

GAO

Report to the Subcommittee on Energy  
and Water Development, Committee on  
Appropriations, House of  
Representatives

February 1999

DEPARTMENT OF  
ENERGY

Actions Necessary to  
Improve DOE's  
Training Program



19990318 079

**DISTRIBUTION STATEMENT A**  
Approved for Public Release  
Distribution Unlimited

DTIC QUALITY INSPECTED 4



United States  
General Accounting Office  
Washington, D.C. 20548

---

**Resources, Community, and  
Economic Development Division**

B-281789

February 12, 1999

The Honorable Ron Packard  
Chairman, Subcommittee on Energy  
and Water Development  
Committee on Appropriations  
House of Representatives

Dear Mr. Chairman:

As requested, we examined the problems in the Department of Energy's training program and the changes that are needed to address those problems.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time, we will send copies of this report to the appropriate congressional committees; the Secretary of Energy; and the Director, Office of Management and Budget. We will also make copies available to others upon request.

Please contact me on (202) 512-3841 if you or your staff have any questions about this report. Major contributors to this report are listed in appendix II.

Sincerely yours,

A handwritten signature in cursive script, appearing to read 'Victor S. Rezendes'.

Victor S. Rezendes  
Director, Energy, Resources,  
and Science Issues

---

# Executive Summary

---

## Purpose

The Department of Energy (DOE) spent a total of about \$379 million in fiscal year 1997—the most recent year for which cost data are available—on training (about \$57 million for federal employees and about \$322 million for contractor employees). This total represents a reduction of about \$175 million in the amount DOE spent on training in fiscal year 1995. However, GAO reports issued in 1997 and 1998 on DOE's training program showed that further cost reductions and management improvements are achievable. As a result, the Chairman, Subcommittee on Energy and Water Development, House Committee on Appropriations, asked GAO to determine the problems in DOE's training program and the changes that are needed to address those problems. Specifically, this report (1) discusses DOE's current process for setting its training budget, (2) identifies opportunities to reduce the costs associated with DOE's training program, and (3) evaluates DOE's draft plan for training its employees in the future.

---

## Background

Within DOE, federal and contractor training is provided through a decentralized training structure. DOE's headquarters offices, field offices, and contractors all have their own training programs and budgets and dedicated staffs. The decentralization of DOE training has led to the identification of certain problems, which the Department documented in a 1995 training review. Those problems included duplication and waste associated with the development and delivery of both federal and contractor training and a lack of consistency in the training provided across the Department. The review concluded, among other things, that if a DOE-wide training program were developed, tens of millions of dollars in annual training costs could be avoided. During 1995, DOE developed a strategic plan to correct its training problems. According to DOE officials, however, the plan was not entirely successful because of a lack of funding. In November 1997, DOE started drafting a new training plan that it hopes will be made final early in calendar year 1999. The draft training plan lays out a strategy for training DOE employees over 3 fiscal years (1999 through 2001).

---

## Results in Brief

DOE has not completed any of the critical steps identified in the Office of Personnel Management's and its own guidance that lead to the development of a sound and defensible training budget. For instance, DOE has not defined the training needs for various occupations, including program managers and contractor oversight specialists. In addition, DOE

employees have generally not completed individual development plans, and DOE offices have generally not prepared annual training plans.

DOE could reduce its training costs by eliminating certain nonmandatory training and reducing duplicative and nonstandardized training across the Department. About 90 percent of DOE's training, according to a departmental estimate, is not mandated by laws and/or regulations, but DOE has not developed criteria on the type of nonmandatory training that is appropriate. As a result, DOE offers a wide range of nonmandatory training courses, such as a course on determining social styles in the workplace and one on employees facing mid-life questions. Furthermore, because DOE and its contractors independently develop and deliver training, duplicate courses exist and nonstandardized training occurs across the Department.

DOE's draft training plan has several shortcomings that may preclude it from improving departmental training over fiscal years 1999 through 2001, as intended. For example, the draft plan does not realistically estimate what overall costs and overall savings will result from the plan; how the plan will be financed, given DOE's decentralized training resources; and how DOE's training centers of excellence will eliminate duplicative training, as intended.<sup>1</sup> Moreover, even though DOE spent about 85 percent of its fiscal year 1997 training expenditures on contractor employees, the draft training plan does not address the steps necessary to improve contractor training. DOE officials stated that they are aware of these shortcomings and intend to address them in the final plan.

---

## Principal Findings

---

### DOE's Budgeting for Training Could Be Improved

Office of Personnel Management and DOE guidance establish specific critical steps to be followed in developing a training budget. GAO found that DOE has not completed any of these critical steps. The first step is to complete an assessment of occupational training needs. Occupational needs refer to the training needs of groups of individuals, such as program managers and contractor oversight specialists. GAO found that such an assessment had not been conducted throughout DOE primarily because the applicable departmental order on federal employee training contained no provision for doing one. GAO believes that certain groups within DOE would benefit from such an assessment because of the important nature of their

---

<sup>1</sup>The mission of the centers of excellence is to provide high-quality training on topical areas that cut across the entire Department.

work. Those groups include those involved in program management, project management, and contractor oversight. Managers throughout DOE told GAO that the lack of skilled staff in those groups is one of the Department's most fundamental problems.

After training needs have been established, individual employee development plans should be completed, according to DOE training officials. Collectively, these plans define the total training needs of individuals within the Department and are to be used in developing DOE offices' annual training plans. GAO found, however, in reviewing six DOE offices, that only about 33 percent of employees had completed a development plan. Recognizing that few employee development plans were being completed, DOE training officials established a goal in November 1998 of having 90 percent of DOE employees complete such a plan by December 31, 1999. Some DOE training managers interviewed were not aware that the Department's order on federal employee training requires the completion of a development plan, with certain exceptions, for 100 percent of its employees until so informed by GAO.<sup>2</sup>

On the basis, in part, of the information in employee development plans, DOE offices should prepare annual training plans. According to DOE, the offices' annual training plans provide the basis for any request for budget funds. GAO found that training plans had not been completed for five of the six offices it reviewed. For the sixth office, the plan did not contain certain relevant information, including the estimated number of employees to be trained, the type of training necessary, and the resources required to provide that training.

---

## DOE's Spending on Training Could Be Reduced

GAO identified two opportunities for reducing the costs associated with training DOE and contractor employees. First, some nonmandatory training could be reduced or eliminated. According to a departmental estimate, about 90 percent of the training offered by DOE offices is not mandated by laws and/or regulations, and DOE has not developed criteria on what type of nonmandatory training is appropriate. Some nonmandatory training is beneficial for career growth and professional development, such as courses on effective writing and oral presentation skills. However, the benefits of other nonmandatory training, such as (1) determining social styles in the workplace, (2) employees facing mid-life questions, and (3) defensive driving, seemed less clear.

---

<sup>2</sup>The exceptions identified in the DOE order on federal employee training include temporary employees and others for whom, by the nature of their position, training and development would result in minimal benefit to the Department.

Second, DOE's headquarters offices, field offices, and contractors have developed and delivered duplicative courses and nonstandardized training across the Department. In an era of employee downsizing and reduced budgets, it seems inefficient to permit DOE's headquarters offices, field offices, and contractors to develop and deliver courses such as project management, hazardous worker training, and occupational safety and health independently. Rather than develop a course once and deliver it departmentwide, DOE's decentralized training structure permits a generally applicable course to be developed many times over and delivered in different ways.

---

## DOE's Training Plan Could Be Improved

In 1997 and 1998, DOE drafted a new training plan that lays out a strategy for training federal employees over fiscal years 1999 through 2001. The plan contains 18 performance expectations to be accomplished. Those expectations include, for instance, that (1) DOE's average training expenditures per employee will be in alignment with similar federal agencies and the private sector by December 31, 1999, and (2) six training centers of excellence will be established by December 31, 2000.

However, the new plan, as currently drafted, has several shortcomings. First, GAO found that the plan's estimate of the overall costs to implement the plan and the overall savings to be achieved from it were not realistic. According to DOE training officials, it is important that a realistic estimate be included in the plan to solicit the support needed from senior DOE management and the funding needed from the Congress. GAO found, however, that the plan provides a limited projection of the overall costs to implement the plan and overstates the overall savings to be realized from it. For example, DOE attributed about \$1.7 million in cost savings in the plan to one of the Department's two existing centers of excellence but did not offset that cost savings against the approximately \$1.9 million in costs to operate the center. Thus, it is unclear whether the plan's savings will exceed the plan's costs.

