developed at the Program Office/Field Office level. Offices are not obligated to use these generic PD's.

### **Vacancy Announcements**

Recruitment will use available competitive and excepted service authorities. The area of consideration will be Nationwide/All sources. Interdisciplinary positions (GS-7, GS-9, GS-11, and GS-12) in the Engineering/Physical Science areas will be targeted. Opening and closing dates will be coordinated through the DOE TLDP program manager and with Headquarters and Field office coordinators. Rating and selection dates will be established upon closing of the vacancy announcements. Conditions of employment will include security clearance, drug testing, and proof of draft registry. Geographic locations will be provided on the vacancy announcement so applicants can identify their geographic preference.

### **Sources for Candidates**

Diverse technical institutions will be identified through a variety of sources, including databases from colleges and universities and from the DOE publication, Diversity Employment and Recruitment Sources for Workforce 21, dated February 1999. Staff personnel will arrange recruitment trips, or other solicitations, to colleges and universities that are likely to be sources of quality technical candidates, who might also enhance the Department's diversity profile. Candidates will also be recruited through job fairs and special mailings. As appropriate, advertisements will be placed in engineering and professional journals, newspapers, and other



publications. The DOE TLDP program manager and Field office coordinators need to coordinate these efforts in order to address Headquarters as well as Field office staffing needs.

### **Recruitment**

Recruitment will occur nationally and locally by representatives from Headquarters and participating Field Offices. Typically, there will be three recruiters for each school, or event, and will include: Human Resources (HR) staff from Headquarters or Field Organization, a mentor or other technical staff member, and a graduate of the TLDP program.

A recruitment package will be available to the candidates on all recruitment trips. This package will include information on benefits, salary, the Department of Energy, the TLDP, and the local area. Resumes may be collected on these recruitment trips, and will be provided to the appropriate HQ or Field HR specialist for rating, ranking, screening, and referral to selecting official.

## **F. SELECTION CRITERIA AND PROCESS**

### **Application Materials**

Applications, resumes, and other required documentation will be received for review from recruiters, by direct mailings or personal delivery, or by other means at Headquarters and field offices, and by concerned managers at Headquarters and in the field. For Headquarters applicants, HR staff will perform a basic qualifications screening including application or resume review/analysis, qualifications analysis, and matching of knowledge, skills and abilities with job requirements, and grade level determination. Field Office HR staff will similarly screen applications for positions at their sites.

### **Rating and Ranking**

This part of the process will provide consideration and clearance to those individuals eligible for selection under the provisions of the Career Transition Assistance Plan (CTAP), Reemployment Priority List (RPL), Interagency Career Transition Assistance Plan (ICTAP), and Re-promotion Eligible employees (affected by reduction-in-force), as well as screening other sources of applicants. The delegated examiner will provide a list of eligibles, if applicable, to a panel of three or more subject matter experts/technical managers who, along with an HR specialist, will review, rate, and rank applications. Upon completion of these activities, Selection Certificates will be issued to the appropriate Selecting Official(s).

### **Interviews and References**

The DOE employing organization may use a standard interview guideline, supplemented by the employing organization's unique requirements. Candidates for particular positions will be interviewed over a specified time period agreed upon by the Program and Field Offices. The hiring organization will issue and fund invitational travel requests, and conduct interviews using

knowledgeable and qualified Headquarters and/or Field representatives, depending upon the nature and location of the position and organizational requirements.

### **Selections/Non-Selections**

Selectees will receive a tentative job offer from the Program/Field Office, normally within 7 days of the selecting official's decision. Other candidates will be notified as soon as possible of their non-selection, and whether the recruitment action has been canceled or the position re-announced.

### **Job Offers**

Tentative job offers of employment within the General Schedule or Excepted Service may be made only in writing and only by an HR specialist, with a return receipt required. The selectee must respond within 10 days of the signature date of the correspondence accepting the offer or will be considered to have declined. No extensions will be granted to the 10-day response time.

*Offer Accepted:* The HR specialist will establish an effective date of employment, notify non-selects, and arrange for a permanent change of station if applicable.

*Offer Declined:* The HR specialist, in consultation with the selecting official, may offer incentives such as Advanced In-Hire Rate, and/or Recruitment and Relocation Bonuses, as appropriate.

## **G. SERVICE OBLIGATION**

A service obligation of three years for each year of graduate study will be incurred by TLDP participants. This means that an employee would have to work for the Federal Government a minimum of three years after completion of graduate work, if they used the full 12 months of graduate study.

Service obligations may also be incurred by TLDP participants for the formal training and development activities that occur during the first three years of the TLDP, comprised of training, rotational assignments, and developmental activities within the home organization. (Details of this are being worked out and will be made known to applicants for the TLDP).

## **H. HOME ORGANIZATION**

### **Orientation**

The 6-month orientation phase activities provide the TLDP participant with the Department's history and organizational structure, mission, core values, and vision; and the Home Organization's structure, mission, core values, and vision.

Home Orientation consists of the following activities:

- a) Completing employment paperwork

- b) **Badging activities, which include security, intelligence, and employee conduct briefings**
- c) **Introduction to the supervisor of record and organizational group employees**
- d) **Information about roles and responsibilities as they relate to the assigned job and duty station**
- e) **Introduction to the Home Organizational TLDP Coordinator, who will provide continuing information on the program**
- f) **Selection of a Technical Qualification Program functional area and preparation of individual Technical Qualification Record**
- g) **Initiation of Performance and Development Plan/Individual Development/Training Plan**
- h) **Assignment of Home Organization Mentor**

### **Mentors**

Mentoring activities are a vital component of the TLDP. Each participant will be matched with a mentor to guide them during the program. These mentors will assist in providing feedback, guidance, and counseling with the ultimate responsibility of challenging each TLDP participant to strive for professional excellence. As part of that responsibility, each home organization mentor will be required to attend a centrally administered DOE Mentoring Course that will detail the mentoring role, techniques and outcomes. MA-31 will procure the course and provide for a centralized delivery utilizing traditional or technology supported platforms.