Second, the plan does not explain how DOE's decentralized training resources will be committed to finance the plan. At present, few DOE offices have actively participated in developing the performance expectations contained in the plan. Whether other DOE offices that have not been actively involved in the plan will financially support it, when completed, remains to be seen. For the plan to be successful, full support from offices throughout DOE will be necessary.

Third, the plan does not present a policy regarding the use of the Department's centers of excellence. The centers are a central feature of the training plan. By operating the centers, DOE intends to effectively eliminate duplicative training within the Department. However, the plan does not present a policy on the use of the centers or mandate that the centers will be the sole source for training within the Department on a topical area, such as project management or occupational safety and health. As a result, one center—the National Environmental Training Office—has not eliminated but has actually delivered training courses that already existed within the Department.

Fourth, the plan does not identify what steps should be taken to improve contractor employees' training. DOE has been aware of contractor training problems since as early as 1995. In addition, DOE spent about 85 percent of its fiscal year 1997 training funds on contractor training. However, DOE has not addressed contractor training problems in any of its training plans. Specifically, GAO noted that the new draft training plan does not identify the need for DOE to (1) establish a departmental order on developing contractor training programs and budgets; (2) incorporate a standard set of performance measures into the Department's performance-based contracts regarding contractor training efficiency and effectiveness; and (3) clarify the roles and responsibilities of DOE's headquarters offices for the oversight of contractor training departmentwide. DOE officials stated that they are aware of the shortcomings in its training plan and now intend to address them in the final plan.

---

## Recommendations

In order to improve DOE's training program, reduce training costs, and improve the draft training plan, GAO is making a series of recommendations in this report, including having the Secretary (1) expeditiously conduct a comprehensive assessment of occupational training needs throughout the Department; (2) establish criteria on the type of nonmandatory training that is appropriate and review and eliminate nonmandatory training courses given across DOE that do not meet those criteria; (3) standardize the development and delivery of training that is generally applicable across DOE; (4) realistically estimate the overall costs to implement and the overall savings to be achieved from the Department's new training plan; and (5) identify in the new training plan the steps necessary to improve contractor training performance. At a minimum, those steps should include incorporating a standard set of performance measures for training into the Department's performance-based contracts.

---

## Agency Comments

GAO provided copies of a draft of this report to DOE for its review and comment. DOE agreed with the report's recommendations, except for GAO's recommendation that the Department expeditiously complete a comprehensive assessment of occupational training needs. DOE indicated that it had already completed an assessment of occupational training needs for certain occupational groups and had initiated a new program to train research and development program managers. DOE also stated, however, it will only continue conducting these assessments as funding constraints and departmental priorities allow. While GAO is encouraged by the actions that DOE has already taken, GAO is concerned that funding constraints and/or other departmental priorities may, in some way, hinder the completion of a comprehensive assessment of occupational needs. As pointed out in this report, a lack of skilled staff is one of the most fundamental problems in the Department. Accordingly, GAO continues to believe that DOE should expeditiously complete a comprehensive assessment of occupational training needs. DOE's complete response is presented in appendix I.

# Contents

<b>Executive Summary</b>		2
<b>Chapter 1</b>		10
<b>Perspective on DOE Training</b>	DOE's System of Training	10
	DOE's Annual Expenditures on Training	11
	DOE's Training Expenditures Could Be Lower	11
	Agency Comments	13
	Objectives, Scope, and Methodology	13
<b>Chapter 2</b>		16
<b>DOE's Management of Training Could Be Improved</b>	DOE's Budget Process for Training Could Be Improved	16
	DOE's Spending for Training Could Be Reduced	20
	Conclusions	23
	Recommendations	24
	Agency Comments	25
<b>Chapter 3</b>		26
<b>DOE's New Training Plan Could Be Improved</b>	DOE's Plans to Improve Departmental Training Have Evolved	26
	Overall Costs and Overall Savings From the Plan Have Not Been Realistically Estimated	27
	DOE Has Not Determined How the Department's Decentralized Training Resources Will Be Committed to Finance the Plan	28
	A Policy Regarding the Use of the Department's Centers of Excellence Has Not Been Developed	29
	The Steps Necessary to Improve Contractor Employee Training Performance Have Not Been Identified	30
	Conclusions	32
	Recommendations	33
	Agency Comments	33
<b>Appendixes</b>	Appendix I: Comments From the Department of Energy	36
	Appendix II: Major Contributors to This Report	40
<b>Tables</b>	Table 1.1: DOE Expenditures on Training, Fiscal Years 1995-97	11
	Table 1.2: Comparison of Federal Agency Training Data, Fiscal Year 1997	12
	Table 2.1: Percentage of Employees in Selected DOE Headquarters Offices Who Have Completed an IDP, Fiscal Year 1998	19

---

Table 2.2: Examples of Cost per Employee for DOE Contractor  
Training Courses, Fiscal Year 1997

22

---

**Abbreviations**

DOE      Department of Energy  
IDP      Individual Development Plan

# Perspective on DOE Training

Within the Department of Energy (DOE), federal and contractor employee training is provided through a decentralized training structure. DOE's headquarters offices, field offices, and contractors all have their own training programs and budgets and dedicated staffs. These programs provide training to federal and contractor employees on a wide variety of subjects. Comparing fiscal year 1995 and fiscal year 1997, DOE's expenditures on training decreased by about \$175 million, or about 32 percent. A comparison of DOE's training expenditures with other federal agencies and with the private sector indicates that DOE's training expenditures could be lower. DOE has also recognized this.

## DOE's System of Training

Because DOE emphasizes decentralized management, it assigns the main responsibility for employee training to individual DOE offices and contractors. These organizations, in turn, have established their own training programs and budgets with dedicated staffs to provide employee training. At DOE's headquarters, the Office of Management and Administration has the main responsibility for DOE-wide training issues. This office is responsible, for instance, for establishing DOE's training policies, procedures, and management plans.

The administration of training, however, largely falls within the purview of DOE's individual offices and contractors. Specifically, these organizations are responsible for planning, providing resources for, developing and delivering, and reporting on the training given to their employees. In addition, these organizations are responsible for ensuring the efficient and effective management of their training programs.

Generally, these organizations offer their employees three types of training: general, career development, and performance development. General training, which applies to all employees within the Department, includes courses on such subjects as equal employment opportunity, ethics, and security. Career development training, which supports the career growth of employees, includes courses on such subjects as time and stress management. Performance development training, which supports the acquisition or improvement of work-related skills, includes a wide range of courses, from technical courses on subjects such as nuclear physics and chemistry to nontechnical courses on back care and hearing conservation.

## DOE's Annual Expenditures on Training

The Department spends hundreds of millions of dollars annually training federal and contractor employees. According to DOE data, there has been a significant reduction in DOE's training expenditures—about 32 percent—comparing fiscal years 1995, and 1997 (see table 1.1).

Table 1.1: DOE Expenditures on Training, Fiscal Years 1995-97

Dollars in millions

Type of employee	Training expenditures by fiscal year		
	1995	1996	1997
Federal	\$93.4	\$93.5	\$57.2
Contractor	461.0	382.3	322.2
<b>Total expenditures</b>	<b>\$554.4</b>	<b>\$475.8</b>	<b>\$379.4</b>

Note: The figures in the table include the costs of providing the training in-house or contracting out for training. These figures also include the cost of employees' salaries and, for the most part, travel costs to attend training.

Source: DOE.

The reduction in DOE's annual training expenditures from fiscal year 1995 through fiscal year 1997 can be attributed to several factors. Those factors include (1) about a 13-percent decrease in the number of DOE and contractor employees; (2) greater use of advanced training technologies, such as computer-based learning; and (3) congressionally mandated reductions in training funds.

## DOE's Training Expenditures Could Be Lower

DOE's training expenditures could be lower, according to fiscal year 1997 data.<sup>3</sup> First, the amount spent on employee training varied widely among DOE field offices that perform similar functions. For example, according to DOE, the Department's Richland and Savannah River Operations Offices offered similar training, including courses on radiological worker training. However, the Savannah River Operations Office spent less than \$2,300 on training per federal employee while the Richland Operations Office spent over \$4,500 per employee. Second, DOE's average training expenditure per federal employee was higher than most other federal agencies or major private sector companies reviewed by the American Society for Training and Development's Benchmarking Forum.<sup>4</sup> Specifically, the Society's Benchmarking Forum collected and analyzed fiscal year 1997 training cost data from numerous organizations, including DOE, several other federal

<sup>3</sup>Information on training costs for fiscal year 1997 was the latest data available.

<sup>4</sup>The Forum is a private consortium of organizations with a strong commitment to sharing training cost information and seeking best training practices.

agencies, and nearly 60 companies in the private sector. The data showed that DOE's average training expenditure of \$1,808 per federal employee was higher than most other federal agencies reviewed (see table 1.2). The data also showed that DOE's average training expenditure per federal employee was about \$300 higher than the private sector average. The private sector companies included businesses of various types, including American Telephone and Telegraph and the Dow Chemical Company.

Table 1.2: Comparison of Federal Agency Training Data, Fiscal Year 1997

Agency	Training data	
	Number of employees	Total training expenditures per employee
Department of Energy	15,290	\$1,808
Centers for Disease Control and Prevention	7,490	\$689
Federal Aviation Administration	48,000	\$2,378
Food and Drug Administration	9,097	\$1,387
National Institutes of Health	16,500	\$537
Tennessee Valley Authority	15,211	\$1,485

Source: GAO obtained the data from the agencies listed.

Similarly, for contractor employees, DOE's training expenditures could be lower, according to fiscal year 1997 data. First, the amount spent on contractor employee training varied widely at DOE locations that perform similar functions. For instance, the contractor supporting DOE's Richland Operations Office spent an average of about \$1,510 per employee while the contractor supporting the Savannah River Operations Office spent an average of about \$3,500 per employee. Second, the average training expenditure per DOE contractor employee during fiscal year 1997 was about \$130 higher than the private sector average.<sup>5</sup>

DOE has also analyzed its training costs relative to these other organizations and believes the analysis represents a good comparison of training data. According to a DOE training official, the analysis shows, for instance, that DOE's costs per training day are still too high compared with those of private sector companies.

<sup>5</sup>A training expenditure of \$130 per employee multiplied by 105,297 (the number of DOE contractor employees in fiscal year 1997) equals a training cost of about \$13.7 million.

---

## Agency Comments

In commenting on a draft of this report, DOE indicated that its current training expenditure level of 2.5 percent to 3.0 percent of payroll was comparable to similar, technology-intensive, large, private companies. We noted, however, that DOE's average training expenditure per federal employee was higher than most other federal agencies or major private sector companies reviewed by the American Society for Training and Development's Benchmarking Forum. DOE did not dispute that information.

---

## Objectives, Scope, and Methodology

As agreed with the Chairman, Subcommittee on Energy and Water Development, House Committee on Appropriations, we determined the problems that exist with DOE's training program and the changes that are needed to address those problems. Specifically, this report (1) discusses DOE's current process for setting its training budget, (2) identifies opportunities to reduce the costs associated with DOE's training program, and (3) evaluates DOE's draft plan for training the Department's employees in the future.

To review the current process for setting the training budget, we contacted both DOE headquarters and field office officials. At DOE headquarters, we held extensive discussions with officials within the Office of Training and Human Resource Development. This office has the lead responsibility for drafting a new training plan that, when completed in early calendar year 1999, will lay out a strategy for improving DOE employee training over fiscal years 1999 through 2001. We also held discussions with officials on the Department's Training and Development Management Council. This council is responsible for overseeing the efforts to improve DOE's training program. In addition, we interviewed officials and reviewed training activities of six DOE headquarters offices—the Offices of Defense Programs; Environment, Safety, and Health; Energy Information Administration; Environmental Management; Science (formerly Energy Research); and Fossil Energy. These offices were selected because, according to their staffing levels, they are some of the largest offices within DOE headquarters. We further held discussions with officials at selected DOE field locations, including officials at the Department's two training centers of excellence—the Nonproliferation and National Security Institute in Albuquerque, New Mexico, and the National Environmental Training Office in Aiken, South Carolina.<sup>6</sup> Generally, a center of excellence

---

<sup>6</sup>The Nonproliferation and National Security Institute's mission is to provide tactical training to DOE contractors' protective forces throughout the nation. The National Environmental Training Office's mission is to provide high-quality technical environmental training to federal and contractor employees across DOE.

is a DOE organization that has been selected for its training, development, and technical expertise in a topical area that cuts across the entire Department.<sup>7</sup>

To identify opportunities to reduce the costs associated with DOE's training program, we reviewed various departmental documents. These included, but were not limited to, (1) a DOE memorandum documenting the results of the Department's 1995 training review; (2) DOE's 1995 and 1996 strategic training implementation plans; (3) DOE's 1998 draft training plan; and (4) the minutes of the Training and Development Management Council. We also relied on the GAO work done under three previous assignments: (1) Department of Energy: Training Cost Data for Fiscal Years 1995 Through 1997 (GAO/RCED-97-140R, May 6, 1997); (2) Department of Energy: Status of DOE's Efforts to Improve Training (GAO/RCED-97-178R, June 27, 1997); and (3) Department of Energy: DOE Contractor Employee Training (GAO/RCED-98-155R, May 8, 1998).

To further identify opportunities to reduce DOE's training costs, we compared DOE's training costs with those of other federal agencies and the private sector. Specifically, we contacted training officials both inside and outside the federal government. Within the federal government, these contacts included training officials with the Department of Health and Human Services, the Department of Transportation's Federal Aviation Administration, and the Tennessee Valley Authority. These agencies, as well as DOE, voluntarily provided training cost information to us and a private organization, the American Society for Training and Development's Benchmarking Forum. Outside the federal government, we contacted an official with the American Society for Training and Development's Benchmarking Forum, which had collected training cost information from nearly 60 private sector companies. From the contacts made, training cost information was obtained, analyzed, and compared with training cost information we had obtained from DOE. Generally, comparing training cost information from DOE and other federal agencies and the private sector appeared appropriate. All organizations, for instance, offer their employees a certain amount of technical skills training.<sup>8</sup> The training cost information we obtained was for fiscal year 1997 and was the latest data available.

---

<sup>7</sup>Examples of topical area training include environmental management; safeguards and security; project management; occupational safety and health; and hazardous worker training.

<sup>8</sup>The American Society for Training and Development's Benchmarking Forum defined technical skills training as job-specific training that focuses on procedures, including the use of technology, to create products, deliver services, or engage in processes. Technical skills training is provided to workers who use technology or machinery in their jobs.

To evaluate DOE's draft plan for training the Department's employees in the future, we contacted federal training officials both inside and outside of the Department. Externally, these contacts included training officials with the Office of Personnel Management; Defense Information Systems Agency; Federal Emergency Management Agency; and Nuclear Regulatory Commission. Within DOE headquarters, these contacts included officials with the Offices of Science; Environmental Management; Environment, Safety, and Health; Field Management; Procurement and Assistance Management; and Human Resources Management. At DOE field locations, these contacts included officials at the Nonproliferation and National Security Institute; National Environmental Training Office; Richland Operations Office; Rocky Flats Field Office; and Savannah River Operations Office. In all cases, these officials were contacted to obtain their views on the types of training problems DOE should be addressing in its draft training plan.

We also reviewed various reports that have dealt with improving federal employee training. These included, among others, Getting Results Through Learning, Human Resource Development Council, June 1997; Leadership for Change: Human Resource Development in the Federal Government, U. S. Merit Systems Protection Board, July 1995; and Leadership for America: Rebuilding the Public Service, The National Commission on the Public Service, 1989.

We provided a draft of this report to DOE for its review and comment. DOE's comments are included as appendix I and are discussed in the chapters where appropriate.

We conducted our work from June 1998 through January 1999 in accordance with generally accepted government auditing standards.