### **Rotational Assignment**

To achieve the Department's goals, participants will need additional professional and technical skills and knowledge to begin productive and ethically responsible careers. Rotational work assignments provide practical, real-life experiences and an opportunity to see the interactions between the assigned duty station and other elements of the Department. Three rotational work assignments are required. Each is designed to maximize exposure to the range of responsibilities of DOE activities and aid in development of confident, highly qualified, knowledgeable technical staff members.

Rotational assignments will be developed by the TLDP participant and Home Organization TLDP Coordinator, who will coordinate the activity with Headquarters (MA-31). All rotational assignments must provide meaningful work for the participant and will include the following information as a minimum:

- a) **Field/Program Office Mission**
- b) **Major goals associated with the Field/Program Office Strategic Plan**
- c) **Major issues of concern at the Field/Program Office**
- d) **Participant's duties/responsibilities**
- e) **Participant's expectations of the assignment**
- f) **Participant performance measures**

- g) How the Field/Program Office assignment contributes to the development of the participant
- h) Assignment of an on-site DOE mentor and work supervisor

### **Accelerated Promotion**

TLDP participants may be eligible for accelerated promotion in as little as six months from the date of the initial appointment to the program. Eligibility for accelerated promotion will consider entry level, time-in-grade, and performance. Site specific guidance may be implemented to supplement the core considerations.

### **Advanced Educational Program**

Twelve (12) months of graduate education may be made available after the first three years. Graduate study must be in a technical discipline appropriate to the mission of the Home Organization. A continued service obligation of three years continuing work at DOE for one year of graduate study will be required. The graduate project or thesis may be completed after the participant returns to the Home Organization and should be a work-based project.

Home organizations may consider other developmental assignments for TLDP participants who already possess graduate degrees, such as extended details to other Federal, private sector, or international organizations. As with graduate education, the purpose of such developmental assignments should be to provide participants with advanced skills and knowledge that will support the accomplishment of the Department's current or projected missions.

### **Security Clearance**

Participants will complete the paperwork to initiate the appropriate level of security clearance required to perform the assigned duties. The minimum level of security clearance will be L with most positions requiring a Q level of clearance.

### **Technical Qualification Program**

The Technical Qualification Program (TQP) is the Department's program that ensures technical competence of its workforce. Upon completion of the first three years of the TLDP, each participant will be required to be fully qualified within their assigned functional area qualification standard.

### **TLDP Coordinator**

The Home Organization will assign a single person to serve as the on-site TLDP Coordinator. The Coordinator will assist the TLDP participants in understanding the program, assisting with on-site programmatic issues, and coordination and finalization of rotational assignments.

## **Employee Programs**

The Home Organization will ensure the TLDP participants are fully aware of all Human Resources programs, such as Employee Assistance Program, health benefits, insurance, wellness program, performance and development plans, individual development plans, etc.

## **I. CENTRAL LEARNING ACTIVITIES**

### **Applied Engineering Fundamentals Course**

An Applied Engineering Fundamentals Course (AEFC) will be developed to provide for a transition and application from academic education and the Department's missions. The AEFC will provide TLDP participants with the ability to integrate and apply varied engineering and technical disciplines to topical DOE problems and situations. Acquisition of interdisciplinary knowledge and reliance on teamwork skills using DOE specific case studies and field experiences will also be emphasized. It is anticipated that the AEFC will be four months in length, and will be delivered by a highly respected and accredited engineering college, university, or other provider. The instruction will be augmented and assisted by subject matter experts familiar with contemporary DOE technical issues who can serve as role models and technical resources. Procurement and contract management of an appropriate college, university, or other provider and the DOE subject matter experts will be done by MA-31.

The AEFC as designed and delivered in previous years will be revalidated to assess its current applicability in meeting the needs of DOE. An AEFC Review Committee will be assembled by MA-31 with a membership composition consisting of DOE and/or contractor personnel having previous experience with the AEFC and/or are recognized as outstanding subject matter experts. Other expertise from previous TLDP graduates and sources in academia familiar with excellence in engineering education practices may also be solicited to serve on the committee. During the delivery of the AEFC, this committee will conduct periodic assessments to assure the course is meeting pedagogical and contract expectations and ascertain if real-time changes are needed. Although the content of the AEFC will be revalidated by the AEFC Review Committee, current modules are:

- Thermodynamics
- Fluids
- Heat Transfer
- Civil Engineering
- Electrical Engineering
- Chemistry & Materials
- Nuclear Engineering
- Data Communications
- Instrument & Control Systems
- Environment and Pollution Control
- Chemical Processing & Nuclear Materials

- Radiological Controls
- Design Project

A class supervisor will be appointed to manage the TLDP participants while on detail to the course. The class supervisor will be responsible for ensuring that all coordinated learning activities are completed with integrity and providing guidance to program participants as requested or required. Individual TLDP participant performance assessment/feedback sessions will also be conducted on a routine basis by the class supervisor.

**Leadership Development/Management Course/Activities**

Leadership/Management training will be provided to TLDP participants to facilitate their ability to achieve future leadership positions in the Department. It is expected that the Leadership-Management phase of the TLDP will be two months in length, and will cover such subjects as: Technical Project Management, Program Management, and, Contract Administration for Technical Representatives. The Leadership/Management training will be offered at a central location, most likely as an immediate follow on to the AEFC, coordinated by the Office of Training & Human Resource Development (MA-31).

# TLDP Timeline

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