---

# DOE's Management of Training Could Be Improved

---

Two important aspects associated with the management of DOE training could be improved. Those two are how DOE develops its training budgets and how it spends its training funds. We found that DOE has not successfully completed any of the critical steps necessary to develop a sound and defensible training budget. Specifically, we noted that occupational training needs have not been defined throughout the Department and incorporated into employees' individual development plans (IDP); IDPs have generally not been prepared and used to support DOE offices' annual training plans; and annual training plans have generally not been prepared and used to support DOE's annual training budgets. With respect to how DOE spends its training funds, we identified two factors that account for the high costs associated with DOE training. Those factors are that DOE offices and contractors offer a high percentage of training that is not mandated by laws and/or regulations and that DOE's offices and contractors independently develop and deliver training. DOE, for its part, is aware of the problems associated with its budgeting for and expenditure of funds on training and is considering corrective actions. However, our review raised questions regarding the direction and/or pace of DOE's actions.

---

## DOE's Budget Process for Training Could Be Improved

According to the Office of Personnel Management and DOE guidance, certain steps are critical in developing a training budget. First, training needs should be defined. Second, the training needs should be incorporated into employees' IDPs. Third, the IDPs should be used to prepare annual training plans. The successful completion of these steps supports the development of sound and defensible training budgets. We found, however, that DOE has not successfully completed any of these steps. Specifically, we found the following:

- Occupational training needs<sup>9</sup> have not been defined throughout the Department and incorporated into employees' IDPs;
- IDPs have generally not been prepared and used to support DOE's annual training plans; and
- Annual training plans have generally not been prepared and used to support DOE's annual training budgets.

As a result, DOE's annual training budgets are not directly tied to the training needs of the Department. Instead, DOE's annual training budgets

---

<sup>9</sup>Occupational needs are the training needs of groups of individuals, such as program managers and contractor oversight specialists.

have generally been based on the amount of funding received in previous fiscal years.

---

### Training Needs Have Not Been Defined

A training needs assessment is a critical initial step in developing a training budget. According to Office of Personnel Management regulations, an agency needs to assess its occupational training needs periodically.<sup>10</sup> The assessment evaluates what performance is desired within an agency and what performance presently exists. When a gap exists, the assessment identifies the training necessary to elevate performance to the level desired. We found that DOE has not conducted a comprehensive assessment of occupational needs throughout the Department.<sup>11</sup>

The primary reason that a comprehensive assessment has not been conducted throughout DOE is that the Department's order on federal employee training contains no provision for doing one. Specifically, the training order outlines the objectives and responsibilities for federal employee training throughout the Department. It also outlines the components essential to the administration of employee training. The order does not, however, require that occupational training needs be assessed.<sup>12</sup> DOE training officials indicated that such an assessment had been included in the preceding DOE order on employee training but was deleted from the current order under the Department's paperwork reduction program.

During this and previous reviews of DOE activities, we have identified several departmental occupational groups that would most likely benefit from an assessment of occupational training needs. For instance, we believe that property managers may not be adequately trained. Supporting that view, we found that DOE recently surveyed 145 property managers and determined that 65 (or about 45 percent) had received no formal property management training. DOE also recently surveyed its field locations to determine if project managers are being properly trained. DOE guidance requires that employees who are project managers must be certified as possessing certain skills and receiving certain training. However,

---

<sup>10</sup>5 C.F.R. 410.203. This regulation is nonspecific on the frequency of an occupational training needs assessment but suggests that such an assessment could be done as often as annually.

<sup>11</sup>DOE's National Environmental Training Office has conducted an occupational needs assessment for environmental management training for fiscal years 1997 and 1998.

<sup>12</sup>DOE Order 360.1 specifies that personnel involved in the safe operation of defense nuclear facilities will have their technical skills assessed and will receive continuing training to maintain certain necessary skills.

preliminary data show that many project managers have not received certification. For instance, DOE's Savannah River Operations Office reported that only 2 of its 33 project managers had been certified. We further reported that managers throughout DOE believe that the lack of skilled staff in program, project, and contractor oversight positions is one of the Department's most fundamental problems.<sup>13</sup>

Recognizing that certain occupational groups should have their training needs assessed, DOE, in November 1998, proposed a revised order and manual on federal employee training. The proposed manual states that an occupational needs assessment must be completed at least every 5 years once the revised order and manual are made final.<sup>14</sup> In addition, the manual notes that such an assessment must include, but not be limited to, scientific and technical, acquisition, project management, and financial management functions. The DOE training official responsible for drafting the revised order and manual advised us that the 5-year assessment cycle was arbitrarily chosen. Furthermore, the sequence in which various occupational groups will be assessed has not yet been decided. DOE officials expect the revised order to be made final in the spring of 1999.

---

## IDPs Have Not Been Prepared

After training needs have been established, IDPs should be prepared. According to DOE's training order, an IDP is required for all employees within 60 days after they join the Department or transfer to a new position, and these IDPs should be reviewed and updated annually.<sup>15</sup> The IDPs provide the mechanism to define total individual training needs within the Department and are to be used in preparing DOE offices' annual training plans. Only a small percentage of the employees in the DOE offices we reviewed have completed an IDP.

During 1998, we reviewed the training practices followed by six DOE headquarters offices. Only one office had IDPs completed for more than half of its employees. The six offices provided us with the estimates of completed IDPs shown in table 2.1.

---

<sup>13</sup>Department of Energy: Opportunity to Improve Management of Major System Acquisitions (GAO/RCED-97-17, Nov. 26, 1996).

<sup>14</sup>The manual also states that each DOE office must identify annually its critical needs that, when met, will be most effective in improving organizational and workplace performance.

<sup>15</sup>DOE's training order does not require an IDP for temporary employees and for others for whom, by the nature of their position, training and development would result in minimal benefit to the Department.

**Table 2.1: Percentage of Employees in Selected DOE Headquarters Offices Who Have Completed an IDP, Fiscal Year 1998**

Headquarters office	Percentage of employees who have completed an IDP
Defense Programs	18
Environment, Safety, and Health	81
Energy Information Administration	36
Environmental Management	0
Fossil Energy	30
Science	40

Source: DOE.

For the six offices combined, only 33 percent of the employees had completed an IDP.

Recognizing that few of its employees had completed an IDP, DOE training officials established a goal in November 1998 of having 90 percent of DOE employees with an approved IDP by December 31, 1999. DOE training officials explained that the 90-percent goal is based on the belief that that may be the best percentage achievable. Some DOE training managers interviewed were not aware that the Department's order on federal employee training requires the completion of an IDP, with certain exceptions, for 100 percent of the Department's employees until we informed them.

### Annual Training Plans Have Not Been Developed

Each DOE office should complete an annual training plan that is based in part on the information contained in the IDPs, according to DOE's training order. This plan provides the basis for developing training budgets. It should also contain certain information, such as the estimated number of employees to be trained, the type of training necessary, and the resources required to provide that training. We found that the annual training plans either have not been completed or did not contain the information necessary to justify a budget request.

Five of the six offices had not completed an annual training plan for fiscal year 1998. For the one office that had—the Office of Environment, Safety, and Health—the plan did not contain the information required by DOE's training order. For instance, the plan did not estimate the number of employees to be trained, the type of training necessary, or the resources required to provide that training. Instead, the plan identified the initiatives planned for fiscal year 1998, such as the need to continually provide

employees with efficient course registrations and accurate training records. The DOE training official responsible for preparing the annual training plan explained that the plan did not contain certain information because it had been prepared using the previous year's annual training plan as a guide, and this plan lacked this information.<sup>16</sup>

Recognizing that annual training plans were not being completed or were not being completed properly, DOE, as early as 1996, had attempted to develop a template for the plan. DOE envisioned that the template would include an outline and suggested language. Because this template was subsequently cancelled, DOE training officials in December 1998 immediately disseminated a copy of a properly completed fiscal year 1999 annual training plan as the model to be followed.

---

## DOE's Spending for Training Could Be Reduced

We identified two opportunities for reducing the costs associated with DOE and contractor employees' training. First, some nonmandatory training could be reduced or eliminated. According to a departmental estimate, about 90 percent of the training offered by DOE offices and contractors is not mandated by laws and/or regulations. In addition, DOE has not developed criteria on what type of nonmandatory training is appropriate. Some nonmandatory training is beneficial for career growth and professional development, such as courses on effective writing and oral presentation skills. However, the benefits of other nonmandatory training, such as determining social styles in the workplace, seemed less clear. Second, DOE's headquarters offices, field offices, and contractors have developed and delivered duplicative courses and nonstandardized training across the Department. This problem has occurred because DOE's decentralized training structure allows generally applicable courses, such as project management, hazardous worker training, and occupational safety and health, to be developed by each office and contractor.

---

## Training Not Mandated by Laws And/or Regulations

Federal agencies offer various types of training to their employees, including technical skills, executive development, supervisory skills, and mandatory training. We found that DOE as well as four other federal agencies estimated their fiscal year 1997 training expenditures by course type and provided that data to the American Society for Training and

---

<sup>16</sup>DOE's training order was issued in May 1995 and would also have been applicable to any annual training plans prepared in fiscal year 1997.

Development's Benchmarking Forum.<sup>17</sup> According to these estimates, only 10 percent of DOE's fiscal year 1997 training funds were spent for federal employee training mandated by laws and/or regulations.<sup>18</sup> In comparison, two other agencies spent more and two other agencies spent less of their fiscal year 1997 funding on mandatory training. Specifically, the Federal Aviation Administration spent about 42 percent and the Tennessee Valley Authority spent about 17 percent on mandatory training, while the Centers for Disease Control and Prevention spent about 3 percent and the National Institutes of Health spent about 3 percent.

In addition, some training considered by DOE contractors to be mandated by laws and/or regulations may not in fact be legally required. For instance, in a 1998 report of contractor training activities at DOE's Savannah River Plant, we found that the contractor's internal audit office questioned the legal references for 30 percent of the training courses listed as mandatory.<sup>19</sup> In that report, we pointed out that the contractor could not provide us with justification for each course it had considered mandated by regulation.

We also found that DOE has not developed criteria on what type of nonmandatory training is appropriate. A DOE training official agreed, saying that there is a lot of "gray area" between what training is appropriate and not appropriate within the Department.<sup>20</sup> Some nonmandatory training is beneficial for career growth and professional development, such as courses on effective writing and oral presentation skills. However, the benefits of other nonmandatory training seemed less clear. For example, one location offered a course to employees facing mid-life questions, another offered a course on determining social styles in the workplace, and a third offered a course on defensive driving.

According to DOE training officials, while the Department estimated that only 10 percent of its training funds are spent on mandatory training, this estimate had not been confirmed by a detailed analysis. Furthermore, this estimate was only an informed estimate and did not include the training

---

<sup>17</sup>The Benchmarking Forum gathered this information to profile the type of training various organizations provide to their employees.

<sup>18</sup>The American Society for Training and Development's Benchmarking Forum defined mandatory training as instruction that is provided to meet environmental safety and health requirements, equal employment opportunity and affirmative action requirements, right-to-know, and government-mandated training.

<sup>19</sup>Department of Energy: DOE Contractor Employee Training (GAO/RCED-98-155R, May 8, 1998).

<sup>20</sup>This DOE training official added that the Department's proposed revision to its order on federal employee training will stipulate, however, that training must be mission-related and related to an employee's duties to be funded.

required, for example, by DOE orders. These officials also stated that the type of nonmandatory training offered is generally left up to DOE's individual offices. Accordingly, DOE has no immediate plans to develop a more accurate estimate or conduct a comprehensive review of nonmandatory training offered across the Department.

### Independent Development and Delivery of Training

In 1998, we reviewed the training courses that were independently developed and delivered by DOE contractors at four field locations.<sup>21</sup> The review showed that the cost per employee for these courses varied considerably among the contractors reviewed. For example, one course on environmental laws and regulations varied in cost from \$72 per employee at one location to \$624 per employee at another location. A second course on hands-on fire extinguisher use varied in cost from \$2.50 per employee at one location to \$102 per employee at another location (see table 2.2).

**Table 2.2: Examples of Cost Per Employee for DOE Contractor Training Courses, Fiscal Year 1997**

Course	Contractor at			
	Oak Ridge	Richland	Rocky Flats	Savannah River
Back Injury Prevention	\$28.50	\$108	\$84	\$50
Environmental Laws and Regulations	\$624	\$152	\$192	\$72
Hands-on Fire Extinguisher Use	\$2.50	\$102	Not offered	\$48
Hoisting and Rigging	\$592	\$328	\$72	\$240
Occurrence Reporting	\$84	\$62	\$44	\$36

Source: DOE.

Various factors account for the cost differences shown in the table, including the length of the course and the labor rate used for the instructor who provided the training. For instance, the course on environmental laws and regulations varied in length from 4 to 24 hours, and the course on hands-on fire extinguisher use varied in length from 15 minutes to 3 hours. Consequently, employees attending these courses received a dissimilar level of training, depending on the location. For some courses, for instance, Rocky Flats used an outside vendor to provide its training at a very favorable labor rate.

<sup>21</sup>Department of Energy: DOE Contractor Employee Training (GAO/RCED-98-155R, May 8, 1998).

In response to the problems associated with the independent development and delivery of training, DOE has been working since 1995 to standardize training courses that are generally applicable across the Department. DOE foresaw a number of benefits to be derived from standardization, including an overall reduction in training costs and staff, the establishment of a consistent knowledge base among employees, and the elimination of redundant training.

In 1997, however, DOE abandoned its proposal to standardize training. At that time, DOE officials indicated that such a standardization effort was too comprehensive in scope in view of the more than 21,000 training courses in the DOE training community.<sup>22</sup> DOE officials said the Department will continue efforts to standardize training by developing a listing of all DOE courses, called the Universal Catalog, and establishing centers of excellence on selected topics. As of December 1998, neither effort has been successful in standardizing training. The Universal Catalog was only 35-percent complete and more than 1 year behind schedule for completion. In addition, only two centers of excellence had been established, although DOE had planned to designate four centers of excellence by the end of the year. According to a DOE training official, competing DOE priorities precluded the Department from fully funding and making greater progress on both efforts.

---

## Conclusions

DOE can improve budgeting and reduce spending on training. In the budgetary area, DOE has not successfully completed any of the critical steps needed to develop sound and defensible training budgets. Because DOE has not completed these steps, its training budgets are not directly tied to the training needs of the Department. DOE also has not taken a number of actions to reduce its training expenditures. It has not developed criteria on what type of nonmandatory training is appropriate within the Department, which has led to a wide range of nonmandatory training courses being offered. DOE's decentralized training structure has also led to the independent development and delivery of training courses by DOE's headquarters offices, field offices, and contractors.

In regard to budgeting, DOE has not conducted a comprehensive assessment of occupational training needs throughout the Department to better understand its training needs. Certain occupational groups would benefit from such an assessment, most notably those involved in program

---

<sup>22</sup>DOE added that with the Department facing many challenges, including the downsizing of training personnel and decreases in the training budget, it is limited in accomplishing what was intended.

management, property management, and contractor oversight tasks. In addition, DOE has not completed an IDP for all employees required to have one by DOE order. DOE training officials have established a goal of completing IDPs for 90 percent of DOE employees by December 31, 1999. However, without some other impetus, such as holding managers accountable for ensuring that their staff complete IDPs, it is difficult to see how establishing a goal will have any more success than the requirements already contained in a DOE order. Finally, DOE offices have either not completed annual training plans or not completed them properly. According to DOE, the annual training plan provides the basis for any request for budget funds.

Opportunities also exist for DOE to reduce its training costs. Specifically, DOE has not developed criteria on what type of nonmandatory training is appropriate nor reviewed the thousands of nonmandatory training courses offered using such criteria. In addition, DOE has not standardized the development and delivery of training courses that have general application across the Department. This has produced unnecessary and duplicative training courses throughout DOE.

---

## Recommendations

To improve the process for setting the training budget, we recommend that the Secretary of Energy require

- the expeditious completion of a comprehensive occupational training needs assessment throughout the Department. Where the assessment process cannot be expedited, priorities should be set for the order in which occupational groups will be assessed;
- the completion of IDPs for all departmental employees required to have one by DOE order; and
- the completion of annual training plans as required by DOE order.

To reduce spending on DOE training, we recommend that the Secretary of Energy require

- the establishment of criteria for what type of nonmandatory training is appropriate and a review and elimination of nonmandatory training courses given across DOE that do not meet those criteria; and
- the standardization of the development and delivery of training that has general application across DOE.

---

## Agency Comments

DOE agreed with our recommendations, except for the one that the Department expeditiously complete a comprehensive assessment of occupational training needs. In this regard, DOE indicated that it had already completed such an assessment for certain occupational groups and initiated a new program to rebuild a talented and well-trained corps of research and development program managers. Furthermore, DOE stated it will continue conducting these assessments as funding constraints and departmental priorities allow. While we are encouraged by the actions that DOE has already taken, we are concerned that funding constraints and/or other departmental priorities may, in some way, hinder the completion of a comprehensive occupational needs assessment. As we pointed out in this report, the lack of skilled staff is one of the most fundamental problems in the Department. Accordingly, we continue to believe that DOE should expeditiously complete a comprehensive assessment of occupational training needs.

In addition, the Department disagreed with our use of the concept of nonmandatory training and with our discussion of whether excessive nonmandatory training takes place in the Department. DOE indicated that internal DOE directives as well as professional and international standards also impose significant training requirements upon the Department. DOE commented that, while this training is not normally defined as "mandatory" by externally imposed laws or regulations, it is required and does promote efficient as well as safe work practices. Nonetheless, DOE concurred in the benefits of reviewing training courses periodically and stated it is in the process of revising internal guidelines to better assess training, including the nonmandatory training that is given.

# DOE's New Training Plan Could Be Improved

DOE's November 1998 draft training plan represents the Department's most recent attempt to improve its training. The plan lays out a strategy for training DOE employees over 3 fiscal years (1999 through 2001). However, it has several shortcomings. Specifically, the plan does not

- realistically estimate the overall costs to implement the plan and the overall savings to be achieved from it;
- explain how DOE's decentralized training resources will be committed to finance the plan;
- present a DOE policy regarding the use of the Department's centers of excellence; and
- identify the steps necessary to improve contractor training performance.

DOE training officials told us they were aware of these shortcomings and intend to address each of them before a final training plan is issued.

## DOE's Plans to Improve Departmental Training Have Evolved

In May 1995, the Department reviewed its training program and found a number of problems. The problems cited by the review included duplication and waste associated with the development and delivery of both federal and contractor training and a lack of consistency in the training provided across the Department. The review concluded, among other things, that if a DOE-wide training program were developed, tens of millions of dollars in annual training costs could be avoided.

In response to the 1995 DOE review, the Department issued a strategic plan in July 1995 to improve federal employee training. DOE indicated that it intended to eventually develop a similar document to improve training for its contractors. Since its issuance, the strategic plan has had some success. For instance, DOE has established a new training structure that includes, for example, the Training and Development Management Council, which is responsible for overseeing the efforts to improve DOE's training program. In addition, DOE has established two training centers of excellence.

On the other hand, DOE has not achieved many of the goals established by the strategic plan. For instance, DOE had intended to reduce by 50 percent the number of duplicate training courses offered by it and its contractors. According to DOE officials, the Department must first enter all training courses into a central database before it can analyze courses and reduce redundancy.<sup>23</sup>

<sup>23</sup>According to a DOE training official, the schedule for entering all training courses into the central database has not yet been determined.

In July 1997, DOE decided to terminate its strategic training plan, recognizing that it had not been entirely successful, and replace it with a new training plan. DOE began drafting this new training plan in November 1997 and intends to make the plan final early in calendar year 1999. With the new training plan, DOE believes that further reductions in training expenditures are possible. In that regard, the plan contains 18 performance expectations to be accomplished. Those expectations include, for instance, (1) having DOE's average training expenditures per employee be in alignment with similar federal agencies and the private sector by December 31, 1999; (2) not having DOE fund the development of duplicate training courses as of December 31, 1999; and (3) establishing six training centers of excellence by December 31, 2000.

---

## Overall Costs and Overall Savings From the Plan Have Not Been Realistically Estimated

According to DOE's new training plan, it is important that DOE estimate the overall dollar savings to be realized from the plan. Such an estimate, DOE training officials believe, is necessary to obtain the support needed from senior DOE management and the funding needed from the Congress. We found, however, that the plan provides a limited projection of the overall costs to implement the plan and no overall estimate of the cost savings to be realized from it. Instead, the plan only provides certain indications of the cost savings that are possible. However, these estimated cost savings are overstated. For that reason, it is unclear whether the plan's savings will exceed its costs.

In the draft plan, DOE estimates that about \$2 million will be needed over fiscal years 1999 through 2001 to implement the performance actions contained in the plan. DOE also acknowledges that this overall estimate is understated. It states that cost estimates have not yet been made final for certain key portions of the plan, including the implementation of a DOE-wide training information system and a technology-supported learning program. In a March 1998 submission to the Congress, DOE estimated that the costs for these two portions for fiscal years 1999 through 2001 would be \$3.8 million and \$3.4 million, respectively. However, no fiscal year 1999 funding was appropriated for these two portions.

Conversely, DOE provides no overall estimate of cost savings for the 3-year period covered by the plan. Instead, DOE intends to wait and see what cost savings the plan will generate. In the plan, nevertheless, DOE points out that about \$3 million in savings were realized during fiscal year 1998 from several initiatives supported by the plan. Our review determined that these savings are overstated. For example, the \$3 million savings is based, in

part, on reported cost savings of about \$1.7 million by DOE's National Environmental Training Office in Aiken, South Carolina, for developing training courses that were then used at other DOE locations. We found, however, that the \$1.7 million in savings was not offset against the approximately \$1.9 million in costs to operate the Training Office in 1998. DOE training officials told us they will reevaluate and validate the cost data before the plan is made final. The director of the Training Office added that it must be recognized that the Training Office is only in its start-up phase and an immediate return on investment cannot be expected.

---

## DOE Has Not Determined How the Department's Decentralized Training Resources Will Be Committed to Finance the Plan

DOE's headquarters offices, field offices, and contractors all have their own training programs and training budgets. For DOE's training plan to be successful, according to DOE, support and funding will be needed from offices throughout the Department. We found, however, that the plan does not explain how or according to what formula these DOE offices will be asked to commit funds to finance the plan. Moreover, we found that few DOE offices have actively participated in the development of the performance expectations contained in that plan. Thus, when the plan is completed, it is unknown whether support and funding will be available throughout the Department for the plan.

According to DOE, each office within the Department is responsible for implementing the plan and will be held accountable for carrying out the expectations in it. In addition, each office will commit resources to ensure that the performance expectations in the plan are met. The plan does not specify, however, how, or according to what formula, these offices will be asked to commit resources to finance the plan. Instead, the plan indicates that DOE's Training and Development Management Council will determine sometime in the future how the plan will be funded.<sup>24</sup>

While each office is responsible for the plan's implementation, few offices have actively participated in the development of the performance expectations contained in it. According to the minutes of training plan meetings, representatives from only six of DOE's principal offices have volunteered to take the lead in developing any of these performance expectations. DOE training officials also told us they did not foresee participation from any more offices.

---

<sup>24</sup>The Training and Development Management Council is responsible for overseeing the efforts to improve DOE's training program.

Once the training plan is completed, the training and development management council intends to forward the plan to the Secretary of Energy for endorsement. According to DOE training officials, the Secretary's endorsement may help offices throughout the Department that did not participate in the plan's development to accept its contents. However, how the plan will be funded is not discussed in the plan.

---

## A Policy Regarding the Use of the Department's Centers of Excellence Has Not Been Developed

A central feature of DOE's training plan is the creation of centers of excellence. The mission of these centers is to provide high-quality training on a topical area that cuts across the entire Department. By operating the centers of excellence, DOE intends to eliminate the duplication of training. We found, however, that the training plan does not present a policy on the centers' use or mandate that the centers will be the sole source for training on a topical area. Without that mandate, there is no assurance that duplication of training will be eliminated by the centers.

Furthermore, DOE's draft training plan provides little information on the centers-of-excellence concept. According to the training plan, two centers of excellence were successfully launched in December 1997. On the basis of that success, the plan indicates that further actions are planned. These include (1) forming a panel of experts to review applications to become a center of excellence, (2) recommending topical areas for center-of-excellence designation, and (3) developing general operating principles and means to evaluate the operating centers of excellence. The training plan indicates that four additional centers of excellence will be established by the end of fiscal year 2000.

However, the training plan does not articulate a policy on, or mandate the use of, the centers within the Department.<sup>25</sup> Absent that mandate, we found that one of the centers has separately delivered training courses on subjects that already existed within the Department. For example, during fiscal year 1998, the National Environmental Training Office delivered a 3-day course on Environmental Laws and Regulations. We determined that a similar course of comparable duration already existed elsewhere within DOE. For example, contractors at both DOE's Oak Ridge Operations Office and Rocky Flats Field Office offer a 3-day course on Environmental Laws and Regulations. In commenting on this matter, the director of the training office said that DOE and DOE/contractor training organizations have historically worked independently. Therefore, it will take some time for

---

<sup>25</sup>In a January 30, 1998, memorandum, DOE's Office of Environmental Management advised its employees seeking training related to environmental management to look first to the courses provided by the National Environmental Training Office.

these very same organizations to work more closely together. The director added that the training office, nevertheless, has had tremendous success during its first year in forming partnerships with various DOE locations to eliminate duplicate training. Furthermore, the training office's newer courses are not being duplicated and in fact are being requested throughout DOE.

---

## The Steps Necessary to Improve Contractor Employee Training Performance Have Not Been Identified

According to DOE data, the Department spent about \$322.2 million on training contractor employees during fiscal year 1997. Despite this large investment in its contractors and the documented problems in contractor training identified in DOE's 1995 review of training, the Department's draft training plan does not identify the steps necessary to improve contractors' training performance or reduce costs. Instead, according to DOE training officials, the Department will be working with its contractors to improve contractor training through a subsequent installment of the plan. However, we found that DOE has not (1) established a departmental order on developing contractor training programs and budgets; (2) incorporated a standard set of performance measures into its performance-based contracts regarding contractors' training efficiency and effectiveness; and (3) clarified the roles and responsibilities of DOE offices for the oversight of contractor training departmentwide. DOE training officials told us they were aware that these issues must be resolved and intend to address them in a subsequent installment of the training plan. However, a date for the subsequent installment to the training plan has not yet been established.

While DOE's order on federal employee training contains in-depth information on the administration of federal training, we found that its order on contractors' human resource management provides considerably less detail on contractor employee training. This latter order only requires that each contractor submit an employee substance abuse and employee assistance program for approval by the appropriate DOE contracting officer. It does not, however, discuss the need for or the contents of an employee training program. The order also does not provide any guidance on developing a contractor's annual training budget. Because of these omissions, DOE training officials told us the Department intends to issue a new order pertaining to contractor employee training sometime in the future. A DOE timetable for the issuance of that new order has not been established.

We also found that DOE has not developed a standard set of performance measures to promote cost reductions in contractor training

departmentwide. In May 1998, we reported that, for four contractors we reviewed, the applicable DOE field locations used various measures during fiscal year 1997 to evaluate contractors' training performance.<sup>26</sup> For example, at the Oak Ridge National Laboratory, DOE included a performance measure in the contract that required the contractor to develop a plan to consolidate all training records into an integrated database. In addition, at the Rocky Flats Field Office, DOE included a performance measure in the contract that required the contractor to fulfill 95 percent of the special requests for training when more than 3-days' notice had been given. Although such measures could improve record keeping and course scheduling, they would not, for the most part, help eliminate unnecessary costs for contractor training or improve training effectiveness.

In on our review of contractor training, we identified three performance measures that were not being used DOE-wide that could reduce contractor training costs. Specifically, we noted that DOE has not instituted a standard performance measure to take the following actions:

- Consolidate training operations where multiple DOE contractors or multiple contractor training organizations are present. Such consolidation can substantially reduce costs by eliminating redundant training organizations and redundant training courses. For example, at one contractor location contacted, the contractor consolidated training that had previously been provided by four separate organizations and reported a cost savings of about \$3.3 million the following year.
- Subcontract (i.e., outsource) training courses to qualified vendors. Outsourcing can reduce the cost for providing contractor training. For example, the contractor at one location contacted outsourced about 65 percent of its training to a qualified vendor at an estimated savings of more than \$0.6 million over a 2-year period.
- Use training course materials from other DOE locations rather than develop courses independently. One contractor, for example, advised us it has no policy or procedures requiring it to consider using materials from other DOE locations before deciding to develop a new training course. We noted that this contractor, in fiscal year 1997, spent over \$3.9 million independently developing contractor training courses at its site.

---

<sup>26</sup>Department of Energy: DOE Contractor Employee Training, (GAO/RCED-98-155R, May 8, 1998). The four contractors were selected because their annual expenditures for training have been among the highest across the DOE complex and, collectively, they accounted for 48 percent of DOE's contractor training expenditures in fiscal year 1997.

Only one of the four contractors we reviewed had performance measures aimed at reducing training costs.<sup>27</sup>

We further found that the roles and responsibilities for overseeing contractor training performance departmentwide have not been adequately addressed. According to DOE training officials we contacted, four DOE headquarters offices have some interface with contractors departmentwide—the Office of Human Resources Management, the Office of Contract and Resource Management, the Office of Worker and Community Transition, and the Office of Field Management. None of these offices, however, has responsibility for overseeing contractor training performance. According to an official with the Office of Human Resources Management, this office collects contractor training cost data but has limited contact with contractor training personnel. According to an official with the Office of Contract and Resource Management, this office only reviews contractor employees' compensation, pensions, and benefits. According to an official with the Office of Worker and Community Transition, this office is primarily concerned with contractors' employee displacement and downsizing programs. According to an official with the Office of Field Management, this office may deliver training on a particular subject to both federal and contractor employees in the field. None of these DOE offices indicated, however, that they review the contractor training courses offered or the contractor training budgets.

DOE training officials agreed that the steps outlined above could improve contractor training. These officials also told us that the training plan will be revised to be applicable to DOE's contractor workforce. In addition, specific performance objectives and measures will be included in the plan. Furthermore, the DOE order on contractor employee training will be revised to include a chapter that will assign responsibility and provide guidance for developing, monitoring, and evaluating training for departmental contractors.

---

## Conclusions

DOE's new training plan represents the Department's vision of the improvements needed in federal employee training for fiscal years 1999 through 2001. However, as currently drafted, the plan contains shortcomings. First, it does not provide a realistic estimate of the overall costs and overall savings associated with its new training plan. According

---

<sup>27</sup>The contract for DOE/Richland Operations Office contained performance measures to (1) develop a plan to eliminate redundant training functions, (2) evaluate the possibility of consolidating all training under one organization, and (3) eliminate redundant training courses.

to DOE training officials, such an estimate is necessary to obtain the support needed from senior DOE management and the funding needed from the Congress. Second, the plan does not explain how DOE's decentralized training resources will be committed to accomplish the plan. At present, few DOE offices have actively participated in developing the performance expectations contained in the plan. Whether DOE offices that have not been actively involved in the plan will financially support it, when completed, remains to be seen. Third, the plan does not present a policy regarding the use of the Department's centers of excellence. The centers are a central feature of the training plan. By operating the centers, DOE intends to eliminate the duplication of training within the Department. However, the plan does not present a policy on the use of the centers or mandate that the centers be the sole source for training within the Department on a topical area. Finally, even though DOE spent about 85 percent of its training budget for fiscal year 1997 on training contractor employees, DOE's training plan does not address what steps should be taken to improve contractor employee training. Because of these shortcomings, the plan will not provide DOE with a reliable roadmap for the future, as intended. DOE officials told us they plan to correct these shortcomings, but it is not clear exactly how they will do this.

---

## Recommendations

To improve DOE's new training plan, we recommend that the Secretary of Energy require that the plan include

- a realistic estimate of the overall costs to implement the plan and the overall savings to be achieved;
- an explanation of how DOE's decentralized training resources will be committed to finance the plan;
- a policy regarding the use of the Department's centers of excellence; and
- an identification of the steps necessary to improve contractor training performance. At a minimum, those steps should include (1) establishing departmental guidance on the development, monitoring, and evaluation of contractor training programs and budgets, (2) incorporating a standard set of performance measures regarding training into its performance-based contracts, and (3) clarifying the roles and responsibilities for the oversight of contractor training performance departmentwide.

---

## Agency Comments

DOE concurred with the overall direction and intent of these recommendations. Among other things, DOE said that , as part of the plan, it will provide estimates of costs and savings in implementing the training

---

**Chapter 3**  
**DOE's New Training Plan Could Be**  
**Improved**

---

plan. In addition, DOE said it will develop a policy on the use of the centers of excellence. Finally, DOE will add a new chapter to an existing DOE order to clarify DOE's oversight roles and responsibilities for contractor training and provide performance-based contractor training objectives and measures to be incorporated into major contracts as they are renewed and offered for competitive bidding.



# Comments From the Department of Energy



**Department of Energy**

Washington, DC 20585  
February 5, 1999

Victor S. Rezendes, Director  
Energy, Resources, and Science Issues  
U.S. General Accounting Office  
Washington, D.C. 20548

Dear Mr. Rezendes:


This responds to your letter of January 28, 1999 to Secretary Richardson transmitting the draft report Department of Energy: Actions Necessary to Improve DOE's Training Program (GAO/RCED -99-56).

We have worked closely with William Fenzel and Robert Baney during their reviews leading to this draft report. Comments were provided, at their request, on the draft statement of facts. In the preparation of our response to the draft report itself, we have obtained comments from several Washington, D.C. and field offices.

We agree in general with the majority of the recommendations of the draft report. Our comments are in the enclosed document.

If you have any questions, please do not hesitate to contact me or Thomas W. Evans, Director, Office of Training and Human Resource Development on (202) 426-1506.

Sincerely,

  
Rick Farrell  
Director of Management  
and Administration

Enclosure

Enclosure

Comments on Draft GAO Report  
Department of Energy: Actions Necessary to Improve DOE's Training Program  
(GAO/RCED-99-56)

General Comments

The Department of Energy has undergone continual downsizing since 1995 (18 percent in the Federal workforce and 16 percent in the contractor workforce). In January 1999, the U.S. General Accounting Office in Major Management Challenges and Program Risks stated "a lack of staff with requisite skills is an underlying cause of problems in several [program] areas." (GAO/OCG-99-6, p. 27) In addition, over 25 percent of the Federal workforce in some technical functions and approximately 50 percent of senior managers and executives are eligible to retire in the next five years. The climate of downsizing, workforce restructuring, and technical skills needs underscores the importance of having established in the Department a viable and adequately funded training program.

The Department has already reduced training costs by \$175 million or about 32 percent from 1995 to 1997. We acknowledge that better training plans, budgets, and needs analyses can improve training cost management in the Department. However, the Department's current expenditure level of 2.5 to 3.0 percent of payroll is comparable to similar, technology intensive, large, private companies. Improved training administration, which increases standardization of common training courses, reduces duplication of training development and delivery costs, and increases the use of technology to package training and to make it more accessible, can produce some additional savings. These savings, however, need to be reinvested in critical human resources acquisition, retention, and retraining programs as the Department seeks to recover from severe downsizing and rebuild a talented and diverse workforce.

The Department concurs that its training can be managed more efficiently and effectively. However, given the changes taking place in the workforce, the aging technical and industrial facilities in the Department, and the effects of not having sufficient "staff with requisite skills," the Department states that it may have to reallocate resources and invest additional resources in training to insure support for mission critical occupational activities.

Comments on Individual Recommendations

GAO Recommendation: *To improve the training budget process, we recommend that the Secretary of Energy require*

- - *the expeditious completion of a comprehensive occupational training needs assessment throughout the Department. Where the assessment process cannot be expedited, prioritize the order in which occupational groups will be assessed.*
- - *the completion of IDPs (individual development plans) within the Department as required by DOE order; and*

Appendix I  
Comments From the Department of Energy

-- the completion of annual training plans as required by DOE order.

The Department concurs that actions must be taken to ensure that IDPs and training plans are completed as required by applicable DOE policies.

In regard to occupational needs assessments, the Department has completed analyses and implemented training programs for the defense nuclear facilities technical workforce and safeguards and security personnel. Programs are also in place for procurement professionals, property managers, and information management specialists. DOE is also initiating a new program to rebuild a talented and well-trained corps of research and development technical program managers.

Within funding constraints and in accordance with priorities established in its strategic plan, the Department will continue to complete occupational needs assessments and manage training programs to meet identified needs, consistent with government-wide law and regulation and Departmental directives.

GAO Recommendation: To reduce spending on DOE training, we recommend that the Secretary of Energy require

-- establishment of criteria as to what type of nonmandatory training is appropriate, and a review and elimination of nonmandatory training courses given across DOE that do not meet that criteria; and  
-- a standardization of the development and delivery of training that has general application across DOE.

The Department concurs that increased standardization of common training courses and reductions in duplicated training development costs, especially when combined with the effective use of new technologies, can produce savings and improve the quality of learning. The Department's Training and Development Management Council and the training centers of excellence have and will continue to pursue these objectives.

However, there is disagreement, which we have discussed with General Accounting Office reviewers, over the use of the concept of "nonmandatory" training and whether excessive "nonmandatory" training takes place in the Department. DOE internal directives governing health and safety standards and internationally recognized, industry established, performance and certification standards, such as those examined by the Defense Nuclear Facilities Safety Board in its reviews of Department operations, impose significant training requirements. This required training is designed to ensure safe and environmentally sound facility operations. While this training is not normally defined as "mandated" by externally imposed law or regulation, it is required and it does promote efficient as well as safe practices.

Furthermore, training needs are also necessarily defined by specific work and employee needs. "Defensive Driving" for vehicle operators at a major field site where accidents have occurred is quite appropriate.

Appendix I  
Comments From the Department of Energy

The Department concurs in the benefit of reviewing course offerings periodically and is in the process of revising internal guidelines to better address the ongoing assessment of training offerings. In this regard, particular attention will be paid to "nonmandatory" offerings. The Department also believes that determining priorities through needs analyses, implementing programs based on those identified needs, and using training centers of excellence to manage training more efficiently will yield improvements in the quality and cost-management of training.

*GAO Recommendation: To improve DOE's new training plan, we recommend that the Secretary of Energy require the plan to*

- - realistically estimate the overall costs to implement and overall savings to be achieved from the plan;
- - explain how DOE's decentralized training resources will be committed to finance the plan;
- - present a policy regarding the use of the Department's centers of excellence; and
- - identify the steps necessary to improve contractor training performance. At a minimum, those steps should include (1) establishing Departmental guidance on the development, monitoring and evaluation of contractor training, (2) incorporating a standard set of performance measures regarding training into its performance-based contracts, and (3) clarifying the roles and responsibilities for the oversight of contractor training performance Department-wide.

The Department concurs with the overall direction and intent of these recommendations.

The cost of implementing the Department of Energy Education, Training, and Development Business Plan will be estimated and the accomplishments will be reviewed to determine performance related improvements and savings. The plan will also be reviewed to determine how best to allocate adequate resources to meet commitments under the plan.

In regard to the use of training centers of excellence by Departmental organizational components, a policy is currently being developed on this issue. At this time, the Department does not favor granting the training centers sole-source-type control over training delivery in their functional areas. Instead, the Department favors a limited, preferred source approach that will reduce duplication and foster economies of scale, but maintain competitiveness with commercial and other appropriate sources.

Training and procurement officials have undertaken the task of establishing policy guidelines on contractor training management in the Department order on contractor human resource management programs (DOE O 350.1). A new chapter in the order will clarify oversight roles and responsibilities and provide performance-based objectives and measures to be incorporated into major contracts as they are renewed or recompeted. The Department's Business Management Oversight Program provides for contractor self-assessments and periodic Department evaluations in addition to annual contract performance reviews.

# Major Contributors to This Report

---

Resources,  
Community, and  
Economic  
Development Division  
Washington, D.C.

(Ms.) Gary L. Jones, Associate Director  
William F. Fenzel, Assistant Director  
Robert J. Baney, Evaluator-in-Charge  
William M. Seay, Team Member